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SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

Ready for reading in all disciplines

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Introduction

SREB Readiness Courses

In 2011, the Southern Regional Education Board (SREB) began forming a regional partnership of states and experts to develop two readiness courses, one in mathematics and one in disciplinary literacy. The courses were designed to help under-prepared students reach their state’s college- and career-readiness benchmarks before high school graduation.

The quality resources found within the SREB Readiness Courses have now been aligned to Texas standards. The Texas Association of School Administrators (TASA) in 2014 led a project to engage teams of Texas teachers and content specialists to align all units and corresponding lessons to the Texas Essential Knowledge and Skills (TEKS) and Texas College and Career Readiness Standards (CCRS). Texas districts can now easily use and adapt the courses to meet the needs of their students.

The Readiness Courses are designed to assist students who are assessed as “unready” for postsecondary education—meaning they do not reach the state’s college- and career-readiness benchmarks on the ACT, SAT, or other assessment—to become prepared and reach those benchmarks.

These courses are best suited for the middle range of students, not those who can succeed in Advanced Placement courses or who are severely behind. The courses are built with rigor, innovative instructional strategies, and a concentration on contextual learning that departs from procedural memorization and focuses on engaging the students in a real-world context. They provide literacy strategies that allow students to read and comprehend all manner of texts and genres in every core discipline and numeracy skills not yet fully understood in the typical high school math class. In short, these courses target students with weaknesses and college-ready skill gaps and re-educate them in new ways to ensure they are prepared for postsecondary-level pursuits.

SREB began working with five states setting up teams of educators to begin formulating the curricula outlines and draft both the math and disciplinary literacy courses. These teams consisted of K-12 educators; faculty from two- and four- year colleges and universities and technical colleges; state agency personnel from secondary and post-secondary state agencies; and national experts. SREB engaged regional and national experts in math and disciplinary literacy curriculum to lead these teams. The content was guided by standards, instructional strategies and tools suggested by experts, but it was written by the states.

In fall 2012, SREB partnered with eight additional states to review the draft units and provide feedback for revisions. Contributors from these states, from educators to state representatives, provided detailed reviews of all units in each course. An additional review of the drafts was also provided in spring 2013. SREB began field-testing individual course units in 20 classrooms in four of the original states. Feedback from reviewers

Literacy Ready: Ready for reading in all disciplines

and testers led to a six-month review process ending in early fall 2013. During this time, three more states joined the project with interest in piloting the courses after completion.

The outcomes of this extensive development and revision process are the two SREB Readiness Courses—Literacy Ready and Math Ready. The courses are available free of charge to any district, school or teacher who wishes to download them from the TASA website, www.tasanet.org. The full courses and additional resources, including informational publications, policy briefs, state information and slide presentations, are also available on the SREB website at SREB.org/Ready.

Literacy Ready: Ready for reading in all disciplines

The SREB Readiness Course titled Literacy Ready is an innovative, dynamic course built to help students master the literacy skills needed for three core subject areas — English, social science and science. Literacy Ready consists of six units: two in history, two in English and two in science. Content of the discipline is at the forefront of the curriculum; while the disciplinary literacy skills are emphasized through reading and writing assignments based on the content. Units are focused on truly understanding how to read and interpret texts in the discipline on a college level. They are designed to be used as steppingstones, with the first module in each subject less rigorous and demanding than the last.

English (supplemental fourth-year or senior English)

Both units are designed to address the following essential question: “How is the exponential increase of information that we process in all forms of media affecting the way we live?”

Unit 1: Informational

The first unit engages students in reading informational text from Nicholas Carr’s *The Shallows: What the Internet is Doing to Our Brains*, as well as a number of related supplemental texts. Students practice the following reading skills with an English disciplinary focus: literary epistemology; reading for argument, claim and evidence; reading for rhetorical strategies and patterns; and reading for internal and external connections. The unit conclusion engages students in collecting evidence for a stance-based synthesis presentation on a topic drawn from the central text. Students use feedback received from peers and from the teacher to revise their syntheses and submit a synthesis essay.

Unit 2: Literary

The second unit moves into literary study, using *Ubik* by Philip K. Dick as the central text. In this unit, students read the central text and a variety of related supplemental texts. They practice the following reading skills with an English disciplinary focus: literary epistemology, close reading; inference, interpretation of rhetorical strategies and patterns; and reading for internal and external connections. The unit conclusion involves students in collecting and presenting evidence for a literary argument essay on one of three topics related to the central text. With a draft of the literary argument in hand, students participate in a debate related to a common question drawn from the theme of the novel.

Science (biology)

Each unit has a different theme associated with science. The first unit evaluates science claims in health and nutrition, while the second requires students to dig further to understand DNA structure and the future of biotechnology.

Unit 1: Nutrition

In this unit, students are introduced to disciplinary literacy in the sciences. Students learn strategies for reading multiple types of text, including science textbooks, research articles and news articles. They also learn a variety of ways to write about science—from personal reflection to public consumption—and to comprehend science information in multiple representations, including animations, diagrams, charts and tables.

Unit 2: DNA and Biotechnology

In this unit, students extend their understanding of reading and writing in the sciences as they read research articles and textbook material, take notes from lecture videos and make predictions using scientific models. The text material in this second science unit is more complex in both content and composition than the material in the first unit. Additionally, students are asked to write in more depth as they prepare and present an evidence-based scientific poster in a research symposium.

Social Science (U.S. history or government)

Units are unified by the topic “concepts of liberty and freedom.”

Unit 1: Civil Rights Movement

The first unit focuses on the Civil Rights Movement and the changes that took place over the period of the 1960s. Students draw information from a textbook chapter, a film, a lecture, and a number of primary source documents as they learn to read history, to recognize implicit and explicit claims and evidence, to write a historical account and to form arguments.

Unit 2: U.S. Foreign Affairs

The second unit focuses on U.S. involvement in foreign affairs: the Cuban Missile Crisis and the Vietnam War. In this unit, students read multiple texts as well, but more emphasis is placed on writing historical arguments based on their reading. The texts and sources in this unit are more complex than in the first.

*These two books will need to be purchased in print or electronic form to teach the **English units** of this Literacy course.

Carr, Nicholas. *The Shallows: What the Internet Is Doing to Our Brains*. W.W. Norton & Co, 2010.

Dick, Phillip K. *Ubik*. Mariner Books, 2012.

For the **science units**, these two texts need to be purchased in print or electronic form, or the class instructor will need to request permission to use a free copy from the publisher.

For instructions on how to purchase electronic access to the texts at a discount rate from the publishers, please visit the download page at [SREB.org/Ready](https://www.sreb.org/Ready).

Belk, Colleen (2012). *Biology: Science for Life*. Chapter 3 and 4. 4th ed., Cummings, Benjamin., Pearson, January 4, 2012.
ISBN 10: 0321767829 ISBN 13: 9780321767820.

Phelan, J (2009). *What is life? A Guide to Biology*. Chapter 5: DNA. 1st ed., WH Freeman, April 30, 2009.
ISBN-10: 1429223189/ISBN-13: 978-1429223188.

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TASA wishes to express its sincere appreciation to the content alignment teams responsible for making this Texas Edition of the SREB Readiness Courses available to educators across the state. Of special note, the expertise, leadership, and commitment of Chrissy Boydston, Mary Kemper, Eric Simpson, and David Surdovel are greatly valued.



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SREB Readiness Courses
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Literacy Ready

English Unit 1 . Informational

Unit 1

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Unit 1

Course Overview

Overview and Rationale:

The goal of both English units in this course is to help students be prepared for the kind of reading and writing tasks that are common in college English classes. The first unit involves students in reading Nicholas Carr's informational text, *The Shallows: What the Internet is Doing to Our Brains* as well as a number of related supplemental texts. Students will examine the central text for its argument structure and will evaluate the sources and evidence used to support its argument. Students will learn to write in the genre of rhetorical précis, which involves summarization and an understanding of tone, audience and author purpose. Students will study content-rich vocabulary pulled from the central text and will learn important word-learning strategies, including deciphering meaning from context, prefix/suffix/root word study, and figurative, denotative and connotative meanings. The conclusion of the unit will involve students in collecting evidence for a stance-based synthesis essay on a topic/quote drawn from the central text, and using the central text, supplemental texts, and other sources found through library research to support their synthesis writing.

Essential Question:

How is the exponential increase of information that we process in all forms of media affecting the way we live?

Unit Objectives:

1. Students will be able to recognize the disciplinary constructs that influence how reading and writing take place in English classes.
2. Students will develop reading endurance or the ability to read lengthy complex texts independently.
3. Students will be able to summarize complex texts and to see structural and/or organizational patterns, such as the structure of an essay, in those texts.
4. Students will be able to do close readings of complex texts. This involves inferencing as well as the ability to read critically and to distinguish between what is in the text (plot, information, etc.) and the larger picture (theme, connection to society, etc.).
5. Students will be able to read multiple texts, including non-print texts, and compare their content, style and genre.
6. Students will be able to synthesize two or more texts and to use information from those texts to write a synthesis essay.
7. Students will study content-rich vocabulary pulled from the central text.

Week 1

Lesson 1: The Impact of Noise: A Gateway Activity

1. Students will participate in a survey on the reading and writing they have typically done in English classes, their Internet use and multitasking.
2. Students will be introduced to the notion of disciplinary literacy in English classes, as well as the purpose and the goals of the course.
3. Students will examine the first three paragraphs of the prologue, in order to understand how Carr sets up his argument for technology changing the way people think.
4. Students will develop a definition for *net enthusiasts* and *net skeptics*, using information pulled from the context of the prologue and dictionary definitions. Students will complete a reading log for the prologue.
5. Students will participate in a multitasking experiment. Students will analyze the results of the experiment, develop a class definition of multitasking and discuss connections to Carr's argument.
6. Students will view a short video excerpt of an interview with researcher Clifford Nass on multitasking, then read and annotate an edited transcript of the interview. Students will refine their definition of multitasking and summarize Nass's research.
7. Students will participate in a wrap-up discussion.
8. Students will receive teacher modeling of the assigned homework activities, which includes a reading log for Chapter One. Students should complete the reading log during the remainder of class or for homework.

Week 2

Lesson 2: The Rhetorical Précis as a Summarization Tool

1. Students will use their reading logs to examine the argument/claim/evidence structure for Chapter One and to evaluate whether or not Carr's claim and sources seem convincing to them.
2. Students will be introduced to the rhetorical précis structure and the purpose of the genre, with a focus on developing a four-sentence summary of essential information: identifying information, main point, evidence, conclusions drawn, audience and tone.
3. Students will read an article by Robert Marzano entitled "Summarizing to Comprehend" and will examine a sample rhetorical précis for the article.
4. Students will work with a partner or small group to write a rhetorical précis of pages five to 10 of Chapter One and will examine the précis written in class, making revisions as necessary.
5. Students will be assigned to read Chapter Two for homework or during the remainder of class. As they read, they will complete the reading log in their academic notebooks for this section of the text and vocabulary work as assigned.

Lesson 3: Vital Paths

6. Students will debrief the process of writing a rhetorical précis.
7. Students will be introduced to the culminating project for this unit, including the definition and purpose of a synthesis essay, and will begin examining the three choices of quotes for their response to this project.
8. Students will examine content-rich vocabulary pulled from Chapter Two. They will then participate in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories.
9. Students will write one-sentence statements of Carr's argument in Chapter Two and will evaluate their statements. As a whole, the class will develop a concept map of the evidence Carr presents in Chapter Two and will examine the types of evidence Carr provides and evaluate the effectiveness of each type of evidence.
10. Students will make predictions for the content that will be presented in Chapter Three. Students will be assigned to read Chapter Three for homework or during the remainder of class. As they read, they will complete the reading log in their academic notebooks for Chapter Three and vocabulary work as assigned.

Week 3

Lesson 4: The Mind, the Page and an Argument

1. Students will examine vocabulary from Chapter Three. Students will participate in a process of teaching the words to other students, sorting words into categories and developing rationales for those categories.
2. Students will participate in a discussion of the concepts found in Chapter Three and the development of one-sentence claims for the chapter.
3. Students will receive teacher modeling of annotation on the opening paragraphs of Chapter Four and will be assigned to complete the reading and annotation of Chapter Four, the reading log and vocabulary work for this chapter.
4. Students will participate in a whole-class discussion of Chapter Four and will read excerpts from writings by Benjamin Franklin, Ralph Waldo Emerson and Frederick Douglass. Students will examine those readings to determine the main idea, connections with each other and connections with Carr's argument.
5. Students will receive teacher modeling of synthesis writing and will begin reading Chapter Five, noticing synthesis techniques within the opening paragraphs. Students will be assigned to complete their reading of Chapter Five, along with the reading log and vocabulary work for the chapter.

Lesson 5: The Internet, Books and Our Brains

1. Students will begin examination of Chapter Five by tracing the development of the Web as a medium using a timeline or other graphic organizer.
2. Students will read a short *Time* magazine article entitled "You" and participate in a discussion comparing the article's tone to Carr's.

Week 4

Lesson 5: The Internet, Books and Our Brains (continued)

1. Students will read a blog post by Clay Shirky that addresses the impact of the Internet on newspaper publishing and will highlight quotes in that blog post that may relate to their chosen quote for the synthesis essay.
2. Students will learn how to embed quotes in a sentence and will practice embedding the quotes they have selected in a sentence of their own.
3. Students will learn a note taking strategy, using a modified version of the Cornell Notes system with the opening paragraphs of Chapter Six in the Carr text.
4. Students will be assigned to read Chapters Six and Seven, to complete reading logs for both chapters and to do vocabulary work for both chapters.
5. Students will choose the most convincing evidence from Chapters Six and Seven for the statement, “the Internet is changing the way people read and write books.” They will then practice embedding the most convincing quote found in a sentence and will participate in a discussion focusing on information from Chapters Six and Seven.
6. Students will study both teacher- and student-selected vocabulary words. They will participate in a process of teaching the words to other students, sorting words into categories and developing rationales for those categories.
7. Students will review contextual information and dictionary information for the word *algorithm* in preparation for their reading of Chapter Eight.
8. Students will be assigned to read Chapter Eight and to complete the reading log and vocabulary work for this chapter, either for homework or during the remainder of class.

Lesson 6: The Alienating Potential of Technology

9. Students will work with a partner or small group to write and revise a synthesis paragraph of the strongest evidence Carr uses, related to a quote from Chapter Eight, which was read for homework.
10. Students will read and annotate a blog by Scott Karp, entitled “The Evolution from Linear Thought to Networked Thought,” and will write and revise a rhetorical précis on the blog.
11. Students and teacher will participate in a discussion pulling information from Karp’s blog to connect to the three quotes for the synthesis essay.
12. Students will be introduced to Chapter Nine through a close examination of the opening paragraphs and will be assigned to read Chapter Nine and to complete the reading log and vocabulary work on the chapter for homework or during the remainder of class.
13. Students will use their reading logs and the text to find a quote from the chapter that most clearly states Carr’s argument and to outline the evidence Carr presents. The students will then participate in a discussion of this evidence and the counter-arguments that might be made.
14. Students will be introduced to the concept of *alienation*, will be assigned to read Chapter 10 and complete the reading log and vocabulary work on the chapter for homework or during the remainder of class.

Week 5

Lesson 6: The Alienating Potential of Technology (continued)

1. Students will participate in a discussion to examine Carr's final statement of the book and connect that statement to the three quotes for the synthesis essay, as well as to develop counter-arguments.
2. Students will study both teacher- and student-selected vocabulary words from Chapters Eight to 10. They will participate in a process of teaching the words to other students, sorting words into categories and developing rationales for those categories.

Lesson 7: Drafting and Presentation

1. Students will participate in a review of the synthesis essay assignment and of the quotes to which they will respond in their synthesis essay.
2. Students will develop a timeline for their writing project.
3. Students will review the writing they have done in their academic notebooks looking for information that could be used to support their synthesis essay thesis statement.
4. Students will take note of holes in their evidence and work in the library or media center to obtain additional sources and evidence.
5. Students will create a summary paragraph for their synthesis essay, create an outline and write a draft.
6. Students will create and present a three-minute presentation to a small group on their stance and the evidence they have to support their stance.

Week 6

Lesson 8: Synthesis Writing

1. Students will receive peer and teacher feedback on their presentations.
2. Students will receive teacher feedback on the synthesis essay drafts, including feedback on the structure of the synthesis essay, thesis statement, transitions, citing and embedding source materials and mechanics/ grammar/spelling.
3. Students will receive instruction on specific writing issues related to the rough drafts.
4. Students will read both teacher and peer feedback and look for patterns to apply to their drafts.
5. Students will receive instruction on the revision and editing process.
6. Students will receive modeling on how to provide helpful peer feedback, focused on the structure of the synthesis essay, thesis statement, transitions, citing and embedding source materials and mechanics/grammar/spelling.
7. Students will work with a partner to do a final proofing and editing of their drafts using peer conferring.

Lesson 1

The Impact of Noise: A Gateway Activity

Overview and Rationale:

In this introductory lesson for the English unit focusing on the exponential increase of information in all forms of media and its impact on the way we live, students will be introduced to the notion of disciplinary literacy and to the purpose and assignments in this course. They will be asked to consider how they use the Internet, what their reading habits are and how much multitasking they do. They will read the prologue from Nicholas Carr's *The Shallows: What the Internet is Doing to Our Brains* and will focus their reading on an understanding of the structure of the argument. Students will participate in a multitasking experiment as a gateway activity and will develop a class definition of the term multitasking. Subsequently, they will compare their definition to an expert's definition. Finally, students will view a video on the impact of multitasking and will connect this to their reading of the Carr prologue through class discussion. This introductory work will help both students and teacher to develop a class community. In addition, students need to have an understanding of the big ideas of the course and the purpose of the module, in order to understand how this course might be different from other English courses they have taken. Students will begin to see how arguments are put together in preparation for their own writing.

Tasks/Expected Outcomes:

1. Students will explore the nature of disciplinary literacy in English/language arts classes, as well as the goals and purposes of the course.
2. Students will read informational text so as to recognize argument/claim/evidence, structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
3. Students will participate in a data collection and analysis experiment designed to engage them with the content of the unit, to assist them in understanding how evidence can be used to substantiate claims and to develop a definition for multitasking.
4. Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers’ questions and contradictory information.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
- 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
- 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.

11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebooks
- Copies of *The Shallows: What the Internet is Doing to Our Brains*
- Survey of student Internet use (see teacher resources)
- Distractors (i.e. video, music, bells ringing, cell phones, etc.)
- Space to divide the class in two
- Short passage with multiple-choice questions
- Clifford Nass interview transcript
- Excerpt from video of Clifford Nass
(<http://www.pbs.org/wgbh/pages/frontline/digitalnation/interviews/nass.html>)

Timeframe:

250 minutes

Targeted Vocabulary:

- General Academic Vocabulary
- Net enthusiast/skeptic
 - Multitasking

Activity One

Student Survey, Discussion and Juicy Sentences (Approx. 50 minutes)

Ask students to work in their academic notebooks to complete a survey.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: Take a few minutes to think about the following questions; write a brief response to each question. You will be asked to share your responses with the whole group.

1. What kinds of reading and writing have you typically done in an English class?
2. How do you use the Internet?
3. In general, on a daily basis, how much time do you spend on the Internet?
4. Do you multitask? If so, how?

Share responses either as a whole group or a pair-share activity. Ask students to introduce themselves to the group and share their responses about reading and writing in English class, Internet use and multitasking.

Ask students to turn to the course overview section of the academic notebook. Read aloud the first two paragraphs (see below).

Course Overview

Welcome to the first English literacy unit of the SREB Readiness Course- Literacy Ready. What does English literacy mean? English literacy is based on an understanding that texts—both literary and informational—provide a terrain for interrogating the meanings of human experiences and that literary texts are open to dialogue between and among readers and texts. When reading texts in English classes, both in high school and in college, students should be able:

- to read for and recognize the development of argument/claim/evidence structure and point of view over the course of a text,
- to decipher rhetorical strategies and patterns,
- to make inferences from details,
- to analyze how the author’s choices contribute to the power, persuasiveness or beauty of the text,
- to draw on prior knowledge to construct interpretations and
- to use the text to reflect on the human condition or the reader’s life.

In this course, you will take part in several activities aimed at improving your literacy, specifically as literacy is used in English. While certainly the content covered in this course is important, a principal purpose of this course is to equip you with the tools necessary to be more successful in your college coursework. To that end, the creators of the course have developed this academic notebook.

Tell students that they will examine two “juicy sentences.” Look at this quote:

“English literacy is based on an understanding that texts—both literary and informational—provide a terrain for interrogating the meanings of human experiences and that literary texts are open to dialogue between and among readers and texts.”

In order to have students unpack the meaning of this sentence and to understand what disciplinary literacy looks like in English classes, ask them to discuss questions such as the following:

- What might it mean for a text to “provide a terrain for interrogating the meanings of human experiences”?
- How can we connect texts with our own lives or with society?
- How can a text be open to dialogue?
- How can that dialogue take place “between and among readers and texts?”

Once that sentence is thoroughly discussed, move on to the following sentence:

“When reading texts in English classes, both in high school and in college, students should be able:

- to read for and recognize the development of argument/claim/evidence structure and point of view over the course of a text,
- to decipher rhetorical strategies and patterns,
- to make inferences from details,

- to analyze how the author’s choices contribute to the power, persuasiveness or beauty of the text,
- to draw on prior knowledge to construct interpretations and
- to use the text to reflect on the human condition or the reader’s life.”

This is a set of goals for the course, so it’s important that students understand what they hope to accomplish. **Ask students to examine each of the bullet points and talk about how familiar they are with each, what they know about each, and what their strengths and weaknesses are with each.**

Ask students to reflect on the “juicy sentences” exercise. How did focusing on these juicy sentences impact their understanding? How does this differ from ways they have read in the past? (Skimming, reading but not really focusing or comprehending. This time I really had to pay attention.) This unpacking of ideas and reading parts more than one time is a way to do “close reading,” a strategy students will use throughout this unit.

Explain to students the theme for this six-week English course is: “Technologies and their Impact.” The reading text for this course will be Nicholas Carr’s *The Shallows: What the Internet is Doing to Our Brains*.

Explain to students that this course focuses on the kinds of disciplinary literacy they will be expected to undertake in a college setting. The course as a whole includes six units, with two each in English, science and history. Students may take from one to all of the units, depending on what their state and school district makes available to them.

In this unit, students will be expected to:

- Read and analyze *The Shallows* and supplemental readings.
- Learn vocabulary from all of the texts.
- Determine the arguments and counter-arguments in the book and in additional readings.
- Summarize ideas from the reading selections.
- Develop a stance on one of the ideas from the central text.
- Write a synthesis essay.

Assessment:

Outcome 1:

Students will explore the nature of disciplinary literacy in English/language arts classes, as well as the goals and purposes of the course.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Participates in class discussion around the “juicy sentences” and the course goals drawn from the course overview. | No | Somewhat | Very |
| Reflection on the course overview indicates an understanding of disciplinary literacy and the course goals. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Two

Net Enthusiasts/Net Skeptics (Approx. 90 minutes)

Tell students that they will be reading a section from the central text (The Shallows) in order to work together to develop a definition for what Carr calls *net enthusiasts* and *net skeptics*. Remind students that making meaning from texts is part of the way in which students read texts in English classes. In addition, tell students that this activity will prepare them for the vocabulary work that they will be doing later with the central text.

Read aloud the first three paragraphs of the prologue, from the beginning (page one) to the sentence, “One side’s abundant Eden is the other’s vast wasteland.” Use text-dependent questions to help students understand the text as you read. For example, after the first paragraph, ask the following question:

Carr describes McLuhan’s *Understanding Media* as “mind-bending” and “a prophecy.” What “mind-bending” idea did McLuhan predict was happening to the human mind?

After the second paragraph, ask the following question:

The phrase “what’s been forgotten” signals that the author is transitioning from supporting one claim to pointing out that there’s evidence against it. Limiting your observations to the first two paragraphs, what potential negative impact does Carr cite from McLuhan’s work? Where in the text do you see this potential negative impact?

After the third paragraph, ask the following question:

What do people feel both positive and negative about when considering the transformative technologies that Carr mentions? What do the critics and the champions say in censure or in praise?

Students should see that Carr is providing the following:

- some background on McLuhan’s *Understanding Media*, specifically that he argues technology (telephone, radio, movies, television) was beginning to create a global society and to break the dependence on printed text,
- an introduction to McLuhan’s notion that “the medium is the message,” and
- the idea that people who argue over new technologies are typically arguing over the content, not the technology itself.

Write on the board or overhead the terms *net enthusiast* and *net skeptic*. Ensure that students understand what an enthusiast is and what a skeptic is. For example, explain that a football enthusiast might be a person who not only cheers at football games, but also believes that football builds teamwork abilities, helps individuals work together as a group and helps individuals build strength. A football skeptic, on the other hand, might look on football as a dangerous sport that produces head injuries, resembles a battlefield and produces violent behavior among the individuals involved.

Divide the class into two groups: enthusiasts and skeptics. Charge each group to be “watchdogs” for words that fit their side. During the read aloud, point out “trigger words” that highlight changes or shifts from one side to another.

Read aloud the remainder of the prologue, stopping at the end of each paragraph (or more frequently, if needed) pointing out to students where Carr adds information that they can consider in their definitions of *net enthusiast* and *net skeptic*. Write these words/

phrases/ideas on the board next to the word it relates to. For example, in the paragraph beginning “The Internet is the latest medium to spur this debate,” note the phrase “...a new golden age of access” next to “*net enthusiast*” and the phrase “...a new dark age of mediocrity and narcissism” next to “*net skeptic*.”

Ask students to work in their academic notebooks to write down textual clues for the definitions of these two words and to develop their own definition, based on those clues. Provide students with the dictionary definitions of *enthusiast* and *skeptic*, or have them look up the definitions.

Enthusiast: (noun) A person who is filled with enthusiasm for some principle, pursuit, etc.; a person of ardent zeal.

Skeptic: (noun) A person who maintains a doubting attitude, as toward values, plans, statements or the character of others.

FROM THE STUDENT ACADEMIC NOTEBOOK

Your teacher will read for you the first three paragraphs of *The Shallows*, Prologue, The Watchdog and the Thief, pages one and two, helping you to understand and analyze this section.

As you read the remainder of the Prologue, look for words and phrases that will help you understand what Carr means by the terms, “net enthusiast” and “net skeptic,” and write those words and phrases, as well as your own definition for these terms, in the graphic organizer below. Your teacher will provide you with the dictionary definition of an “enthusiast” and a “skeptic.” What additional information does the definition provide for you?

| Net enthusiast | Net skeptic |
|---|---|
| Textual clues <hr/> <hr/> | Textual clues <hr/> <hr/> |
| My definition based on those clues <hr/> <hr/> | My definition based on those clues <hr/> <hr/> |
| Added information from the dictionary definition <hr/> <hr/> | Added information from the dictionary definition <hr/> <hr/> |
| Revised definition <hr/> <hr/> | Revised definition <hr/> <hr/> |

Ask several students to volunteer their revised definitions and ask them to explain.

Write students' revised definitions on the white board or project on a document camera.

Ask students to take note not only of the definitions of these terms but also of the format used to study them. Similar vocabulary work will be ongoing throughout the unit. Remind students that they will need to write their vocabulary work in readable prose, which means using complete sentences and standard grammar/usage.

Begin a *Shallows* vocabulary word wall chart, which is essentially a list of the words studied from each chapter that are tied specifically to the content of these chapters. For this lesson, the terms *net enthusiast* and *net skeptic* should be added to the word wall chart. In future lessons, students will choose their TOP FIVE words from the vocabulary studied for inclusion on the word wall chart.

Assessment:

Outcome 4:

Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

After they have completed their reading, refer students to the academic notebook, where they will find a reading log for the prologue. Model for students one or two answers to the question about negative effects of the Internet, including quotes with page numbers from the text. For example, teachers/students might note the following:

- “a popular medium molds what we see and how we see it” (page 3),
- “it changes who we are, as individuals and as a society” (page 3),
- we don’t notice the impacts because we’re too dazzled by the medium (page 3),
- etc.

FROM THE STUDENT ACADEMIC NOTEBOOK

Reading Log: Read *The Shallows*, Prologue: The Watchdog and the Thief, pages one through four.

As you read, take notes using the chart below. Be sure to include page numbers and cite the text.

In the prologue, Carr argues that we have been so dazzled by new communication technologies and the access they provide that we have neglected to see some potential negative effects they may have on us. In the space below, write down the possible negative effects that Carr mentions, including page numbers.

(space provided)

When students have completed their reading log for this section, ask them to compare with a shoulder partner. Share the evaluation rubric for reading logs with students. If time allows, ask them to carry out a self-evaluation.

Facilitate a brief whole-class discussion on this question: Based on your reading of the prologue, what argument do you expect the author to advance in this book? What evidence do you find for your chosen argument?

In the discussion, students should be able to see Carr is coming down on the side of the “net skeptics” and he is attempting to point out technology has the potential to, and perhaps is, changing people and changing society in negative ways.

Debrief the general results of the note-taking after discussion or after evaluation and indicate that part of students’ work in the unit is to develop detailed note-taking strategies designed to help them locate important text details for use later in the synthesis writing activity.

Assessment:

Outcome 2:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three

Gateway Activity (Approx. 35 minutes)

Reading Passage: Clarke, Arthur C. "A Necessary Tranquilizer." *Across The Board* 38.6 (2001): 67. MasterFILE Premier. Web. 6 September 2012 (see Teacher Resources).

Divide students into two groups and find a way to isolate the groups from each other. Both groups will be required to read a short passage and answer multiple-choice questions about the passage. In the first group, students should be subjected to multiple distractions, such as cell phones ringing, texting, video clips and/or music playing or other distractions as the teacher can manage them. The second group will be doing the same task, but with no distractions. This activity should be timed; make sure that all students stop working when time is called. Students will carry out this task in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

"A Necessary Tranquilizer" by Arthur C. Clarke

Directions: Read the following passage. Answer the questions that follow the passage by circling the letter of the correct answer. This is a timed reading assignment and you will have 10 minutes to read and answer the questions.

(1) We have all seen unbuttoned beer-bellies slumped in front of the TV set, and transistorized morons twitching down the street, puppets controlled by invisible disc jockeys. (2) These are not the highest representatives of our culture; but, tragically, they may be typical of the near future. (3) As we evolve a society oriented toward information, and move away from one based primarily on manufacture and transportation, there will be millions who cannot adapt to the change. (4) We may have no alternative but to use the lower electronic arts to keep them in a state of drugged placidity.

(5) For in the world of the future, the sort of mindless labor that has occupied 99 percent of mankind, for much more than 99 percent of its existence, will of course be largely taken over by machines. (6) Yet most people are bored to death without work—even work that they don't like. (7) In a workless world, therefore, only the highly educated will be able to flourish, or perhaps even to survive. (8) The rest are likely to destroy themselves and their environment out of sheer frustration. (9) This is no vision of the distant future; it is already happening, most of all in the decaying cities.

(10) So perhaps we should not despise TV soap operas if, during the turbulent transition period between our culture and real civilization, they serve as yet another opium for the masses. (11) This drug, at any rate, is cheap and harmless, serving to kill Time—for those many people who like it better dead.

1. According to Clarke, why will we need the TV set in the information age?
 - a. To numb the masses of people who cannot adapt to change.
 - b. To relieve the boredom people experience from working.
 - c. To assist with the transition to the information age.
 - d. To educate the masses who are workless.

2. Clarke suggests that the main purpose of work is
 - a. To allow the educated to flourish.
 - b. To produce competent citizenry.
 - c. To rebuild the decaying cities.
 - d. To alleviate boredom.

3. Which of the following best describes the tone of this passage?
 - a. Outraged
 - b. Sarcastic
 - c. Amused
 - d. Optimistic

4. In sentence 11, "This drug" is referring to:
 - a. Opium
 - b. Soap operas
 - c. TV
 - d. Education

5. Clarke makes all of the following predictions about man's ability to adapt to the change from a manufacturing based society to an information based society EXCEPT...
 - a. They will destroy the environment.
 - b. They will destroy themselves.
 - c. They will need opium to suppress frustration.
 - d. They will need to kill time with TV.

Number of your correct answers:

Average scores for the multitasking group:

Average scores for the non-multitasking group:

What is the class' definition of multitasking?

What connections can you make between this multitasking experiment and Carr's argument?

Once the experiment is over, grade the responses to the quiz as a whole class.

Correct answers to the quiz are as follows:

1. a; 2. d; 3. b; 4. b; 5. c

Ask students to write down in their academic notebooks the number of correct answers they received and determine the average scores for each group (i.e., number of answers correct divided by the number in the group). Put the average scores for both groups up so that all students can see it and discuss the results of the experiment. Based on your classroom results, what do students think about multitasking and its potential to interfere with comprehension? Refer to the survey question about multitasking.

As a whole group, develop a class definition of the term "multitasking" and ask students to write the class' definition in their academic notebook. Briefly discuss students' experiences with multitasking—do they see themselves as good multitaskers or poor multitaskers?

Ask the class to refer back to the discussion about Carr's prologue. What connections between this experiment and Carr's argument can you make? Ask students to write a few ideas about the connections in the academic notebook, then briefly discuss this as a whole class.

Assessment:

Outcome 3:

Students will participate in a data collection and analysis experiment designed to engage them with the content of the unit, to assist them in understanding how evidence can be used to substantiate claims and to develop a definition for “multitasking.”

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Student participates fully in in-class work, including assigned individual, small group and whole-class tasks and discussions. | No | Somewhat | Very |
| Total Points | 3 | | |

Activity Four

Consulting an Expert (Approx. 40 minutes)

Show students the video excerpt of an interview with researcher Clifford Nass.

The video excerpt and a full text of the interview can be found on PBS.org:

www.pbs.org/wgbh/pages/frontline/digitalnation/interviews/nass.html.

(Please note that the transcript of the interview in the academic notebook has been edited for length.)

FROM THE STUDENT ACADEMIC NOTEBOOK

Interview with Clifford Nass

Directions: Work either individually or with a partner to read and annotate the interview with Clifford Nass, a professor at Stanford University and the founder and direction of the Communication between Humans and Interactive Media (SHIME) Lab, below.

Annotation involves making notes in the margin, based on your reading of the text. For this annotation exercise, use the following symbols for your annotations:

M = anything that adds to or changes our understanding of the definition of “multitasking.”

B = big ideas that are important for our understanding of the experiment that Nass and his colleagues are doing.

In addition, underline the specific text that you are targeting with your annotation.

(Edited text of the interview provided.)

Tell students they will work with a partner (or individually) beginning with the page titled “Interview with Clifford Nass” in their academic notebooks to read and annotate the full interview with Nass by making notes in the margin and underlining the text. Tell the students that annotation is another of several strategies for note-taking that they will be using throughout the unit; eventually, they can select and use the best strategies for their own style of note-taking. Students should be using the following scheme:

M = anything that adds to or changes our understanding of the definition of “multitasking.”

B = big ideas that are important for our understanding of the experiment that Nass and his colleagues are doing.

Underline the words and phrases in the text that the annotation is referring to.

Read aloud the first two Interviewer/Nass interactions, beginning with “Interviewer: what is multitasking?” and ending with “...some special ability that psychologists had no idea about, or what’s going on?” After each response by Nass, stop and model the annotation scheme. For example, in Nass’s first response, you might write an M in the margin and underline “using information, multiple sources.” In the second response by Nass, you might write a B in the margin and underline, “how do they do it?” Other responses are certainly possible. After you have modeled the annotation process, explain to students that annotation is a strategy that they will be using throughout the unit to help make sense of text as they read it. This strategy will be particularly helpful—both in high school and in college—when students are asked to do a large quantity of reading.

After modeling the annotation strategy, ask students to work with a partner or on their own to complete their reading, underlining and annotation of the interview text.

Divide the class into two groups. Each group will be assigned to report out on a different topic related to this text. One group will use members’ annotations (“M”) and the interview with Nass to flesh out the class’s definition of multitasking. One group will use members’ annotations (“B”) and the interview with Nass to develop a summary of Nass’s research. Both groups will carry out this work in the academic notebook on the page titled “Nass’s Experiment and the Definition of Multitasking.” Each group should report out what it finds, and students should take notes on the contents of the reports.

Activity Five

Wrap-Up Discussion (Approx. 15 minutes)

Referring back to students’ notes from the Carr prologue, discuss:

Compare your reading of Carr’s prologue to the interview with Clifford Nass. Would Nass be considered a net enthusiast? Or a net skeptic? What evidence do you find that leads you to believe this?

Do you consider yourself a net enthusiast or a net skeptic? Why?

Is the Internet making us stupid? Use this discussion to refer back to all of the activities, readings and concepts that have been introduced, including: (a) students’ survey responses, (b) Carr’s ideas in the prologue, (c) data *collected through the multitasking experiment* and (d) Nass’s research on multitasking.

Activity Six

Homework Preparation (approx. 20 minutes)

For homework, students are assigned to read *The Shallows*, Chapter One: Hal and Me, pages five to 16 and to take notes in their academic notebooks while they read, using the T-chart provided. The focus of this reading is for students to collect the following information as they read:

- a) a collection of the evidence Carr is using to make his argument;
- b) a summary of the argument Carr is making in the chapter; and
- c) an evaluation of the types of evidence Carr uses.

To prepare students for this reading, read the first two paragraphs aloud, then stop to ask the following question:

In these two paragraphs, Carr is using a scene from a movie and his own experiences to help him make his argument. In what way have Carr’s reading experiences changed?

Ask students to continue reading silently, to the end of the first full paragraph on page eight (“... but they wouldn’t go back to the way things used to be”). For each paragraph (total of seven) students should write in the left-hand column of the academic notebook one statement indicating what the evidence presented in that paragraph includes. For example, for the first paragraph on page six (beginning “I think I know what’s going on”), students might write, “Carr describes how the Internet assists in his research, shopping and other activities.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Read *The Shallows*, Chapter One: Hal and Me, pages five to 16.

As you read, take notes using the chart below. Be sure to include page numbers and cite the text.

Write **statements** from each paragraph of the reading, including quotes with page numbers, that contain the evidence that Carr is using to make his argument.

(space provided)

Write **one sentence** capturing the “big idea” or the argument that Carr is making in this chapter.

(space provided)

Using your notes from the reading, what types of evidence does Carr provide? (ie., personal narrative, blog posts, etc.)?

(space provided)

While students are working on this activity, circulate to provide feedback. Afterwards, ask students to volunteer their statements and provide feedback. Students should complete this activity with Chapter One during the remainder of class or for homework.

Assessment:

Outcome 2:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Teacher
Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students to complete a survey, shared responses and discussed them.
2. Reviewed the course overview and examined “juicy sentences.”
3. Explained the purpose and contents of the unit.
4. Worked with students on the first three paragraphs of the prologue.
5. Helped students to establish definitions of *net enthusiast* and *net skeptic*.
6. Added the terms *net enthusiast* and *net skeptic* to *The Shallows* vocabulary word wall chart.
7. Modeled the reading log for the remainder of the prologue.
8. Facilitated a discussion on the argument and evidence found in the prologue.
9. Carried out a class multitasking experiment and discussed the results.
10. Showed a short video excerpt of an interview with researcher Clifford Nass.
11. Modeled the annotation process for the interview text reading and asked students to complete the process on their own; facilitated group reporting of the annotations.
12. Modeled the process for completing the reading log on Chapter One and assigned it for homework or for the remainder of class.

Lesson 2

The Rhetorical Précis as a Summarization Tool

Overview and Rationale:

Students will use their reading logs from Chapter One of *The Shallows* to examine the argument/claim/evidence structure in that section of text and to evaluate whether or not Carr's claim and the types of evidence used are convincing. Students will then be introduced to the rhetorical précis structure, with a focus on developing a four-sentence summary of essential information, including a citation, main point, evidence, conclusions drawn, audience and tone. The rhetorical précis will be a staple for the remainder of the semester's work and will provide a pattern to follow when writing summaries. Students will read an article by Marzano entitled "Summarizing to Comprehend" and will compile a bulleted list of its main ideas. They will then read a sample rhetorical précis and will spend time in class writing a rhetorical précis on a section of *The Shallows*. Marzano's article points out the patterns of development that are essential to greater understanding of a text; the rhetorical précis gives students a pattern to follow to identify key components of a piece of writing and evaluate the rhetorical strategies employed by authors. Finally, students will be introduced to Chapter Two of *The Shallows* and will be assigned to read this chapter and to complete a reading log either in class or for homework.

Tasks/Expected Outcomes:

1. Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
2. Students will demonstrate their ability to summarize and understand the rhetorical situation of a text by creating a rhetorical précis of an informational text.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and

- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.

Throughout this course, only grade 12 standards are used.

Materials:

- Text: “Summarizing to Comprehend” by Robert Marzano
- Academic notebooks
- Copies of *The Shallows: What the Internet is Doing to Our Brains*
- Sample rhetorical précis
- Slide show on the rhetorical précis

Timeframe:

105 minutes

Targeted Vocabulary:

Words that Help You Understand the Discipline

- Rhetorical précis
- Claim
- Evidence

Activity One

Reading for Claim and Evidence (Approx. 20 minutes)

Ask students to work with a small group or a partner in their academic notebooks to develop a central claim and a list of evidence they can all agree on, using their reading logs for Chapter One of *The Shallows*. Ask each of the groups to report out on the central claim and the evidence provided by Carr.

FROM THE STUDENT ACADEMIC NOTEBOOK

Developing a Claim and Evidence

Directions: Work with a small group or partner to develop a central claim statement and a list of evidence for Chapter One of *The Shallows*. Use your reading log for Chapter One (see page 17) and write your group’s claim statement and evidence in the space below.

(space provided)

Facilitate a whole-class discussion on the concluding question of the reading log: Using your notes from the reading, what types of evidence does Carr provide? Students should focus their attention on how convincing the types of evidence and the points that Carr makes are. For example, Carr cites the experiences of several individual bloggers (Karp, Friedman and Davis), a research study, a talk by a professor and his own personal experience with computers and the Internet. Ask students to discuss whether an individual’s experience or a research study is more convincing and why Carr might have chosen to include both in this chapter. Ensure that there is rich discussion and clear understanding by the class of the evidence used throughout the text.

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Two

Writing the Rhetorical Précis (Approx. 75 minutes)

Tell students they will today be learning to write a rhetorical précis, which is a four-sentence genre that provides a precise synthesis of an informational text. In the process of learning to write a rhetorical précis, students will develop summarizing abilities and the ability to examine the structure of an informational text and to explicitly state the author’s purpose and relationship with the audience. To learn how to write a rhetorical précis, students will read a short article and use it to write a practice rhetorical précis, then practice again with the chapter from Carr that they read for homework.

Show the Powerpoint explaining the details of a rhetorical précis.

Ask students to read the article, “Summarizing to Comprehend” by Robert Marzano in their academic notebooks. Encourage students to underline, highlight, take notes, annotate in the margins, etc., while they read.

FROM THE STUDENT ACADEMIC NOTEBOOK

Summarizing to Comprehend Robert J. Marzano

Directions: Read the short article below. You can underline, highlight, take notes, annotate in the margins, look up words in the dictionary, or use other tools that work for you while you read.

As the most cherished skill in the world of language arts, comprehension is also crucial to understanding texts in every other subject area. Although the process of comprehension is complex, at its core, comprehension is based on summarizing—restating content in a succinct manner that highlights the most crucial information. During the mid-1970s and early 1980s, the work of cognitive psychologists (see Kintsch, 1974; van Dijk, 1980; van Dijk & Kintsch, 1983) made this clear.

In a series of studies with teachers, we determined that summarizing strategies have a substantial average effect on student understanding of academic content. Across 17 experimental/ control studies that teachers conducted, we found that using summarizing strategies, on average, increased students' understanding of content by 19 percentile points (see Haystead & Marzano, 2009).

Summarizing Strategies That Work

As with all instructional strategies, we found that some approaches to summarizing are more effective than others. Five strategies appear to influence students' ability to comprehend text.

Strategy #1: Clarify what's important.

Summarizing strategies that do not emphasize text structure have the least powerful effect. Some summarizing strategies simply ask students to sort content into information that is either important or extraneous. The problem with this approach is that it provides no guidance as to how students might differentiate important from unimportant information.

To be effective, a summarizing strategy should help students discern the inherent structures in a text. For example, a story has a structure: There are main characters; there is rising and falling action; there are events that take place in certain locations, and so on. If students are aware that these elements are important aspects of stories, they are more likely to identify them and, consequently, more likely to comprehend the stories they read.

Strategy #2: Familiarize students with multiple text structures.

The story structure is familiar to students because they experience stories early on in their lives and because teachers typically teach story structures as a regular part of language arts instruction. Throughout their schooling, however, students will encounter many other kinds of text structures that are more expository in nature. Unless students recognize these structures, they may be less successful at comprehending the expository content in their textbooks and related readings. Important expository text structures include:

- *Description structures*, which describe characteristics of a particular person, place, or thing.
- *Generalization structures*, which begin with a general statement like, “There are a wide variety of consequences for breaking federal rules regarding carry-on baggage on commercial airplanes.” Examples illustrating the generalization follow.
- *Argument structures*, which begin with a statement that must be proven or supported. Proof or evidence follows the statement. Sometimes qualifiers identify exceptions to the proof or evidence provided. For example, an argument supporting global warming might list pieces of evidence that make the argument valid.
- *Definition Structures*, which begin by identifying a specific term and then describing the general category to which the term belongs, along with specific characteristics of the term that distinguish it from other terms within the category. For example, a text structure might articulate the characteristics of the process of commensalism, first explaining that it is a type of symbiosis and then showing how it is different from other types of symbiosis.
- *Comparison structures*, which identify two elements, such as commensalism and mutualism, and list how those elements are similar and dissimilar.
- *Problem/solution structures*, which begin by describing a problem such as “The problem of the divide in wealth between the upper 10 percent of people in the United States and everyone else can be addressed in a number of ways.” Possible solutions follow.

Strategy #3: Help students recognize layers.

Such expository structures will help students comprehend relatively short passages. However, long expository texts have structures layered within structures, and each layer represents a unique comprehension task.

For example, a section of text might start with a general statement and then provide specific examples of that generalization. But the discussion might also include a description of a person, place, or thing or a definition of a specific term.

Knowing that texts have many layers of structures is crucial to unlocking the meaning of extended expository discourse. Without this awareness, students might assume that one structure should organize the content; the presence of multiple structures may confuse them.

Strategy #4: Encourage graphic representations.

Along with identifying text structures, it is helpful for students to represent those structures graphically. For example, a student might represent a description structure graphically by drawing a circle that contains the element described, with spokes emanating from the circle noting the various characteristics describing that element. A student might represent a generalization structure by stating the generalization at the top of a chart, with the examples indented underneath to the right. The more subordinate an example is to the generalization, the farther the student would indent it to the right.

Strategy #5: Review essential terminology.

Even if a student recognizes that a section of a science text is organized as a

generalization pattern about relationships in nature, she will have little chance of comprehending that section if she does not understand important terms used in the text, such as meiosis, mitosis, symbiosis and the like. Teachers should carefully preview texts and ensure that students have at least a basic understanding of important terms.

Making Sense of the Text

Comprehension is crucial to learning—and effective comprehension depends on one’s ability to recognize the structures inherent in a text. Spending more time and energy teaching text structures to students and then helping them recognize these structures in their reading can enhance students’ ability to comprehend a wide variety of texts.

References

Haystead, M. W., & Marzano, R. J. (2009). *Meta-analytic synthesis of studies conducted at Marzano Research Laboratory on instructional strategies*. Englewood, CO: Marzano Research Laboratory.

Kintsch, W. (1974). *The representation of meaning in memory*. Hillsdale, NJ: Erlbaum.

van Dijk, T. A. (1980). *Macrostructures*. Hillsdale, NJ: Erlbaum.

van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. Hillsdale, NJ: Erlbaum.

Marzano, Robert J. “Summarizing To Comprehend.” *Educational Leadership* 67.6 (2010): 83. Print.

Once students have completed their reading of the article, instruct students to write a bulleted list of the main ideas of the article, using their own words, in the space provided in the academic notebook. When students have completed their bulleted lists of main ideas, have them compare their bulleted lists with a partner. Working with their partner, they should compare the summaries and discuss how much of the information they selected as being essential matches with what their partner selected.

FROM THE STUDENT ACADEMIC NOTEBOOK

In the section below, write a bulleted list of the essential ideas of “Summarizing to Comprehend,” using your own words.

(space provided)

Compare your bulleted list with one written by a partner. What ideas did you both select as being essential to the summary?

(space provided)

Lead a class discussion of the main ideas represented in the article; create a list of main ideas on the board. Analyze the list and determine if some of the ideas are non-essential and could be removed from the list. Determine if essential ideas may have been overlooked and need to be added to the list.

Discuss with the class the structure of organization for good quality writing. Most pieces of writing:

- a. Begin with an introduction that ends with a thesis.
- b. Provide a body of evidence, examples or anecdotes that illustrate the thesis.
- c. End with conclusions drawn.
- d. Use language that is directed to a particular audience and expresses tone.

Explain to students that the rhetorical précis allows us to create a synthesis of all of this information in a tight, concise paragraph.

Examine with students the Rhetorical Précis Guidelines and Sample, based on the Marzano article, in the academic notebook. Explain what a rhetorical précis is by looking at the 4 sentences and evaluating the information provided in each sentence.

Show the MLA citation for the Marzano article (in the academic notebook) and label each section of the citation for students. Refer students to MLA Citation Guide, also in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Rhetorical Précis Guidelines and Sample

First, provide the MLA citation for the text on which you are creating a rhetorical précis. (See MLA citation guide in the academic notebook for more help with citations.)

If it is an **electronic journal, the MLA citation will look like this:**

Marzano, Robert J. "Summarizing To Comprehend." *Educational Leadership* 67.6 (2010): 83. MasterFILE Premier. Web. 6 Sept. 2012.

If it is a **print journal, the MLA citation will look like this:**

Marzano, Robert J. "Summarizing To Comprehend." *Educational Leadership* 67.6 (2010): 83. Print.

Sentence 1: The first sentence should include the author's name, the title of the work, the date of publication in parentheses, a rhetorically accurate verb (such as asserts, argues, suggests, implies, claims), and a that-clause containing the major assertion (thesis statement) of the work.

EXAMPLE: Robert Marzano in *Summarizing to Comprehend* (2010) asserts that teachers will see an increase in student comprehension when students are well-versed in effective summarizing strategies.

Sentence 2: The second sentence should: (a) explain how the author develops and/or supports the thesis, (b) discuss how the author accomplishes his/her task, (c) support the strong verb used in sentence one, and (d) cite where to locate the specific points addressed.

EXAMPLE: Marzano supports this assertion by reviewing five key strategies that lead to higher levels of comprehension; some of these strategies include: emphasizing text structure to differentiate between essential and non-essential information; learning to decipher expository text structures such as description, argumentation, definition and comparison; recognizing layers within expository text; creating graphic representations of text structure; and finally, defining essential vocabulary within the text.

Sentence 3: The third sentence should state the author’s apparent purpose, followed by an “in order to” phrase.

EXAMPLE: The writer concludes that in order for students to improve reading comprehension, they must be able to identify developmental patterns within a text.

Sentence 4: The fourth sentence should describe the intended audience and/or the relationship the author establishes with the audience.

EXAMPLE: The writer establishes a direct tone to convince his audience of educators that it is vital to use instructional strategies that highlight multiple text structures in order to increase comprehension.

Tell students that they will work with a partner or a small group to write a rhetorical précis for pages five to 10 of *The Shallows*, Chapter One, including an MLA citation for the book, in their academic notebooks on the page titled “Practicing the Rhetorical Précis.” They can use their reading log, which was already completed on this chapter, and they should use the same pattern that is present in the powerpoint and in the sample rhetorical précis. As students work with a partner or small group, the teacher should move around the room, providing feedback and assistance. Once students have completed the rhetorical précis, ask for volunteers or call on partners to provide their rhetorical précis for the class. As a whole class, examine each sentence of each practice rhetorical précis and see where the sentences meet or don’t meet the pattern. Make revisions to the practice rhetorical précis to improve their quality.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: Write a rhetorical précis of Chapter One from *The Shallows* in the space below, following the pattern for a rhetorical précis.

(space provided)

Directions: In the space below, write an MLA citation for *The Shallows*, paying attention to the sample MLA book citation.

Sample MLA book citation (print):

Carr, Nicholas G. *The Big Switch: Rewiring the World, from Edison to Google*. New York: W.W. Norton, 2008. Print.

(space provided)

Assessment:

Outcome 2:

Students will demonstrate their ability to summarize and understand the rhetorical situation of a text by creating a rhetorical précis of an informational text.

Rhetorical Précis of Chapter One pages five to10

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Adheres to the form of the rhetorical précis (MLA citation, formatting and sentence formulas). | No | Somewhat | Very |
| Content thoughtfully and accurately represents the original text in a synthesis, without using any part of the original text or abstract. | No | Somewhat | Very |
| Sentence structure adheres to standard conventions of grammar, usage and mechanics. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three

Note-Taking on Carr’s Chapter 2 (Approx. 10 minutes)

Remind students of what they determined were the central arguments and the types of evidence Carr provides in Chapter One. Ask students to skim Chapter Two and to make predictions about both the continuation of the argument that will be included here and the content of the evidence provided, based on their reading of and work with Chapter One. Explain to students they will be carrying out the same process with Chapter Two, writing down the evidence Carr uses to make his argument in Chapter Two and writing a one-sentence statement of Carr’s argument. This text-dependent work is designed to help students to engage with the text while using note-taking, an important tool for college-level work.

In the remainder of class or for homework, students should read Chapter Two: “The Vital Paths” and “A Digression” pages 17-38 in the Carr central text. Students should complete the reading log for this chapter.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students to work with a group to develop a central claim and a list of evidence used in Chapter One, then facilitated a whole-class discussion to evaluate the types of evidence Carr uses.
2. Explained the purpose for writing a rhetorical précis and showed the Powerpoint slides on the rhetorical précis.
3. Asked students to read “Summarizing to Comprehend” and to write a bulleted list of the article’s main ideas and compare their list with a partner.
4. Facilitated a whole-class effort to establish a list of the main ideas of the article.
5. Discussed with students the structure of organization for quality writing.
6. Shared the sample rhetorical précis for the Marzano article and evaluated each of the four sentences with students.
7. Labeled each section of the MLA citation for the Marzano article.
8. Asked students to work with a partner or small group to write a rhetorical précis for pages five to 10 of *The Shallows* and examined samples from students’ work as a whole class.
9. Introduced students to Chapter Two of *The Shallows* and the reading log assignment for that chapter.
10. Asked students to complete their reading of Chapter Two of *The Shallows* and the reading log for homework.

Lesson 3

Vital Paths

Overview and Rationale:

In this lesson, students will debrief the process of writing a rhetorical précis. Students will then study both teacher- and student-selected vocabulary words, collecting both definitional and contextual information from the central text, and will participate in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories. Students will use their notes taken on Carr’s Chapter Two (“The Vital Paths”) and the vocabulary words they have studied to understand the structure and content of Carr’s argument as preparation for developing their own stance on Carr’s argument and collecting information for a synthesis of evidence supporting their stance. Students will be asked to examine the types of evidence that Carr provides (i.e., historical events, quotes from experts, personal anecdotes and other types) and to evaluate the effectiveness of each type of evidence. In addition, students will be introduced to the culminating project for this unit and will begin examining the three choices of quotes for their response to this project. The focus here is to ask students to begin analyzing the rhetorical structure of the argument, the content of the argument, unfamiliar words used in the argument, and to begin developing their own positions on that argument.

Tasks/Expected Outcomes:

1. Students will debrief their experience writing the rhetorical précis, examine the skills that they are developing through this writing practice and be provided with an opportunity to revise their rhetorical précis.
2. Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.
3. Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
4. Students will demonstrate their ability to evaluate evidence and recognize the types of evidence that can be used to support a claim in argument writing.
5. Students will demonstrate their understanding of the writing task and the expectations for success.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
 - (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism,

- antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
- (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;
 - (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers’ questions and contradictory information.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses foreffect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebooks
- Index cards and markers
- Chart paper
- Copies of *The Shallows: What the Internet is Doing to Our Brains*

Timeframe:

145 minutes

Targeted Vocabulary:

Words that Help You Understand the Discipline

- Rhetorical précis
- Claim
- Evidence

Words from Carr's *The Shallows*, Chapter 2

- philology (17)
- concentric (18)
- ingenious (18)
- telegraphic (18)
- appendages (19)
- immutability (21)
- malleable (21)
- plasticity (21)
- tenuous (23)
- nihilism (23)
- peripheral (25)
- neuroplasticity (25)
- meticulous (26)
- habituated (28)
- empiricism (28)
- rationalism (28)
- determinism (34)

Activity One

Debrief of Writing Précis (Approx. 30 minutes)

Students should share their précis of Carr's Chapter One, pages five to 10 (this précis was written on the page titled "Practicing the Rhetorical Précis in the academic notebook) with a partner or small group. In the small group, students should compare essential ideas and come to a consensus on the essential ideas represented in this section of the book.

Ask two to three students to volunteer to share their rhetorical précis with the class; use the document camera or other technology to allow everyone to see the samples.

Debrief the process of writing a rhetorical précis with students by asking the following questions:

- What kinds of skills, knowledge and ways of thinking did you have to use in order to read this material and write the rhetorical précis?
- What might you do differently the next time you are asked to write one?
- How might writing a rhetorical précis be helpful in reading and writing tasks outside of this class?

Students should recognize that they will need to be prepared to write a rhetorical précis again for this class and that the skills involved in writing a rhetorical précis will be applicable to much of their college-level work; indeed, these skills should also apply to other classes they may be currently taking in high school.

Based on their sharing and feedback provided by their peers through the discussion of the sample rhetorical précis, students may wish to revise their initial drafts. They should be provided an opportunity to do so.

Assessment:

Outcome 1:

Students will debrief their experience writing the rhetorical précis, examine the skills they are developing through this writing practice and be provided with an opportunity to revise their rhetorical précis.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in class discussion and work on rhetorical précis. | No | Somewhat | Very |
| Discussion of the skills involved in writing a rhetorical précis indicates an understanding of the transferability of these skills. | No | Somewhat | Very |
| Revise précis based on class work and discussion. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Two

Examining the Prompts for the Synthesis Essay (Approx. 20 minutes)

Ask the class to examine the prompt for the synthesis paper, which can be found on the page titled “Synthesis Essay Assignment” in the academic notebook and is seen below. With the class, read through the assignment description and the three quotes. Ask students to write a short response to the two questions that follow.

FROM THE STUDENT ACADEMIC NOTEBOOK

Informational/Explanatory/ Synthesis 19

Directions: Read the assignment description of the culmination project of this unit. Then respond to the prompt below.

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading Nicholas Carr’s *The Shallows: What the Internet is Doing to our Brains* and other informational texts on the impact of information technology, write a synthesis essay in which you support a thesis based on one of the following quotes from Carr’s text. Support your position with evidence from the texts.

“With the exception of alphabets and number systems, the Net may well be the single most powerful mind-altering technology that has ever come into general use. At the very least, it’s the most powerful that has come along since the book” (Carr,118).

“Karp, Friedman, and Davis—all well-educated men with a keenness for writing—seem fairly sanguine about the decay of their faculties for reading and concentrating. All things considered, they say, the benefits they get from using the Net—quick access to loads of information, potent searching and filtering tools, an easy way to share their opinions with a small but interested audience—make up for the loss of their ability to sit still and turn the pages of a book or magazine” (Carr, 8).

“The price we pay to assume technology’s power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities—those for reason, perception, memory, emotion” (Carr, 211).

Use your best voice, academic language, and third person point of view. Incorporate at least three sources (at least one from our class discussions) to support your ideas. Include at least three direct quotes; all quotes and paraphrased information must include a parenthetical citation. The last page of your paper should be your works cited page. Follow all MLA guidelines for formatting and documentation.

You will also give a three-minute presentation highlighting the main ideas presented in your essay. Your presentation should:

- include your thesis statement,
- include at least three main points that support your thesis,
- include at least three pictures/charts/graphs (some visual representation) of the three main points, and
- follow all MLA guidelines for formatting and documentation.

Select one of the three quotes from Carr that interests you the most.

What kind of ideas and thoughts do you have in response to this prompt? What have you seen so far in Carr’s text or in the other texts you have read that seems to connect to this quote?

(space provided)

Review each student’s response to ensure she/he understands the task. Have students share responses so that students can hear/know what each other is doing and encourage them to help each other when appropriate.

Share the scoring rubric for the writing assignment. Review each of the seven scoring elements in the rubric. Ask students to discuss what each element means in terms of their preparation for and writing of the paper.

Tell students that any writing project will have a timeline involved. Model for students a common or sample timeline for this particular writing project using the page titled “Timeline for Writing Synthesis Presentation and Paper” in the academic notebook. Begin by clarifying the due date for the synthesis essay draft. Ask students to fill in their own estimates of how long each task will take and to refer back to this timeline throughout the project. Note that students will be working at different paces, so in this particular project, teachers will need to have flexibility within the class’s timeline.

FROM THE STUDENT ACADEMIC NOTEBOOK

Timeline for Writing Synthesis Presentation and Paper

Directions:

In the spaces below, create a timeline for completion of this project.

| | How and when will I do this? | What resources do I need? |
|----------------------------------|------------------------------|---------------------------|
| Review Assignment | | |
| Collect notes and look for holes | | |
| Collect additional research | | |
| Write a summary paragraph | | |
| Create an outline | | |
| Write a rough draft | | |
| Create and give a presentation | | |
| Revise and edit | | |
| Submit final draft | | |

Assessments:

Outcome 1:

Students will complete preparatory work toward the synthesis essay assignment and will write a draft of a synthesis essay.

Timeline

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Student’s timeline presents a “doable” estimation of time allowances, within the time allotted for the draft. | No | Somewhat | Very |
| Student’s timeline shows awareness of the student’s strengths and weaknesses in writing. | No | Somewhat | Very |
| Student’s timeline shows awareness of the process of writing an essay. | No | Somewhat | Very |
| Total Points | 9 | | |

Outcome 5:

Students will demonstrate an understanding of the writing task and expectations for success.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Responds to prompt questions with accurate assessment of what the prompt means and entails. | No | Somewhat | Very |
| Identifies potential points of evidence to support one of the selected quotes. | No | Somewhat | Very |
| Participates in the discussion of the scoring rubric and contributes to defining the elements. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three

Vocabulary (Approx. 50 minutes)

Ask students to open their academic notebooks to the page titled “Vocabulary from Carr’s Chapter Two.” Remind students of the work that was done in class with developing definitions for *net enthusiast* and *net skeptic* in the previous week. Tell students that they will now work with a list of vocabulary, pulled from Chapter Two of Carr’s central text, as well as their own self-selected vocabulary words from that chapter, to examine the claim and evidence laid out in Chapter Two more thoroughly and to reinforce the importance of using the context to help them understand how the word is being used in the text.

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Carr’s Chapter Two, “Vital Paths”

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Two. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|------------------|-------------------|----------------------|------------------|
| philology (17) | immutability (21) | nihilism (23) | habituated (28) |
| concentric (18) | malleable (21) | peripheral (25) | empiricism (28) |
| ingenious (18) | plasticity (21) | neuroplasticity (25) | rationalism (28) |
| telegraphic (18) | tenuous (23) | meticulous (26) | determinism (34) |
| appendages (19) | | | |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ | |

| | |
|--|---|
| Word I have chosen from Chapter Two: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

Choose one of the words from the choice list and model the kind of work expected from students, using the sample provided below and projecting this modeling on the document camera or using the white board.

As you work through the sample on the next page with students, you should emphasize how students can use the dictionary definition, their own understanding of the word or its parts, and the context of the word to determine a useful meaning that helps understand the text.

| | |
|--|---|
| Word: <i>philology</i> | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <i>“In 1879, his health problems worsening, he’d been forced to resign his post as a professor of philology at the University of Basel.” (page 17)</i> | |
| Dictionary definition: <i>the branch of knowledge that deals with the structure, historical development, and relationships of a language or languages.</i> | |
| What in the world does that mean? <i>I know that the suffix ‘ology’ means the study of. So I think it means that philology is the study of language.</i> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <i>It seems that Nietzsche was a professor at the University of Basel, one who studied and taught languages, but he had to resign because of health problems.</i> | |

After modeling this vocabulary work for students, ask them to work on their own in their academic notebooks to complete the chart for each of the two words that they have chosen. Remind students that they should choose one word from the list provided and one word from the chapter that is unfamiliar to them.

When students have completed their charts, ask them to write their two words on index cards and to write both the definition and the context (i.e., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *The Shallows*, and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Explain to students that an open sort will require them to sort the words that they have collected into categories. For example, the words *malleable*, *plasticity* and *neuroplasticity* might be placed into a category called “changing” because all of them indicate conditions that involve change. Students can develop their own categories, but all of the members of the group must agree to the categories they have developed, and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Remind students they will continue to collect vocabulary words from the texts they read and that it is important they learn to notice how word knowledge can contribute to their comprehension of texts and how to find the meanings of words unfamiliar to them.

Ask students to review the words they studied in their small group and to pull from those words their TOP FIVE words. The words they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapter Two. Ask each group to report out the words they chose and why they chose them, ie., in what way do their TOP FIVE words connect to or remind them of the content of Chapter Two. Make sure that words chosen by the students as TOP FIVE are placed on *The Shallows* vocabulary word wall chart.

Assessment:

Outcome 2:

Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Four

Argument/Claim/Evidence Structure (Approx. 45 minutes)

Ask three to four students to volunteer to provide their one-sentence statements of Carr’s argument in this chapter from their reading log for Chapter Two in the academic notebook (completed during class or for homework).

Write those statements on the white board or display them on the document camera. As a whole class, ask students to compare those and to note differences. It should be clear to students that Carr’s central argument in this section is that the brain is “plastic” or “malleable” and that, as he says, “We become, neurologically, what we think” (page 33). Explain to students that this statement can be seen as a claim.

Explain to students what a claim is:

- A claim is typically a statement of the point that the author is trying to make.
- A good claim should be one that is debatable, one that reasonable people can hold different ideas on.
- It should take a strong stand, and it should have a quality antithesis, or counter-argument.

Explain to students that we will be spending the next section of class examining the evidence Carr uses to make his claim (our brains are capable of changing) in Chapter Two: The Vital Paths, and how he structures this evidence in the chapter. Students will be drawing from their reading log of the chapter (in the academic notebook) to assist in providing details and structure for the chapter.

On the white board or document camera, create a concept map of Chapter Two, working with students both to organize and help them understand their reading of this chapter. There are many possibilities for how this concept map might look, but one way is presented below.

During the development of the concept map as a whole class, be consistent about referring students back to the text when questions arise. Remind students that they are attempting, here, to develop a map of the text that will help them to see what evidence is being presented and to evaluate both the structure of the evidence and its quality.



Once this concept map is completed, review with students some of the words from the vocabulary list for this chapter that are particularly relevant to Carr’s argument, such as *malleable*, *plasticity*, *neuroplasticity*. Ensure that students are connecting these important concept words to Carr’s claim in this chapter.

Ask students to work with a partner to make a list of the types of evidence that Carr provides (i.e., historical events, quotes from experts, personal anecdotes, and other types) in the academic notebook. Collect from students a list of the evidence types generated by partner work and write this list on a white board or project it on a document camera.

As a whole class, discuss each type of evidence, particularly focusing on how convincing each type is. Ask students to rank the list of evidence types, in terms of how convincing each type is for the argument.

Remind students that in English classes, part of what students do is to read for the structure of the argument. In other words, they are reading to examine the claim and the evidence provided for that claim.

Remind students of their one-sentence summaries of Carr’s argument in Chapter Two. Tell students that the title of Chapter Three is “Tools of the Mind.” Ask students to predict what Carr’s next step in his argument will be, based on this title.

For homework or during the remainder of class, students should read Chapter Three. As they read, they should complete the reading log and the vocabulary work in their academic notebook for this section of the text.

Assessment:

Outcome 4:

Students will demonstrate their ability to evaluate evidence and recognize the types of evidence that can be used to support a claim in argument writing.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in class discussion and work on listing evidence drawn from Carr’s Chapter 2. | No | Somewhat | Very |
| Discusses evaluation of the evidence types and indicates an understanding of the relative value of various types of evidence. | No | Somewhat | Very |
| Total Points | 6 | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Debriefed the rhetorical précis writing process.
2. Reviewed the synthesis essay prompt with students and had them do some preliminary writing on a prompt, followed by a class discussion.
3. Modeled vocabulary study for students using a sample vocabulary word from the list for Chapter Two.
4. Asked students to collect vocabulary information, share it with a small group, carry out a sorting process and share their categories with the whole class.
5. Asked students to volunteer their one-sentence statements about Carr’s Chapter Two and compared those statements.
6. Gave students information about claims.
7. With students, developed a concept map of Chapter Two.
8. Reviewed important vocabulary words related to the concepts in Carr’s argument.
9. Asked students to develop a list of the types of evidence used by Carr in Chapter Two.
10. Worked with students to evaluate the types of evidence used by Carr in Chapter Two.
11. Asked students to predict, based on their reading of Chapter Two, what will be presented in Chapter Three, “Tools of the Mind.”
12. Assigned reading, reading log and vocabulary work for Chapter Three.

Lesson 4

The Mind, the Page and a Synthesis

Overview and Rationale:

In this lesson, students will continue to work through the book-length argument presented by Nicholas Carr in *The Shallows*, reading chapters three and four and taking detailed notes in reading logs in the academic notebook. The lesson plan begins with examination of vocabulary pulled from Chapter Three. Students will use the vocabulary words for which they have been collecting both definitional and contextual information from the central text as an instructional tool for peers in their class, participating in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories. The process of open sorting, which students carry out during this lesson, is designed to get students talking about the words from the chapter and to examine those words in comparison to the other words selected by students. The examination of these words is followed by a discussion of the concepts found in Chapter Three and the development of one-sentence claims for the chapter. Next, students will receive teacher modeling of annotation on the opening paragraphs of Chapter Four and will be assigned to complete the reading and annotation of Chapter Four, along with a reading log and vocabulary work for this chapter. Students will then participate in a whole-class discussion of Chapter Four and will read excerpts from writings by Benjamin Franklin, Ralph Waldo Emerson and Frederick Douglass. Students will examine those readings to determine the main idea, connections with each other and connections with Carr's argument. Students will receive teacher modeling of synthesis writing and will begin reading Chapter Five, noticing synthesis techniques within the opening paragraphs. Students will be assigned to complete their reading of Chapter Five, along with the reading log and vocabulary work for the chapter.

Tasks/Expected Outcomes:

1. Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
2. Students will demonstrate their ability to understand and analyze Carr's content, specifically the history of early technologies and how those technologies impact humanity.
3. Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using context clues and dictionaries.
4. Students will read several documents, collecting information on how those documents connect or disconnect with the ideas in the central text, and they will receive modeling on synthesis in preparation for writing the synthesis essay.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (A) analyze how complex plot structures (e.g., subplots) and devices (e.g., foreshadowing, flashbacks, suspense) function and advance the action in a work of fiction;
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
 - (C) compare and contrast the effects of different forms of narration across various genres of fiction.
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
- (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
- (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
- (D) edit drafts for grammar, mechanics, and spelling; and
- (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (A) write an analytical essay of sufficient length that includes:
- (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;

- (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
- (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;
- (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers’ questions and contradictory information.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author’s purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer’s purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 6. Analyze imagery in literary texts.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebooks
- Copies of *The Shallows: What the Internet is Doing to Our Brains*
- Passages from Franklin, Emerson and Douglass (see teacher resources and academic notebook)

Timeframe:

195 minutes

Targeted Vocabulary:

Words that Help You Understand the Discipline

- determinists
- instrumentalists

Words from Carr's *The Shallows*, Chapter 3

- maturation (39)
- topographic (40)
- cartography (40)
- egocentric (40)
- theodolite (40)
- cyclical (41)
- agrarian (41)
- synchronization (42)
- proliferation (43)
- instrumentalists (46)
- determinists (46)
- metallurgy (48)
- conundrum (49)
- proxies (49)
- logographic (51)
- logosyllabic (53)

Words from Carr's *The Shallows*, Chapter 4

- ephemera (58)
- scribes (59)
- parchment (59)
- stylus (59)
- artisan (60)
- codex (60)
- cognitive (61)
- mellifluous (62)
- obsolete (62)
- antithetical (63)
- anomaly (64)
- seditious (65)
- propagation (67)
- adept (69)
- gendarmes (70)
- tawdry (71)
- symbiotic (74)
- idiosyncratic (75)
- nonlinear (76)

Activity One

Vocabulary and Concepts from Chapter 3 (Approx. 50 minutes)

Ask students to open their academic notebooks to the page titled “Vocabulary from Carr’s Chapter Three.” Remind students of the vocabulary work done in the previous week. Students should have completed their vocabulary work for homework, using one word from the choice list and one self-selected word from Chapter Three.

The list of words that students can choose from for Chapter Three is in the academic notebook, (pictured on the next page), as well as the charts they should have completed for homework.

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Carr’s Chapter Three, “Tools of the Mind”

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Three. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|------------------|----------------------|-----------------------|-------------------|
| maturation (39) | theodolite (40) | proliferation (43) | conundrum (49) |
| topographic (40) | cyclical (41) | instrumentalists (46) | proxies (49) |
| cartography (40) | agrarian (41) | determinists (46) | logographic (51) |
| egocentric (40) | synchronization (42) | metallurgy (48) | logosyllabic (53) |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ | |

| | |
|--|---|
| Word I have chosen from Chapter Three: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

If necessary, choose one of the words from the choice list and model for a second time the kind of work we expect from students, referring back to the sample provided in Lesson Three or using another sample taken from the list of choice words for Chapter Three and projecting this modeling on the document camera or using the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected from Chapter Three. Ask students to write their two words on index card and to write both the definition and the context (i.e., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *The Shallows*, and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories, but all of the members of the group must agree to the

categories they have developed and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Ask students to review the words they studied in their small group and to pull from those words their TOP FIVE words. The words they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapter Three. Ask each group to report out the words they chose and why they chose them, i.e., in what way do their TOP FIVE words connect to or remind them of the content of Chapter Three.

Make sure that the words chosen as top five are placed on *The Shallows* vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

Facilitate a brief discussion on these questions:

Let's look at some of the words on the choice list for Chapter Three, specifically *instrumentalists* and *determinists*. What is the meaning of these two words in this chapter? How is Carr's argument in this chapter connected to the meaning of those words?

Students should know from their vocabulary study that Carr describes *instrumentalists* as those who see technology as a tool that doesn't impact its user, whereas he describes *determinists* as those who see technologies as having a direct impact on human history (see page 46 in *The Shallows* for more). They should also see that Carr is in the progress of synthesizing information to create an argument that our current use of technology is changing the way we think.

Assessment:

Outcome 3:

Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using context clues and dictionaries.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Two

Technological Developments and Their Impact on Our Thinking (Chapter 3)
(Approx. 40 minutes)

Ask students to turn to the reading log for Carr’s Chapter Three. Facilitate a whole-class discussion based on these or similar questions:

According to Carr, how can our intellectual maturation be traced through mapmaking? How do the historical advances in mapmaking reflect changes in society? (Chapter Three, pages 39-41).

Here, students should see that the types of maps people draw as they go from infants to adults change in ways that can be connected to their individual, cognitive and social development. In addition, students should be able to see that Carr is arguing the technology of the map also reflects changes in the development of society, from rudimentary scratches in stone to precision, abstract thinking and specific use. Students should also note Carr is arguing the technology of the map changed the way humans are able think—giving them a way to “understand the unseen forces that shape [man’s] surroundings and his existence” (page 41).

What was the historical progression of the mechanical clock? What influenced the advances of the mechanical clock? (Chapter Three, pages 41-44).

In responses to this question, students should note that the clock progressed from a cyclical flow (sundials, sand clocks, water clocks) to something much more precise. In addition, the need to make sure that time was synchronized across distances and making clocks elaborate and beautiful moved into the need for personal, accurate clocks such as wristwatches. Students should also see that Carr’s discussion of the progression of time is designed to further his argument, that the technology of the clock changed the way we think.

What is Carr’s purpose in presenting this information about mapmaking and time keeping?

Students should see, by the end of this discussion, that Carr is arguing that the technologies cited (having to do with mapmaking and with timekeeping) were significant in that they advanced mankind’s development of abstract reasoning.

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze Carr’s content, specifically the history of early technologies and how those technologies impact humanity.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Participates in class discussion and work on textual information regarding the evolution of mapmaking and the mechanical clock and the impact of these technologies on humanity. | No | Somewhat | Very |
| Discussion of the textual information indicates an understanding of the content of Chapter Three. | No | Somewhat | Very |
| Total Points | 6 | | |

Break the class into groups of three to four students; give each group one of the assignments below, which can be found in the academic notebook on the page titled “Developing a Claim.” These activities focus on how Carr goes about constructing his argument. The goal of this activity is to break down the organization of ideas and look closely at what Carr is building in this chapter.

FROM THE STUDENT ACADEMIC NOTEBOOK

Developing a Claim

Directions: In the space below, follow the directions for your group’s assignment related to Carr’s Chapter Three. Remember that a claim statement should fit the following criteria:

- A claim is typically a statement of the point that the author is trying to make.
- A good claim should be one that is debatable, one that reasonable people can hold different ideas on.
- It should take a strong stand, and it should have a quality antithesis, or counter-argument.

Group 1: Examine the section of Chapter Three that begins on page 44 and ends on page 50. In this section, Carr categorizes technological tools and defines determinists and instrumentalists. With your group members, write a one-sentence claim that Carr is making in this section.

Group 2: Examine the section of Chapter Three that begins on page 50 and ends on page 57. In this section, Carr describes how intellectual technologies of reading and writing shape our brains. With your group members, write a one-sentence claim that Carr is making in this section.

(space provided)

Each group should choose a representative to write its one-sentence claim statement on the white board or to provide it neatly written for the document camera. Focus first on the groups that worked with the first section of Chapter Three (pages 44-50), and then on the groups that worked with the last section of Chapter Three, (pages 50-57). For each section, ensure that students critically examine the claim statements for their fit with the criteria for claims established in Lesson Three, including the following:

- A claim is typically a statement of the point that the author is trying to make.
- A good claim should be one that is debatable, one that reasonable people can hold different ideas on.
- It should take a strong stand, and it should have a quality antithesis, or counterargument.

Ask the class as a whole to examine each of the claims provided by the groups and to determine whether or not the claim statements meet those criteria. Revise as necessary to fit.

To wrap up this section of the reading, facilitate a whole-class discussion on the following question:

Based on your reading of Chapter Three and the claim statements that you developed in relation to Chapter Three, what do you predict Carr will eventually be suggesting about the impact of modern technology and the Internet on the human brain?

Responses to this discussion will vary, but students should be able to see that Carr is going to argue that modern technology is having a detrimental impact on the way in which people think. During the discussion, encourage students to refer back to their reading and to the text specifically to support their predictions for the remainder of the text. Do this by writing down on the white board or a document camera the predictions that students develop and asking them, “What in the central text gives you that idea”? so that they will refer back to the text. Require page numbers and specific quotes.

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three

Text Annotation (Approx. 30 minutes)

Ask students to turn to page 58 in *The Shallows*. Tell students that they will be working through the beginning of this chapter while also learning to annotate text in a way that will be useful to them in college. Remind students that they have already done a simple version of annotation when they read the interview with researcher Clifford Nass and annotated it in the margins with an “M” or a “B.” Today they will learn a more advanced and sophisticated way of annotating text that is particularly useful for non-fiction.

Explain to students that annotation involves writing words and phrases in the margin of a text. The words and phrases that they write could be a summary, a question, a connection or another interesting idea that they have while reading.

Model the process of annotation by reading aloud each of the first three paragraphs of Chapter Four. Use a document camera, if available, to show the text of your book. After each paragraph, model annotations in the margin of each. For example, after the first paragraph, write, “early writing was fragile.” After the second paragraph, write, “cuneiform – official writing” toward the beginning of the paragraph and “clay tablets for longer writing” at the end of the paragraph. After the third paragraph, write “papyrus was easier to use” and “scrolls were frequently used.”

Have students work on their own or with a partner to read through page 67, making annotations as they read. If students are prohibited from writing in the margins, encourage them to use sticky notes, separate pages, or another means of making annotations. Circulate as necessary to ensure that students are working well and understanding the annotating process.

Ask students to share out some of the annotations they made.

Model for students, using the annotations made from *The Shallows*, pages 58-67 to begin answering the first question in the reading log for Chapter Four, “In the space below, trace the history of the book.” Write something like the following:

Writing technologies have progressed from scratch marks on natural products, to cuneiform on clay tablets, to scrolls made from papyrus. Because papyrus scrolls were expensive, people started using wax tablets...

Continue as much as is needed to assist students with using their annotations to develop what is basically a summary of the section of text. Use class time to have students complete the answer to this question.

For homework or during the remainder of class, students should read the remainder of Chapter Four: The Deepening Page and “a digression: on lee de forest and his amazing audion” (pages 58-80). As they read, they should annotate each paragraph; they should use their annotations to complete the remainder of the reading log for that chapter. In addition, they should complete charts for one word from the list for Chapter Four and one self-selected word from Chapter Four.

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Four

The Deepening Page (Approx. 15 minutes)

Facilitate a whole-class discussion, using students’ annotations of Chapter Four and their work in the reading log for Chapter Four by asking students to look back in the text and at their reading log for concepts related to this statement (from page 75 of *The Shallows*):

“As our ancestors imbued their minds with the discipline to follow a line of argument or narrative through a succession of printed pages, they became more contemplative, reflective, and imaginative.”

What historical and research evidence does Carr provide to make this argument?

During the discussion, you should encourage students to refer back to their reading, and to the text specifically, to support their collection of evidence from the text. Do this by writing down on the white board or a document camera the evidence that students find and asking them “What in the central text gives you that idea”? so that they will refer back to the text. Require page numbers and specific quotes.

Activity Five

The Power of Literacy (Approx. 45 minutes)

Tell the class that they will now look at some other authors who have written about the power of literacy.

Break the class into three groups. Each group should be assigned to analyze one of the passages from Benjamin Franklin, Ralph Waldo Emerson and Frederick Douglass (see academic notebook). Instruct students to read their assigned excerpt with two goals:

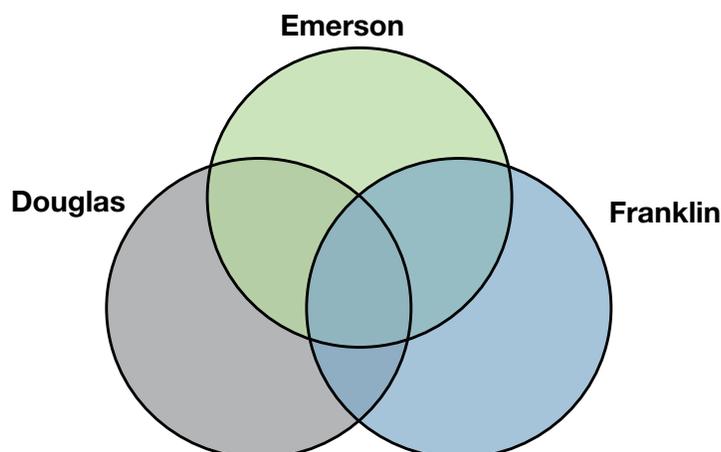
1. Respond to this question: Do you think that the writer of the excerpt you are reading would agree or disagree with Carr? How so?
 2. Collectively write a rhetorical précis on the excerpt your group is reading. Be sure to include an MLA citation (see reference page in academic notebook).
- Group one should read the excerpt from Benjamin Franklin’s autobiography (the section about creating the library).
 - Group two should read the excerpt from Frederick Douglass’ autobiography (Chapter VII).
 - Group three should read the excerpt from Ralph Waldo Emerson’s essay, “The American Scholar.”

FROM THE STUDENT ACADEMIC NOTEBOOK

The Power of Literacy

Directions: Once you have completed your work, your group will report out on both your finding related to the author’s agreement and/or disagreement with Carr, as well as your rhetorical précis. As each group is making its presentation, complete the Venn diagram below.

Note the main ideas of each author in the appropriate circle, using the rhetorical précis written by each group. Note where the authors agree and/or disagree, in the shaded areas. Highlight points in all three circles that show agreement with Carr, as well as points in all three circles that show disagreement with Carr.



Each group should report out on both its finding related to the author’s agreement and/or disagreement with Carr, as well as its rhetorical précis. As each group is making its presentation, ask the students to collectively complete a Venn diagram in their academic notebooks.

Students should put in main ideas in each of the author’s circles, then contribute suggestions for how Emerson/Franklin are connected, how Douglas/Franklin are connected, and how Emerson/Douglas are connected. Once this Venn diagram is completed, ask students to work independently to highlight points in all three circles that show agreement with Carr, as well as points in all three circles that show disagreement with Carr. Discuss the points of agreement and disagreement as a class and make a list of those points on the white board or document camera.

Using either the points of agreement and disagreement with Carr from the discussion, model for students how to write a synthesis paragraph, using the white board or document camera. Such a synthesis might read as follows (but yours will differ based on what your students develop for points of agreement and disagreement).

Benjamin Franklin writes quite positively about the benefits of access to books, in his description of a public library, writing that those who had this access were “better instructed and more intelligent.” Emerson and Douglass, however, seem more conflicted in their estimation of the benefits of reading. Emerson notes that “Books are the best type of the influence of the past,” but because they can be used poorly, they “are for the scholar’s idle times.” Douglass describes how he learned to read as “a curse rather than a blessing” this skill gave him a clear understanding of his situation as a slave, “without the remedy.”

Once this process is completed, remind students that they will be completing a synthesis of information at the end of the unit regarding one of the three quotes from Carr, in which they take a stance either agreeing or disagreeing with Carr’s statement. Remind them that these materials from Douglass, Emerson and Franklin could be used as evidence in their synthesis papers.

Assessment:

Outcome 4:

Students will read several documents, collecting information on how those documents connect or disconnect with the ideas in the central text, and they will receive modeling on synthesis in preparation for writing the synthesis essay.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in group work on assigned document. | No | Somewhat | Very |
| Participates in presentation of main points. | No | Somewhat | Very |
| Participates in discussion of agreements and disagreements among the three documents and with the central text. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Six

Noticing Aspects of Synthesis in Chapter 5 (Approx. 15 minutes)

Ask students to read and annotate the first three paragraphs of Chapter Five, beginning on page 81 and ending on page 82 with "... but Turing seems to have been the first to understand the digital computer's limitless adaptability." Ask students to pay particular attention to the sources Carr is using by examining the endnotes Carr provides within these three paragraphs.

When students are finished reading this short section, make a list of the four sources Carr uses. These include:

- An encyclopedia article about Alan Turing.
- Two articles by Alan Turing.
- A book by George Dyson.

Facilitate a brief discussion of the synthesis techniques Carr uses in these paragraphs. Students should notice Carr uses quotes from his sources, but he introduces those quotes within his own sentences. They might also note Carr strings together information from those sources to tell a story of sorts—in this case, a story about Alan Turing. This story is used eventually in the chapter to help Carr build the case for his argument.

For homework or during the remainder of class, students should read Chapter Five (pages 81-98) of *The Shallows* and complete both the reading log and the vocabulary work for Chapter Five.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Facilitated student work on self-selected vocabulary from Chapter Three and a brief discussion afterward.
2. Facilitated students in writing one-sentence claim statements for a section of Chapter Three.
3. Modeled annotation on the opening paragraphs of Chapter Four and assigned students to read and annotate Chapter Four, complete a reading log on Chapter Four and complete vocabulary work from Chapter Four.
4. Facilitated a whole-class discussion of Chapter Four.
5. Divided students into three groups and assigned each group an excerpt from Benjamin Franklin, Ralph Waldo Emerson or Frederick Douglass.
6. Facilitated small-group work on those three readings to determine the main idea, connections with each other and connections with Carr's argument.
7. Modeled synthesis writing related to these three supplemental readings.
8. Facilitated in-class reading of the opening paragraphs of Chapter Five, noticing synthesis techniques within these paragraphs.
9. Assigned students to complete reading Chapter Five, along with the reading log and vocabulary work for the chapter.

Lesson 5

The Internet, Books and Our Brains

Overview and Rationale:

Students will continue tracing Carr’s argument through reading and discussion of Chapters Five through Seven, which extends his argument by examining the development of the Internet as a medium, its impact on media and other institutions, the evolution of the book into the ebook and research on how the Internet is changing human brains. Students will begin this examination by tracing the development of the web as a medium using a timeline or other graphic organizer. Subsequently, students will read a short *Time* magazine article entitled “You” and participate in a discussion of the connections and disconnections between the article’s tone regarding the potential of the Internet and Carr’s perspective on the same. Students will read a blog post by Clay Shirky that addresses the impact of the Internet on newspaper publishing and will highlight quotes in that blog post that may relate to their chosen quote for the synthesis essay. The teacher will then model how to embed quotes in a sentence and students will practice embedding the quotes they have selected in a sentence of their own. The teacher will model note taking, using a modified version of the Cornell Notes system with the opening paragraphs of Chapter Six in the Carr text. Students will be assigned to read Chapters Six and Seven, to complete reading logs for both chapters and to do vocabulary work for both chapters. With this reading completed, students will choose the most convincing evidence from Chapters Six and Seven for the statement, “The Internet is changing the way people read and write books.” They will practice embedding the most convincing quote found in a sentence and will participate in a discussion focusing on information from Chapters Six and Seven. Students will then study both teacher- and student-selected vocabulary words, collecting both definitional and contextual information from the central text and will participate in a process of teaching the words to other students, sorting them into categories, and developing rationales for those categories. Finally, the teacher will review contextual information and dictionary information for the word *algorithm* in preparation for students’ reading of Chapter Eight. Students will be assigned to read Chapter Eight and to complete the reading log and vocabulary work for this chapter, either for homework or during the remainder of class.

Tasks/Expected Outcomes:

1. Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
2. Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the development of the Internet and its impact on media and other institutions, the evolution of the book into the ebook and research on how the Internet is changing human brains.

3. Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.
4. Students will learn how to embed quotes from sources into their writing.
5. Students will write a rhetorical précis on a supplemental text.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (A) analyze how complex plot structures (e.g., subplots) and devices (e.g., foreshadowing, flashbacks, suspense) function and advance the action in a work of fiction;
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
 - (C) compare and contrast the effects of different forms of narration across various genres of fiction.
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;

- (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
- (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;
- (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers’ questions and contradictory information.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author’s purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer’s purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.

3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 6. Analyze imagery in literary texts.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Copies of *The Shallows*
- Academic Notebooks
- *Time* Magazine article “You” (2006)
- Clay Shirky blog post: *Newspapers and Thinking the Unthinkable*
- Index cards and markers
- Chart paper

Timeframe:

210 minutes

Targeted Vocabulary:

Words from Carr’s *The Shallows*, Chapter Four

- ephemera (58)
- scribes (59)
- parchment (59)
- stylus (59)
- artisan (60)
- codex (60)
- cognitive (61)
- mellifluous (62)
- obsolete (62)
- antithetical (63)
- anomaly (64)
- seditious (65)
- propagation (67)
- adept (69)
- gendarmes (70)
- tawdry (71)
- symbiotic (74)
- idiosyncratic (75)
- nonlinear (76)

Words from Carr’s *The Shallows*, Chapter Five

- incalculable (81)
- universal (82)
- rendering (83)
- typographical (84)
- kineographs (84)
- algorithms (84)
- compendium (85)
- proliferated (86)
- precipitous (87)
- ubiquity (88)
- inexorable (89)
- inextricable (90)
- tenuous (91)
- hegemony (93)
- parishioners (97)

Words from Carr’s *The Shallows*, Chapter Six

- robust (99)
- pixels (100)
- artifacts (102)
- obsolescence (102)
- linearity (104)
- hybrids (105)
- asynchronous (106)
- milieu (107)
- anomaly (108)
- hierarchical (111)
- outré (111)
- kaleidoscopic (112)

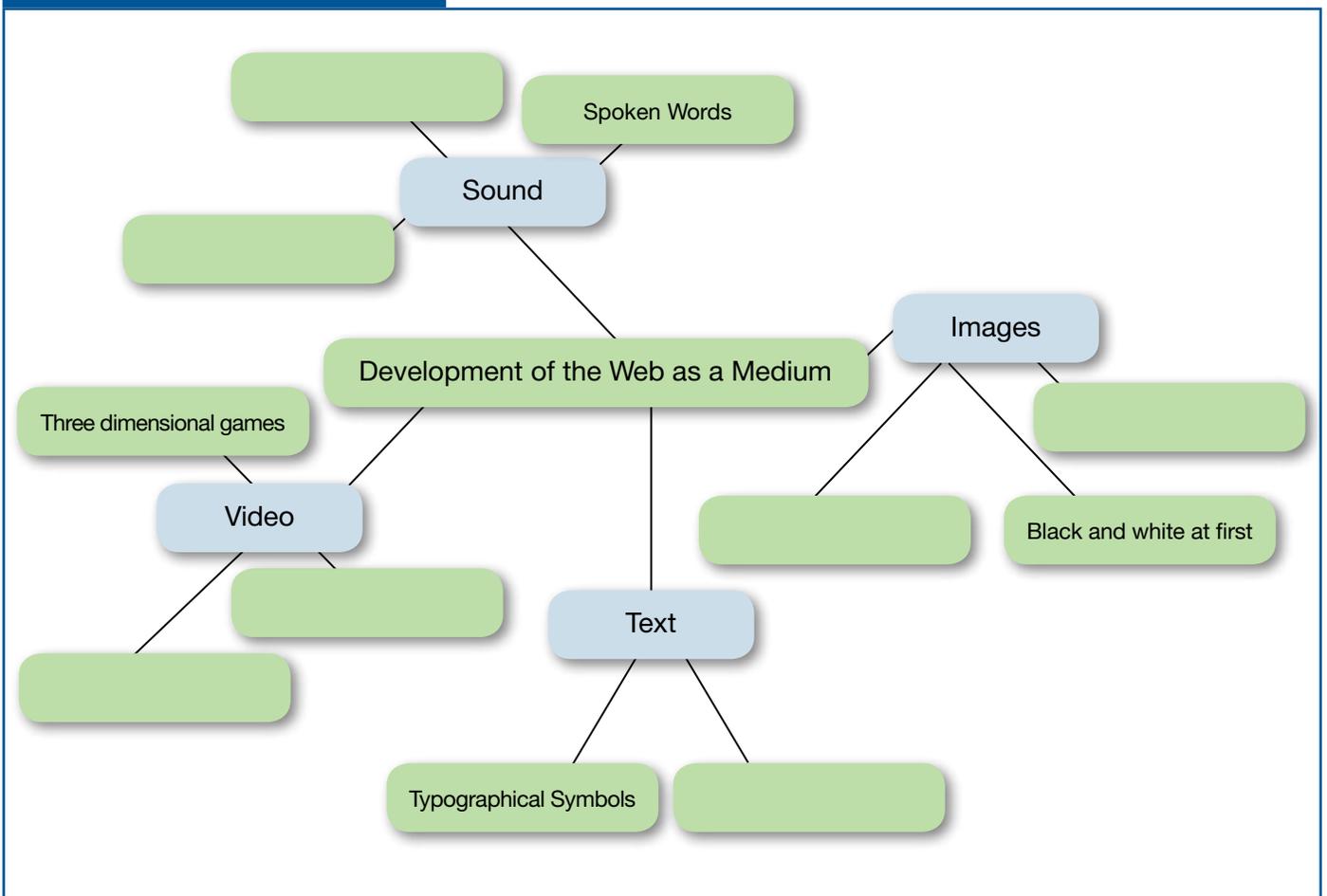
Words from Carr’s *The Shallows*, Chapter Seven

- fortitude (115)
- somatosensory (116)
- interactivity (118)
- cacophony (119)
- naïve (121)
- strenuous (122)
- schemas (124)
- extraneous (125)
- materiality (126)
- hypertext (127)
- hypermedia (129)
- attentional (131)
- influx (132)
- verbiage (135)
- skimming (136)
- trajectory (138)
- optimizing (140)
- reverberate (141)

Activity One **History of the Internet (Approx. 40 minutes)**

With the students, trace the development of the Web as a medium using a timeline or other graphic organizer, developing this timeline or other graphic organizer on a white board or document camera. (A sample graphic organizer is seen below; you may choose to use this one or to develop a graphic organizer that will work better for you and for your students.) Refer to pages 83-85 of *The Shallows* (beginning with the paragraph that starts, “The way the Web has progressed as a medium...”) and students’ work in their reading logs (done previously as homework) and ask students to supply the information for the timeline and develop it collaboratively, all based on Carr’s work in this chapter.

TEACHER RESOURCE



Assessment:

Outcome 1:

Students will read informational text so as to recognize argument, claim, evidence, structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to read the short *Time* magazine article “You” and to annotate the article. Specifically, students should be looking for material that connects with or indicates a disconnect with Carr’s discussion in Chapter Five of the history of the Internet and the impact of the Internet on other media/institutions.

FROM THE STUDENT ACADEMIC NOTEBOOK

Read the short *Time* magazine article “You” (found below) and annotate the article in the margins. Specifically, you should be looking for material that connects with Carr’s discussion in Chapter Five of the history of the Internet and the impact of the Internet on other media/institutions.

Time Magazine Link and Article Text:

(<http://www.time.com/time/magazine/article/0,9171,1570810,00.html>)

The “Great Man” theory of history is usually attributed to the Scottish philosopher Thomas Carlyle, who wrote that “the history of the world is but the biography of great men.” He believed that it is the few, the powerful and the famous who shape our collective destiny as a species. That theory took a serious beating this year.

To be sure, there are individuals we could blame for the many painful and disturbing things that happened in 2006. The conflict in Iraq only got bloodier and more entrenched. A vicious skirmish erupted between Israel and Lebanon. A war dragged on in Sudan. A tin-pot dictator in North Korea got the Bomb, and the President of Iran wants to go nuclear too. Meanwhile nobody fixed global warming, and Sony didn’t make enough PlayStation3s.

But look at 2006 through a different lens and you’ll see another story, one that isn’t about conflict or great men. It’s a story about community and collaboration on a scale never seen before. It’s about the cosmic compendium of knowledge Wikipedia and the million-channel people’s network YouTube and the online metropolis MySpace. It’s about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes.

The tool that makes this possible is the World Wide Web. Not the Web that Tim Berners-Lee hacked together (15 years ago, according to Wikipedia) as a way for scientists to share research. It's not even the overhyped dotcom Web of the late 1990s. The new Web is a very different thing. It's a tool for bringing together the small contributions of millions of people and making them matter. Silicon Valley consultants call it Web 2.0, as if it were a new version of some old software. But it's really a revolution. And we are so ready for it. We're ready to balance our diet of predigested news with raw feeds from Baghdad and Boston and Beijing. You can learn more about how Americans live just by looking at the backgrounds of YouTube videos—those rumpled bedrooms and toy-strewn basement rec rooms—than you could from 1,000 hours of network television.

And we didn't just watch, we also worked. Like crazy. We made Facebook profiles and Second Life avatars and reviewed books at Amazon and recorded podcasts. We blogged about our candidates losing and wrote songs about getting dumped. We camcordered bombing runs and built open-source software.

America loves its solitary geniuses—its Einsteins, its Edisons, its Jobses—but those lonely dreamers may have to learn to play with others. Car companies are running open design contests. Reuters is carrying blog postings alongside its regular news feed. Microsoft is working overtime to fend off user-created Linux. We're looking at an explosion of productivity and innovation, and it's just getting started, as millions of minds that would otherwise have drowned in obscurity get backhauled into the global intellectual economy. Who are these people? Seriously, who actually sits down after a long day at work and says, I'm not going to watch *Lost* tonight. I'm going to turn on my computer and make a movie starring my pet iguana? I'm going to mash up 50 Cent's vocals with Queen's instrumentals? I'm going to blog about my state of mind or the state of the nation or the *steak-frites* at the new bistro down the street? Who has that time and that energy and that passion?

The answer is, you do. And for seizing the reins of the global media, for founding and framing the new digital democracy, for working for nothing and beating the pros at their own game, TIME's Person of the Year for 2006 is you.

Sure, it's a mistake to romanticize all this any more than is strictly necessary. Web 2.0 harnesses the stupidity of crowds as well as its wisdom. Some of the comments on YouTube make you weep for the future of humanity just for the spelling alone, never mind the obscenity and the naked hatred.

But that's what makes all this interesting. Web 2.0 is a massive social experiment, and like any experiment worth trying, it could fail. There's no road map for how an organism that's not a bacterium lives and works together on this planet in numbers in excess of 6 billion. But 2006 gave us some ideas. This is an opportunity to build a new kind of international understanding, not politician to politician, great man to great man, but citizen to citizen, person to person. It's a chance for people to look at a computer screen and really, genuinely wonder who's out there looking back at them. Go on. Tell us you're not just a little bit curious.

Facilitate a discussion addressing the connections and disconnects students find. Students should notice this article is passionately positive about the impact of the Internet and its use on society, whereas Carr has typically seemed quite negative. Students should note that the authors of this article seem to be *net enthusiasts*. Encourage students to consider what evidence from Carr and from this article could be used to dispute claims from both sides.

In addition, ask students to use their reading of Carr to discuss the following questions:

According to Carr, how does the Internet differ from most mass media?

Students should see that Carr says the Internet is “bidirectional” (page 85). Here, encourage students to make connections between the *TIME* article just read and the perspective Carr takes.

What can you infer from the statistics Carr provides on pages 86-87?

Students should be able to tell that more and more people are actually multitasking, using the Internet and other media at the same time. Here, refer students back to the interview with Clifford Nass – if people are doing more and more multitasking, what does the research say is happening to the quality of what they’re doing?

What is increasing as the net grows? Decreasing? Why?

Students should be able to see that Carr is arguing that print materials are decreasing and that multiple forms of technology (such as separate calculators, radios, telephones, etc.) are becoming increasingly digitized, as people want to have access to everything within one device.

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the development of the Internet and its impact on media and other institutions, the evolution of the book into the ebook and research on how the Internet is changing human brains.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Participates in class discussion linking the Carr text with the supplemental reading from <i>Time</i> magazine. | No | Somewhat | Very |
| Participation indicates an understanding of the content of Carr’s argument, specifically the development of the Internet and its impact on media and other institutions. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Two

Another Perspective on Newspapers and Embedding Quotes in Writing
(Approx. 60 minutes)

Have students read and annotate the Clay Shirky blog post: “Newspapers and Thinking the Unthinkable,” also in their academic notebooks. (<http://www.shirky.com/weblog/2009/03/newspapers-and-thinking-the-unthinkable/>)

Ask students to write a rhetorical précis of the Shirky blog post in the academic notebook. You may wish to ask students to work with a partner, or to ask them to work alone, depending on their skill level. Ask one or two students to share their rhetorical précis with the class, using a document camera or other technology. Review the criteria for each of the sentences with the class and make revisions to the sample rhetorical précis as necessary. Provide time in class for students to revise their rhetorical précis.

Remind students that they should be examining the supplemental materials that they read in light of the quote that they want to write about for the culminating project. Ask students to revisit their chosen quote and to highlight, in the Shirky blog post, any quotes that might be usable in their synthesis essay.

Ask one or two students to volunteer to share the quotes from the Shirky blog post that they selected. Model for students how to embed the quote in a sentence. For example, if a student selected the following quote: “Society doesn’t need newspapers. What we need is journalism,” model the following sentence:

According to Clay Shirky, it is journalism itself that will make the difference: “Society doesn’t need newspapers. What we need is journalism.”

Introduce a variety of other ways to embed quotes in text by using some of the following sentence starters (taken from *They Say, I Say: The Moves that Matter in Academic Writing* by Gerald Graff and Cathy Birkenstein):

- X acknowledges that...
- X agrees that...
- X argues that...
- X believes that...

Ask students to practice embedding one of their selected quotes in a sentence, using one of these sentence starters. Ask one or two students to volunteer their sentences, examine them on the document camera or white board and revise for clarity and efficiency.

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the development of the Internet and its impact on media and other institutions, the evolution of the book into the ebook and research on how the Internet is changing human brains.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Participates in class discussion linking the Carr text with the Clay Shirky blog post. | No | Somewhat | Very |
| Participation indicates an understanding of the content of Carr’s argument, specifically the development of the Internet and its impact on media and other institutions. | No | Somewhat | Very |
| Total Points | 6 | | |

Assessment:

Outcome 4:

Students will learn how to embed quotes from sources into their writing.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in class work on embedding quotes in sentences. | No | Somewhat | Very |
| Written work indicates an understanding of how to embed quotes in sentences with clarity. | No | Somewhat | Very |
| Total Points | 6 | | |

Assessment:

Outcome 5:

Students will write a rhetorical précis on a supplemental text.

Rhetorical Précis of Clay Shirky blog post

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Adheres to the form of the rhetorical précis (MLA citation, formatting and sentence formulas). | No | Somewhat | Very |
| Content thoughtfully and accurately represents the original text in a synthesis, without using any part of the original text or abstract. | No | Somewhat | Very |
| Sentence structure adheres to standard conventions of grammar, usage and mechanics. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three

Taking Notes from Text (Approx. 15 minutes)

Model for students how to take notes by key words, using the opening paragraphs of Chapter Six. Ask students to look at the reading log for Chapter Six, as you model taking notes on key words in the left-hand column and quotes, page numbers, and other information in the right-hand column, in order to connect Carr’s evidence to the statement at the top of the page: “The Internet is changing the way people read and write books.” For example, after the first paragraph, write “What about books?” in the left-hand column, and “resistant to the Net’s influence,” “Book publishers have suffered some loss of business,” and “a remarkably robust technology” (all from page 98) in the right-hand column.

Continue modeling as long as necessary so that students get the idea of how to take notes from a textbook chapter.

For homework or during the remainder of class, students should read Chapter Six: The Very Image of a Book, Chapter Seven: The Juggler’s Brain, and “a digression: on the buoyancy of IQ scores.” They should also complete a reading log for each chapter and vocabulary charts for these sections.

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Carr’s Chapter Six, “The Very Image of a Book”

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Six. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|-----------------|--------------------|--------------------|---------------------|
| robust (99) | obsolescence (102) | asynchronous (106) | hierarchical (111) |
| pixels (100) | linearity (104) | milieu (107) | outré (111) |
| artifacts (102) | hybrids (105) | anomaly (108) | kaleidoscopic (112) |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

| | |
|--|---|
| Word I have chosen from Chapter Six: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

FROM THE STUDENT ACADEMIC NOTEBOOK

Reading Log: Read *The Shallows*, Chapter Seven: The Juggler’s Brain and “a digression: on the buoyancy of IQ scores.”

On page 175, Carr writes, “Dozens of studies by psychologists, neurobiologists, educators, and Web designers point to the same conclusion: when we go online, we enter an environment that promotes cursory reading, hurried and distracted thinking, and superficial learning.”

Use the chart below to take notes on the evidence Carr provides and the “so what” of each piece of evidence. An example is provided for you, to help you get started. Be sure to cite page numbers.

| Evidence | “So What?” |
|---|---|
| Research by Ap Dijksterhuis (page 119). | Time away from a problem can help us make better decisions about the problem. |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Based on your reading of this chapter and “a digression” answer the following questions:

What are the differences between working memory and long-term memory?

How is the Internet changing our brains?

Are there any positives to these changes?

What is the Flynn effect and why might it be important in Carr’s argument?

(space provided)

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Carr’s Chapter Seven, “The Juggler’s Brain”

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Seven. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|---------------------|-------------------|-------------------|-------------------|
| fortitude (115) | strenuous (122) | hypermedia (129) | skimming (136) |
| somatosensory (116) | schemas (124) | attentional (131) | trajectory (138) |
| interactivity (118) | extraneous (125) | influx (132) | optimizing (140) |
| cacophony (119) | materiality (126) | verbiage (135) | reverberate (141) |
| naïve (121) | hypertext (127) | | |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ | |

| | |
|--|---|
| Word I have chosen from Chapter Seven: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

Activity Four

Books and Our Brains (Approx. 30 minutes)

By this time, students should have completed their reading of Chapters Six and Seven, as well as the reading logs and vocabulary work on those chapters. **Begin this section of class by offering to answer questions that emerged from this work.**

Once students are ready, write the following statement on the white board or document camera:

“The Internet is changing the way people read and write books.”

Ask students to work with a small group or partner on the page titled “Choosing Evidence” in the academic notebook, using the Carr text and their reading logs for Chapters Six and Seven, to choose the most convincing evidence Carr presents to support this statement. In their small groups, or with a partner, students should also develop a sentence that embeds a quote from Carr, using the sentence starters they practiced previously.

Ask groups or pairs to share their convincing evidence and their sentences with quotes embedded. Provide an opportunity for review of the evidence and of the sentences, making edits as necessary for clarity and efficiency. Allow opportunities for all students to revise their sentences with quotes embedded.

Lead the class in a discussion using the following questions:

- What are the differences in working memory and long-term memory?
- How is the Internet changing our brains?
- Are there any positives to these changes?
- What is the Flynn effect and why might it be important in Carr’s argument?

Facilitate a discussion in which students determine what is the most compelling evidence Carr provides in this chapter, using the reading log completed in the academic notebook. Why is that particular piece of evidence the most compelling?

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the development of the Internet and its impact on media and other institutions, the evolution of the book into the ebook and research on how the Internet is changing human brains.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Participates in class discussion and work on the Carr text. | No | Somewhat | Very |
| Participation indicates an understanding of the content of Carr’s argument, specifically the evolution of the book into the ebook and research on how the Internet is changing human brains. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Five

Vocabulary and Concepts from Chapters Four through Seven (Approx. 50 minutes)

Remind students of the vocabulary work that was done previously. Students should have completed their vocabulary work for previous homework, choosing one word from the choice list and one self-selected word from each of the assigned Chapters Four through Seven.

The list of words that students can choose from for Chapters Four through Seven is in the academic notebook, as well as the charts they should have completed for homework.

If necessary, choose one of the words from the choice list and model the kind of work expected from students, referring back to the sample provided in Lesson Three or using another sample taken from the list of choice words for Chapters Four through Seven and projecting this modeling on the document camera or using the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected, from Chapters Four through Seven, for a total of eight words each. Ask students to write their eight words on index cards and to write both the definition and the context (ie., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *The Shallows*, and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories, but all of the members of the group must agree to the categories they have developed and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words that they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Assessment:

Outcome 3:

Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|--|----|----------|------|
| Identifies vocabulary words, context from which the words are taken and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to review the words that they studied in their small group and to pull from those words their TOP FIVE words. The words that they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapters Four through Seven. Ask each group to report out the words that they chose and why they chose them, ie., in what way do their TOP FIVE words connect to or remind them of the content of Chapters Four through Seven.

Make sure that the words chosen as TOP FIVE are placed on *The Shallows* vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

Activity Six

Understanding Algorithms (Approx. 15 minutes)

Explain to students that they will be continuing their reading of the Carr text with a reading log and with vocabulary work for the chapter, as they have been doing throughout this unit. Before starting the reading, however, there is one word/concept that is important for students to understand, and that is the word *algorithm*. It is possible that this word showed up previously in vocabulary study, as it was one of the words on the choice list for Chapter Five. Students should turn to the page titled “Understanding Algorithms” in their academic notebooks for this work.

Ask students to look back at the use of the word *algorithm* in Chapter Five (page 84): “The network’s ability to handle audio streams was aided by the development of software algorithms, such as the one used to produce MP3 files, that erase from music and other recordings sounds that are hard for the human ear to hear.” They should also look at the use of the word *algorithm* in the first paragraph of Chapter Eight (page 149): “By breaking down each job into a sequence of small steps and then testing different ways of performing them, he created a set of precise instructions—an ‘algorithm,’ we might say today—for how each worker should work.”

Add to this set of knowledge about the word *algorithm* the dictionary definition, which is “a set of rules for solving a problem in a finite number of steps.”

Read for students the sample sentence: “As soon as my mother taught me the algorithm for balancing a checkbook, I was able to balance my own checkbook with few problems.”

After talking through this information, ask students to work with a partner to develop a sentence using the word *algorithm*. Ask one or two students to read their sample sentences. Remind students that the word *algorithm* is going to be very important in their reading of Chapter Eight.

For homework or during the remainder of class, students should read Chapter 8 and complete the reading log and the vocabulary work for the chapter.

Teacher
Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Facilitated students' tracing of the development of the web as a medium using a timeline or other graphic organizer.
2. Asked students to read the *Time* magazine article "You" and facilitated a discussion of the connections and disconnections between the article and the central text.
3. Modeled how to embed quotes in a sentence and facilitated students' practice of embedding quotes in sentences.
4. Modeled note taking and assigned reading of Chapters Six and Seven, as well as reading logs and vocabulary work for those chapters.
5. Divided students into three groups and assigned each group an excerpt from Benjamin Franklin, Ralph Waldo Emerson or Frederick Douglass.
6. Facilitated students' work on choosing convincing evidence from those chapters for the statement, "The Internet is changing the way people read and write books," and students' practice of embedding quotes in sentences.
7. Facilitated a discussion focusing on information from Chapters Six and Seven.
8. Facilitated the instruction and sorting of vocabulary words from Chapters Four through Seven.
9. Placed the top five vocabulary words on *The Shallows* vocabulary word wall chart.
10. Reviewed contextual and dictionary information for the word *algorithm*.
11. Assigned students to read Chapter Eight and to complete the reading log and vocabulary work for this chapter, either for homework or during the remainder of class.

Lesson 6

The Alienating Potential of Technology

Overview and Rationale:

Students will continue tracing Carr’s argument through reading and discussion of Chapters Eight through 10 and the epilogue, which bring home his argument about the ways in which Internet use is changing society, by examination of Google and the Googleplex, human and computer memory and the alienation that can come from technology use. Students will begin this work by working with a partner or small group to write and revise a synthesis paragraph of the strongest evidence that Carr uses, related to a quote from Chapter Eight, which was read for homework. Students will then read and annotate a blog by Scott Karp, entitled “The Evolution from Linear Thought to Networked Thought” and will write and revise a rhetorical précis on the blog. Students and teacher will participate in a discussion pulling information from Karp’s blog to connect to the three quotes for the synthesis essay. Students will then be introduced to Chapter Nine through a close examination of the opening paragraphs and will be assigned to read Chapter Nine and to complete the reading log and vocabulary work on the chapter for homework or during the remainder of class. Once students have read Chapter Nine, they will use their reading logs and the text to: a) find a quote from the chapter that most clearly states Carr’s argument and b) outline the evidence Carr presents. The teacher will then facilitate a discussion on this evidence and the counter-arguments that might be made. Students will be introduced to the concept of *alienation* and will be assigned to read Chapter 10, complete the reading log and vocabulary work on the chapter for homework or during the remainder of class. Once the reading is completed, students and teacher will participate in a discussion to examine Carr’s final statement of the book and connect that statement to the three quotes for the synthesis essay, as well as to develop counter-arguments. Students will then study both teacher- and student- selected vocabulary words from Chapters Eight through 10, collecting both definitional and contextual information from the central text, and will participate in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories.

Tasks/Expected Outcomes:

1. Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
2. Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the impact of Taylorism on Google, distinguishing between human and computer memory, and the potential for alienation inherent in technology use.

3. Students will demonstrate their ability to apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.
4. Students will build on their knowledge of synthesis by writing and revising a synthesis paragraph.
5. Students will write a rhetorical précis on a supplemental text.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (A) analyze how complex plot structures (e.g., subplots) and devices (e.g., foreshadowing, flashbacks, suspense) function and advance the action in a work of fiction;
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
 - (C) compare and contrast the effects of different forms of narration across various genres of fiction.
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its

implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
- (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
- (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
- (D) edit drafts for grammar, mechanics, and spelling; and
- (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (A) write an analytical essay of sufficient length that includes:
- (i) effective introductory and concluding paragraphs and a variety of sentence structures;
- (ii) rhetorical devices, and transitions between paragraphs;

- (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;
- (C) write an interpretation of an expository or a literary text that:
- (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers’ questions and contradictory information.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author’s purpose.
- 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer’s purpose and audience.

2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 6. Analyze imagery in literary texts.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebooks
- Copies of *The Shallows*
- Chart paper

Timeframe:

145 minutes

Targeted Vocabulary:

Words from Carr's *The Shallows*, Chapter Eight

- choreography (149)
- optimization (150)
- permutations (151)
- aesthetic (151)
- analogy (153)
- largesse (155)
- lucrative (155)
- brutish (157)
- ethereal (157)
- complementary (160)
- infringement (162)
- laudable (163)
- digitized (164)
- Transcendentalist (166)
- dissonance (167)
- perpetual (168)
- memex (169)
- malevolent (171)
- embryonic (172)
- Taylorist (173)
- imperialistic (174)
- incubating (175)
- fallacy (176)

Words from Carr's *The Shallows*, Chapter Nine

- proliferation (177)
- synthesis (179)
- crucible (179)
- obsolete (181)
- capacious (182)
- retrograde (183)
- consolidation (184)
- hippocampus (188)
- conundrum (189)
- ethereal (193)
- crux (196)

Words from Carr's *The Shallows*, Chapter 10

- parsing (201)
- penumbra (202)
- banal (203)
- plausibility (206)
- tautology (207)
- apostate (208)
- lucidity (209)
- dexterity (210)
- alienation (211)
- cybernetic (214)
- consensus (217)
- perusal (218)
- erosion (220)
- empathizing (221)

Activity One

Synthesis Writing: Google's Impacts on Our Thinking (Approx. 45 minutes)

Remind students that they have been practicing synthesis writing, and that they will continue that practice with their work on Chapter Eight. Remind them that the purpose of a synthesis is to combine information from various sources to provide information and to make a point.

In order to prepare students to write this synthesis paragraph, read the quote out loud, and ask students to briefly discuss the quote. What are the “delusions of grandeur” that the author mentions? Why does the author seem to believe that the creators of Google have a “pinched conception of the human mind”?

After students have a clear understanding of the quote, ask them to work with a partner or in a small group. They should use their reading logs for Chapter Eight and the text itself to write one paragraph in the academic notebook on the page titled “Writing a Synthesis Paragraph” that synthesizes the strongest evidence that Carr uses in Chapter Eight to support the following argument about Google:

Google is neither God nor Satan, and if there are shadows in the Googleplex they’re no more than the delusions of grandeur. What’s disturbing about the company’s founders is not their boyish desire to create an amazingly cool machine that will be able to outthink its creators, but the pinched conception of the human mind that gives rise to such a desire (p. 176).

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing a Synthesis Paragraph

Directions: With a partner or small group, use your reading log for Chapter Eight and the text itself to write one paragraph that synthesizes the strongest evidence that Carr uses in Chapter Eight to support the following argument about Google:

“Google is neither God nor Satan, and if there are shadows in the Googleplex they’re no more than the delusions of grandeur. What’s disturbing about the company’s founders is not their boyish desire to create an amazingly cool machine that will be able to outthink its creators, but the pinched conception of the human mind that gives rise to such a desire” (page 176).

Write your synthesis paragraph in the space below.

(space provided)

Ask one or two partners or small groups to provide their sample synthesis paragraphs for the whole class to review. Make sure that everyone can see these sample paragraphs by projecting them on a document camera or having students write them on the white board.

Read the synthesis paragraph examples as a class. Ask students to read the paragraphs with an eye toward making them stronger. Questions like these might help:

- Does the synthesis paragraph have a strong topic sentence?
- Are the sources included in the synthesis clear? What about the citations?
- Is what the synthesis is talking about clear at any given moment? How might the synthesis information be clarified?
- Were there any points in the synthesis where you were lost because a transition was missing? If so, where is it and how might it be corrected?

Using the answers to these questions and other ideas that emerge, make revisions and edits to the sample paragraphs as a whole class. If time is pressing, carry out this process with only one sample paragraph.

Provide some time for partners or small groups to go back to their synthesis paragraphs and revise them, using the same questions as above.

Facilitate a whole-class discussion of students' synthesis paragraphs. Focus the discussion on connecting students' opinions about Carr's argument with evidence from Carr's writing. Talk about how they picked the strongest evidence. What was the most convincing evidence Carr presented in this chapter?

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Assessment:

Outcome 4:

Students will build on their knowledge of synthesis by writing and revising a synthesis paragraph.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Adheres to the form of a synthesis paragraph (combining information from more than one source, proper citation of sources). | No | Somewhat | Very |
| Content thoughtfully and accurately represents the combined information. | No | Somewhat | Very |
| Sentence structure adheres to standard conventions of grammar, usage and mechanics. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to read, in pairs, the Scott Karp blog, “The Evolution from Linear Thought to Networked Thought,” which can be found in the academic notebooks. As they read, they should annotate the article. By this time, students should be quite comfortable with annotation, having practiced it several times.

FROM THE STUDENT ACADEMIC NOTEBOOK

The Evolution from Linear Thought to Networked Thought by Scott Kapp

Directions: Read the following blog post by Scott Karp entitled, “The Evolution from Linear Thought to Networked Thought.” As you read, annotate the article. After you have read and marked up the reading, write a rhetorical précis for it in the space below. Be sure to include an MLA citation.

February 9, 2008

by Scott Karp

I was thinking last night about books and why I don’t read them anymore—I was a lit major in college, and used to be voracious book reader. What happened?

I was also thinking about the panel I organized for the O’Reilly TOC conference on Blogs as Books, Books as Blogs—do I do all my reading online because I like blogs better than books now? That doesn’t seem meaningful on the face of it.

Then I read this really interesting post by Evan Schnittman at the OUP Blog about why he uses ebooks only for convenience but actually prefers to read in print.

So do I do all my reading online because it’s more convenient? Well, it is, but it’s not as if I don’t have opportunities to read books. (And I do read a lot of Disney Princess books to my daughter.)

But the convenience argument seems to float on the surface of a deeper issue—there’s something about the print vs. online dialectic that always seemed superficial to me. Books, newspapers, and other print media are carefully laid out. Online content like blogs are shoot from the hip. Books are linear and foster concentration and focus, while the web, with all its hyperlinks, is kinetic, scattered, all over the place.

I’ve heard many times online reading cast in the pejorative. Does my preference for online reading mean I’ve become more scattered and disorganized in my reading?

I’ve also spend a lot of time thinking and talking recently about how understanding the future media on the web is so counterintuitive from the perspective of traditional media—about the challenge of making the leap from thinking about linear distribution to network effects.

After reading Evan’s post and struggling with the convenience argument, I read this Silicon Alley post speculating on a possible lack of demand for ebooks, despite the Kindle reportedly selling well. If I’m such a digital guy, then why do I have no interest in ebooks?

I was eating some peanut butter last night... and then suddenly something clicked. (Don’t know if the peanut butter caused it.)

What if I do all my reading on the web not so much because the way I read has changed, i.e., I’m just seeking convenience, but because the way I THINK has changed?

What if the networked nature of content on the web has changed not just how I consume information but how I process it?

What if I no longer have the patience to read a book because it's too.... linear.

We still retain an 18th Century bias towards linear thought. Non-linear thought—like online media consumption—is still typically characterized in the pejorative: scattered, unfocused, undisciplined.

Dumb.

But just look at Google, which arguably kept our engagement with the sea of content on the web from descending into chaos. Google's PageRank algorithm is the antithesis of linearity thinking—it's pured networked thought.

Google can find relevant content on the web because it doesn't "think" in a linear fashion—it takes all of our thoughts, as expressed in links, and looks at them as a network. If you could follow Google's algorithm in real time, it would seem utterly chaotic, but the result is extremely coherent.

When I read online, I constantly follow links from one item to the next, often forgetting where I started. Sometimes I backtrack to one content "node" and jump off in different directions. There are nodes that I come back to repeatedly, like TechMeme and Google, only to start down new branches of the network.

So doesn't this make for an incoherent reading experience? Yes, if you're thinking in a linear fashion. But I find reading on the web is most rewarding when I'm not following a set path but rather trying to "connect the dots," thinking about ideas and trends and what it all might mean.

But am I just an outlier, or just imagining with too much peanut butter on the brain some new networked thinking macro trend?

Then I remembered—or rather arrived at in nonlinear fashion—a contrarian piece in the Guardian about an NEA study that bemoaned declines in reading and reading skills. The piece points out the study's fatal flaw—that it completely neglected to study online reading.

All Giola has to say about the dark matter of electronic reading is this: "Whatever the benefits of newer electronic media, they provide no measurable substitute for the intellectual and personal development initiated and sustained by frequent reading."

Technological literacy

The only reason the intellectual benefits are not measurable is that they haven't been measured yet. There have been almost no studies that have looked at the potential positive impact of electronic media. Certainly there is every reason to believe that technological literacy correlates strongly with professional success in the information age.

I challenge the NEA to track the economic status of obsessive novel readers and obsessive computer programmers over the next 10 years. Which group will have more professional success in this climate? Which group is more likely to found the next Google or Facebook? Which group is more likely to go from college into a job paying \$80,000 (£40,600)?

But the unmeasured skills of the “digital natives” are not just about technological proficiency. One of the few groups that has looked at these issues is the Pew Research Centre, which found in a 2004 study of politics and media use: “Relying on the internet as a source of campaign information is strongly correlated with knowledge about the candidates and the campaign. This is more the case than for other types of media, even accounting for the fact that internet users generally are better educated and more interested politically. And among young people under 30, use of the internet to learn about the campaign has a greater impact on knowledge than does level of education.”

What I’d be most curious to know is whether online reading actually has a positive impact on cognition—through ways that we perhaps cannot measure or even understand yet, particularly if we look at it with a bias towards linear thought.

Is there such a thing as networked human thought? Certain there is among a group of people enabled by a network—but what about for an individual, processing information via the web’s network?

Perhaps this post hasn’t been an entirely linear thought process—is that necessarily a bad thing?

Read more: <http://publishing2.com/2008/02/09/the-evolution-from-linear-thought-to-net-worked-thought/#ixzz2CmOf6vbm>.

Once the reading is completed, ask students to work on their own to write a rhetorical précis of this blog post in their academic notebook. Remind students to include an MLA citation.

Assessment:

Outcome 5:

Rhetorical Précis of Scott Karp blog post

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Adheres to the form of the rhetorical précis (MLA citation, formatting and sentence formulas). | No | Somewhat | Very |
| Content thoughtfully and accurately represents the original text in a synthesis, without using any part of the original text or abstract. | No | Somewhat | Very |
| Sentence structure adheres to standard conventions of grammar, usage and mechanics. | No | Somewhat | Very |
| Total Points | 9 | | |

Facilitate a discussion in which students examine Karp’s blog for information that might be used to either support or disagree with Carr’s developing argument.

To facilitate this discussion, put the three quotes for the synthesis essay on the document camera or white board and ask students to refer to the text of Chapter Eight for quotes.

TEACHER RESOURCE

“With the exception of alphabets and number systems, the Net may well be the single most powerful mind-altering technology that has ever come into general use. At the very least, it’s the most powerful that has come along since the book” (Carr 118).

“Karp, Friedman, and Davis—all well-educated men with a keenness for writing—seem fairly sanguine about the decay of their faculties for reading and concentrating. All things considered, they say, the benefits they get from using the Net—quick access to loads of information, potent searching and filtering tools, an easy way to share their opinions with a small but interested audience—make up for the loss of their ability to sit still and turn the pages of a book or magazine” (Carr 8).

“The price we pay to assume technology’s power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities—those for reason, perception, memory, emotion” (Carr 211).

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the impact of Taylorism on Google, distinguishing between human and computer memory, and the potential for alienation inherent in technology use.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in class discussion linking the Carr text with the supplemental reading. | No | Somewhat | Very |
| Participation indicates an understanding of the content of Carr’s argument. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Two

Close Reading in Chapter Nine (Approx. 15 minutes)

Ask students to read silently the first paragraph of Chapter Nine, focusing as they read on finding one sentence in the paragraph they think is most important, in terms of the meaning of the paragraph. After students have finished reading the paragraph, ask them to volunteer which sentence they picked and why they picked that sentence. There are several sentences students might pick; the important thing is for them to recognize Carr is starting to build a base for his argument, using the idea that memorization is no longer important.

Ask students to read silently the second paragraph of Chapter Nine. After they have finished reading, write the following sentence starter on the white board or document camera:

“Books have made readers less dependent on our memory, but...”

Ask students to work with a partner to develop an ending to that sentence, based on the second paragraph in Chapter Nine. Students may develop something like the following:

. . . the availability of books has provided more knowledge so that people can be more creative.

. . . the availability of books has allowed writers to develop creative personalities.

. . . the availability of books has allowed writers to choose for themselves what they want to read.

Ask students to share their sentence endings and to refer back to the text for the information they pulled to develop these sentence endings.

Ask students to read silently the third paragraph of Chapter Nine. After they have finished reading, draw their attention to the last sentence of the paragraph:

“Books provide a supplement to memory, but they also, as Eco puts it, “challenge and improve memory; they do not narcotize it” (178).

Ask students to refer to the reading log for Chapter Nine in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Reading Log: *The Shallows*, Chapter Nine: Search, Memory and “a digression: on the writing of this book.” Take notes on your reading in the space below.

In pages 177-182, Carr writes about memory, both human memory and computer memory. For each of the references Carr makes, describe what he is saying about memory. An example is provided for you in the space below.

| Carr’s Reference | Carr’s Description |
|-------------------------|--|
| Shakespeare (page 178) | Hamlet says memory is “the book and volume of my brain.” |
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Read the first full paragraph on page 182. Write a one-sentence summary of Carr’s concern about human memory and computer memory.
(space provided)

FROM THE STUDENT ACADEMIC NOTEBOOK

After reading the remainder of Chapter Nine (through page 197), write a paragraph explaining how Carr sees the difference between human memory and computer memory, as well as the impact of “outsourcing memory” on our brains.

(space provided)

Note for students that the first example in the chart is done for them, referring back to the second paragraph of Chapter Nine. Ask students to develop an entry for the chart using the third paragraph of Chapter Nine and focusing specifically on the quote from Umberto Eco in the last sentence. Students should write something like the following:

Umberto Eco (page 178): Eco says that access to books should improve our memory.

Explain to students that they should continue their reading of Chapter Nine, filling out this chart and following other directions as they read.

For homework or during the remainder of class, students should read Chapter Nine “Search, Memory” and “a digression: on the writing of this book.” Students should complete the reading log and the vocabulary chart for this chapter.

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Carr’s Chapter Nine, “Search, Memory”

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Nine. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | |
|---------------------|---------------------|
| proliferation (177) | consolidation (184) |
| synthesis (179) | hippocampus (188) |
| crucible (179) | conundrum (189) |
| obsolete (181) | ethereal (193) |
| capacious (182) | crux (196) |
| retrograde (183) | |

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze the content of Carr’s argument, specifically the impact of Taylorism on Google, distinguishing between human and computer memory, and the potential for alienation inherent in technology use.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in class discussion and work on the Carr text. | No | Somewhat | Very |
| Participation indicates an understanding of the content of Carr’s argument. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Three

Introducing the Concept of Alienation (Approx. 15 minutes)

Divide the class into small groups or partners.

Ask groups or partners to: (a) find a quote from Chapter Nine they believe most clearly states Carr’s argument within the chapter as a whole; and (b) create an outline of Carr’s evidence presented in the chapter. After completing this work on the page titled “Examining Chapter Nine” in the academic notebook, ask groups to present their quotes and outlines to the class, using the document camera or white board.

FROM THE STUDENT ACADEMIC NOTEBOOK

Examining Chapter Nine

Directions: Working with a small group or partner, you will examine Chapter Nine. With the other members of your group, you should use the space below to:

- a) copy a quote from Chapter Nine that you believe most clearly states Carr’s argument within the chapter as a whole; and
- b) create an outline of Carr’s evidence presented in the chapter.

Quote from Chapter Nine:

Outline of Evidence:

(space provided)

Facilitate a whole-class discussion in which you ask students to respond to the following questions:

- How convinced are you by Carr’s arguments in this chapter?
- What counter-arguments would you make against Carr’s evidence in Chapter Nine?

Explain to students that they will be continuing their reading of the Carr text with a reading log and with vocabulary work for Chapter 10, as they have been doing throughout this unit. Before starting the reading, however, there is one word/concept that is important for students to understand, and that is the word *alienation*. Students will remember that this word showed up in one of the three quotes for the synthesis essay assignment.

Ask students to examine the use of the word alienation in Chapter 10 (page 211) on the page titled “Understanding Alienation” in the academic notebook: “The price we pay to assume technology’s power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities—those for reason, perception, memory, emotion” (Carr 211).

Add to this set of knowledge about the word *alienation* the dictionary definition, which is “the state or experience of being isolated from a group or an activity to which one should belong or in which one should be involved.”

Read for students the sample sentence: “The alienation my parents experienced from their family after their marriage caused my brothers and me to never know or understand our grandparents, aunts, uncles and cousins.”

After discussing this information, ask students to work with a partner to develop a sentence using the word *alienation*. Ask one or two students to read their sample sentences. Use this experience to refer students back to both the definition and the context in Carr’s Chapter 10. Remind students that the word *alienation* is going to be very important in their reading of Chapter 10.

FROM THE STUDENT ACADEMIC NOTEBOOK

Understanding Alienation in Preparation for Chapter 10

alienation in Chapter 10 (page 211):

“The price we pay to assume technology’s power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities—those for reason, perception, memory, emotion” (Carr 211).

alienation:

“the state or experience of being isolated from a group or an activity to which one should belong or in which one should be involved.”

Sample Sentence:

“The *alienation* my parents experienced from their family after their marriage caused my brothers and me to never know or understand our grandparents, aunts, uncles, and cousins.”

In the space below, write an original sentence using the word *alienation*, based on the information about the word that we have received.

(space provided)

For homework or during the remainder of class, students should read Chapter 10 and complete the reading log and the vocabulary work for the chapter.

FROM THE STUDENT ACADEMIC NOTEBOOK

Reading Log: Read *The Shallows*, Chapter 10: A Thing Like Me and the Epilogue. Take notes on your reading in the space below.

In pages 201-208, Carr describes ELIZA, the computer program developed by Joseph Weizenbaum. What is ELIZA, and why does Carr include ELIZA in this section?

In the space below, take notes on evidence in the remainder of the chapter that you find for Carr’s statement that “Alienation ... is the inevitable by-product of the use of technology” (page 212).

(space provided)

Assessment:

Outcome 1:

Students will read informational text so as to recognize argument/claim/evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Reading log shows that student has read the assigned material. | No | Somewhat | Very |
| Reading log includes textual evidence. | No | Somewhat | Very |
| Student uses completed reading log to support classroom dialogue. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Four

Technology and Alienation (Approx. 20 minutes)

Divide the class into small groups or partners.

Ask students to examine the final statement of the book:

“That’s the essence of Kubrick’s dark prophecy: as we come to rely on computers to mediate our understanding of the world, it is our own intelligence that flattens into artificial intelligence” (page 224).

Facilitate a whole-class discussion in which students should examine the following questions:

- How is this quote related to each of the three main ideas for the culminating project?
- Do you agree with Carr’s ultimate view of the Internet and its impact on our intelligence?
- What counter-arguments can you develop against Carr’s view?

Assessment:

Outcome 2:

Students will demonstrate their ability to understand and analyze the content of Carr's argument, specifically the impact of Taylorism on Google, distinguishing between human and computer memory, and the potential for alienation inherent in technology use.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates in class discussion and work on the Carr text. | No | Somewhat | Very |
| Participation indicates an understanding of the content of Carr's argument. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Five

Vocabulary and Concepts from Chapters 8-10 (Approx. 50 minutes)

Ask students to open their academic notebooks to the pages on which they have vocabulary charts for Chapters Eight through 10. Students should have completed their vocabulary work for previous homework, choosing one word from the choice list and one self-selected word from each of the assigned chapters (Eight through 10).

The list of words that students can choose from for Chapters Eight through 10 is in the academic notebook as well as the charts they should have completed for homework.

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Carr's Chapter Eight, "The Church of Google"

Directions:

Choose one of the words from the list in the box below and one unfamiliar word from Chapter Eight. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | |
|--------------------|-------------------------|---------------------|
| choreography (149) | ethereal (157) | memex (169) |
| optimization (150) | complementary (160) | malevolent (171) |
| permutations (151) | infringement (162) | embryonic (172) |
| aesthetic (151) | laudable (163) | Taylorist (173) |
| analogy (153) | digitized (164) | imperialistic (174) |
| largesse (155) | Transcendentalist (166) | incubating (175) |
| lucrative (155) | dissonance (167) | fallacy (176) |
| brutish (157) | perpetual (168) | |

Vocabulary from Carr's Chapter Nine, "Search, Memory"

Choose one of the words from the list in the box below and one unfamiliar word from Chapter Nine. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | |
|---------------------|---------------------|-----------------|
| proliferation (177) | capacious (182) | conundrum (189) |
| synthesis (179) | retrograde (183) | ethereal (193) |
| crucible (179) | consolidation (184) | crux (196) |
| obsolete (181) | hippocampus (188) | |

Vocabulary from Carr's Chapter 10, "A Thing Like Me"

Choose one of the words from the list in the box below and one unfamiliar word from Chapter 10. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | |
|--------------------|------------------|-------------------|
| parsing (201) | apostate (208) | consensus (217) |
| penumbra (202) | lucidity (209) | perusal (218) |
| banal (203) | dexterity (210) | erosion (220) |
| plausibility (206) | alienation (211) | empathizing (221) |
| tautology (207) | cybernetic (214) | |

FROM THE STUDENT ACADEMIC NOTEBOOK

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ | |
| Dictionary definition: _____ | |
| What in the world does that mean? _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ | |

If necessary, choose one of the words from the choice list and model the kind of work we expect from students, referring back to the sample provided in Lesson Three or using another sample taken from the list of choice words for Chapters Eight through 10 and projecting this modeling on the document camera or using the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected, from Chapters Eight through 10. Ask students to write their eight words on index cards, and to write both the definition and the context (ie., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *The Shallows*, and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories, but all of the members of the group must agree to the categories they have developed and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words that they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Assessment:

Outcome 3:

Students will apply strategies for locating words in an informational text that are unfamiliar to them and determining the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to review the words that they studied in their small group and to pull from those words their TOP FIVE words. The words they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapters Eight through 10. Ask each group to report out the words they chose and why they chose them, i.e., in what way do their TOP FIVE words connect to or remind them of the content of Chapters Eight through 10.

Make sure the words chosen as TOP FIVE are placed on *The Shallows* vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

Teacher
Checklist

Use this list to ensure that you have completed all of the lesson components. I . .

1. Facilitated students' work with a partner or small group to write and revise a synthesis paragraph of the strongest evidence Carr uses, related to a quote from Chapter Eight, which was read for homework.
2. Asked students to read and annotate a blog by Scott Karp, entitled, "The Evolution from Linear Thought to Networked Thought."
3. Asked students to write and revise a rhetorical précis on the blog.
4. Facilitated a discussion pulling information from Karp's blog to connect to the three quotes for the synthesis essay.
5. Introduced students to Chapter Nine through a close examination of the opening paragraphs.
6. Assigned students to read Chapter Nine and to complete the reading log and vocabulary work on the chapter for homework or during the remainder of class.
7. Facilitated students' use of their reading logs and the text to: (a) find a quote from the chapter that most clearly states Carr's argument and (b) outline the evidence Carr presents.
8. Facilitated a discussion on this evidence and the counter-arguments that might be made.
9. Introduced students to the concept of alienation and assigned them to read Chapter 10 and complete the reading log and vocabulary work on the chapter for homework or during the remainder of class.
10. Facilitated a discussion to examine Carr's final statement of the book and connect that statement to the three quotes for the synthesis essay, as well as to develop counter-arguments.
11. Facilitated vocabulary study and sorting from Chapters Eight through 10.
12. Placed the TOP FIVE vocabulary words from Chapters Eight through 10 on *The Shallows* vocabulary word wall chart.

Lesson 7

Drafting and Presentation

Overview and Rationale:

At this point in the unit, students have completed their reading of the central text, *The Shallows* by Nicholas Carr. Students should have gathered sufficient evidence from the Carr text to be ready for drafting their synthesis essay based on a stance they have taken on one of three quotes from Carr. Instruction in this lesson begins with a review of the assignment and of the quotes to which students will respond. Students are also asked to revisit the timeline for their writing project that was introduced in Lesson 3. After being given time to go through their academic notebooks and to collect notes that connect to their chosen quote, students will be asked to look for holes or gaps in the evidence they have collected and will be given time in the library or media center to collect additional research. Students will then be asked to write a summary paragraph of their stance and will use a graphic organizer to create an outline. Students will write a draft of their synthesis essay and will create and present a three-minute presentation on their stance and the evidence they have to support their stance. Students will receive peer and teacher feedback on their presentations, as well as teacher feedback on their drafts.

Tasks/Expected Outcomes:

1. Students will complete preparatory work toward the synthesis essay assignment and will write a draft of a synthesis essay.
2. Students will use their synthesis essay draft to make a presentation to the class using their thesis statement and relevant evidence.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;
 - (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author's use of stylistic or rhetorical devices;

- (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers' questions and contradictory information.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 - 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 - 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebooks
- Access to a library or media center

Timeframe:

220 minutes

Targeted Vocabulary:

- General academic vocabulary
- Synthesis

Activity One

Preparatory Work for Writing a Synthesis Essay Draft (Approx. 45 minutes)

Revisit with students the assignment prompt and quotes, as well as the requirements for additional resources, on the page titled “Synthesis Essay Assignment” in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Informational/Explanatory/ Synthesis 19

Directions: Read the assignment description of the culmination project of this unit. Then respond to the prompt below.

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading Nicholas Carr’s *The Shallows: What the Internet is Doing to our Brains* and other informational texts on the impact of information technology, write a synthesis essay in which you support a thesis based on one of the following quotes from Carr’s text. Support your position with evidence from the texts.

“With the exception of alphabets and number systems, the Net may well be the single most powerful mind-altering technology that has ever come into general use. At the very least, it’s the most powerful that has come along since the book” (Carr, 118).

“Karp, Friedman, and Davis—all well-educated men with a keenness for writing—seem fairly sanguine about the decay of their faculties for reading and concentrating. All things considered, they say, the benefits they get from using the Net—quick access to loads of information, potent searching and filtering tools, an easy way to share their opinions with a small but interested audience—make up for the loss of their ability to sit still and turn the pages of a book or magazine” (Carr, 8).

“The price we pay to assume technology’s power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities—those for reason, perception, memory, emotion” (Carr, 211).

Use your best voice, academic language, and third person point of view. Incorporate at least three sources (at least one from our class discussions) to support your ideas. Include at least three direct quotes; all quotes and paraphrased information must include a parenthetical citation. The last page of your paper should be your works cited page. Follow all MLA guidelines for formatting and documentation.

You will also give a three-minute presentation highlighting the main ideas presented in your essay. Your presentation should:

- include your thesis statement,
- include at least three main points that support your thesis,
- include at least three pictures/charts/graphs (some visual representation) of the three main points, and
- follow all MLA guidelines for formatting and documentation.

Select one of the three quotes from Carr that interests you the most.

What kind of ideas and thoughts do you have in response to this prompt? What have you seen so far in Carr’s text or in the other texts you have read that seems to connect to this quote?

(space provided)

Assessment:

Outcome 1:

Students will complete preparatory work toward the synthesis essay assignment and will write a draft of a synthesis essay.

Timeline

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Student’s timeline presents a “doable” estimation of time allowances, within the time allotted for the draft. | No | Somewhat | Very |
| Student’s timeline shows awareness of the student’s strengths and weaknesses in writing. | No | Somewhat | Very |
| Student’s timeline shows awareness of the process of writing an essay. | No | Somewhat | Very |
| Total Points | 9 | | |

Tell students to return to the timeline they began developing in Lesson 3 and make any adjustments necessary in order to meet the due date for the synthesis paper.

Ask students to have their academic notebooks and a highlighter available. Using a document camera or other technology tool, and a volunteer student’s academic notebook, model for students the process of reading through a page of notes, checking for relevance to a prompt and highlighting selected sections.

Ask students to choose one of the prompts and to read through their academic notebooks, highlighting any information contained there that relates in any way to their chosen quote. Once the process of highlighting is complete, students should write a short response on the page titled “Evaluating Source Material” in the academic notebook to the following three questions: (a) What sources do I have available for responding to this prompt? (b) What holes are there in the information that I have? (c) Where might I find additional information to fill in holes?

FROM THE STUDENT ACADEMIC NOTEBOOK

Evaluating Source Material

Directions: Choose one of the quotes from the prompt and read through your academic notebook, highlighting any information contained there that relates to your chosen quote. Once the process of highlighting is complete you should write a short response to the following three questions:

- a) What sources do I have available for responding to this prompt?
- b) What holes are there in the information that I have?
- c) Where might I find additional information to fill in holes?

(space provided)

Ask students share their written responses so that they can hear/know what each other is doing and encourage them to help each other when appropriate.

If the teacher wishes, he or she can provide students with the handout “Potential Supplemental Sources,” which provides a list of other sources that students can consult for writing their synthesis essay.

TEACHER RESOURCES

Potential Supplemental Sources

Aboujaoude, Elias. *Virtually You: The Dangerous Powers of the E-personality*. New York: W.W. Norton, 2011. Print.

Curley, Robert. *Issues in Cyberspace: From Privacy to Piracy*. New York: Britannica Educational Pub. in Association with Rosen Educational Services, 2012. Print.

Friedman, Lauri S. *Social Networking*. Detroit: Greenhaven, 2011. Print.

Friedman, Thomas L. *The World Is Flat: A Brief History of the Twenty-first Century*. New York: Farrar, Straus and Giroux, 2005. Print.

Gerdes, Louise I. *Cyberbullying*. Detroit: Greenhaven, 2012. Print.

Haugen, Hayley Mitchell, and Susan Musser. *Internet Safety*. Detroit: Greenhaven, 2008. Print.

James Bamford. “The Black Box.” *Wired* Apr. 2012: 78-85. Print.

Kiesbye, Stefan. *Does the Internet Increase Crime?* Detroit: Greenhaven, 2010. Print.

Lanier, Jaron. *You Are Not a Gadget: A Manifesto*. New York: Alfred A. Knopf, 2010. Print.

Palfrey, John G., and Urs Gasser. *Born Digital: Understanding the First Generation of Digital Natives*. New York: Basic, 2008. Print.

Rheingold, Howard. *Net Smart: How to Thrive Online*. Cambridge, MA: MIT, 2012. Print.

Vaidhyanathan, Siva. *The Googlization of Everything: (and Why We Should Worry)*. Berkeley: University of California, 2011. Print.

Willis, Laurie. *Electronic Devices in Schools*. Detroit: Greenhaven, 2012. Print.

Take students to the library/media resource center so that they can find additional source material for their literary argument.

Activity Two

Write a Summary Paragraph (Approx. 15 minutes)

Tell students that they are going to write a summary paragraph that includes a thesis statement and sequences the key points they plan to make in their synthesis essay. The writing of this summary paragraph may show students they need more research, they should focus the evidence they have, or they are on the right track. Remind students of the rhetorical précis work they did previously in this unit, which included summary writing. At this point, they are writing a paragraph containing the thesis statement with key points that will support the development of their synthesis.

If necessary, show students summaries and abstracts or opening paragraphs from professional work. You may also collectively write a summary demonstrating a controlling idea with key points that support the development of the explanation. Students should carry out this work on the page titled “Writing a Summary Paragraph” of the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing a Summary Paragraph

In the space below, write a summary paragraph that includes a thesis statement and sequences the key points you plan to make in your synthesis essay.

(space provided)

Once students have completed their summary paragraphs, ask them to review the timeline they created in light of their summary paragraphs. Do they need additional research? Or can they move on?

Assessment:

Outcome 1:

Students will complete preparatory work toward the synthesis essay assignment and will write a draft of a synthesis essay.

Summary Paragraph

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Student’s summary paragraph provides a concise summary statement that establishes a controlling idea. | No | Somewhat | Very |
| Student’s summary paragraph identifies key points that support development of the synthesis. | No | Somewhat | Very |
| Student’s summary paragraph is written in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three Create an Outline (Approx. 25 minutes)

Ask students to work on the page titled “Creating an Outline” in their academic notebooks to create an outline using the research form for their paper. This outline will include key elements drawn from students’ reading or research, an evaluation of each source, and citation information that will be helpful to their final draft. Students will need to pull information from the rhetorical précis they have written, as well as from their reading logs and the additional information they found through the research portion of this lesson.

FROM THE STUDENT ACADEMIC NOTEBOOK

Creating an Outline

Directions:

Using the research form below, create an outline for your synthesis essay.

Idea presented in Carr (quote on which you will base your thesis):

(space provided)

Summary paragraph containing thesis statement:

(space provided)

Source used from class discussions (list using MLA format):

(space provided)

Evaluation of material (how/what will it contribute to your paper or support your argument? How does it relate to the other information that you’ve found?):

(space provided)

Paraphrased ideas or “direct quotes” from this source to use in paper (if applicable, record the page numbers where the quote is found).

Additional sources (minimum of two; use MLA format):

Source #2:

Evaluation of material (how/what will it contribute to your paper or support your argument? How does it relate to the other information that you’ve found?):

Paraphrased ideas or “direct quotes” from this source to use in paper (if applicable, record the page numbers where the quote is found):

Source #3:

Evaluation of material (how/what will it contribute to your paper or support your argument? How does it relate to the other information that you’ve found?):

(space provided)

Paraphrased ideas or “direct quotes” from this source to use in paper (if applicable, record the page numbers where the quote is found):

(space provided)

Assessment:

Outcome 1:

Students will complete preparatory work toward the synthesis essay assignment and will write a draft of a synthesis essay.

Outline

| Evaluation Rubric | | | |
|---|-----------|----------|------|
| Student applies an outline strategy to support the controlling idea. | No | Somewhat | Very |
| Student's outline provides citations and references with elements for correct form. | No | Somewhat | Very |
| Student's outline represents a credible implication about an issue or topic. | No | Somewhat | Very |
| Student's outline is written in readable prose. | No | Somewhat | Very |
| Total Points | 12 | | |

Activity Four

Write a Draft (Approx. 90 minutes)

Using their outline, students will construct an initial draft of a synthesis with an emerging line of thought and structure, including appropriate embedding of quotations and other evidence, with appropriate citation. The drafting work will be done on students' own paper or computer, not in the academic notebook. Tell the students:

Redraft an opening for your composition with one or more paragraphs that establishes the controlling idea and provides a lead in for your reader. Write an initial draft to include multiple paragraphs: an opening, development of your process, an ending to include either a comment, conclusion or implication. Include evidence, such as quotations, with appropriate citations.

Any additional time needed can be carried out at home so that students have completed their draft by the beginning of the next week. In order to provide students with appropriate feedback on their drafts, the teacher should be prepared to read and comment on the students' drafts and to analyze patterns of writing problems that can be addressed through mini-lessons on writing in Lesson Eight.

Assessment:

Outcome 1:

Students will complete preparatory work toward the synthesis essay assignment and will write a draft of a synthesis essay.

| Evaluation Rubric | | | |
|--|-----------|----------|------|
| Draft provides an opening that includes a controlling idea and an opening strategy relevant to the prompt. | No | Somewhat | Very |
| Draft addresses all elements of the prompt. | No | Somewhat | Very |
| Draft includes evidence with appropriate citation. | No | Somewhat | Very |
| Draft is written in readable prose. | No | Somewhat | Very |
| Total Points | 12 | | |

Activity Five

Create and Deliver a Presentation (Approx. 45 minutes)

Tell the students to use their initial draft to transfer their main ideas and supporting evidence to a PowerPoint or other presentation technology; they should prepare for a three-minute presentation containing a summary of their synthesis, including the evidence they have collected for their synthesis, to a small group. Consider the following recommendations for grouping:

1. Group students by the quote they have selected for their synthesis essay.
2. Keep the groups small (no more than four) so that less time is spent on the overall presentation, thus allowing for greater revision time.

Each student will make a three-minute presentation of his or her thesis statement and supporting evidence to the class. While students are presenting, members of their small group will complete a feedback form on each other's presentations. The focus of this feedback is on the content of the presentation, as this feedback will be directly used to revise the draft of the synthesis essay for the final draft.

Ask students to address the following for each presentation, using the peer feedback form: How convincing for you was the evidence presented here? What could have made it more convincing? What other advice would you provide to the speaker?

FROM THE STUDENT ACADEMIC NOTEBOOK

Peer Feedback Form

Name of Presenter:

Your Name:

How convincing for you was the evidence presented here?

What could have made it more convincing?

What other advice would you provide to the speaker?

Assessment:

Outcome 2:

Students will use their synthesis essay draft to make a presentation to the class using their thesis statement and relevant evidence.

Presentation

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Presentation provides a concise and clear summary of main points in the synthesis. | No | Somewhat | Very |
| Presentation includes evidence, such as quotations, with appropriate citation. | No | Somewhat | Very |
| Presentation style is coherent and effective. | No | Somewhat | Very |
| Total Points | 9 | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Reviewed with students the assignment and the quotes to which they will respond.
2. Facilitated students' development of a timeline for their writing project.
3. Gave students time to go through their academic notebooks and collect notes that connect to their chosen quote.
4. Asked students to look for holes or gaps in the evidence they have collected and gave them time in the library or media center to collect additional research.
5. Asked students to write a summary paragraph of their stance and to use a graphic organizer to create an outline.
6. Asked students to write a draft of their synthesis essay.
7. Asked students to create and present a three-minute presentation on their stance and the evidence they have to support their stance.
8. Ensured that students received peer and teacher feedback on their presentations, as well as teacher feedback on their drafts.

Lesson 8

Synthesis Writing: Final Draft

Overview and Rationale:

Students will use peer and teacher feedback elicited from their presentations, as well as teacher feedback on synthesis essay drafts, to revise and edit their drafts and to write and submit a final draft of their synthesis essays.

Tasks/Expected Outcomes:

1. Students will use peer and teacher feedback elicited from their presentations and drafts to revise and edit their synthesis essays and turn in the final draft.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
 - (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;

- (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;
- (C) write an interpretation of an expository or a literary text that:
- (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author's use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers' questions and contradictory information.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Throughout this course, only grade 12 standards are used.

Materials:

- Drafts of students' synthesis essays
- Peer feedback on presentations; teacher feedback on drafts
- Academic notebook
- In-text citations basics handout

Timeframe:

250 minutes

Targeted Vocabulary:

- None

Activity One

Preparatory Work for Writing a Synthesis Essay Draft (Approx. 45 minutes)

Review with students the assignment prompt and quotes, as well as the requirements for additional resources, on the page titled “Synthesis Essay Assignment” in the academic notebook.

Provide students with copies of the peer feedback on their presentations. Provide students with teacher feedback on their synthesis drafts.

Ask students to read the feedback and to look for patterns and for ideas that they could apply to the revision of their synthesis essay drafts. Help students understand the importance of revision by clarifying the difference between revision and editing. (Revision applies to changes in wording, transitions, big picture ideas, etc., while editing applies to spelling, punctuation, mechanics and usage issues.)

The teacher may choose to present mini-lessons on specific writing issues, based on the analysis of students’ rough drafts. For example, if several students are having difficulty with providing appropriate citations, with embedding quotes in the body of the paper, with subject-verb agreement, etc., the teacher may wish to present a mini-lesson on one of these topics. The topic for the mini-lesson(s) should be appropriate for the strengths and weaknesses of the students’ rough drafts.

Model the revision process by using one of the students’ papers (or your own, if you are writing with the students) and showing students how to go about revising. Depending on the student, this revision may require, (a) additional resources and library time to find those resources; (b) rewriting and restructuring, with time to peer and/or teacher conference; and (c) careful editing, with helpful direction from the teacher on grammar/mechanics/usage issues.

Model for students how to provide helpful and critical peer feedback. To model helpful feedback, ask for a volunteer to bring his or her rough draft forward and sit with the volunteer, reading sections of his or her paper as directed and providing critical feedback. The purpose of this modeling is to ensure that students understand their role as peer readers of the draft. The teacher might begin this modeling by asking, “What do you see as the strengths and weaknesses of your draft”? or a similar question. The volunteer’s answer should provide you with a way to focus your reading. Next, read a paragraph at a time out loud, stopping to provide feedback to the volunteer as you read. In your feedback, be sure to provide help based on the volunteer’s response to the “strengths and weaknesses” question. In addition, provide feedback on the following: the structure of the synthesis essay (introduction/body/conclusion), thesis statement, transitions, citing and embedding source materials and mechanics/grammar/spelling.

After modeling, ask students who were observing the feedback session to discuss what they noticed and how they might be able to carry out similar feedback to their peers when they review.

Ask students to work with a partner to do a final proofing and editing of their drafts, using peer conferring. They should work through the Editing & Revision Checklist: Synthesis Essay in the academic notebook. Provide students with a copy of the in-text citations information sheet if necessary. If time allows, carry out this peer conferring process with more than one partner.

TEACHER RESOURCE

In-Text Citations: The Basics

Guidelines for referring to the works of others in your text using MLA style is covered in your language textbook as well as on several on-line sources. All provide extensive examples, so it's a good idea to consult them if you want to become even more familiar with MLA guidelines or if you have a particular reference question. The On-Line Writing Lab at Purdue University website is: <http://owl.english.purdue.edu/owl/resource/557/02/>. The following information comes from that website.

Basic In-Text Citation Rules

In MLA, referring to the works of others in your text is done by using a parenthetical citation. Immediately following a quotation from a source or a paraphrase of a source's ideas, you place the author's name followed by a space and the relevant page number(s).

Human beings have been described as "symbol-using animals" (Burke 3).

When a source has no known author, use a shortened title of the work instead of an author name. Place the title in quotation marks if it's a short work, or italicize or underline it if it's a longer work.

Your in-text citation will correspond with an entry in your Works Cited page, which, for the Burke citation above, will look something like this:

Burke, Kenneth. *Language as Symbolic Action: Essays on Life, Literature, and Method*. Berkeley: U of California P, 1966.

We'll review how to make a Works Cited page later, but right now it's important to know that parenthetical citations and Works Cited pages allow readers to know which sources you consulted in writing your essay, so that they can either verify your interpretation of the sources or use them in their own scholarly work.

Multiple Citations

To cite multiple sources in the same parenthetical reference, separate the citations by a semi-colon:

...as has been discussed elsewhere (Burke 3; Dewey 21).

When Citation is *Not* Needed

Common sense and ethics should determine your need for documenting sources. You do not need to give sources for familiar proverbs, well-known quotations or common knowledge. Remember, this is a rhetorical choice, based on audience. If you're writing for an expert audience of a scholarly journal, he'll have different expectations of what constitutes common knowledge.

In-Text Citations: Author-Page Style

MLA format follows the author-page method of in-text citation. This means that the author's last name and the page number(s) from which the quotation or paraphrase is taken must appear in the text, and a complete reference should appear on your Works Cited page. The author's name may appear either in the sentence itself or in parentheses following the quotation or paraphrase, but the page number(s) should always appear in the parentheses, not in the text of your sentence. For example:

Wordsworth stated that Romantic poetry was marked by a “spontaneous overflow of powerful feelings” (263).

Romantic poetry is characterized by the “spontaneous overflow of powerful feelings” (Wordsworth, 263).

Wordsworth extensively explored the role of emotion in the creative process (263).

The citation, both (263) and (Wordsworth, 263), tells readers that the information in the sentence can be located on page 263 of a work by an author named Wordsworth. If readers want more information about this source, they can turn to the Works Cited page, where, under the name of Wordsworth, they would find the following information:

Wordsworth, William. *Lyrical Ballads*. London: Oxford U.P., 1967.

Anonymous Work/Author Unknown

If the work you are citing to has no author, use an abbreviated version of the work’s title. (For non-print sources, such as films, TV series, pictures, or other media, or electronic sources, include the name that begins the entry in the Works Cited page). For example:

An anonymous Wordsworth critic once argued that his poems were too emotional (“Wordsworth Is a Loser,” 100).

Citing Authors with Same Last Names

Sometimes more information is necessary to identify the source from which a quotation is taken. For instance, if two or more authors have the same last name, provide both authors’ first initials (or even the authors’ full name if different authors share initials) in your citation. For example:

Although some medical ethicists claim that cloning will lead to designer children (R. Miller, 12), others note that the advantages for medical research outweigh this consideration (A. Miller, 46).

Citing Multiple Works by the Same Author

If you cite more than one work by a particular author, include a shortened title for the particular work from which you are quoting to distinguish it from the others.

Lightenor has argued that computers are not useful tools for small children (“Too Soon” 38), though he has acknowledged elsewhere that early exposure to computer games does lead to better small motor skill development in a child’s second and third year (“Hand-Eye Development” 17).

Citing Indirect Sources

Sometimes you may have to use an indirect source. An indirect source is a source cited in another source. For such indirect quotations, use “qtd. in” to indicate the source you actually consulted. For example:

Ravitch argues that high schools are pressured to act as “social service centers, and they don’t do that well” (qtd. in Weisman 259).

Citing the Bible

In your first parenthetical citation, you want to make clear which Bible you’re using (and underline or italicize the title), as each version varies in its translation, followed

by book (do not italicize or underline), chapter and verse. For example:

Ezekiel saw “what seemed to be four living creatures,” each with faces of a man, a lion, an ox, and an eagle (New Jerusalem Bible, Ezek. 1.5-10).

All future references can then just cite book, chapter, and verse, since you’ve established which edition of the Bible you will be using.

Formatting Quotations

When you directly quote the works of others in your paper, you will format quotations differently depending on their length. Below are some basic guidelines for incorporating quotations into your paper.

Short Quotations

To indicate short quotations (fewer than four typed lines of prose or three lines of verse) in your text, enclose the quotation within double quotation marks. Provide the author and specific page citation (in the case of verse, provide line numbers) in the text, and include a complete reference on the Works Cited page. Punctuation marks such as periods, commas, and semicolons should appear after the parenthetical citation. Question marks and exclamation points should appear within the quotation marks if they are a part of the quoted passage but after the parenthetical citation if they are a part of your text. For example:

According to some, dreams express “profound aspects of personality” (Foulkes 184), though others disagree.

According to Foulkes’s study, dreams may express “profound aspects of personality” (184).

Is it possible that dreams may express “profound aspects of personality” (Foulkes 184)?

Mark breaks in short quotations of verse with a slash, /, at the end of each line of verse: (a space should precede and follow the slash)

Cullen concludes, “Of all the things that happened there / That’s all I remember” (11-12).

Long Quotations

Place quotations longer than four typed lines in a free-standing block of text, and omit quotation marks. Start the quotation on a new line, with the entire quote indented one inch from the left margin; maintain double-spacing. Only indent the first line of the quotation by a half inch if you are citing multiple paragraphs. Your parenthetical citation should come after the closing punctuation mark. When quoting verse, maintain original line breaks. (You should maintain double-spacing throughout your essay.) For example:

Nelly Dean treats Heathcliff poorly and dehumanizes him throughout her narration:

They entirely refused to have it in bed with them, or even in their room, and I had no more sense, so, I put it on the landing of the stairs, hoping it would be gone on the morrow. By chance, or else attracted by hearing his voice, it crept to Mr. Earnshaw’s door, and there he found it on quitting his chamber. Inquiries were made as to how it got there; I was obliged to confess, and in recompense for my cowardice and inhumanity was sent out of the house (Bronte 78).

Adding or Omitting Words In Quotations

If you add a word or words in a quotation, you should put brackets around the words to indicate that they are not part of the original text.

Jan Harold Brunvand, in an essay on urban legends, states: “some individuals [who retell urban legends] make a point of learning every rumor or tale” (78).

If you omit a word or words from a quotation, you should indicate the deleted word or words by using ellipsis marks, which are three periods (...) preceded and followed by a space. For example:

In an essay on urban legends, Jan Harold Brunvand notes that “some individuals make a point of learning every recent rumor or tale ... and in a short time a lively exchange of details occurs” (78).

Students should submit their final draft before or on the due date for scoring and feedback.

Assessment:

Outcome 1:

Students will use peer and teacher feedback elicited from their presentations and drafts to revise and edit their synthesis essays and turn in the final draft.

Revision and Editing Process

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Student demonstrates use of revision strategies that clarify logic and development of ideas. | No | Somewhat | Very |
| Student uses of revision strategies that improves word-usage and phrasing. | No | Somewhat | Very |
| Student demonstrates use of revision strategies that create smooth transitions between sentences and paragraphs. | No | Somewhat | Very |
| Total Points | 9 | | |

Students should submit their final draft before or on the due date for scoring and feedback.

Rubric for Synthesis Essay

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|---|-----|---|-----|--|-----|--|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. Makes no mention of counter claims. | | Establishes a claim Makes note of counter claims. | | Establishes a credible claim. Develops claim and counter claims fairly. | | Establishes and maintains a substantive and credible claim or proposal. Develops claims and counter claims fairly and thoroughly. |
| Reading/ Research | Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. Makes no connections or a connection that is irrelevant to argument or claim. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. Makes a connection with a weak or unclear relationship to argument or claim. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. Makes a relevant connection to clarify argument or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim Makes a clarifying connection(s) that illuminates argument and adds depth to reasoning. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage and mechanics. Sources are used without citation | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation. | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

Unit 1

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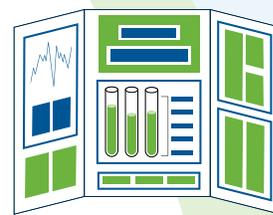
Purdue Online Writing Lab. "MLA In-Text Citations: The Basics." Purdue University — <http://owl.english.purdue.edu/owl/resource/747/02/>.

SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

English Unit 1

The Academic Notebook



Name

Unit 1

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Course Overview

Welcome to the first English literacy unit of the SREB Readiness Course- Literacy Ready. What does English literacy mean? English literacy is based on an understanding that texts—both literary and informational—provide a terrain for interrogating the meanings of human experiences and that literary texts are open to dialogue between and among readers and texts. When reading texts in English classes, both in high school and in college, students should be able to:

- read for and recognize the development of argument/claim/evidence structure and point of view over the course of a text,
- decipher rhetorical strategies and patterns,
- make inferences from details,
- analyze how the author’s choices contribute to the power, persuasiveness or beauty of the text,
- draw on prior knowledge to construct interpretations, and
- use the text to reflect on the human condition or the reader’s life.

In this course, you will take part in several activities aimed at improving your literacy, specifically as literacy is used in English. While certainly the content covered in this course is important, a principal purpose of this course is to equip you with the tools necessary to be more successful in your college coursework. To that end, the creators of the course have developed this academic notebook.

Purposes of the Academic Notebook

The academic notebook has several roles in this course. First, you will keep a record of your reading of the central text, *The Shallows: What the Internet is Doing to Our Brains*, by making reading log entries for assigned readings. The idea behind the reading logs is to provide you with both direction and structure for collecting the ideas, for noticing the structure of the argument, and for evaluating the claims and the evidence in this central text. The notes that you take in the reading log will be used at the end of the unit as preparation for a synthesis essay, in which you will take a position on one of the arguments made in the central text and synthesize information supporting your position.

A second role of the notebook is to provide you with a space in which you can make note of new vocabulary that you encounter in the text and collect information about the meanings of those words. To carry out this role, you will use vocabulary charts to make note of words that are new to you, write the context in which you find the word, rate your understanding of the word, and write a dictionary definition for the word as well as your own understanding of that definition.

The final role of the notebook is that of an assessment tool. Your instructor may periodically take up the notebooks and review your work to insure that you are remaining on task and to assist you with any material that is causing you difficulty. At the end of this six-week module, your instructor will review the contents of this notebook as part of your overall grade. Thus, it is important that you take this work seriously as this notebook becomes the record of your activity in this course.

You will notice that a good deal of the work involved in this course will need to be done as homework. For some of you, this increased amount and difficulty of homework may be a challenge. As the purpose of this course is to prepare you for the types of reading and writing you will do in college, and as college courses typically require significant amounts of homework, it is important that you commit yourself to maintaining consistency in your homework.

The academic notebook is organized by lesson, and your teacher will give you instructions on which pages you should attend to during class and for homework.

Lesson 1

The Impact of Noise

In this lesson, you will . . .

- Explore the nature of disciplinary literacy in English/language arts classes, as well as the goals and purposes of the course.
- Read informational text so as to recognize argument, claim, and evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
- Participate in a data collection and analysis experiment designed to engage you with the content of the unit, to assist you in understanding how evidence can be used to substantiate claims and to develop a definition for *multitasking*.
- Apply strategies for locating words in an informational text that are unfamiliar to you and determining the meaning of those words, using both context clues and dictionaries.

Directions:

Take a few minutes to think about the questions below; write a brief response to each question. You will be asked to share your responses with the whole group.

1. What kinds of reading and writing have you typically done in an English class?

2. How do you use the Internet?

3. In general, on a daily basis, how much time do you spend on the Internet?

4. Do you multitask? If so, how?



Your teacher will read for you the first three paragraphs of *The Shallows*, Prologue, The Watchdog and the Thief, pages one and two, helping you to understand and analyze this section.

As you read the remainder of the Prologue, look for words and phrases that will help you understand what Carr means by the terms “net enthusiast” and “net skeptic” and write those words and phrases, as well as your own definition for these terms, in the graphic organizer below. Your teacher will provide you with the dictionary definition of an “enthusiasm” and a “skeptic.” What additional information does the definition provide for you?

| net enthusiast | net skeptic |
|---|---|
| Textual clues <hr/> <hr/> <hr/> <hr/> <hr/> | Textual clues <hr/> <hr/> <hr/> <hr/> <hr/> |
| My definition based on those clues <hr/> <hr/> <hr/> <hr/> | My definition based on those clues <hr/> <hr/> <hr/> <hr/> |
| Added information from the dictionary definition <hr/> <hr/> <hr/> <hr/> | Added information from the dictionary definition <hr/> <hr/> <hr/> <hr/> |
| Revised definition <hr/> <hr/> <hr/> <hr/> | Revised definition <hr/> <hr/> <hr/> <hr/> |

“A Necessary Tranquilizer” by Arthur C. Clarke

Directions: Read the following passage. Answer the questions that follow the passage by circling the letter of the correct answer. This is a timed reading assignment and you will have 10 minutes to read and answer the questions.

(1) We have all seen unbuttoned beer-bellies slumped in front of the TV set, and transistORIZED morons twitching down the street, puppets controlled by invisible disc jockeys.

(2) These are not the highest representatives of our culture; but, tragically, they may be typical of the near future. (3) As we evolve a society oriented toward information, and move away from one based primarily on manufacture and transportation, there will be millions who cannot adapt to the change. (4) We may have no alternative but to use the lower electronic arts to keep them in a state of drugged placidity.

(5) For in the world of the future, the sort of mindless labor that has occupied 99 percent of mankind, for much more than 99 percent of its existence, will of course be—even work that they don't like. (7) In a workless world, therefore, only the highly educated will be able to flourish, or perhaps even to survive. (8) The rest are likely to destroy themselves and their environment out of sheer frustration. (9) This is no vision of the distant future; it is already happening, most of all in the decaying cities.

(10) So perhaps we should not despise TV soap operas if, during the turbulent transition period between our culture and real civilization, they serve as yet another opium for the masses. (11) This drug, at any rate, is cheap and harmless, serving to kill Time—for those many people who like it better dead.

1. According to Clarke, why will we need the TV set in the information age?

- a. To numb the masses of people who cannot adapt to change.
- b. To relieve the boredom people experience from working.
- c. To assist with the transition to the information age.
- d. To educate the masses who are workless.

2. Clarke suggests that the main purpose of work is

- a. To allow the educated to flourish.
- b. To produce competent citizenry.
- c. To rebuild the decaying cities.
- d. To alleviate boredom.

3. Which of the following best describes the tone of this passage?

- a. Outraged
- b. Sarcastic
- c. Amused
- d. Optimistic

4. In sentence 11, "This drug" is referring to:

- a. Opium
- b. Soap operas
- c. TV
- d. Education

5. Clarke makes all of the following predictions about man's ability to adapt to the change from a manufacturing based society to an information based society EXCEPT...

- a. They will destroy the environment.
- b. They will destroy themselves.
- c. They will need opium to suppress frustration.
- d. They will need to kill time with TV.

Number of your correct answers:

Average scores for the multitasking group:

Average scores for the non-multitasking group:

Interview with Clifford Nass

Directions: Work either individually or with a partner to read and annotate the interview with Clifford Nass, a professor at Stanford University and the founder and direction of the Communication between Humans and Interactive Media (SHIMe) Lab, below. Annotation involves making notes in the margin, based on your reading of the text. Annotation is another of several strategies for note-taking that you will be using throughout this unit; eventually, you will select and use the best strategies for your own style of note-taking. For this annotation exercise, use the following symbols for your annotations:

M = anything that adds to or changes our understanding of the definition of “multitasking.”

B =big ideas that are important for our understanding of the experiment that Nass and his colleagues are doing.

In addition, underline the specific text that you are targeting with your annotation.

Interviewer: What is multitasking?

Nass: *Multitasking as we’re studying it here involves looking at multiple media at the same time. So we’re not talking about people watching the kids and cooking and stuff like that. We’re talking about using information, multiple sources. And that is the part of everyone’s life that’s growing so rapidly.*

Interviewer: So what’s the big point here [behind your research]? ...

Nass: *The big point here is, you walk around the world, and you see people multitasking, working on tasks while watching TV, while talking with people. If they’re at the computer, they’re playing games and they’re reading e-mail and they’re on Facebook, etc. Yet classic psychology says that’s impossible; no one can do that. So we’re confronted with a mystery. Here are all these people doing things that psychology says is impossible. And we want to ask the question, how do they do it? Do they have some secret ingredient, some special ability that psychologists had no idea about, or what’s going on?*

Interviewer: What are you putting them through here [in your lab]?

Nass: *What we’re doing here is, we’re giving them different tasks that ask about the most basic ways the brain works. We’re not literally throwing them in with 10 different things at once, but to ask the question, do their brains work differently? Do high multitaskers think about information differently than low multitaskers?*

Interviewer: Explain to me what a high multitasker and a low multitasker is.

Nass: *We call those high multitaskers ... who are constantly using many things at one time when it comes to media. So let’s say they’re doing e-mail while they’re chatting, while they’re on Facebook, while they’re reading websites, while they’re doing all these other things. And low multitaskers are people who really are more one-at-a-time people. When they’re texting, they’re texting. When they’re reading a website, they’re reading a website. So those are the low multitaskers.*

Psychologists say all of us should be low multitaskers. But obviously the world’s changing, and more and more people, especially young people, but even older people, are becoming multitaskers.

Interviewer: What are the experiments that you’re doing today?

Nass: *Today we have people doing two experiments. The first one asks the question, can high and low multitaskers focus on something and not be distracted? Because one*

would think to multitask, you'd have to be good at ignoring distractions and going, "Oh, that's important; that's unimportant."

The idea we're looking at today is can high multitaskers ignore irrelevancy, which would seem to be very important. So what we do is we're going to show them red rectangles and blue rectangles, tell them all we want to know is did the red rectangles move. Ignore the blue. They're totally irrelevant. And what we want to see is if the high multitaskers can ignore them, the blue, very well, or are they suckers for looking at the blue rectangles.

Interviewer: What about the other experiment?

Nass: The other experiment has to do with the idea of shifting from one task to another. In fact, that's where the term "multitasking" comes from. So what we're doing here is we're telling people, we're going to either show you the word "letter" or "number" and then show you a letter and number. And if you see the word "letter," press this letter if it's a vowel and this one if it's a consonant. If you see the word "number," press this one if it's even and this one if it's odd. And the idea is to see when people have to switch from looking at the number to looking at the letter, how fast are they? Are high multitaskers fast multitaskers? Or are they in some sense slower, crippled by having to switch from task to task?

Interviewer: What did you expect when you started these experiments?

Nass: Each of the three researchers on this project thought that ... high multitaskers [would be] great at something, although each of us bet on a different thing.

I bet on filtering. I thought, those guys are going to be experts at getting rid of irrelevancy. My second colleague, Eyal Ophir, thought it was going to be the ability to switch from one task to another. And the third of us looked at a third task that we're not running today, which has to do with keeping memory neatly organized. So we each had our own bets, but we all bet high multitaskers were going to be stars at something.

Interviewer: And what did you find out?

Nass: We were absolutely shocked. We all lost our bets. It turns out multitaskers are terrible at every aspect of multitasking. They're terrible at ignoring irrelevant information; they're terrible at keeping information in their head nicely and neatly organized; and they're terrible at switching from one task to another.

Interviewer: So what do you make of that?

Nass: We're troubled, because if you think about it, if on the one hand multitasking is growing not only across time, but in younger and younger kids we're observing high levels of multitasking, if that is causing them to be worse at these fundamental abilities —I mean, think about it: Ignoring irrelevancy—that seems pretty darn important. Keeping your memory in your head nicely and neatly organized—that's got to be good. And being able to go from one thing to another? Boy, if you're bad at all of those, life looks pretty difficult.

And in fact, we're starting to see some higher-level effects [of multitasking]. For example, recent work we've done suggests we're worse at analytic reasoning, which of course is extremely valuable for school, for life, etc. So we're very troubled about, on the one hand, the growth, and on the other hand, the essential incompetence or failure.

One would think that if people were bad at multitasking, they would stop. However, when we talk with the multitaskers, they seem to think they're great at it and seem totally unfazed and totally able to do more and more and more. We worry about it, because as people become more and more multitaskers, as more and more people—not just young kids, which we're seeing a great deal of, but even in the workplace, people being forced to multitask, we worry that it may be creating people who are unable to think well and clearly.

Interviewer: Are there certain kinds of thought that suffer more than others?

Nass: It's a great question. The answer is yes. So we know, for example, that people's ability to ignore irrelevancy—multitaskers love irrelevancy. They get distracted constantly. Multitaskers are very disorganized in keeping their memory going so that we think of them as filing cabinets in the brain where papers are flying everywhere and disorganized, much like my office.

And then we have them being worse at switching from one task to another. It's very troubling. And we have not yet found something that they're definitely better at than people who don't multitask.

Interviewer: We were at MIT, and we were interviewing students and professors. And the professors, by and large, were complaining that their students were losing focus because they were on their laptops during class, and the kids just all insisted that they were really able to manage all that media and still pay attention to what was important in class—pick and choose, as they put it. Does that sound familiar to you?

Nass: It's extremely familiar. And the truth is, virtually all multitaskers think they are brilliant at multitasking. And one of the big new items here, and one of the big discoveries is, you know what? You're really lousy at it. And even though I'm at the university and tell my students this, they say: "Oh, yeah, yeah. But not me! I can handle it. I can manage all these," which is, of course, a normal human impulse. So it's actually very scary.

Interviewer: So who are these kids that you picked [for your study] to come in here today?

Nass: We picked the kids at Stanford who are multitasking a whole lot. So on a college campus, most kids are doing two things at once, maybe three things at once. These are kids who are doing five, six or more things at once, all the time.

So they're the kids who are texting while talking with people, while working on their papers, while chatting on multiple sessions. They're the kids who are playing multiple games on their screen while they're doing Facebook, while they're talking, while they're doing all these other things. So these are the extreme kids, the kids who are at the very, very high end of that.

Interviewer: And do these kids think they're pretty good at it?

Nass: Yeah. They all seem to think they're really good at it. In fact, what's ironic is when we talk with people who multitask all the time, those who don't—even though our research suggests the ones who don't would actually be better at it—they're the ones who are sure they're really bad at it. And the ones who do it all the time and are sure they are great at it are really bad at it. So it's a real question: What's going on?

Some things that we know get lost are, first of all, anytime you switch from one task to another, there's something called the "task switch cost," which basically, imagine, is I've got to turn off this part of the brain and turn on this part of the brain. And it's not free; it takes time. So one thing that you lose is time.

A second thing you lose is when you're looking at unrelated things, our brains are built to relate things, so we have to work very, very hard when we go from one thing to another, going: "No, not the same! Not the same! Stop it! Stop it!" It's why people who aren't multitaskers, like me, often experience when we're typing and someone walks up and starts talking with you—you've probably had this—you start typing their words and go, "Ah, what happened?" And that's because your brain loves to mix. So we're spending a lot of time trying to beat down this combining brain we have.

At the end of the day, it seems like it's affecting things like ability to remember long term, ability to handle analytic reasoning, ability to switch properly, etc., if this stuff is, again, ... trained rather than inborn. If it's inborn, what we're losing is the ability to do a lot of things that we're doing. We're doing things much, much poorer and less efficiently in time. So it's actually costing us time.

One of the biggest delusions we hear from students is, "I do five things at once because I don't have time to do them one at a time." And that turns out to be false. That is to say, they would actually be quicker if they did one thing, then the next thing, then the next. It may not be as fun, but they'd be more efficient.

Interviewer: You're confident of that?

Nass: Yes. There's lots and lots of evidence. And that's just not our work. The demonstration that when you ask people to do two things at once they're less efficient has been demonstrated over and over and over. No one talks about it—I don't know why—but in fact there's no contradictory evidence to this for about the last 15, 20 years. Everything [as] simple as the little feed at the bottom of a news show, the little text, studies have shown that that distracts people. They remember both less. Studies on asking people to read something and at the same time listen to something show those effects. So there's really, in some sense, no surprise there. There's denial, but there's no surprise.

The surprise here is that what happens when you chronically multitask, you're multitasking all the time, and then you don't multitask, what we're finding is people are not turning off the multitasking switch in their [brain]—we think there's a switch in the brain; we don't know for sure—that says: "Stop using the things I do with multitasking. Focus. Be organized. Don't switch. Don't waste energy switching." And that doesn't seem to be turned off in people who multitask all the time.

Interviewer: So are you suggesting that by multitasking all the time, we are actually changing our brains and making our brains worse at focusing on one thing?

Nass: There's a good chance. We don't know for sure, because it also could be that people are born to multitask. That is, they're born with the desire to do all these things, and that's making them worse. But there is reason to worry at least, and believe that.

One of the other worries is, we're seeing multitasking younger and younger and younger. So in a lovely study, someone showed that when infants were breastfeeding and the television was on, infants were doing a lot of television watching. Now, if we think about it, the way that we think that breastfeeding evolved the way it did is the

distance from the mother's face to the infant is the perfect focal distance. The voice is one that's very attractive.

Well, if you think about it, what is television filled with? Faces and voices. What do babies love? Faces and voices. So now, at a time when we believe that children learn intense concentration, they're being drawn away. Then as they get older, as they get to 3 or 4, we started feeling guilty that we put kids in front of the TV as a baby-sitter. So what did we do? We didn't turn off the TV. We started giving them toys, books, etc., while they're watching TV. So what are we telling them? We're telling them, "Don't pay attention; do many things at once." Well, it may not then be surprising that years later, that's how they view the media world.

Interviewer: So is there any movement to stop all this multitasking?

Nass: Oddly enough, we see the opposite. We see a number of societal forces encouraging multitasking. So in a lot of workplaces we see people being told, "You must answer e-mail within 15 minutes." Well, that means you're stopping what you're doing. Or, "You must keep your chat windows open."

Among software, how many new apps are there every single day on the iPhone, on the Android? How many new YouTube videos are there? How often does Facebook change? So, if anything, cultural forces and the expectation that people will respond instantly and chat and talk and do all these things all at once means, frankly, all the pressure is going that way.

We are seeing some rebellion. So, for example, [there are] companies, you know, calling me and saying, "How can we stop this? Our workforce is being driven crazy," or teachers trying desperately—mostly failing—to control the level of multitasking in the classroom. But it seems like mostly a losing battle.

Interviewer: It's disturbing.

Nass: It is scary. And it changes. We don't know how to teach to multitaskers. We don't know how to design software for multitaskers. We don't know how to have conversations effectively with multitaskers. So we're utterly unprepared for a world we're being thrust into.

Interviewer: What about the notion that kids, because they've learned how to multitask for longer, are better at it than people like you and I?

Nass: We expected that, and we hope that. There are some colleagues who are looking at kids and children and development. One of the things we're seeing important for kids is—already mentioned it—very young age groups, infants watching TV ... and doing a bunch of other tasks.

But what we're also seeing is, in younger and younger ages, social relationships occurring online rather than face to face, and all the classical theories of developmental psychology worked on the assumption that kids would interact with other kids, and you learned everything from that—everything from moral development to your identity to whatever. We're seeing incredible growth in social multitasking among younger and younger kids. We're talking third grade, fourth grade. As soon as they can write, one of the first things they're writing is social communication, not reading books. So now all of a sudden, we're changing that, too.

Of course the advantage is, it's hard for me to navigate talking with two people at once. But on the Web, I can easily talk with—well, not easily [for me]—I can talk with four

people at once. I can have four different conversations at the same time. So we don't know at all—and again, it's scary just because we don't know—how are their brains changing. How is the whole nature of social life [changing] because of multitasking?

One of the biggest points here I think is, when I grew up, the greatest gift you could give someone was attention, and the best way to insult someone was to ignore them. ... The greatest gift was attention. Well, if we're in a society where the notion of attention as important is breaking apart, what now is the relationship glue between us? Because it's always been attention.

Interviewer: What is it [now]? Do you have any theories?

Nass: No. None at all, and it's scary, because this seems to be an inexorable trend.

Text of website:

(www.pbs.org/wgbh/pages/frontline/digitalnation/interviews/nass.html#1).

Lesson 2

The Rhetorical Précis

In this lesson, you will . . .

- Read informational text so as to recognize argument, claim, and evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
- Demonstrate your ability to summarize and understand the rhetorical situation of a text by creating a rhetorical précis of an informational text.
- Apply strategies for locating words in an informational text that are unfamiliar to you and determining the meaning of those words, using both context clues and dictionaries.

Summarizing to Comprehend

Robert J. Marzano:

Directions: Read the short article below. You can underline, highlight, take notes, annotate in the margins, look up words in the dictionary, or use other tools that work for you while you read.

As the most cherished skill in the world of language arts, comprehension is also crucial to understanding texts in every other subject area. Although the process of comprehension is complex, at its core, comprehension is based on summarizing—restating content in a succinct manner that highlights the most crucial information. During the mid-1970s and early 1980s, the work of cognitive psychologists (see Kintsch, 1974; van Dijk, 1980; van Dijk & Kintsch, 1983) made this clear.

In a series of studies with teachers, we determined that summarizing strategies have a substantial average effect on student understanding of academic content. Across 17 experimental/ control studies that teachers conducted, we found that using summarizing strategies, on average, increased students' understanding of content by 19 percentile points (see Haystead & Marzano, 2009).

Summarizing Strategies That Work

As with all instructional strategies, however, we found that some approaches to summarizing are more effective than others. Five strategies appear to influence students' ability to comprehend text.

Strategy #1: Clarify what's important.

Summarizing strategies that do not emphasize text structure have the least powerful effect. Some summarizing strategies simply ask students to sort content into information that is either important or extraneous. The problem with this approach is that it provides no guidance as to how students might differentiate important from unimportant information.

To be effective, a summarizing strategy should help students discern the inherent structures in a text. For example, a story has a structure: There are main characters; there is rising and falling action; there are events that take place in certain locations, and so on. If students are aware that these elements are important aspects of stories, they are more likely to identify them and, consequently, more likely to comprehend the stories they read.

Strategy #2: Familiarize students with multiple text structures.

The story structure is familiar to students because they experience stories early on in their lives and because teachers typically teach story structures as a regular part of language arts instruction. Throughout their schooling, however, students will encounter many other kinds of text structures that are more expository in nature. Unless students recognize these structures, they may be less successful at comprehending the expository content in their textbooks and related readings. Important expository text structures include:

- *Description structures*, which describe characteristics of a particular person, place, or thing.

- *Generalization structures*, which begin with a general statement like, “There are a wide variety of consequences for breaking federal rules regarding carry-on baggage on commercial airplanes.” Examples illustrating the generalization follow.
- *Argument structures*, which begin with a statement that must be proven or supported. Proof or evidence follows the statement. Sometimes qualifiers identify exceptions to the proof or evidence provided. For example, an argument supporting global warming might list pieces of evidence that make the argument valid.
- *Definition Structures*, which begin by identifying a specific term and then describing the general category to which the term belongs, along with specific characteristics of the term that distinguish it from other terms within the category. For example, a text structure might articulate the characteristics of the process of commensalism, first explaining that it is a type of symbiosis and then showing how it is different from other types of symbiosis.
- *Comparison structures*, which identify two elements, such as commensalism and mutualism, and list how those elements are similar and dissimilar.
- *Problem/solution structures*, which begin by describing a problem such as “The problem of the divide in wealth between the upper 10 percent of people in the United States and everyone else can be addressed in a number of ways.” Possible solutions follow.

Strategy #3: Help students recognize layers.

Such expository structures will help students comprehend relatively short passages. However, long expository texts have structures layered within structures, and each layer represents a unique comprehension task.

For example, a section of text might start with a general statement and then provide specific examples of that generalization. But the discussion might also include a description of a person, place, or thing or a definition of a specific term.

Knowing that texts have many layers of structures is crucial to unlocking the meaning of extended expository discourse. Without this awareness, students might assume that one structure should organize the content; the presence of multiple structures may confuse them.

Strategy #4: Encourage graphic representations.

Along with identifying text structures, it is helpful for students to represent those structures graphically. For example, a student might represent a description structure graphically by drawing a circle that contains the element described, with spokes emanating from the circle noting the various characteristics describing that element. A student might represent a generalization structure by stating the generalization at the top of a chart, with the examples indented underneath to the right. The more subordinate an example is to the generalization, the farther the student would indent it to the right.

Strategy #5: Review essential terminology.

Even if a student recognizes that a section of a science text is organized as a generalization pattern about relationships in nature, she will have little chance of comprehending that section if she does not understand important terms used in the text, such as meiosis, mitosis, symbiosis and the like. Teachers should carefully preview texts and ensure that students have at least a basic understanding of important terms.

Making Sense of the Text

Comprehension is crucial to learning—and effective comprehension depends on one’s ability to recognize the structures inherent in a text. Spending more time and energy teaching text structures to students and then helping them recognize these structures in their reading can enhance students’ ability to comprehend a wide variety of texts.

References

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Kintsch, W. (1974). *The representation of meaning in memory*. Hillsdale, NJ: Erlbaum.

van Dijk, T. A. (1980). *Macrostructures*. Hillsdale, NJ: Erlbaum.

van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. Hillsdale, NJ: Erlbaum.

Marzano, Robert J. “Summarizing To Comprehend.” *Educational Leadership* 67.6 (2010): 83. Print.

Rhetorical Précis Guidelines and Sample

First, provide the MLA citation for the text on which you are creating a rhetorical précis. (See MLA citation guide on pages 24 – 25 for more help with citations.)

If it is an **electronic journal, the MLA citation will look like this:**

Marzano, Robert J. “Summarizing To Comprehend.” *Educational Leadership* 67.6 (2010): 83. MasterFILE Premier. Web. 6 Sept. 2012.

If it is a **print journal, the MLA citation will look like this:**

Marzano, Robert J. “Summarizing To Comprehend.” *Educational Leadership* 67.6 (2010): 83. Print.

Sentence 1: The first sentence should include the author’s name, the title of the work, the date of publication in parentheses, a rhetorically accurate verb (such as asserts, argues, suggests, implies, claims), and a that-clause containing the major assertion (thesis statement) of the work.

EXAMPLE: Robert Marzano in *Summarizing to Comprehend* (2010) asserts that teachers will see an increase in student comprehension when students are well-versed in effective summarizing strategies.

Sentence 2: The second sentence should: (a) explain how the author develops and/or supports the thesis; (b) discuss how the author accomplishes his/her task; and (c) support the strong verb used in sentence one; and cite where to locate the specific points addressed.

EXAMPLE: Marzano supports this assertion by reviewing five key strategies that lead to higher levels of comprehension; some of these strategies include: emphasizing text structure to differentiate between essential and non-essential information; learning to decipher expository text structures such as description, argumentation, definition, and comparison; recognizing layers within expository text; creating graphic representations of text structure; and finally, defining essential vocabulary within the text.

Sentence 3: The third sentence should state the author’s apparent purpose, followed by an “in order to” phrase.

EXAMPLE: The writer concludes that in order for students to improve reading comprehension, they must be able to identify developmental patterns within a text.

Sentence 4: The fourth sentence should describe the intended audience and/or the relationship the author establishes with the audience.

EXAMPLE: The writer establishes a direct tone to convince his audience of educators that it is vital to use instructional strategies that highlight multiple text structures in order to increase comprehension.

MLA Citation Guide

A Book (Print version):

Carr, Nicholas G. *The Big Switch: Rewiring the World, from Edison to Google*. New York: W.W. Norton, 2008. Print.

Carr, Nicholas G. *The Shallows: What the Internet Is Doing to Our Brains*. New York: W.W. Norton, 2010. Print.

A Book (Electronic version):

Flippo, Rona F., and David C. Caverly. *Handbook of College Reading and Study Strategy Research*. n.p.: Lawrence Erlbaum Associates, 2000. eBook Collection (EBSCOhost). Web. 21 Dec. 2012.

Matsuo, Tokuro, and Takayuki Fujimoto. *E-Activity and Intelligent Web Construction: Effects Of Social Design*. n.p.: Information Science Reference, 2011. eBook Collection (EBSCOhost). Web. 21 Dec. 2012.

A Scholarly Journal (Electronic):

McCullough, Heather. "The Fate of Reading, Thinking, and Learning in an Electronic Age." *International Journal of the Book* 7.4 (2010): 65. Publisher Provided Full Text Searching File. Web. 21 Dec. 2012.

Stephenson, Wen. "The Message Is The Medium: A Reply To Sven Birkerts and The Gutenberg Elegies." *Chicago Review* 41.4 (1995): 116. MasterFILE Elite. Web. 21 Dec. 2012.

A Scholarly Journal (Print):

Nystrand, Martin. "Research on the Role of Classroom Discourse As It Affects Reading Comprehension." *Research in the Teaching of English* 40.4 (2006): 392-412. Print.

A Magazine Article (Electronic version):

Birkerts, Sven. "Resisting the Kindle." *The Atlantic*. N.p., Mar. 2009. Web. 21 Dec. 2012.

Khater, Rami. "Social Media Evolution, Not Revolution." *The Huffington Post*. TheHuffingtonPost.com, 20 Dec. 2012. Web. 21 Dec. 2012.

A Blog (Electronic version):

Karp, Scott. "The Evolution from Linear Thought to Networked Thought." Web log post. Publishing 2.0. Publishing 2.0, 9 Feb. 2008. Web. 21 Dec. 2012.

Lesson 3

Vital Paths

In this lesson, you will . . .

- Apply strategies for locating words in an informational text that are unfamiliar to you and determining the meaning of those words, using both context clues and dictionaries.
- Read informational text so as to recognize argument, claim, and evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
- Demonstrate your ability to evaluate evidence and recognize the types of evidence that can be used to support a claim in argument writing.

Synthesis Essay Assignment

Read the assignment description for the culminating project of this unit. Then respond to the prompt below.

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading Nicholas Carr’s *The Shallows: What the Internet is Doing to our Brains* and other informational texts on the impact of information technology, write a synthesis essay in which you support a thesis based on one of the following quotes from Carr’s text. Support your position with evidence from the texts.

“With the exception of alphabets and number systems, the Net may well be the single most powerful mind-altering technology that has ever come into general use. At the very least, it’s the most powerful that has come along since the book” (Carr, 118).

“Karp, Friedman, and Davis—all well-educated men with a keenness for writing— seem fairly sanguine about the decay of their faculties for reading and concentrating. All things considered, they say, the benefits they get from using the Net— quick access to loads of information, potent searching and filtering tools, an easy way to share their opinions with a small but interested audience— make up for the loss of their ability to sit still and turn the pages of a book or magazine” (Carr, 8).

“The price we pay to assume technology’s power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities— those for reason, perception, memory, emotion” (Carr, 211).

Use your best voice, academic language, and third person point of view. Incorporate at least three sources (at least one from our class discussions) to support your ideas. Include at least three direct quotes; all quotes and paraphrased information must include a parenthetical citation. The last page of your paper should be your works cited page. Follow all MLA guidelines for formatting and documentation.

You will also give a three-minute presentation highlighting the main ideas presented in your essay. Your presentation should:

- include your thesis statement,
- include at least three main points that support your thesis,
- include at least three pictures/charts/graphs (some visual representation) of the three main points, and
- follow all MLA guidelines for formatting and documentation.

Select one of the three quotes from Carr that interests you the most.

What kind of ideas and thoughts do you have in response to this prompt? What have you seen so far in Carr’s text or in the other texts you have read that seems to connect to this quote?

Evaluating Source Materials

Directions: In the spaces below, create a timeline for completion of this project.

| | How and when will I do this? | What resources do I need? |
|----------------------------------|------------------------------|---------------------------|
| Review Assignment | | |
| Collect notes and look for holes | | |
| Collect additional research | | |
| Write a summary paragraph | | |
| Create an outline | | |
| Write a rough draft | | |
| Create and give a presentation | | |
| Revise and edit | | |
| Submit final draft | | |

Vocabulary from Carr's Chapter Two, "Vital Paths"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Two. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|------------------|-------------------|----------------------|------------------|
| philology (17) | immutability (21) | nihilism (23) | habituated (28) |
| concentric (18) | malleable (21) | peripheral (25) | empiricism (28) |
| ingenious (18) | plasticity (21) | neuroplasticity (25) | rationalism (28) |
| telegraphic (18) | tenuous (23) | meticulous (26) | determinism (34) |
| appendages (19) | | | |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> <hr/> | |

Vocabulary from Carr's Chapter Three, "Tools of the Mind"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Three. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|------------------|----------------------|-----------------------|-------------------|
| maturation (39) | theodolite (40) | proliferation (43) | conundrum (49) |
| topographic (40) | cyclical (41) | instrumentalists (46) | proxies (49) |
| cartography (40) | agrarian (41) | determinists (46) | logographic (51) |
| egocentric (40) | synchronization (42) | metallurgy (48) | logosyllabic (53) |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Lesson 4

The Mind, the Page and a Synthesis

In this lesson, you will . . .

- Read informational text so as to recognize argument, claim, and evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
- Demonstrate the ability to understand and analyze Carr's content, specifically the history of early technologies and how those technologies impact humanity.
- Apply strategies for locating words in an informational text that are unfamiliar to you and determining the meaning of those words, using both context clues and dictionaries.
- Read several documents, collecting information on how those documents connect or disconnect with the ideas in the central text, and they will receive modeling on synthesis in preparation for writing the synthesis essay.

Developing a Claim

Directions: In the space below, follow the directions for your group’s assignment related to Carr’s Chapter Three. Remember that a claim statement should fit the following criteria:

- A claim is typically a statement of the point that the author is trying to make.
- A good claim should be one that is debatable, one that reasonable people can hold different ideas on.
- It should take a strong stand, and it should have a quality antithesis, or counterargument.

Group 1: Examine the section of Chapter Three that begins on page 44 and ends on page 50. In this section, Carr categorizes technological tools and defines determinists and instrumentalists. With your group members, write a one-sentence claim that Carr is making in this section.

Group 2: Examine the section of Chapter Three that begins on page 50 and ends on page 57. In this section, Carr describes how intellectual technologies of reading and writing shape our brains. With your group members, write a one-sentence claim that Carr is making in this section.

Vocabulary from Carr's Chapter Four, "The Deepening Page"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Four. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|----------------|-------------------|------------------|--------------------|
| ephemera (58) | codex (60) | anomaly (64) | gendarmes (70) |
| scribes (59) | cognitive (61) | sedition (65) | tawdry (71) |
| parchment (59) | mellifluous (62) | propagation (67) | symbiotic (74) |
| stylus (59) | obsolete (62) | adept (69) | idiosyncratic (75) |
| artisan (60) | antithetical (63) | | nonlinear (76) |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Excerpt from Benjamin Franklin's *Autobiography* taken from *Gutenberg Online Library*:

Not having any copy here of what is already written, I know not whether an account is given of the means I used to establish the Philadelphia public library, which, from a small beginning, is now become so considerable, though I remember to have come down to near the time of that transaction (1730). I will therefore begin here with an account of it, which may be struck out if found to have been already given.

At the time I establish'd myself in Pennsylvania, there was not a good bookseller's shop in any of the colonies to the southward of Boston. In New York and Philad'a the printers were indeed stationers; they sold only paper, etc., almanacs, ballads, and a few common school-books. Those who lov'd reading were oblig'd to send for their books from England; the members of the Junto had each a few. We had left the alehouse, where we first met, and hired a room to hold our club in. I propos'd that we should all of us bring our books to that room, where they would not only be ready to consult in our conferences, but become a common benefit, each of us being at liberty to borrow such as he wish'd to read at home. This was accordingly done, and for some time contented us.

Finding the advantage of this little collection, I propos'd to render the benefit from books more common, by commencing a public subscription library. I drew a sketch of the plan and rules that would be necessary, and got a skilful conveyancer, Mr. Charles Brockden, to put the whole in form of articles of agreement to be subscribed, by which each subscriber engag'd to pay a certain sum down for the first purchase of books, and an annual contribution for increasing them. So few were the readers at that time in Philadelphia, and the majority of us so poor, that I was not able, with great industry, to find more than fifty persons, mostly young tradesmen, willing to pay down for this purpose forty shillings each, and ten shillings per annum. On this little fund we began. The books were imported; the library was opened one day in the week for lending to the subscribers, on their promissory notes to pay double the value if not duly returned. The institution soon manifested its utility, was imitated by other towns, and in other provinces. The libraries were augmented by donations; reading became fashionable; and our people, having no publick amusements to divert their attention from study, became better acquainted with books, and in a few years were observ'd by strangers to be better instructed and more intelligent than people of the same rank generally are in other countries.

When we were about to sign the above-mentioned articles, which were to be binding upon us, our heirs, etc., for fifty years, Mr. Brockden, the scrivener, said to us, "You are young men, but it is scarcely probable that any of you will live to see the expiration of the term fix'd in the instrument." A number of us, however, are yet living; but the instrument was after a few years rendered null by a charter that incorporated and gave perpetuity to the company.

The objections and reluctances I met with in soliciting the subscriptions, made me soon feel the impropriety of presenting one's self as the proposer of any useful project, that might be suppos'd to raise one's reputation in the smallest degree above that of one's neighbors, when one has need of their assistance to accomplish that project. I therefore put myself as much as I could out of sight, and stated it as a scheme of a number of friends, who had requested me to go about and propose it to such as they thought

lovers of reading. In this way my affair went on more smoothly, and I ever after practis'd it on such occasions; and, from my frequent successes, can heartily recommend it. The present little sacrifice of your vanity will afterwards be amply repaid. If it remains a while uncertain to whom the merit belongs, some one more vain than yourself will be encouraged to claim it, and then even envy will be disposed to do you justice by plucking those assumed feathers, and restoring them to their right owner.

This library afforded me the means of improvement by constant study, for which I set apart an hour or two each day, and thus repair'd in some degree the loss of the learned education my father once intended for me. Reading was the only amusement I allow'd myself. I spent no time in taverns, games, or frolicks of any kind; and my industry in my business continu'd as indefatigable as it was necessary. I was indebted for my printing-house; I had a young family coming on to be educated, and I had to contend with for business two printers, who were established in the place before me. My circumstances, however, grew daily easier. My original habits of frugality continuing, and my father having, among his instructions to me when a boy, frequently repeated a proverb of Solomon, "Seest thou a man diligent in his calling, he shall stand before kings, he shall not stand before mean men," I from thence considered industry as a means of obtaining wealth and distinction, which encourag'd me, tho' I did not think that I should ever literally stand before kings, which, however, has since happened; for I have stood before five, and even had the honor of sitting down with one, the King of Denmark, to dinner.

Excerpt from Emerson's *The American Scholar* essay taken from Gutenberg Online Library:

II. The next great influence into the spirit of the scholar is the mind of the Past,—in whatever form, whether of literature, of art, of institutions, that mind is inscribed. Books are the best type of the influence of the past, and perhaps we shall get at the truth,—learn the amount of this influence more conveniently,—by considering their value alone.

The theory of books is noble. The scholar of the first age received into him the world around; brooded thereon; gave it the new arrangement of his own mind, and uttered it again. It came into him life; [25] it went out from him truth. It came to him short-lived actions; it went out from him immortal thoughts. It came to him business; it went from him poetry. It was dead fact; now, it is quick thought. It can stand, and it can go. It now endures, it now flies, it now inspires.[15] Precisely in proportion to the depth of mind from which it issued, so high does it soar, so long does it sing.

Or, I might say, it depends on how far the process had gone, of transmuting life into truth. In proportion to the completeness of the distillation, so will the purity and imperishableness of the product be. But none is quite perfect. As no air-pump can by any means make a perfect vacuum,[16] so neither can any artist entirely exclude the conventional, the local, the perishable from his book, or write a book of pure thought, that shall be as efficient, in all respects, to a remote posterity, as to contemporaries, or rather to the second age. Each age, it is found, must write its own books; or rather, each generation for the next succeeding. The books of an older period will not fit this.

Yet hence arises a grave mischief. The sacredness which attaches to the act of creation, the act of thought, is instantly transferred to the record. The poet chanting was felt to be a divine man. Henceforth the chant is divine also. The writer was a just and wise spirit. Henceforward it is settled the book is perfect; as love of the hero corrupts into worship of his statue. Instantly the book becomes noxious.[17] [26] The guide is a tyrant. We sought a brother, and lo, a governor. The sluggish and perverted mind of the multitude, always slow to open to the incursions of Reason, having once so opened, having once received this book, stands upon it, and makes an outcry if it is disparaged. Colleges are built on it. Books are written on it by thinkers, not by Man Thinking, by men of talent, that is, who start wrong, who set out from accepted dogmas, not from their own sight of principles. Meek young men grow up in libraries, believing it their duty to accept the views which Cicero, which Locke,[18] which Bacon,[19] have given; forgetful that Cicero, Locke and Bacon were only young men in libraries when they wrote these books.

Hence, instead of Man Thinking, we have the bookworm. Hence the book-learned class, who value books, as such; not as related to nature and the human constitution, but as making a sort of Third Estate[20] with the world and soul. Hence the restorers of readings,[21] the emendators,[22] the bibliomaniacs[23] of all degrees. This is bad; this is worse than it seems.

Books are the best of things, well used; abused, among the worst. What is the right use? What is the one end which all means go to effect? They are for nothing but to inspire.[24] I had better never see a book than to be warped by its attraction clean out of my own orbit, and made a satellite instead of a system. The one thing in the world of value is the [27] active soul,—the soul, free, sovereign, active. This every man is entitled to; this every man contains within him, although in almost all men obstructed, and

as yet unborn. The soul active sees absolute truth and utters truth, or creates. In this action it is genius; not the privilege of here and there a favorite, but the sound estate of every man.[25] In its essence it is progressive. The book, the college, the school of art, the institution of any kind, stop with some past utterance of genius. This is good, say they,—let us hold by this. They pin me down.[26] They look backward and not forward. But genius always looks forward. The eyes of man are set in his forehead, not in his hindhead. Man hopes. Genius creates. To create,—to create,—is the proof of a divine presence. Whatever talents may be, if the man create not, the pure efflux of the Deity is not his;[27]—cinders and smoke there may be, but not yet flame. There are creative manners, there are creative actions, and creative words; manners, actions, words, that is, indicative of no custom or authority, but springing spontaneous from the mind's own sense of good and fair.

On the other part, instead of being its own seer, let it receive always from another mind its truth, though it were in torrents of light, without periods of solitude, inquest, and self-recovery; and a fatal disservice[28] is done. Genius is always sufficiently the enemy of genius by over-influence.[29] The literature of [28] every nation bear me witness. The English dramatic poets have Shakespearized now for two hundred years.[30]

Undoubtedly there is a right way of reading, so it be sternly subordinated. Man Thinking must not be subdued by his instruments. Books are for the scholar's idle times. When he can read God directly, the hour is too precious to be wasted in other men's transcripts of their readings.[31] But when the intervals of darkness come, as come they must,—when the soul seeth not, when the sun is hid and the stars withdraw their shining,—we repair to the lamps which were kindled by their ray, to guide our steps to the East again, where the dawn is.[32] We hear, that we may speak. The Arabian proverb says, "A fig-tree, looking on a fig-tree, becometh fruitful."

It is remarkable, the character of the pleasure we derive from the best books. They impress us ever with the conviction that one nature wrote and the same reads. We read the verses of one of the great English poets, of Chaucer,[33] of Marvell,[34] of Dryden,[35] with the most modern joy,—with a pleasure, I mean, which is in great part caused by the abstraction of all time from their verses. There is some awe mixed with the joy of our surprise, when this poet, who lived in some past world, two or three hundred years ago, says that which lies close to my own soul, that which I also had well-nigh thought and said. But for the evidence thence afforded to the philosophical doctrine of the identity of all minds, we should [29] suppose some pre-established harmony, some foresight of souls that were to be, and some preparation of stores for their future wants, like the fact observed in insects, who lay up food before death for the young grub they shall never see.

I would not be hurried by any love of system, by any exaggeration of instincts, to underrate the Book. We all know that as the human body can be nourished on any food, though it were boiled grass and the broth of shoes, so the human mind can be fed by any knowledge. And great and heroic men have existed who had almost no other information than by the printed page. I only would say that it needs a strong head to bear that diet. One must be an inventor to read well. As the proverb says, "He that would bring home the wealth of the Indies must carry out the wealth of the Indies." There is then creative reading as well as creative writing. When the mind is braced by labor and invention, the page of whatever book we read becomes luminous with

manifold allusion. Every sentence is doubly significant, and the sense of our author is as broad as the world. We then see, what is always true, that as the seer's hour of vision is short and rare among heavy days and months, so is its record, perchance, the least part of his volume. The discerning will read, in his Plato^[36] or Shakespeare, only that least part,—only the authentic utterances of the oracle;—all the rest he rejects, were it never so many times Plato's and Shakespeare's.

[30]

Of course there is a portion of reading quite indispensable to a wise man. History and exact science he must learn by laborious reading. Colleges, in like manner, have their indispensable office,—to teach elements. But they can only highly serve us when they aim not to drill, but to create; when they gather from far every ray of various genius to their hospitable halls, and by the concentrated fires set the hearts of their youth on flame. Thought and knowledge are natures in which apparatus and pretension avail nothing. Gowns^[37] and pecuniary foundations,^[38] though of towns of gold, can never countervail the least sentence or syllable of wit.^[39] Forget this, and our American colleges will recede in their public importance, whilst they grow richer every year.

Excerpt from Frederick Douglass' Narrative taken from Gutenberg Online Library:

I lived in Master Hugh's family about seven years. During this time, I succeeded in learning to read and write. In accomplishing this, I was compelled to resort to various stratagems. I had no regular teacher. My mistress, who had kindly commenced to instruct me, had, in compliance with the advice and direction of her husband, not only ceased to instruct, but had set her face against my being instructed by any one else. It is due, however, to my mistress to say of her, that she did not adopt this course of treatment immediately. She at first lacked the depravity indispensable to shutting me up in mental darkness. It was at least necessary for her to have some training in the exercise of irresponsible power, to make her equal to the task of treating me as though I were a brute.

My mistress was, as I have said, a kind and tender-hearted woman; and in the simplicity of her soul she commenced, when I first went to live with her, to treat me as she supposed one human being ought to treat another. In entering upon the duties of a slaveholder, she did not seem to perceive that I sustained to her the relation of a mere chattel, and that for her to treat me as a human being was not only wrong, but dangerously so. Slavery proved as injurious to her as it did to me. When I went there, she was a pious, warm, and tender-hearted woman. There was no sorrow or suffering for which she had not a tear. She had bread for the hungry, clothes for the naked, and comfort for every mourner that came within her reach. Slavery soon proved its ability to divest her of these heavenly qualities. Under its influence, the tender heart became stone, and the lamblike disposition gave way to one of tiger-like fierceness. The first step in her downward course was in her ceasing to instruct me. She now commenced to practise her husband's precepts. She finally became even more violent in her opposition than her husband himself. She was not satisfied with simply doing as well as he had commanded; she seemed anxious to do better. Nothing seemed to make her more angry than to see me with a newspaper. She seemed to think that here lay the danger. I have had her rush at me with a face made all up of fury, and snatch from me a newspaper, in a manner that fully revealed her apprehension. She was an apt woman; and a little experience soon demonstrated, to her satisfaction, that education and slavery were incompatible with each other.

From this time I was most narrowly watched. If I was in a separate room any considerable length of time, I was sure to be suspected of having a book, and was at once called to give an account of myself. All this, however, was too late. The first step had been taken. Mistress, in teaching me the alphabet, had given me the *inch*, and no precaution could prevent me from taking the *ell*.

The plan which I adopted, and the one by which I was most successful, was that of making friends of all the little white boys whom I met in the street. As many of these as I could, I converted into teachers. With their kindly aid, obtained at different times and in different places, I finally succeeded in learning to read. When I was sent of errands, I always took my book with me, and by going one part of my errand quickly, I found time to get a lesson before my return. I used also to carry bread with me, enough of which was always in the house, and to which I was always welcome; for I was much better off in this regard than many of the poor white children in our neighborhood. This bread I used to bestow upon the hungry little urchins, who, in return, would give me that more valuable bread of knowledge. I am strongly tempted to give the names of

two or three of those little boys, as a testimonial of the gratitude and affection I bear them; but prudence forbids;—not that it would injure me, but it might embarrass them; for it is almost an unpardonable offence to teach slaves to read in this Christian country. It is enough to say of the dear little fellows, that they lived on Philpot Street, very near Durgin and Bailey’s ship-yard. I used to talk this matter of slavery over with them. I would sometimes say to them, I wished I could be as free as they would be when they got to be men. “You will be free as soon as you are twenty-one, *but I am a slave for life!* Have not I as good a right to be free as you have?” These words used to trouble them; they would express for me the liveliest sympathy, and console me with the hope that something would occur by which I might be free.

I was now about twelve years old, and the thought of being a *slave for life* began to bear heavily upon my heart. Just about this time, I got hold of a book entitled “The Columbian Orator.” Every opportunity I got, I used to read this book. Among much of other interesting matter, I found in it a dialogue between a master and his slave. The slave was represented as having run away from his master three times. The dialogue represented the conversation which took place between them, when the slave was retaken the third time. In this dialogue, the whole argument in behalf of slavery was brought forward by the master, all of which was disposed of by the slave. The slave was made to say some very smart as well as impressive things in reply to his master—things which had the desired though unexpected effect; for the conversation resulted in the voluntary emancipation of the slave on the part of the master.

In the same book, I met with one of Sheridan’s mighty speeches on and in behalf of Catholic emancipation. These were choice documents to me. I read them over and over again with unabated interest. They gave tongue to interesting thoughts of my own soul, which had frequently flashed through my mind, and died away for want of utterance. The moral which I gained from the dialogue was the power of truth over the conscience of even a slaveholder. What I got from Sheridan was a bold denunciation of slavery, and a powerful vindication of human rights. The reading of these documents enabled me to utter my thoughts, and to meet the arguments brought forward to sustain slavery; but while they relieved me of one difficulty, they brought on another even more painful than the one of which I was relieved. The more I read, the more I was led to abhor and detest my enslavers. I could regard them in no other light than a band of successful robbers, who had left their homes, and gone to Africa, and stolen us from our homes, and in a strange land reduced us to slavery. I loathed them as being the meanest as well as the most wicked of men. As I read and contemplated the subject, behold! that very discontentment which Master Hugh had predicted would follow my learning to read had already come, to torment and sting my soul to unutterable anguish. As I writhed under it, I would at times feel that learning to read had been a curse rather than a blessing. It had given me a view of my wretched condition, without the remedy. It opened my eyes to the horrible pit, but to no ladder upon which to get out. In moments of agony, I envied my fellow-slaves for their stupidity. I have often wished myself a beast. I preferred the condition of the meanest reptile to my own. Any thing, no matter what, to get rid of thinking! It was this everlasting thinking of my condition that tormented me. There was no getting rid of it. It was pressed upon me by every object within sight or hearing, animate or inanimate. The silver trump of freedom had roused my soul to eternal wakefulness. Freedom now appeared, to disappear no more forever. It was heard in every sound, and seen in every thing. It was ever present to torment me with

a sense of my wretched condition. I saw nothing without seeing it, I heard nothing without hearing it, and felt nothing without feeling it. It looked from every star, it smiled in every calm, breathed in every wind, and moved in every storm.

I often found myself regretting my own existence, and wishing myself dead; and but for the hope of being free, I have no doubt but that I should have killed myself, or done something for which I should have been killed. While in this state of mind, I was eager to hear any one speak of slavery. I was a ready listener. Every little while, I could hear something about the abolitionists. It was some time before I found what the word meant. It was always used in such connections as to make it an interesting word to me. If a slave ran away and succeeded in getting clear, or if a slave killed his master, set fire to a barn, or did any thing very wrong in the mind of a slaveholder, it was spoken of as the fruit of *abolition*. Hearing the word in this connection very often, I set about learning what it meant. The dictionary afforded me little or no help. I found it was “the act of abolishing;” but then I did not know what was to be abolished. Here I was perplexed. I did not dare to ask any one about its meaning, for I was satisfied that it was something they wanted me to know very little about. After a patient waiting, I got one of our city papers, containing an account of the number of petitions from the north, praying for the abolition of slavery in the District of Columbia, and of the slave trade between the States. From this time I understood the words *abolition* and *abolitionist*, and always drew near when that word was spoken, expecting to hear something of importance to myself and fellow-slaves. The light broke in upon me by degrees. I went one day down on the wharf of Mr. Waters; and seeing two Irishmen unloading a scow of stone, I went, unasked, and helped them. When we had finished, one of them came to me and asked me if I were a slave. I told him I was. He asked, “Are ye a slave for life?” I told him that I was. The good Irishman seemed to be deeply affected by the statement. He said to the other that it was a pity so fine a little fellow as myself should be a slave for life. He said it was a shame to hold me. They both advised me to run away to the north; that I should find friends there, and that I should be free. I pretended not to be interested in what they said, and treated them as if I did not understand them; for I feared they might be treacherous. White men have been known to encourage slaves to escape, and then, to get the reward, catch them and return them to their masters. I was afraid that these seemingly good men might use me so; but I nevertheless remembered their advice, and from that time I resolved to run away. I looked forward to a time at which it would be safe for me to escape. I was too young to think of doing so immediately; besides, I wished to learn how to write, as I might have occasion to write my own pass. I consoled myself with the hope that I should one day find a good chance. Meanwhile, I would learn to write.

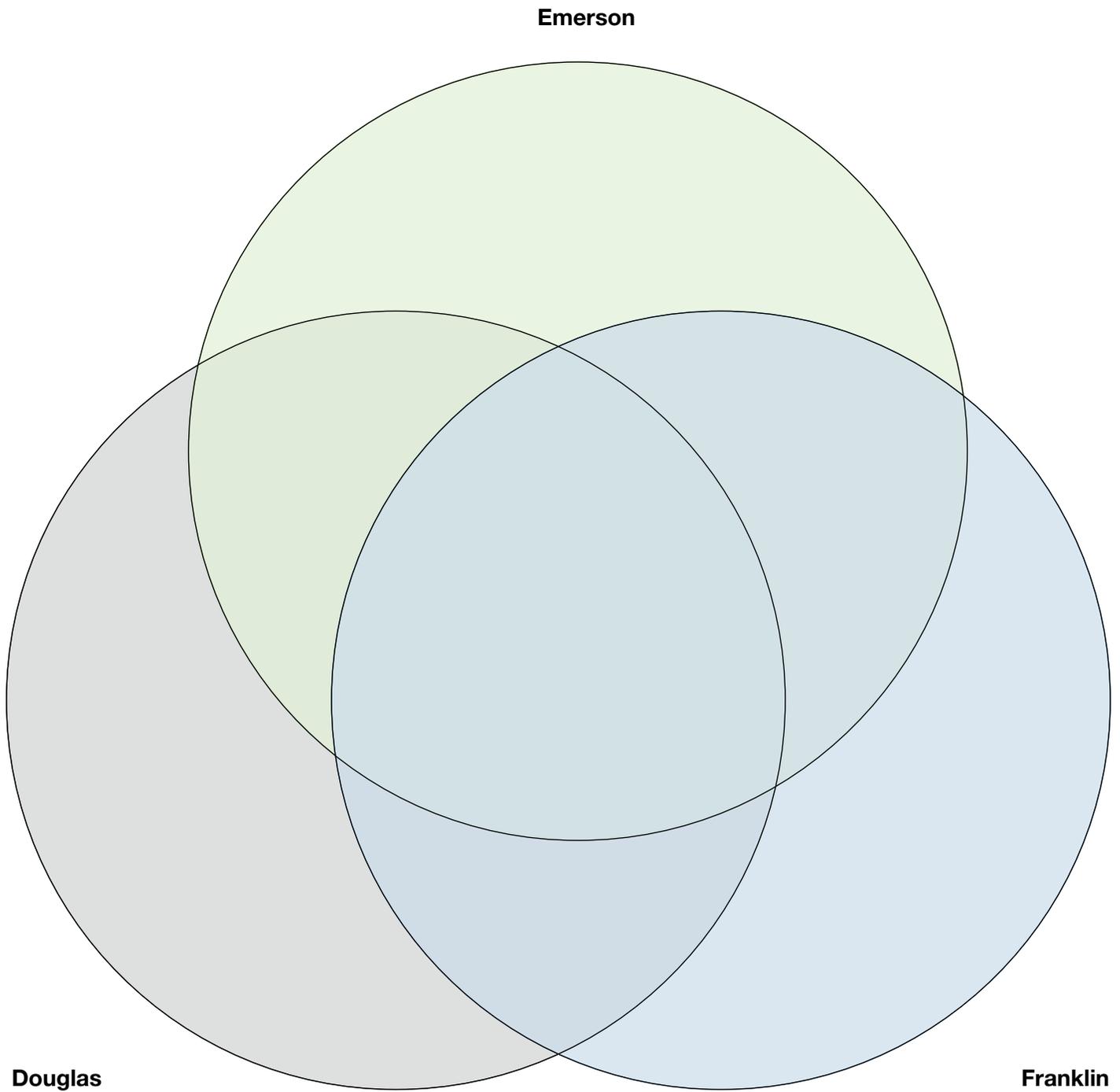
The idea as to how I might learn to write was suggested to me by being in Durgin and Bailey’s ship-yard, and frequently seeing the ship carpenters, after hewing, and getting a piece of timber ready for use, write on the timber the name of that part of the ship for which it was intended. When a piece of timber was intended for the larboard side, it would be marked thus—“L.” When a piece was for the starboard side, it would be marked thus—“S.” A piece for the larboard side forward, would be marked thus—“L. F.” When a piece was for starboard side forward, it would be marked thus—“S. F.” For larboard aft, it would be marked thus—“L. A.” For starboard aft, it would be marked thus—“S. A.” I soon learned the names of these letters, and for what they were intended when placed upon a piece of timber in the ship-yard. I immediately commenced

copying them, and in a short time was able to make the four letters named. After that, when I met with any boy who I knew could write, I would tell him I could write as well as he. The next word would be, "I don't believe you. Let me see you try it." I would then make the letters which I had been so fortunate as to learn, and ask him to beat that. In this way I got a good many lessons in writing, which it is quite possible I should never have gotten in any other way. During this time, my copy-book was the board fence, brick wall, and pavement; my pen and ink was a lump of chalk. With these, I learned mainly how to write. I then commenced and continued copying the Italics in Webster's Spelling Book, until I could make them all without looking on the book. By this time, my little Master Thomas had gone to school, and learned how to write, and had written over a number of copy-books. These had been brought home, and shown to some of our near neighbors, and then laid aside. My mistress used to go to class meeting at the Wilk Street meetinghouse every Monday afternoon, and leave me to take care of the house. When left thus, I used to spend the time in writing in the spaces left in Master Thomas's copy-book, copying what he had written. I continued to do this until I could write a hand very similar to that of Master Thomas. Thus, after a long, tedious effort for years, I finally succeeded in learning how to write.

Directions:

Once you have completed your work, your group will report out on both your findings related to the author's agreement and/or disagreement with Carr, as well as your rhetorical précis. As each group is making its presentation, complete the Venn diagram on the next page.

Note the main ideas of each author in the appropriate circle using the rhetorical précis written by each group. Note where the authors agree and/or disagree in the shaded areas. Highlight points in all three circles that show agreement with Carr, as well as points in all three circles that show disagreement with Carr.



Vocabulary from Carr's Chapter Five, "The Deepening Page"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Five. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|--------------------|-------------------|-------------------|-------------------|
| incalculable (81) | kineographs (84) | precipitous (87) | tenuous (91) |
| universal (82) | algorithms (84) | ubiquity (88) | hegemony (93) |
| rendering (83) | compendium (85) | inexorable (89) | parishioners (97) |
| typographical (84) | proliferated (86) | inextricable (90) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Lesson 5

The Internet, Books and Our Brains

In this lesson, you will . . .

- Read informational text so as to recognize argument, claim, and evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
- Demonstrate your ability to understand and analyze the content of Carr's argument, specifically the development of the Internet and its impact on media and other institutions, the evolution of the book into the ebook, and research on how the Internet is changing human brains.
- Apply strategies for locating words in an informational text that are unfamiliar to you and determining the meaning of those words, using both context clues and dictionaries.
- Learn how to embed quotes from sources into your writing.
- Write a rhetorical précis on a supplemental text.

Directions: Read the short *Time* magazine article “You” (found below) and annotate the article in the margins. Specifically, you should be looking for material that connects with Carr’s discussion in Chapter Five of the history of the Internet and the impact of the Internet on other media/institutions.

Time Magazine Link and Article Text:

(<http://www.time.com/time/magazine/article/0,9171,1570810,00.html>)

The “Great Man” theory of history is usually attributed to the Scottish philosopher Thomas Carlyle, who wrote that “the history of the world is but the biography of great men.” He believed that it is the few, the powerful and the famous who shape our collective destiny as a species. That theory took a serious beating this year.

To be sure, there are individuals we could blame for the many painful and disturbing things that happened in 2006. The conflict in Iraq only got bloodier and more entrenched. A vicious skirmish erupted between Israel and Lebanon. A war dragged on in Sudan. A tin-pot dictator in North Korea got the Bomb, and the President of Iran wants to go nuclear too. Meanwhile nobody fixed global warming, and Sony didn’t make enough PlayStation3s.

But look at 2006 through a different lens and you’ll see another story, one that isn’t about conflict or great men. It’s a story about community and collaboration on a scale never seen before. It’s about the cosmic compendium of knowledge Wikipedia and the million-channel people’s network YouTube and the online metropolis MySpace. It’s about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes.

The tool that makes this possible is the World Wide Web. Not the Web that Tim Berners-Lee hacked together (15 years ago, according to Wikipedia) as a way for scientists to share research. It’s not even the overhyped dotcom Web of the late 1990s. The new Web is a very different thing. It’s a tool for bringing together the small contributions of millions of people and making them matter. Silicon Valley consultants call it Web 2.0, as if it were a new version of some old software. But it’s really a revolution. And we are so ready for it. We’re ready to balance our diet of predigested news with raw feeds from Baghdad and Boston and Beijing. You can learn more about how Americans live just by looking at the backgrounds of YouTube videos—those rumpled bedrooms and toy-strewn basement rec rooms—than you could from 1,000 hours of network television.

And we didn’t just watch, we also worked. Like crazy. We made Facebook profiles and Second Life avatars and reviewed books at Amazon and recorded podcasts. We blogged about our candidates losing and wrote songs about getting dumped. We camcordered bombing runs and built open-source software.

America loves its solitary geniuses—its Einsteins, its Edisons, its Jobses—but those lonely dreamers may have to learn to play with others. Car companies are running open design contests. Reuters is carrying blog postings alongside its regular news feed. Microsoft is working overtime to fend off user-created Linux. We’re looking at an explosion of productivity and innovation, and it’s just getting started, as millions of minds that would otherwise have drowned in obscurity get backhauled into the global intellectual economy. Who are these people? Seriously, who actually sits down after a long day at work and says, I’m not going to watch *Lost* tonight. I’m going to turn on my computer and make a movie starring my pet iguana? I’m going to mash up 50 Cent’s vocals with Queen’s instrumentals? I’m going to blog about my state of mind or the state of the nation or the *steak-frites* at the new bistro down the street? Who has that time and that energy and that passion?

The answer is, you do. And for seizing the reins of the global media, for founding and framing the new digital democracy, for working for nothing and beating the pros at their own game, TIME's Person of the Year for 2006 is you.

Sure, it's a mistake to romanticize all this any more than is strictly necessary. Web 2.0 harnesses the stupidity of crowds as well as its wisdom. Some of the comments on YouTube make you weep for the future of humanity just for the spelling alone, never mind the obscenity and the naked hatred.

But that's what makes all this interesting. Web 2.0 is a massive social experiment, and like any experiment worth trying, it could fail. There's no road map for how an organism that's not a bacterium lives and works together on this planet in numbers in excess of 6 billion. But 2006 gave us some ideas. This is an opportunity to build a new kind of international understanding, not politician to politician, great man to great man, but citizen to citizen, person to person. It's a chance for people to look at a computer screen and really, genuinely wonder who's out there looking back at them. Go on. Tell us you're not just a little bit curious.

Directions: Read the following blog post, written by Clay Shirky, and write a rhetorical précis for it in the space provided below. Include an MLA citation for this text.

Clay Shirky blog post:

<http://www.shirky.com/weblog/2009/03/newspapers-and-thinking-the-unthinkable/>.

Newspapers and Thinking the Unthinkable

Back in 1993, the Knight-Ridder newspaper chain began investigating piracy of Dave Barry’s popular column, which was published by the Miami Herald and syndicated widely. In the course of tracking down the sources of unlicensed distribution, they found many things, including the copying of his column to alt.fan.dave_barry on usenet; a 2000-person strong mailing list also reading pirated versions; and a teenager in the Midwest who was doing some of the copying himself, because he loved Barry’s work so much he wanted everybody to be able to read it.

One of the people I was hanging around with online back then was Gordy Thompson, who managed internet services at the New York Times. I remember Thompson saying something to the effect of “When a 14 year-old kid can blow up your business in his spare time, not because he hates you but because he loves you, then you got a problem.” I think about that conversation a lot these days.

The problem newspapers face isn’t that they didn’t see the internet coming. They not only saw it miles off, they figured out early on that they needed a plan to deal with it, and during the early 90s they came up with not just one plan but several. One was to partner with companies like America Online, a fast-growing subscription service that was less chaotic than the open internet. Another plan was to educate the public about the behaviors required of them by copyright law. New payment models such as micro-payments were proposed. Alternatively, they could pursue the profit margins enjoyed by radio and TV, if they became purely ad-supported. Still another plan was to convince tech firms to make their hardware and software less capable of sharing, or to partner with the businesses running data networks to achieve the same goal. Then there was the nuclear option: sue copyright infringers directly, making an example of them.

As these ideas were articulated, there was intense debate about the merits of various scenarios. Would DRM or walled gardens work better? Shouldn’t we try a carrot-and-stick approach, with education and prosecution? And so on. In all this conversation, there was one scenario that was widely regarded as unthinkable, a scenario that didn’t get much discussion in the nation’s newsrooms, for the obvious reason.

The unthinkable scenario unfolded something like this: The ability to share content wouldn’t shrink, it would grow. Walled gardens would prove unpopular. Digital advertising would reduce inefficiencies, and therefore profits. Dislike of micropayments would prevent widespread use. People would resist being educated to act against their own desires. Old habits of advertisers and readers would not transfer online. Even ferocious litigation would be inadequate to constrain massive, sustained law-breaking. (Prohibition redux.) Hardware and software vendors would not regard copyright holders as allies, nor would they regard customers as enemies. DRM’s requirement that the attacker be allowed to decode the content would be an insuperable flaw. And, per Thompson, suing people who love something so much they want to share it would piss them off.

Revolutions create a curious inversion of perception. In ordinary times, people who do no more than describe the world around them are seen as pragmatists, while those who

imagine fabulous alternative futures are viewed as radicals. The last couple of decades haven't been ordinary, however. Inside the papers, the pragmatists were the ones simply looking out the window and noticing that the real world increasingly resembled the unthinkable scenario. These people were treated as if they were barking mad. Meanwhile the people spinning visions of popular walled gardens and enthusiastic micropayment adoption, visions unsupported by reality, were regarded not as charlatans but saviors.

When reality is labeled unthinkable, it creates a kind of sickness in an industry. Leadership becomes faith-based, while employees who have the temerity to suggest that what seems to be happening is in fact happening are herded into Innovation Departments, where they can be ignored *en bloc*. This shunting aside of the realists in favor of the fabulists has different effects on different industries at different times. One of the effects on the newspapers is that many of their most passionate defenders are unable, even now, to plan for a world in which the industry they knew is visibly going away.

* * *

The curious thing about the various plans hatched in the '90s is that they were, at base, all the same plan: "Here's how we're going to preserve the old forms of organization in a world of cheap perfect copies!" The details differed, but the core assumption behind all imagined outcomes (save the unthinkable one) was that the organizational form of the newspaper, as a general-purpose vehicle for publishing a variety of news and opinion, was basically sound, and only needed a digital facelift. As a result, the conversation has degenerated into the enthusiastic grasping at straws, pursued by skeptical responses.

"The Wall Street Journal has a paywall, so we can too!" (Financial information is one of the few kinds of information whose recipients don't want to share.) "Micropayments work for iTunes, so they will work for us!" (Micropayments work only where the provider can avoid competitive business models.) "The New York Times should charge for content!" (They've tried, with QPass and later TimesSelect.) "Cook's Illustrated and Consumer Reports are doing fine on subscriptions!" (Those publications forgo ad revenues; users are paying not just for content but for unimpeachability.) "We'll form a cartel!" (...and hand a competitive advantage to every ad-supported media firm in the world.)

Round and round this goes, with the people committed to saving newspapers demanding to know "If the old model is broken, what will work in its place?" To which the answer is: Nothing. Nothing will work. There is no general model for newspapers to replace the one the internet just broke.

With the old economics destroyed, organizational forms perfected for industrial production have to be replaced with structures optimized for digital data. It makes increasingly less sense even to talk about a publishing industry, because the core publishing solves—the incredible difficulty, complexity, and expense of making something available to the public—has stopped being a problem.

* * *

Elizabeth Eisenstein's magisterial treatment of Gutenberg's invention, *The Printing Press as an Agent of Change*, opens with a recounting of her research into the early history of the printing press. She was able to find many descriptions of life in the early 1400s,

the era before movable type. Literacy was limited, the Catholic Church was the pan-European political force, Mass was in Latin, and the average book was the Bible. She was also able to find endless descriptions of life in the late 1500s, after Gutenberg's invention had started to spread. Literacy was on the rise, as were books written in contemporary languages, Copernicus had published his epochal work on astronomy, and Martin Luther's use of the press to reform the Church was upending both religious and political stability.

What Eisenstein focused on, though, was how many historians ignored the transition from one era to the other. To describe the world before or after the spread of print was child's play; those dates were safely distanced from upheaval. But what was happening in 1500? The hard question Eisenstein's book asks is "How did we get from the world before the printing press to the world after it? What was the revolution itself like?"

Chaotic, as it turns out. The Bible was translated into local languages; was this an educational boon or the work of the devil? Erotic novels appeared, prompting the same set of questions. Copies of Aristotle and Galen circulated widely, but direct encounter with the relevant texts revealed that the two sources clashed, tarnishing faith in the Ancients. As novelty spread, old institutions seemed exhausted while new ones seemed untrustworthy; as a result, people almost literally didn't know what to think. If you can't trust Aristotle, who can you trust?

During the wrenching transition to print, experiments were only revealed in retrospect to be turning points. Aldus Manutius, the Venetian printer and publisher, invented the smaller octavo volume along with italic type. What seemed like a minor change — take a book and shrink it — was in retrospect a key innovation in the democratization of the printed word. As books became cheaper, more portable, and therefore more desirable, they expanded the market for all publishers, heightening the value of literacy still further.

That is what real revolutions are like. The old stuff gets broken faster than the new stuff is put in its place. The importance of any given experiment isn't apparent at the moment it appears; big changes stall, small changes spread. Even the revolutionaries can't predict what will happen. Agreements on all sides that core institutions must be protected are rendered meaningless by the very people doing the agreeing. (Luther and the Church both insisted, for years, that whatever else happened, no one was talking about a schism.) Ancient social bargains, once disrupted, can neither be mended nor quickly replaced, since any such bargain takes decades to solidify.

And so it is today. When someone demands to know how we are going to replace newspapers, they are really demanding to be told that we are not living through a revolution. They are demanding to be told that old systems won't break before new systems are in place. They are demanding to be told that ancient social bargains aren't in peril, that core institutions will be spared, that new methods of spreading information will improve previous practice rather than upending it. They are demanding to be lied to.

There are fewer and fewer people who can convincingly tell such a lie.

* * *

If you want to know why newspapers are in such trouble, the most salient fact is this: Printing presses are terrifically expensive to set up and to run. This bit of economics, normal since Gutenberg, limits competition while creating positive returns to scale for the press owner, a happy pair of economic effects that feed on each other. In a notional

town with two perfectly balanced newspapers, one paper would eventually generate some small advantage—a breaking story, a key interview—at which point both advertisers and readers would come to prefer it, however slightly. That paper would in turn find it easier to capture the next dollar of advertising, at lower expense, than the competition. This would increase its dominance, which would further deepen those preferences, repeat chorus. The end result is either geographic or demographic segmentation among papers, or one paper holding a monopoly on the local mainstream audience.

For a long time, longer than anyone in the newspaper business has been alive in fact, print journalism has been intertwined with these economics. The expense of printing created an environment where Wal-Mart was willing to subsidize the Baghdad bureau. This wasn't because of any deep link between advertising and reporting, nor was it about any real desire on the part of Wal-Mart to have their marketing budget go to international correspondents. It was just an accident. Advertisers had little choice other than to have their money used that way, since they didn't really have any other vehicle for display ads.

The old difficulties and costs of printing forced everyone doing it into a similar set of organizational models; it was this similarity that made us regard Daily Racing Form and L'Osservatore Romano as being in the same business. That the relationship between advertisers, publishers, and journalists has been ratified by a century of cultural practice doesn't make it any less accidental.

The competition-deflecting effects of printing cost got destroyed by the internet, where everyone pays for the infrastructure, and then everyone gets to use it. And when Wal-Mart, and the local Maytag dealer, and the law firm hiring a secretary, and that kid down the block selling his bike, were all able to use that infrastructure to get out of their old relationship with the publisher, they did. They'd never really signed up to fund the Baghdad bureau anyway.

* * *

Print media does much of society's heavy journalistic lifting, from flooding the zone—covering every angle of a huge story—to the daily grind of attending the City Council meeting, just in case. This coverage creates benefits even for people who aren't newspaper readers, because the work of print journalists is used by everyone from politicians to district attorneys to talk radio hosts to bloggers. The newspaper people often note that newspapers benefit society as a whole. This is true, but irrelevant to the problem at hand; “You're gonna miss us when we're gone!” has never been much of a business model. So who covers all that news if some significant fraction of the currently employed newspaper people lose their jobs?

I don't know. Nobody knows. We're collectively living through 1500, when it's easier to see what's broken than what will replace it. The internet turns 40 this fall. Access by the general public is less than half that age. Web use, as a normal part of life for a majority of the developed world, is less than half that age. We just got here. Even the revolutionaries can't predict what will happen.

Imagine, in 1996, asking some net-savvy soul to expound on the potential of craigslist, then a year old and not yet incorporated. The answer you'd almost certainly have gotten would be extrapolation: “Mailing lists can be powerful tools”, “Social effects are intertwining with digital networks”, blah blah blah. What no one would have told you,

could have told you, was what actually happened: craigslist became a critical piece of infrastructure. Not the idea of craigslist, or the business model, or even the software driving it. Craigslist itself spread to cover hundreds of cities and has become a part of public consciousness about what is now possible. Experiments are only revealed in retrospect to be turning points.

In craigslist's gradual shift from 'interesting if minor' to 'essential and transformative', there is one possible answer to the question "If the old model is broken, what will work in its place?" The answer is: Nothing will work, but everything might. Now is the time for experiments, lots and lots of experiments, each of which will seem as minor at launch as craigslist did, as Wikipedia did, as octavo volumes did.

Journalism has always been subsidized. Sometimes it's been Wal-Mart and the kid with the bike. Sometimes it's been Richard Mellon Scaife. Increasingly, it's you and me, donating our time. The list of models that are obviously working today, like Consumer Reports and NPR, like ProPublica and WikiLeaks, can't be expanded to cover any general case, but then nothing is going to cover the general case.

Society doesn't need newspapers. What we need is journalism. For a century, the imperatives to strengthen journalism and to strengthen newspapers have been so tightly wound as to be indistinguishable. That's been a fine accident to have, but when that accident stops, as it is stopping before our eyes, we're going to need lots of other ways to strengthen journalism instead.

When we shift our attention from 'save newspapers' to 'save society', the imperative changes from 'preserve the current institutions' to 'do whatever works.' And what works today isn't the same as what used to work.

We don't know who the Aldus Manutius of the current age is. It could be Craig Newmark, or Caterina Fake. It could be Martin Nisenholtz, or Emily Bell. It could be some 19 year old kid few of us have heard of, working on something we won't recognize as vital until a decade hence. Any experiment, though, designed to provide new models for journalism is going to be an improvement over hiding from the real, especially in a year when, for many papers, the unthinkable future is already in the past.

For the next few decades, journalism will be made up of overlapping special cases. Many of these models will rely on amateurs as researchers and writers. Many of these models will rely on sponsorship or grants or endowments instead of revenues. Many of these models will rely on excitable 14 year olds distributing the results. Many of these models will fail. No one experiment is going to replace what we are now losing with the demise of news on paper, but over time, the collection of new experiments that do work might give us the journalism we need.

Vocabulary from Carr's Chapter Six, "The Very Image of a Book"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Six. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | |
|--------------------|--------------------|---------------------|
| robust (99) | linearity (104) | anomaly (108) |
| pixels (100) | hybrids (105) | hierarchical (111) |
| artifacts (102) | asynchronous (106) | outré (111) |
| obsolescence (102) | milieu (107) | kaleidoscopic (112) |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Based on your reading of this chapter and “a digression” answer the following questions:

What are the differences between working memory and long-term memory?

How is the Internet changing our brains?

Are there any positives to these changes?

What is the Flynn effect and why might it be important in Carr’s argument?

Vocabulary from Carr's Chapter Seven, "The Juggler's Brain"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Seven. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|---------------------|-------------------|-------------------|-------------------|
| fortitude (115) | strenuous (122) | hypermedia (129) | skimming (136) |
| somatosensory (116) | schemas (124) | attentional (131) | trajectory (138) |
| interactivity (118) | extraneous (125) | influx (132) | optimizing (140) |
| cacophony (119) | materiality (126) | verbiage (135) | reverberate (141) |
| naïve (121) | hypertext (127) | | |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> <hr/> | |

Vocabulary from Carr's Chapter Eight, "The Church of Google"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Eight. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|--------------------|---------------------|-------------------------|---------------------|
| choreography (149) | lucrative (155) | digitized (164) | EMBRYONIC (172) |
| optimization (150) | brutish (157) | Transcendentalist (166) | Taylorist (173) |
| permutations (151) | ethereal (157) | dissonance (167) | imperialistic (174) |
| aesthetic (151) | complementary (160) | perpetual (168) | incubating (175) |
| analogy (153) | infringement (162) | memex (169) | fallacy (176) |
| largesse (155) | laudable (163) | malevolent (171) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

What is “Taylorism” and how does it apply to Google?

What seems to be Carr’s perspective on Google’s effort to digitize all published books?

How do you know what his perspective is?

Lesson 6

The Alienating Potential of Technology

In this lesson, you will . . .

- Read informational text so as to recognize argument, claim, and evidence structure and point of view in relation to the central claim of *The Shallows: What the Internet is Doing to Our Brains*.
- Demonstrate your ability to understand and analyze the content of Carr's argument, specifically the impact of Taylorism on Google, distinguishing between human and computer memory and the potential for alienation inherent in technology use.
- Demonstrate your ability to apply strategies for locating words in an informational text that are unfamiliar to you and determining the meaning of those words, using both context clues and dictionaries. Learn how to embed quotes from sources into your writing.
- Build on your knowledge of synthesis by writing and revising a synthesis paragraph.
- Write a rhetorical précis on a supplemental text.

The Evolution From Linear Thought To Networked Thought by Scott Karp

Directions: Read the following blog post by Scott Karp entitled, “The Evolution from Linear Thought to Networked Thought.” As you read, annotate the article. After you have read and marked up the reading, write a rhetorical précis for it in the space below. Be sure to include an MLA citation.

February 9, 2008

I was thinking last night about books and why I don’t read them anymore—I was a lit major in college, and used to be voracious book reader. What happened?

I was also thinking about the panel I organized for the O’Reilly TOC conference on Blogs as Books, Books as Blogs—do I do all my reading online because I like blogs better than books now? That doesn’t seem meaningful on the face of it.

Then I read this really interesting post by Evan Schnittman at the OUP Blog about why he uses ebooks only for convenience but actually prefers to read in print.

So do I do all my reading online because it’s more convenient? Well, it is, but it’s not as if I don’t have opportunities to read books. (And I do read a lot of Disney Princess books to my daughter.)

But the convenience argument seems to float on the surface of a deeper issue—there’s something about the print vs. online dialectic that always seemed superficial to me. Books, newspapers, and other print media are carefully laid out. Online content like blogs are shoot from the hip. Books are linear and foster concentration and focus, while the web, with all its hyperlinks, is kinetic, scattered, all over the place.

I’ve heard many times online reading cast in the pejorative. Does my preference for online reading mean I’ve become more scattered and disorganized in my reading?

I’ve also spend a lot of time thinking and talking recently about how understanding the future media on the web is so counterintuitive from the perspective of traditional media—about the challenge of making the leap from thinking about linear distribution to network effects.

After reading Evan’s post and struggling with the convenience argument, I read this Silicon Alley post speculating on a possible lack of demand for ebooks, despite the Kindle reportedly selling well. If I’m such a digital guy, then why do I have no interest in ebooks?

I was eating some peanut butter last night... and then suddenly something clicked. (Don’t know if the peanut butter caused it.)

What if I do all my reading on the web not so much because the way I read has changed, i.e. I’m just seeking convenience, but because the way I THINK has changed?

What if the networked nature of content on the web has changed not just how I consume information but how I process it?

What if I no longer have the patience to read a book because it’s too.... linear.

We still retain an 18th Century bias towards linear thought. Non-linear thought—like online media consumption—is still typically characterized in the pejorative: scattered, unfocused, undisciplined.

Dumb.

But just look at Google, which arguably kept our engagement with the sea of content on the web from descending into chaos. Google's PageRank algorithm is the antithesis of linearity thinking—it's pured networked thought.

Google can find relevant content on the web because it doesn't "think" in a linear fashion—it takes all of our thoughts, as expressed in links, and looks at them as a network. If you could follow Google's algorithm in real time, it would seem utterly chaotic, but the result is extremely coherent.

When I read online, I constantly follow links from one item to the next, often forgetting where I started. Sometimes I backtrack to one content "node" and jump off in different directions. There are nodes that I come back to repeatedly, like TechMeme and Google, only to start down new branches of the network.

So doesn't this make for an incoherent reading experience? Yes, if you're thinking in a linear fashion. But I find reading on the web is most rewarding when I'm not following a set path but rather trying to "connect the dots," thinking about ideas and trends and what it all might mean.

But am I just an outlier, or just imagining with too much peanut butter on the brain some new networked thinking macro trend?

Then I remembered—or rather arrived at in nonlinear fashion—a contrarian piece in the Guardian about an NEA study that bemoaned declines in reading and reading skills. The piece points out the study's fatal flaw—that it completely neglected to study online reading.

All Giola has to say about the dark matter of electronic reading is this: "Whatever the benefits of newer electronic media, they provide no measurable substitute for the intellectual and personal development initiated and sustained by frequent reading."

Technological literacy

The only reason the intellectual benefits are not measurable is that they haven't been measured yet. There have been almost no studies that have looked at the potential positive impact of electronic media. Certainly there is every reason to believe that technological literacy correlates strongly with professional success in the information age.

I challenge the NEA to track the economic status of obsessive novel readers and obsessive computer programmers over the next 10 years. Which group will have more professional success in this climate? Which group is more likely to found the next Google or Facebook? Which group is more likely to go from college into a job paying \$80,000 (£40,600)?

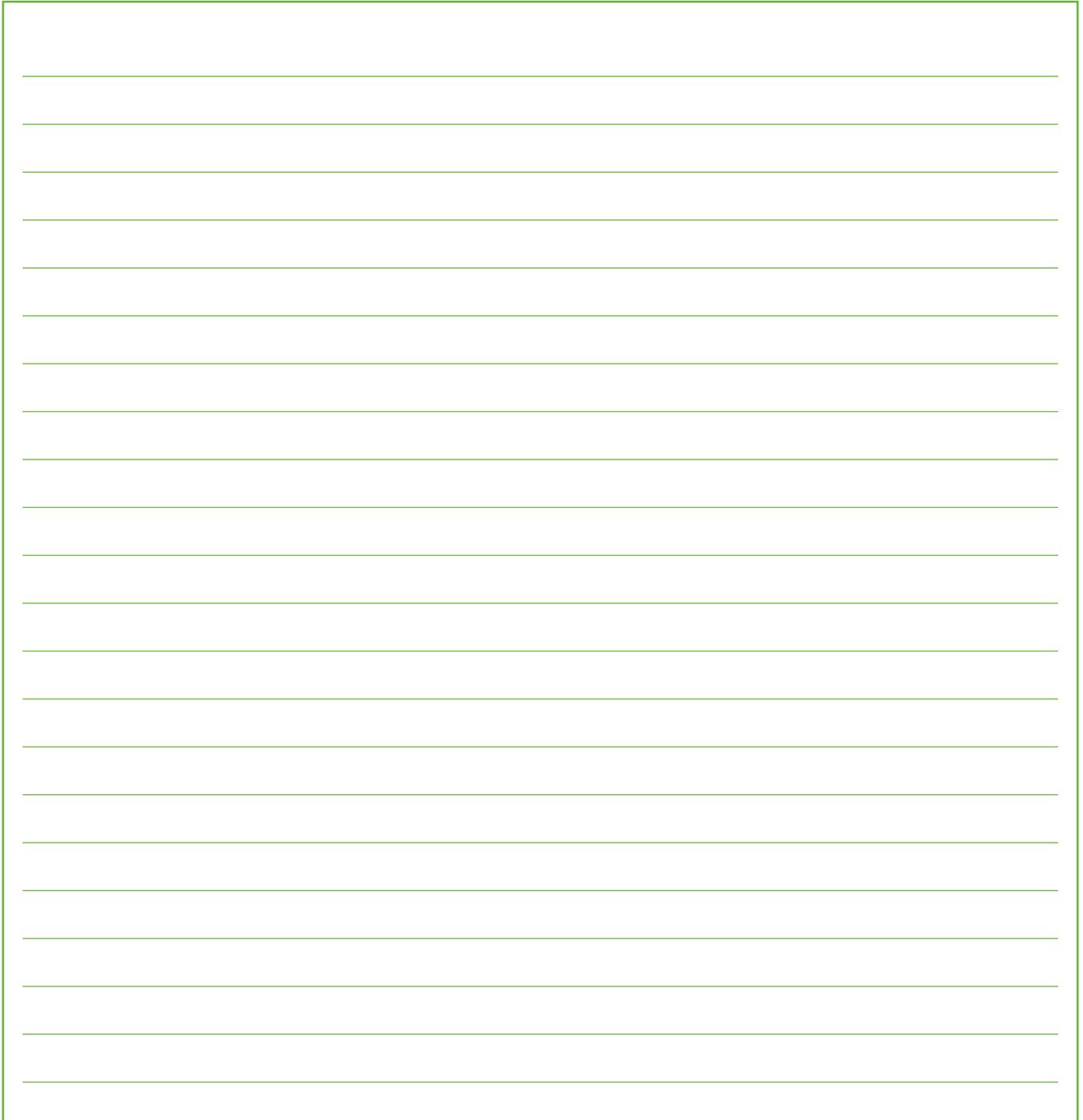
But the unmeasured skills of the "digital natives" are not just about technological proficiency. One of the few groups that has looked at these issues is the Pew Research Centre, which found in a 2004 study of politics and media use: "Relying on the internet as a source of campaign information is strongly correlated with knowledge about the candidates and the campaign. This is more the case than for other types of media, even accounting for the fact that internet users generally are better educated and more interested politically. And among young people under 30, use of the internet to learn about the campaign has a greater impact on knowledge than does level of education."

What I'd be most curious to know is whether online reading actually has a positive impact on cognition—through ways that we perhaps cannot measure or even understand yet, particularly if we look at it with a bias towards linear thought.

Is there such a thing as networked human thought? Certain there is among a group of people enabled by a network—but what about for an individual, processing information via the web’s network?

Perhaps this post hasn’t been an entirely linear thought process—is that necessarily a bad thing?

Read more: <http://publishing2.com/2008/02/09/the-evolution-from-linear-thought-to-networked-thought/#ixzz2CmOf6vbm>.



Reading Log: *The Shallows*, Chapter Nine: Search, Memory and “a digression: on the writing of this book.” Take notes on your reading in the space below.

In pages 177-182, Carr writes about memory, both human memory and computer memory. For each of the references Carr makes, describe what he is saying about memory. An example is provided for you in the space below.

Key words:

Quotes, page numbers, other information:

Shakespeare (page 178)

Hamlet says memory is “the book and volume of my brain.”

Vocabulary from Carr's Chapter Nine, "Search, Memory"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Nine. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | |
|---------------------|---------------------|-----------------|
| proliferation (177) | capacious (182) | conundrum (189) |
| synthesis (179) | retrograde (183) | ethereal (193) |
| crucible (179) | consolidation (184) | crux (196) |
| obsolete (181) | hippocampus (188) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Vocabulary from Carr's Chapter 10, "A Thing Like Me"

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 10. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | |
|--------------------|------------------|-------------------|
| parsing (201) | apostate (208) | consensus (217) |
| penumbra (202) | lucidity (209) | perusal (218) |
| banal (203) | dexterity (210) | erosion (220) |
| plausibility (206) | alienation (211) | empathizing (221) |
| tautology (207) | cybernetic (214) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Lesson 7

Drafting and Presentation

In this lesson, you will . . .

- Complete preparatory work toward the synthesis essay and write a draft of a synthesis essay.
- Use your synthesis essay draft to make a presentation to the class using your thesis statement and relevant evidence.
- Receive peer and teacher feedback on your presentation and teacher feedback on your draft.

Synthesis Essay Assignment

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading Nicholas Carr's *The Shallows: What the Internet is Doing to our Brains* and other informational texts on the impact of information technology, write a synthesis essay in which you support a thesis based on one of the following quotes from Carr's text. Support your position with evidence from the texts.

"With the exception of alphabets and number systems, the Net may well be the single most powerful mind-altering technology that has ever come into general use. At the very least, it's the most powerful that has come along since the book" (Carr, 118).

"Karp, Friedman, and Davis—all well-educated men with a keenness for writing— seem fairly sanguine about the decay of their faculties for reading and concentrating. All things considered, they say, the benefits they get from using the Net—quick access to loads of information, potent searching and filtering tools, an easy way to share their opinions with a small but interested audience—make up for the loss of their ability to sit still and turn the pages of a book or magazine" (Carr, 8).

"The price we pay to assume technology's power is alienation. The toll can be particularly high with our intellectual technologies. The tools of the mind amplify and in turn numb the most intimate, the most human, of our natural capacities—those for reason, perception, memory, emotion" (Carr, 211).

Use your best voice, academic language, and third person point of view. Incorporate at least three sources (at least one from our class discussions) to support your ideas. Include at least three direct quotes; all quotes and paraphrased information must include a parenthetical citation. The last page of your paper should be your works cited page. Follow all MLA guidelines for formatting and documentation.

You will also give a three-minute presentation highlighting the main ideas presented in your essay. Your presentation should:

- include your thesis statement,
- include at least three main points that support your thesis,
- include at least three pictures/charts/graphs (some visual representation) of the three main points, and
- follow all MLA guidelines for formatting and documentation.

Evaluating Source Material

Directions:

Choose one of the quotes from the prompt and read through your academic notebook, highlighting any information contained there that relates to your chosen quote. Once the process of highlighting is complete you should write a short response to the following three questions:

a) What sources do I have available for responding to this prompt?

b) What holes are there in the information that I have?

c) Where might I find additional information to fill in holes?

Source used from class discussions *(list using MLA format):*

Evaluation of material *(how/what will it contribute to your paper or support your argument):*

How does it relate to the other information that you've found?

Additional sources (*minimum of two; use MLA format*):

Source #2:

Evaluation of material (*how/what will it contribute to your paper or support your argument?*)

How does it relate to the other information that you've found?

Source #3:

Evaluation of material *(how/what will it contribute to your paper or support your argument?)*

How does it relate to the other information that you've found?

Peer Feedback Form

Name of Presenter:

Your Name:

How convincing for you was the evidence presented here?

What could have made it more convincing?

What other advice would you provide to the speaker?

Lesson 8

Synthesis Writing: Final Draft

In this lesson, you will . . .

- Use peer and teacher feedback elicited from your presentations and teacher feedback on your draft to revise and edit your synthesis essay and turn in the final draft.

Revise and Edit the Synthesis Essay Draft

Paper's Author

Paper's Editor

Directions: Answer all questions to the best of your ability. Circle “Yes” or “No” for each question. You need to read the paper several times. Do not skip sentences. Do not skim. Read very closely. Even read aloud quietly, so you can hear problems. Make any changes necessary to gain a yes answer to all questions.

Title:

- | | | |
|------------------------------|-----------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 1. Is there a title? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 2. If “Yes,” is the title specific and supported by the paper? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 3. Is the title centered? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 4. The title should not be not underlined, italicized, or quoted. Did the writer do this correctly? |

Introduction:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 1. Is there an attention-getter? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 2. Is there background information about the topic? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 3. Is there a good transition between the attention-getter and essential information? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 4. Is there a thesis statement? Mark the thesis statement on the paper. Put a bracket next to it on the left side. |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 5. Is the thesis supported by the topic sentences throughout the paper? |

Body Paragraph #1

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 1. Is there a topic sentence and is it the first or second sentence in the paragraph? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 2. Do you introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase. |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 3. Do you provide citations after each quote or paraphrase? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence? |

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Body Paragraph #2

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Do you introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Do you provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Body Paragraph #3

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Do you introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Do you provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Body Paragraph #4

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Do you introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Do you provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Subsequent Body Paragraphs

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Do you introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Do you provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Conclusion:

- Yes No 1. Do you refer to the thesis in some way without directly restating it?
- Yes No 2. Do you avoid introducing new information in the conclusion?
- Yes No 3. Is your concluding sentence meaningful and memorable?

Works Cited Page

- Yes No 1. Is the title Works Cited centered at the top?
- Yes No 2. Have you used at least four different sources?
- Yes No 3. Are all of your sources those required for this assignment (one book, two periodicals, one web - .edu or .gov)?
- Yes No 4. Is only the first line of each source left aligned with the side of the paper?
- Yes No 5. Are the sources in alphabetical order?
- Yes No 6. As much as you can tell, is each source listed in the correct format?
- Yes No 7. Is the entire page double-spaced?

Grammar/Mechanics Checklist:

1. Read through the entire paper and look at all of the words that end with –s. Check and make sure that the writer didn't forget to make a possessive –s. On the paper, put 's (apostrophe s) any where it is needed.
2. Read through the entire paper and look for any sentence that begins with the following words: **when, because, since, if, although, after, even though, while, in order that.** First, make sure these sentences are not fragments. Second, **make sure there is a comma after the subordinate clause.**
3. Check for sentences beginning with the word **“So.”** Get rid of the word. It probably isn't needed. Do the same for sentences beginning with **“And”** or **“But.”**
4. Circle any use of the words **“you,” “your,” “me,” “I,” “we,”** and so on. Suggest how the writer can avoid these words.
5. Read through the entire paper. Mark all uses of the words **“they”** and **“their,”** and make sure that the antecedents are plural. Also check to make sure there is a clear antecedent for these words.
6. Mark all uses of the words **“this,” “that,” “these,”** or **“those.”** Remind the writer to follow these words with specific nouns.
7. Read the entire paper and make sure that all sentences make sense. Mark sentences that don't make sense and suggest how the writer can change them.
8. Read the entire paper again and make sure that all words are **spelled correctly.** Circle words that are questionable. Check for common misspelled words: *then, than, effect, affect, its, it's, their, there, to, too, two.*
9. Check all quotes. Make sure that they are not by themselves and that they have correct MLA citations. Make sure that the sentences are punctuated correctly. And make sure that the page numbers are done right.
10. Make sure that titles are properly designated by *italics*, **underlining**, or **quotation marks.**
11. Read through the entire paper and check every time the writer uses the word **that.** Make sure it shouldn't be **who.**
12. Check every comma in the paper, and make sure that it is not bringing together two complete sentences.
13. Check all of the following words: **and, but, so, for, or.** Make sure that there isn't a comma needed. Ask your teacher if you are not sure. If these words are bringing together two complete sentences, then use a comma before the conjunction.
14. Anytime you see a **colon (:)** or a **semi-colon (;),** make sure that it is used correctly.
15. Read the paper one last time and make sure that there are no other mistakes that you can identify. Check for transitions, double negatives, verb forms, subject-verb agreement, and so on. Help the writer get an A.
16. Check to make sure that the entire paper is in **consistent tense** (no shifting from past to present, etc.).
17. Check all verbs ending with –ing, and make sure you can't change it. You are looking for passive verbs: some form of the verb *be* + the past participle of the verb.
Example: “Many options *were tried* by the soldiers.” can be changed to “The soldiers *tried* many options.” Check to make sure that passive sentences couldn't be better if they were *active.*



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Literacy Ready

English Unit 2 . Literacy

Unit 2

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Unit 2

Course Overview

Overview and Rationale:

The second English unit involves students in reading Philip K. Dick’s novel *Ubik* as well as a number of related supplemental texts. Students will practice the following reading skills with an English disciplinary focus: close reading, summarizing plot and character development, interpretation of rhetorical patterns and developing interpretive questions. Throughout the reading of the novel, students will practice skills needed for writing a literary argument essay, including developing a strong thesis, developing mini-claims related to the thesis, collecting and presenting evidence to support a thesis, embedding source material and citing sources. The culminating project of the unit will require students to choose one of three thematic prompts on *Ubik* to draft, revise and edit a literary argument essay. A potential extension to this culminating project is a three-way debate and discussion.

Essential Question:

How is the exponential increase of information that we process in all forms of media affecting the way we live?

Unit Objectives:

1. Students will be able to recognize the disciplinary constructs that influence how reading and writing take place in English classes.
2. Students will develop reading endurance, the ability to read lengthy complex texts independently.
3. Students will be able to do close readings of complex texts. This involves inferencing as well as the ability to read critically and to distinguish between what is in the text (plot, information, etc.) and the larger picture (theme, connection to society, etc.).
4. Students will be able to find textual support or evidence for their inferences and to craft that evidence into a sophisticated argument.
5. Students will be able to summarize complex texts and to see structural and/or organizational patterns, such as the structure of an essay, in those texts.
6. Students will be able to read multiple texts, including non-print texts, and compare their content, style and genre.
7. Students will study content-rich vocabulary pulled from the central text.

Week 1

Lesson 1: Ubiquitous Computing and Avatars: A Gateway Activity

1. Students will be introduced to the notion of disciplinary literacy in English classes, the purpose for the course and the goals of the course.
2. Students will participate in a personal prediction exercise in which they will develop their own avatar based on what they imagine they will be like in 30 years, taking into consideration potential technological developments, cultural developments and personal developments. This avatar, which will be posted on the classroom wall, will become a holding place for the work students do throughout the module in relation to the central text, the supplemental texts and their work toward the culminating project of the module.
3. Students will read a short article defining *technology* and will collaboratively develop a class definition for *technology*.
4. Students will explore the term *ubiquitous computing* and connect their newly developed knowledge of this term to the novel, *Ubik*.
5. Students will examine several different book covers that have been published with editions of the novel, *Ubik*, and they will make predictions about the novel based on those book covers and the work done with *ubiquitous computing*.
6. Students will revisit their avatars and make changes as appropriate.
7. Students will receive teacher direction on vocabulary unique to the world of the novel.
8. Students will receive teacher modeling of the reading and research log for Chapter One of *Ubik*, focusing on the reading and writing skills required to complete the reading and research log successfully. These skills include summary, close reading and interpretation, and the asking of interpretive, conclusion-drawing questions.
9. Students will receive teacher modeling of vocabulary work, which will be part of the reading assignment for each chapter.
10. Students will be assigned to have Chapters One through Four in *Ubik* read by the next class period. For each chapter, students should complete a reading and research log and vocabulary work in their academic notebooks.

Week 2

Lesson 2: Identity: *Ubik* Chapters One to Four

1. Students will read and discuss the culminating assessment prompt.
2. Students will read a description of a literary argument essay and a sample literary argument essay.
3. Students will choose one of the prompts for the literary argument essay and respond to it and connect it to the novel.
4. Students will review the components of a thesis statement and will work with a partner to practice developing a thesis statement on a section of the text.

5. Students will work with a partner or a small group to take notes on identity-related issues in Chapter One and will post ideas from their notes on the avatar they created in Lesson One.
6. Students will be introduced to the concept of inferencing and will practice developing inferences on Joe Chip from Chapter Three of *Ubik*. Students will then work with a group to practice making inferences regarding a selected character from Chapters One through Four of *Ubik*.
7. Students will participate in a sorting process with the vocabulary words from Chapters Two through Four of *Ubik* and will relate chosen words to concepts in those chapters.
8. Students will be assigned to read Chapters Five through Eight in *Ubik* and to complete a reading and research log and vocabulary work for each chapter. They will be given some time in class to begin this work and will complete the assignment for homework.

Week 3

Lesson 3: Consumerism

1. Students will use their reading and research logs to participate in a two-part discussion. This discussion will focus on the plot and character development as well as the close reading and interpretation of Chapters Five through Eight.
2. Students will work with a small group to take notes on a question on consumerism and will post ideas from their notes on the avatar they created in Lesson One.
3. Students will read a short excerpt from “Writing a Literary Argument” on the types of evidence typically used in a literary argument essay. Students will then work with a group to examine a character’s explanation for the time jump that seems to occur in Chapter Five. Students will pull textual evidence supporting and/or refuting this explanation.
4. Students will read an excerpt from *Feed*, by M.T. Anderson and will practice developing an argument by linking together claims, mini-claims and evidence.
5. Students will practice a format for embedding textual evidence in a literary argument. They will read and analyze excerpts from a chapter by Mark Poster entitled “Future Advertising: Dick’s *Ubik* and the Digital Ad” from *Consumption in an Age of Information*.
6. Students will examine the consumerism prompt for the literary argument essay and will examine and discuss the opening epigrams for each chapter.
7. Students will work with a partner to develop a thesis, three mini-claims that support the thesis and evidence to support their mini-claims, embedding their evidence appropriately. The focus for this thesis development is to answer the question the main character in *Ubik* is struggling with: What has happened and who is responsible?

Week 3

Lesson 3: Consumerism (continued)

8. Students will examine content-rich vocabulary from the central text. They will participate in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories.
9. Students will be assigned to read Chapters Nine through 12 in *Ubik* and to complete a reading and research log and vocabulary charts for each chapter. They will be given some time in class to begin this work and will complete the assignment for homework.

Week 4

Lesson 4: Humanity

1. Students will use their reading and research logs to participate in a two-part discussion. This discussion will focus on the plot and character development as well as the close reading and interpretation of Chapters Nine through 12.
2. Students will examine the humanity prompt for the literary argument essay and will work with a partner to develop a thesis statement, three mini-claims and evidence to support those mini-claims related to the way in which the technology in Joe Chip's apartment, the vehicle he drives and the can/bottle of *Ubik* are all reverting to earlier forms.
3. Students will work with a small group to take notes on a humanity-related question and will post ideas from their notes on the avatar they created in Lesson One.
4. Students will read an interview with Philip K. Dick. Working independently, students will write a paragraph in which they embed evidence taken from the interview transcript, using the structure taught previously.
5. Students will discuss the concept of half-life from the novel.
6. Students will work with a small group to take notes on humanity-related questions and will post one idea from their journal on the avatar they created in Lesson One.
7. Students will examine content-rich vocabulary from the central text. They will participate in a process of teaching the words to other students, sorting words into categories and developing rationales for those categories.

Week 5

Lesson 5: Concluding and Resolving the Novel

1. Students will be given class time to begin reading Chapters 13 through 17 in *Ubik* and to complete a reading and research log for each chapter, as well as vocabulary work; students will complete this work for homework.
2. Students will use their reading and research logs to participate in a two-part discussion. This discussion will focus on the plot and character development as well as the close reading and interpretation of Chapters 13 through 17.
3. Students will practice supporting a claim with mini-claims and evidence.

4. Students will use a template to develop a simple statement of claim.
5. Students will work individually to develop a thesis statement/claim for the prompt they have chosen for the literary argument essay.
6. Students will re-read Chapter 17 and develop a two-sentence statement that explains the conclusion to the novel, referring to the text for evidence to support their explanations.
7. Students will examine content-rich vocabulary from the central text. They will participate in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories.

Week 6

Lesson 6: Writing a Literary Argument

1. Students will review the prompts and material in their academic notebooks and avatar parking lots, looking for information to support their thesis in their literary argument essay.
2. Students will take note of holes in their evidence and work in the library or media center to obtain additional sources and evidence.
3. Students will create a summary paragraph, an outline and a draft for their literary argument essay.
4. Students will receive teacher feedback on drafts. As necessary, the teacher will provide instruction on specific issues related to the rough drafts.
5. Students will work with a partner to do a final proofing and editing of their drafts, using peer conferring.
7. Students will revise their drafts and literary argument essay.
8. Extension (optional): After the literary argument essay is completed, students will participate in a debate and discussion.

Lesson 1

Ubiquitous Computing and Avatars: A Gateway

Overview and Rationale:

In this introductory lesson for the English literary unit, students will be introduced to the notion of disciplinary literacy, to the purpose of the course, and to the central text and assignments in this course. Students will participate in a personal prediction exercise, in which they will develop their own avatar based on what they imagine they will be like in 30 years. In the development of this avatar, students will be directed to imagine what technological developments, cultural developments and personal developments will have taken place in this 30-year time span and how those developments might have impacted who they are. This avatar, which will be posted on the classroom wall, will become a holding place for the work students do throughout the module in relation to the central text, the supplemental texts and their work toward the culminating project of the unit. Students will read an extended definition of *technology* and will do online research on *ubiquitous computing*. At the end of the lesson, students will examine a variety of *Ubik* book covers that have been published in various editions of the novel and will make predictions about the book based on the art in those book covers, as well as the definitions of *technology* and their study of *ubiquitous computing*. This preparatory work—personal, academic and predictive—will provide a basis on which students can rely as they begin to read and work with *Ubik*.

Tasks/Expected Outcomes:

1. Students will explore the nature of disciplinary literacy in English/language arts classes, as well as the goals and purpose of the course.
2. Students will use their beliefs about technological, cultural and individual development in an activity designed to establish both the themes of the unit and relevance to the students' lives.
3. Students will examine an extended definition for *technology* and will do online research on *ubiquitous computing*.
4. Students will examine *Ubik* book covers and will make predictions about the novel, using the information on the definition of technology and on *ubiquitous computing* they found.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.

9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Butcher paper, markers, scissors, tape
- A place in the classroom to display students' avatars
- Computer lab with Internet access
- Academic notebooks

Timeframe:

155 minutes

Targeted Vocabulary:

- General Academic Vocabulary
- Technology
 - Ubiquitous Computing

Activity One

Disciplinary Literacy in English/Course Goals/Juicy Sentences (Approx. 30 minutes)

Ask students to turn to the Course Overview section of the academic notebook.
Read aloud the first two paragraphs (see below).

FROM THE STUDENT ACADEMIC NOTEBOOK

Course Overview

Welcome to the second English literacy unit of the SREB Readiness Course- Literacy Ready. What does English literacy mean? English literacy is based on an understanding that texts—both literary and informational—provide a terrain for interrogating the meanings of human experiences and that literary texts are open to dialogue between and among readers and texts. When reading texts and writing about them in English classes, both in high school and in college, students should be able to

- decipher rhetorical strategies and patterns,
- make inferences from details,
- analyze how an author's choices contribute to its overall structure and meaning as well as its aesthetic impact,
- draw on prior knowledge to construct interpretations,
- use the text to reflect on the human condition or the reader's life,
- collect evidence for interpretations, and
- present the interpretation and evidence in a literary argument.

In this course, you will take part in several activities aimed at improving your literacy, specifically as literacy is used in English. While certainly the content covered in this course is important, a principal purpose of this course is to equip you with the tools necessary to be more successful in your college coursework. To that end, the creators of the course have developed this academic notebook.

Tell students that you will examine two “juicy sentences.” First look at this quote:

English literacy is based on an understanding that texts—both literary and informational—provide a terrain for interrogating the meanings of human experiences and that literary texts are open to dialogue between and among readers and texts.

Discuss the sentence. In order to have students unpack the meaning of this sentence and to understand what disciplinary literacy looks like in English classes, ask them to discuss questions such as the following:

- What might it mean for a text to “provide a terrain for interrogating the meanings of human experiences”?
- How can we connect texts with our own lives or with society?
- How can a text be open to dialogue?
- How can that dialogue take place “between and among readers and texts”?
- How might this type of reading be unique to an English class?

Repeat the process with the next sentence. Once that sentence is thoroughly discussed, move on to the following sentence:

“When reading texts and writing about them in English classes, both in high school and in college, students should be able to

- *decipher rhetorical strategies and patterns,*
- *make inferences from details,*
- *analyze how an author’s choices contribute to its overall structure and meaning as well as its aesthetic impact,*
- *draw on prior knowledge to construct interpretations,*
- *use the text to reflect on the human condition or the reader’s life,*
- *collect evidence for interpretations, and*
- *present the interpretation and evidence in a literary argument.”*

Remind students this is a set of goals for the course, so it’s important that they understand what they hope to accomplish. Ask students to examine each of the bullet points and talk about how familiar they are with each, what they know about each and what their strengths and weaknesses are with each.

Ask students to reflect on the “juicy sentences” exercise. How did focusing on these juicy sentences impact students’ understanding? How does this differ from ways students have read in the past? (Students might mention that in the past they have practiced skimming, reading but not really focusing or comprehending. This time they really had to pay attention.) This unpacking of ideas and reading small pieces of text is an example of close reading, a strategy used throughout this unit.

Explain to students this course focuses on the kinds of disciplinary literacy they will be expected to undertake in a college setting. The course as a whole includes six units, with two each in English, science and history. They may take from one to six of the units, depending on what their school district makes available to them.

Explain to students they will be expected to

- read and analyze Philip K. Dick’s novel *Ubik* and supplemental readings,
- study and learn vocabulary and word-learning strategies,
- summarize, analyze and interpret the central text, and
- write a literary argument essay.

Assessment:

Outcome 1:

Students will explore the nature of disciplinary literacy in English/language arts classes, as well as the goals and purposes of the course.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Participates in class discussion around the “juicy sentences” and the course goals drawn from the course overview. | No | Somewhat | Very |
| Reflection on the course overview indicates an understanding of disciplinary literacy and the course goals. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Two

Developing an Avatar (Approx. 45 minutes)

In this activity, students will trace their upper body outlines on butcher paper and use the avatar to project how technological, societal and personal changes may impact them in the future. Students should be instructed to add “pockets” to their avatars so that their notes will not get lost. These avatars will be hung on the wall in the classroom to serve as “idea parking lots” for the duration of the unit.

Provide instructions to students. Explain to students that this image will be a self-portrait, what students will be calling an “avatar” for the duration of this unit. Students should project themselves 30 years into the future—what will they look like? They should consider changes in technology (genetic research and modification, physical enhancements from developing technology, etc.), changes in society and changes in themselves personally, and create an avatar. Students should consider the following questions:

- What will I physically look like?
- How will I act? How will I treat others?
- What sort of career will I be engaged in?
- What sort of relationships will I have?
- What changes in society will have taken place? How will those changes impact me?

- What changes in technology will have taken place? How will those changes impact me?

Students can use both images and descriptive phrases to add this information to their avatars.

Discuss the avatars. Once students have worked for 30 minutes or so, engage students in a discussion in which they explain some of the modifications they created for themselves. Make sure to have students discuss physical, mental and emotional modifications.

Activity Three

Ubiquitous Computing (Approx. 60 minutes)

Ask students to read the extended definition of *technology*. Tell students that if they are going to look ahead to imagine how technology might impact them in the future, they must know what is meant by technology before they can consider the impact it has on their lives. They will be examining a brief article, which provides an extended definition of the word *technology*. Ask students to read the article “A Closer Look: Definition of Technology” in the academic notebook, and to underline or highlight any piece of information that they would consider essential to a definition of *technology*.

Develop a class definition for *technology*. Using the information students have highlighted or underlined, ask students to develop a class definition for *technology*. Keep this definition available on a wall chart, to which additional words will be added as the vocabulary work in the unit continues.

Define *ubiquitous*. Write the sentence, “In our society, technology is ubiquitous,” on the white board or project it on a document camera. Ask students to make an educated guess at the meaning of the word *ubiquitous*. After students have made their educated guesses, provide them with the following definition: “existing or being everywhere at the same time, constantly encountered, widespread.” Tell students that the novel that we will read in this unit is titled *Ubik*, which is a shortened form of the word *ubiquitous*.

Research *ubiquitous computing*. Ask students to work with a partner to research the phrase *ubiquitous computing* using an online search engine. Students should write on the page titled “Exploring Ubiquitous Computing” in their academic notebooks the websites and the information they find. Once students have summarized their research, they should find a partner and share their information, noting key similarities and differences.

Discuss *ubiquitous computing*. Ask students as a class to consider the concept of *ubiquitous computing*. What are the pros and cons of this concept? Make a list on the board using student suggestions. Inform students that as they begin reading in class that day, they should keep the term *ubiquitous* in mind. What else, as they begin reading the novel, seems to be ubiquitous in the text, aside from technology?

Assessment:

Outcome 2:

Students will use their beliefs about technological, cultural, and individual development in an activity designed to establish both the themes of the unit and relevance to the students' lives.

Outcome 3:

Students will examine an extended definition for *technology* and will do online research on *ubiquitous computing*.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates fully in development of avatar | No | Somewhat | Very |
| Participates fully in the class discussion of the influences of technology and the pros/cons of "ubiquitous computing." | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Four

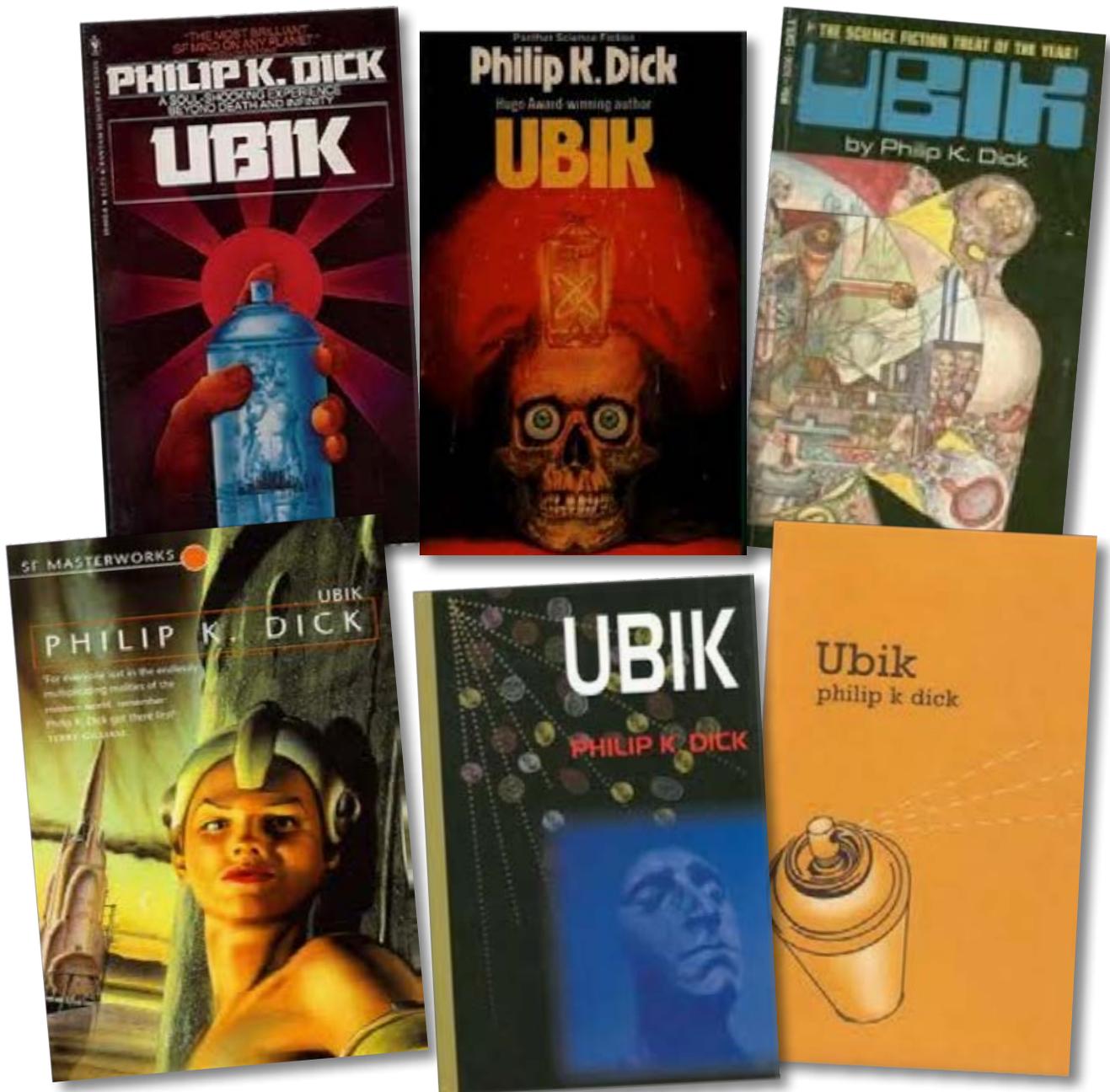
Predicting the Contents of the Novel (Approx. 20 minutes)

Give directions. Ask students to look in their academic notebooks on the page titled "Making Predictions" at a variety of book covers for editions of *Ubik*. After examining the book covers, students should respond to the questions about predictions.

FROM THE STUDENT ACADEMIC NOTEBOOK

Making Predictions

Directions: Examine the photographs below, all of which are book covers for editions of Philip K. Dick's novel, *Ubik*. Based on the work we have done thus far on the words *technology* and *ubiquitous computing*, as well as the variety of images presented on these book covers, what do you think this novel will be about? On the next page, make a prediction and explain your prediction.



Discuss the predictions. Ask students to share their predictions and to talk about how they developed those predictions. As students are sharing their predictions, ask them to point out specifically where they got these ideas; their ideas should come from the images, and/or their knowledge of the terms *technology* and *ubiquitous computing*. Asking students to refer back to the specifics from which they made their predictions is an important step toward analysis and interpretation. Remind students that they should think about these predictions as they begin to read the text.

Revisit the avatars. Ask students to revisit their avatars and to make any changes they think are appropriate, based on the discussion of *technology*, *ubiquitous computing* and their predictions for *Ubik*.

Assessment:

Outcome 4:

Students will examine *Ubik* book covers and make predictions about the novel using the information on the definition of *technology* and on *ubiquitous computing* that they found.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Participates fully in examination of <i>Ubik</i> book covers and uses them, as well as the definitions of <i>technology</i> and <i>ubiquitous computing</i> to make potentially valid predictions about the text. | No | Somewhat | Very |
| Identifies evidence to support predictions. | No | Somewhat | Very |
| Total Points | 6 | | |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Introduced students to the notion of disciplinary literacy, the purpose of the course and the central text and assignments in this course.
2. Asked students to create an avatar of themselves, predicting technological, cultural and personal developments over the next 30 years.
3. Asked students to read an extended definition of *technology*.
4. Asked students to do online research on *ubiquitous computing*.
5. Asked students to examine book covers for *Ubik* and to use them as well as the information on *technology* and *ubiquitous computing* to make predictions about the novel.

Lesson 2

Identity: *Ubik* Chapters One to Four

Overview and Rationale:

This lesson will engage students in an in-class reading of the opening section of Phillip K. Dick's *Ubik*, focusing on words that are unique to the world created by Dick and word-learning strategies for unfamiliar words, including context and examination of word parts. Through teacher modeling, students will be introduced to the reading and research log, which is a continuing assignment in this unit. The reading and research log will engage students in summarizing the text they have read, applying close reading and interpretation to the text and developing interpretive questions. Students will read a description of a literary argument essay as well as a sample literary argument essay. Students will choose one of the prompts for the culminating literary argument essay and connect it to the novel. Students will practice developing a thesis statement related to an excerpt from Chapter Two. Students will work with a small group or a partner to develop notes in response to questions about identity from Chapters One to Two and will pull key ideas to post on their avatar parking lots. Students will be introduced to inferencing and will develop text-based inferences for characters in the first four chapters of *Ubik*. Students will use their vocabulary study as an instructional tool for peers in their class, participating in a process of teaching the words to other students, sorting them into categories and developing rationales for those categories. Students will participate in small-group and whole-class discussions of Chapters One through Four, using questions drawn from students' reading and research logs.

Tasks/Expected Outcomes:

1. Students will learn strategies for determining the meaning of unfamiliar words using context clues and word parts as part of an exploration of the world of the novel.
2. Students will use the reading and research log to summarize plot and character development, note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation and develop questions requiring deeper reading and interpretation.
3. Students will build toward the literary argument essay by investigating the prompts and learning how to write a thesis statement.
4. Students will make text-based inferences, focusing on character development.
5. Students will participate in small-group and whole-class discussion on themes of identity in the central text.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (2) Reading/Comprehension of Literary Text/Theme and Genre. Students analyze, make inferences and draw conclusions about theme and genre in different cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to:
 - (A) compare and contrast works of literature that express a universal theme;
 - (B) compare and contrast the similarities and differences in classical plays with their modern day novel, play, or film versions; and
 - (C) relate the characters, setting, and theme of a literary work to the historical, social, and economic ideas of its time.
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (A) analyze how complex plot structures (e.g., subplots) and devices (e.g., foreshadowing, flashbacks, suspense) function and advance the action in a work of fiction;
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
 - (C) compare and contrast the effects of different forms of narration across various genres of fiction;
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (7) Reading/Comprehension of Literary Text/Sensory Language. Students understand, make inferences and draw conclusions about how an author’s sensory language creates imagery in literary text and provide evidence from text to support their understanding. Students are expected to analyze how the author’s patterns of imagery, literary allusions, and conceits reveal theme, set tone, and create meaning in metaphors, passages, and literary works.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns;

- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text;

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 - 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 - 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Copies of Phillip K. Dick's *Ubik*
- Sample reading and research log entry

Targeted Vocabulary:

Discipline Specific Vocabulary

- Epigram
- Level 1 and Level 2 Questions

Vocabulary taken from Chapter One*

- ubik (1)
- telepath (1)
- vidphone (1)
- psi (1)
- inertials (1)
- teep (1)
- precog (1)
- polymorphic (2)
- bichannel circuit (2)
- physiognomic (2)
- telepathic aura (2)
- identflag (2)

Vocabulary taken from Chapter Two

- effluvium (10)
- nebulous (10)
- luminous (11)
- theologians (13)
- vainglory (15)
- proxima (15)
- proximity (16)
- metaphysical (18)

Timeframe:

295 minutes

Vocabulary taken from Chapter Three

- incised (19)
- conapt (20)
- homeostatic (23)
- perpetuity (23)
- gratuity (24)
- erratic (25)
- caveat emptor (25)
- miasma (26)
- lobotomy (26)
- stultifying (27)
- apparatus (30)
- feasible (32)
- aggregate (32)
- eradicated (32)
- indices (33)

Vocabulary taken from Chapter Four

- manifestation (37)
- incongruous (38)
- hidebound (40)
- subsidiary (41)
- ponder (42)

* All page numbers in this unit are from xx edition of *Ubik*.

Activity One

Introduction of the World of the Novel and Words Unique to this Novel (Approx. 20 minutes)

Prep students for the activity. Prior to beginning to read Chapter One aloud to students, tell students that they will definitely see words in this text that will be unfamiliar to them. Some of these are words the author created in order to build the world of the novel, so they are unique to this novel.

Explain to students: *As we read the opening, we will be stopping after every paragraph to identify some of those unfamiliar words that were created by the author. We will use our knowledge of the context, other related words, and prefixes/roots/suffixes to figure out the meanings of these words OR to see if we need to continue reading to get more information.*

Remind students about the previous activities carried out with *ubiquitous computing, technology*, the development of their avatars and the book covers of *Ubik*.

Begin reading Chapter One of *Ubik* out loud. The teacher will read the beginning of Chapter One aloud to students, stopping along the way to ask questions and determine the meaning of the words that are unique to this novel (approximately pages one to three).

Read the opening epigram. Tell students this is known as an *epigram* and each chapter of the novel opens with one. Add the word *epigram* to the wall chart. Ask the following question:

Based on this opening epigram, what do you think a “Ubik” is? What words/phrases lead you to believe this?

Students might respond that it is a vehicle of some kind because of the word *blue-book*.

Read the first paragraph. Ask students to go back into the text and look at the following words: *telepath, vidphones, psis*. Ask students the following question:

How might you determine the meaning of any of those words (telepath, vidphones, psis) from the sentences that we have already read, or from the words themselves?

Students might respond the word *telepath* could have something to do with telepathy, a *vidphone* might be a combination of a video and a phone, and there isn't much to tell us what a *psi* is.

Discuss how to determine word meanings. Remind students sometimes the context around a word is used to figure out its meaning, but sometimes the context of a word isn't very helpful (as in the case of the word *psi*). When that happens, the word itself can be examined to see if there are any clues inside it (such as *telepath* and *vidphone*). Sometimes looking up the word in a dictionary or continuing reading can be helpful. In this case, the word *psi* is a word that Philip K. Dick created for his novel.

Discuss the opening paragraph. Tell students that now they know something about those words, they should begin getting an idea of the setting of the novel or the plot of the novel from this first paragraph. Ask the following question:

This paragraph lays out a situation that we need to understand in order to get the gist of what's happening in the novel. What is it that “started vidphones ringing”?

Students should respond that a telepath disappeared from the map of a business called Runciter Associates, and this was one of a series of similar disappearances.

Ask the following question:

This paragraph also tells us about two different organizations: Runciter Associates and something called “Hollis.” Based on this paragraph, what kind of relationship exists between these two organizations?

Students should respond that these two organizations seem to be at odds with each other or competing with each other in some way.

Read the next several paragraphs aloud. Stop at “What? Melipone’s gone? You kid me.” Ask students what words in this section seem to be new or perhaps unique to the world of this novel. (Students should notice *inertials*, *teep* and *precog*.)

Ask the following question:

How might you determine the meaning of any of those words (inertials, teep, precog) from the sentences that we have already read or from the words themselves?

Students should note that there is very little in the context to give an idea of these words’ meanings. However, the word *inertials* might be related to the word *inertia* and the word *precog* might be related to the idea of precognition.

Ask the following question:

We also find out a bit more in this section about Runciter and Hollis. What words and phrases assist in gaining knowledge about these two? What do they tell us?

Students should notice the “massive, sloppy head of Glen Runciter” and “his ruffled gray mass of wirelike hair,” both of which indicate his appearance and his age. Students might also notice Glen Runciter is most likely the boss at Runciter Associates, and he confirms the notion that Runciter Associates and Hollis’ organization are at odds with or competing with each other.

Read the remainder of the section. End with “‘Goodeve.’ Runciter hung up”. Ask students again to find words that seem to be unique to this novel (*polymorphic*, *bichannel circuit*, *telepathic aura*, *identflag*) and for other words that are unfamiliar (perhaps words such as *physiognomic template*, *somberly*, etc.). Again, ask students the following question:

How might you determine the meaning of any of those words (polymorphic, bichannel circuit, telepathic aura, identflag) from the sentences that we have already read, or from the words themselves?

Students should notice *polymorphic* is made up of two parts: *poly* and *morph*. A *bichannel circuit* seems to relate to the *vidphone* mentioned earlier, that *telepathic aura* confirms our understanding of *telepaths*, and that *identflag* seems to be a combination of *identity* and *flag*.

Explain to students that *poly* means “many” and that *morph* has many meanings, but among them is “a distinct form of an organism or species.” Talk with students about putting those two together and what can be determined, as well as what that implies about the “Bonds of Erotic Polymorphic Experience” motel. Continue in this way talking about the remainder of these words.

Ask students:

What else do we learn about the setting, the world, and the situation between Runciter Associates and Hollis' organization through this section of the text?

Students might notice the businesses involved have something to do with telepathy and that aura produced by telepaths can evidently be measured. Students might also notice Melipone is an exceptional telepath and he is the one who has disappeared. Runciter can visit his dead wife in a moratorium in Switzerland, and people can travel to other planets or “colony worlds” in this novel.

Reflect on what has been learned. Ask students to reflect on vocabulary learning from this exercise. (Students should note that there are a variety of ways to learn new words, and that sometimes they need to have patience with unfamiliar words, expecting that they will eventually gain knowledge of these words from the text. Other times they may need to head to the dictionary, but remember that how a word is used in a novel may be quite different from how it is presented in a dictionary.)

Assessment:

Outcome 1:

Students will learn strategies for determining the meaning of unfamiliar words, using context clues and word parts, as part of an exploration of the world of the novel.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Student participates in finding unfamiliar words. | No | Somewhat | Very |
| Student participates in class discussion regarding strategies for determining meaning. | No | Somewhat | Very |
| Student's participation suggests that he or she understands how to develop word meaning from both context and word parts. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Two

Introduction of Summarization and Close Reading in the Reading and Research Logs (Approx. 40 minutes)

Introduce the activity. Inform students that as they read, they will be keeping a reading and research log in their academic notebooks. The purpose of this log is to provide a site in which students can

- show that they have read the text,
- practice summarization and synthesis,
- practice literary interpretation and
- practice writing skills.

Explain to students that the next activities are designed to help them understand how to carry out the reading and research log, which they will be doing for each chapter of the novel.

Assign and review summarization practice. Ask students to work with a partner/ small group to write a brief summary of plot and character development from the section previously read aloud and discussed on the page titled “Summarizing” in their academic notebooks. Ask a couple of partners/small groups to volunteer their summary sentences, and write those on the white board or show on the document camera. Compare the summaries, focusing on what is essential information in this short section and providing feedback. Remind students that one of the items they will need to carry out in the reading and research log is a summary of plot and character development. Ensure that students understand how to write a summary, as they will need to do this for each chapter of the assigned reading.

FROM THE STUDENT ACADEMIC NOTEBOOK

Summarizing

Directions: In the space below, work with a partner to write a brief summary of the pages that were read aloud from *Ubik*.

(space provided)

Prepare students for close reading and interpretation. Once students are clear on summary, the class will move on to parts II and III of the reading and research log, which focus on noticing the author’s textual patterns in his writing and making interpretations of those patterns.

Ask students to go back into the section of Chapter One that was read aloud and pull out words or phrases from the text that caught their attention, that made them ask questions, that made them curious to know more—this could be something they thought was weird, something they thought was confusing, something they found funny or interesting. They should write their list in their academic notebooks on the page titled “Close Reading and Interpretation.” Ask students to report out some of the words or phrases they noticed and make a list of the aspects of the text mentioned by students on the white board or document camera.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: Go back into the section of Chapter One that was read aloud and pull out patterns from the text that caught your attention, that made you ask questions, that made you curious to know more—this could be something you thought was weird, something you thought was confusing or something you found funny or interesting. Write down in the space below some of the patterns that you noticed, including the page numbers where those patterns were found.

(space provided)

Examine this list. Ask students to classify the things they made note of: Which of these things are character-driven? Which of them are connected to plot or setting? Which of them seem to identify key concepts or themes that the author might develop and examine further throughout the novel? Which of them contain rhetorical strategies and literary devices?

Model close reading and interpretation. Select one of the words or phrases from the list provided by students and compose a sample reading and research log entry for close reading and interpretation (parts II and III) for students, on the board or on a document camera, so that they can see/hear you engaging with this topic or idea. (See a sample reading and research log entry for the opening pages of *Ubik* below. As you write, clarify for students that part II will ask students to notice textual patterns—words or phrases—and that part III asks them to make some interpretation of those patterns.

TEACHER RESOURCES

Sample Research and Reading Log for the opening pages of *Ubik*

Directions: As you read, take note of plot and character development, as well as any patterns (i.e., repetitions, contradictions, similarities) that stand out to you. When you have completed the assigned reading, write your reading log here.

Part I: Write a brief summary of the plot and character development that occurred in this section.

In this brief section, Runciter learns through a vidphone with a technician, that S. Dole Melipone, a top telepath in his company, has disappeared. Runciter indicates that he will consult his dead wife in a moratorium in Switzerland. We also learn that Glen Runciter is the head of Runciter Associates, which seems to be in competition with an organization run by someone named Hollis. Glen Runciter, an older man with a big head and wiry hair.

Part II: What patterns caught your attention? Here you should describe the pattern, including specific words and phrases from the text, along with page numbers.

One of the things that I noticed in this section is the way the author uses odd-sounding terms that are not familiar to me. For example, he mentions telepaths (page 1), vidphone (page 1), inertials (page 1), teep (page 1), precogs (page 1), and physiognomic (page 2), all within the first two pages.

Part III: Why might the author have chosen to use that pattern? How does the author's word choice impact your interpretation of the novel?

Perhaps the author is attempting to give an impression that this novel is set in the future, in a time when technologies are quite different. It seems that these terms could indicate that people in the future are telepathic, and that their telepathic abilities are perhaps assisted by technology. By using these terms that sound similar to ones we use (telephone/vidphone, for example), the author is trying to build on technologies that are currently in use and emphasize both the similarities and differences.

Remind students that for each chapter, they should use one of those categories (character-driven, connections to plot or setting, key concepts or themes, rhetorical strategies/literary devices) to think about and engage with what they are reading in the assigned chapters of the text. This work of close reading will be beneficial in not only carrying on interpretations of the novel, but also in writing the literary argument essay at the end of this unit.

Give students independent practice with writing interpretations of textual patterns that they notice. Ask students to go back to the list of words and phrases that they noticed (“Close Reading and Interpretation” in their academic notebooks) and to write a paragraph on the page titled “Close Reading and Interpretation: Student Practice” of the academic notebook answering the question for part III of the reading and research log: *Why might the author have chosen to use that pattern? How does the author’s word choice impact your interpretation of the novel?*

FROM THE STUDENT ACADEMIC NOTEBOOK

Close Reading and Interpretation: Student Practice

Directions: In the space below, write a paragraph in which you provide an interpretation of one of the patterns you noticed in your reading of Chapter One (see the previous page of the academic notebook).

Answer these questions:

Why might the author have chosen to use that pattern? How does the author’s word choice impact your interpretation of the novel?

(space provided)

Ensure that students know how to complete this portion of the reading and research log assignment and answer questions related to the portion of the novel that was read.

Activity Three

Introduction of Level 1 and Level 2 Questions in the Reading and Research Logs (Approx. 40 minutes)

It is important that students understand the difference between what we are calling Level 1 and Level 2 reading. Level 1 reading deals with surface information; these types of questions can help students to make sure that they understand what is going on in terms of basic plot points. Level 2 questions require that students dig deeper, make inferences and draw conclusions that will lead to interpretations about what they are reading. Students should be engaged with both Level 1 and Level 2 questions in their reading and research logs, and both types of questions should be text-dependent.

Continue reading aloud. Continue reading Chapter One aloud to students. On the page with the text (“...all the way here from the North American Confederation.”), stop and ask students a series of Level 1 questions. Explain to students that Level 1 questions deal with surface information, the kind that you can get very simply from referring back to the text.

Examples:

- *What is Resurrection Day?*
- *Who is Herbert Schoenheit von Vogelsang?*
- *What kind of service does the Beloved Brethren Moratorium provide?*

Read a few pages further (end with “...ready at this time to reveal to the world.”).

Ask students a couple of Level 2 questions. Explain to students that Level 2 questions require that students dig deeper, make inferences and draw conclusions or interpretations about what they are reading.

Examples:

- *What does Dick’s description of Runciter imply about his personality?*
- *What particular details does he use to reinforce this implication?*

Ask students the following questions and have them identify them as Level 1 or Level 2 questions:

Examples:

- *What is a teep? (Level 1)*
- *What does Dick mean when he says “Medical science, he conjectured, supplies the material groundwork, and out of the authority of his mind Runciter supplies the remainder”? (Level 2)*
- *Explain what a prudence organization does. (Level 1)*

Students practice independently. Ask students to complete their reading of Chapter One silently and to develop from Chapter One a Level 2 question in the reading log for this chapter on page 17 in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Level 1 and Level 2 Questions

Directions: Level 1 questions deal with surface information; these types of questions can help you to make sure that you understand what is going on in terms of basic plot points. Level 2 questions require that you dig deeper, make inferences and draw conclusions and make interpretations about what you are reading. Complete your reading of *Ubik*, Chapter One silently and write a Level 2 question for the chapter in the space below.

(space provided)

Sharing of Level 2 questions. Choose one or two of students' Level 2 questions and/or the sample Level 2 question below, and use them to facilitate a class discussion of Chapter One.

On page three, Runciter is described in this way: "...with a grimacing smile, as if some repellent midnight fluid had crept up into his aged throat." What emotion is the author attempting to convey that Runciter might be feeling? How might someone observing Runciter react to his smile?

Assessment:

Outcome 2:

Students will use the reading and research log to summarize plot and character development, note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation and to learn to develop questions that require deeper reading and interpretation.

| Reading and Research Log Assessment | |
|---|--------------------------------------|
| Rate each item on a scale of one to five, with five highest and one lowest. | |
| The log provides evidence that the student has read and comprehended the portion of the text assigned. | -----1-----2-----3-----4-----5-----> |
| The log presents an accurate and complete summary of the portion of the text assigned, without omitting important ideas or including unnecessary details. | -----1-----2-----3-----4-----5-----> |
| The log provides evidence that the student is noticing and interpreting word choices and other rhetorical patterns. | -----1-----2-----3-----4-----5-----> |
| The log provides evidence that the student is capable of producing appropriate Level 2 questions. | -----1-----2-----3-----4-----5-----> |
| Writing in the log is competent, both in terms of its organizational structure and in its use of standard English usage and punctuation. | -----1-----2-----3-----4-----5-----> |
| TOTAL: <input type="text"/> /25 | |

Activity Four

Modeling Vocabulary Work (Approx. 15 minutes)

Explain the importance of vocabulary study in reading literary works. Tell students that as they read the novel, they will also be studying vocabulary from the novel. Remind students that this making meaning from texts is part of the way in which texts are read in English classes. Explain to students that you will be modeling the type of vocabulary work that you expect from students as they study *Ubik*.

NOTE: If your students have already completed English Unit One of this readiness course, you may omit the modeling that follows and choose simply to remind students of the type of vocabulary work they should be doing. Otherwise, we recommend that you take the time to model for students how they should carry out this vocabulary study.

Choose one of the words from the choice list for *Ubik* Chapters One to Four and model the kind of work expected from students, using the sample provided below and projecting this modeling on the document camera or using the white board.

As you work through the sample with students, you should emphasize how students can use the dictionary definition, their own understanding of the word or its parts and the context of the word to determine a useful meaning that helps understand the text.

| | |
|---|---|
| <p>Word: nebulous</p> | <p>My understanding of this word is (circle one): Excellent Fair Poor</p> |
| <p>Context (including page #): “As to her own stated wishes, before her death and in early half-life encounters—this had become handily nebulous in his mind” (page 10).</p> | |
| <p>Dictionary definition: Hazy, vague, indistinct, or confused. What in the world does that mean? Confused, cloudy, not clear.</p> | |
| <p>My sense of the word, including the context and the dictionary definition, in my own words: This is saying that Glen Runciter has only an unclear or confused memory of what his wife, Ella Runciter, wanted for her half-life experience.</p> | |

After modeling this vocabulary work for students, ask them to work on their own in their academic notebooks (pages 21, 24, and 27) to complete the charts for the two words that they have chosen from each of the assigned chapters, Chapters Two through Four. Remind students that they should choose one word from the list provided for each chapter and one word from each chapter that is unfamiliar to them.

Assign Chapters Two through Four. Students should read Chapters Two through Four in *Ubik* for homework or during the remainder of class. For each chapter, students should write a reading and research log in their academic notebook. Students' success in carrying out summary, close reading and interpretation, and developing Level 2 questions will largely depend on how much time in class is spent reviewing the reading and research log, so it is strongly suggested that you spend about ten minutes in every class period reviewing students' responses and providing feedback so that they can see what they need to do this work successfully. In addition, students should complete a vocabulary chart for two words from each chapter (in this case, Chapters Two through Four), drawing one word from the choice list for each chapter and choosing an additional word on their own.

FROM THE STUDENT ACADEMIC NOTEBOOK

READING AND RESEARCH LOG FOR *Ubik*, Chapter Two

Directions: As you read, take note of plot and character development, as well as any of the author’s language choices that stand out to you. When you have completed the assigned reading, write your reading log here.

Part I: Write a brief summary of the plot and character development that occurred in this chapter.

Part II: What patterns in the author’s words and phrases caught your attention? Here you should list the words and phrases you noticed, along with page numbers.

Part II: Why might the author have chosen to use words/phrases in that way? How does the author’s word choice impact your interpretation of the novel? Think about at least one of these categories: character development; connections to plot or setting; key concepts or themes; rhetorical strategies/ literary devices.

Part IV: Write a *Level 2* question for this chapter.

Each chapter’s log asks the same questions as above in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Philip K. Dick's *Ubik*, Chapter Two

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Two. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | |
|----------------|------------------|-------------------|
| effluvium (10) | theologians (13) | proximity (16) |
| nebulous (10) | vainglory (15) | metaphysical (18) |
| luminous (11) | proxima (15) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Philip K. Dick's *Ubik*, Chapter Three

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Three. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|------------------|--------------------|------------------|-----------------|
| incised (19) | gratuity (24) | lobotomy (26) | aggregate (32) |
| conapt (20) | erratic (25) | stultifying (27) | eradicated (32) |
| homeostatic (23) | caveat emptor (25) | apparatus (30) | indices (33) |
| perpetuity (23) | miasma (26) | feasible (32) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

FROM THE STUDENT ACADEMIC NOTEBOOK

Vocabulary from Philip K. Dick's *Ubik*, Chapter Four

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Four. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- manifestation (37)
- subsidiary (41)
- incongruous (38)
- ponder (42)
- hidebound (40)

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Assessment:

Outcome 1:

Students will learn strategies for determining the meaning of unfamiliar words, using context clues and word parts, as part of an exploration of the world of the novel.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Five

Introducing the Literary Argument Essay (Approx. 35 minutes)

Introduce the prompts for the literary argument essay. Place the prompts for this culminating writing task on the page titled “Literacy Argument Essays” in the academic notebook on the board or project it on a document camera. Ask students to read the prompts and lead students in a thorough deconstruction of all parts of the prompt so that they deeply understand what they will be asked to do in the assessment.

FROM THE STUDENT ACADEMIC NOTEBOOK

Literary Argument Essay

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading *Ubik*, by Philip K. Dick and other informational texts, and conducting independent research, write an essay in which you address one of the prompts below (or an approved topic of your choosing) and argue the thesis. Be sure to acknowledge opposing views. Support your position with evidence from the texts.

Prompts:

- a) Philip K. Dick and other authors featured in this unit express views on consumerism and its impact on society. Examine their multiple viewpoints. Take a position on the viewpoint you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.

- b) How do Philip K. Dick and the other authors featured in this unit portray characters' attempts to maintain a sense of personal identity in a technological society? Take a position on the technique used to portray personal identity you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- c) How does the technology in these texts shape society's views on what it means to be human? Are these views different when considered on an individual basis? Take a position on the impact of technology on humanity and explain why. Support your argument with specific, relevant evidence from the texts.

Introduce the rubric for the literary argument essay. Ask students to examine the rubric for the literary argument essay on the page titled "Rubric for Literary Argument Essay." in the academic notebook), or modify it in class based on the feedback from discussion.

FROM THE STUDENT ACADEMIC NOTEBOOK

Rubric for Literary Argument Essay

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-------------------|--|-----|---|-----|---|-----|--|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. D: Addresses additional demands superficially. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. D: Addresses additional demands sufficiently. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. D: Addresses additional demands with thoroughness and makes a connection to claim. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. | | Establishes a claim. | | Establishes a credible claim. | | Establishes and maintains a substantive and credible claim or proposal. |
| Reading/ Research | Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim. |

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|---|-----|---|-----|---|-----|---|
| Organization | Attempts to organize ideas, but lacks control of structure. | | Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation. | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation. | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

Add information for Web site. Introduce the literary argument essay. Share the following text with students:

http://academic.cengage.com/resource_uploads/downloads/1413022812_59427.pdf.

Read the opening pages of this chapter with students beginning with the page titled “Writing Literacy Arguments” in the academic notebook and discuss the basic points made about the literary argument in the text, including the following:

- Defining a literary argument essay (one in which a position is taken on a debatable topic related to a piece of literature and the author attempts to change the reader’s mind about it).
- Choosing a topic (one about which reasonable people may disagree, one that is narrow enough for the page limit and one that is interesting).
- Developing an argumentative thesis (one that takes a strong stand, one which an anti-thesis can be developed and one that can be supported).
- Defining key terms.
- Considering the audience.
- Refuting opposing arguments.

CHAPTER 5

WRITING LITERARY ARGUMENTS

Most of the essays you write about literature are **expository**— that is, you write to give information to readers. For example, you might discuss the rhyme or meter of a poem or examine the interaction of two characters in a play. (Most of the student essays in this book are expository.) Other essays you write may be **literary arguments** that is, you take a position on a debatable topic and attempt to change readers' minds about it. The more persuasive your argumentative essay, the more likely readers will be to concede your points and grant your conclusion.

When you write a literary argument, you follow the same process you do when you write any essay about a literary topic. However, because the purpose of an argument is to convince readers, you need to use some additional strategies to present your ideas.

Planning a Literary Argument

Choosing a Debatable Topic

Frequently, an instructor will assign a topic or specify a particular literary work for you to discuss. Your first step will be to decide exactly what you will write about. Because an argumentative essay attempts to change the way readers think, it must focus on a **debatable topic**, one about which reasonable people may disagree. **Factual statements**— statements about which reasonable people do *not* disagree — are therefore inappropriate as topics for argument.

Factual Statement: Linda Loman is Willy Loman's long-suffering wife in Arthur Miller's play Death of a Salesman.

Debatable Topic: More than a stereotype of the long-suffering wife, Linda Loman in Arthur Miller's play Death of a Salesman is a multidimensional character.

In addition to being debatable, your topic should be narrow enough for you to develop within your page limit. After all, in an argumentative essay, you will have

to present your own ideas and supply convincing support while also pointing out the strengths and weaknesses of opposing arguments. If your topic is too broad, you will not be able to discuss it in enough detail.

Finally, your topic should be interesting. Keep in mind that some topics — such as the significance of the wall in Robert Frost’s poem “Mending Wall” — have been written about so often that you will probably not be able to say anything very new or interesting about them. Instead of relying on an overused topic, choose one that enables you to write something original.

Developing an Argumentative Thesis

After you have chosen your topic, your next step is to state your position in an **argumentative thesis** — one that takes a strong stand. Properly worded, this thesis statement will lay the foundation for the rest of your argument.

One way to make sure that your thesis actually does take a stand is to formulate an **antithesis** — a statement that takes an arguable position opposite from yours. If you can construct an antithesis, you can be certain that your thesis statement takes a stand. If you cannot, your thesis statement needs further revision to make it argumentative thesis.

Thesis Statement: The last line of Richard Wright’s short story “Big Black Good Man” indicates that Jim was fully aware all along of Olaf’s deep-seated racial prejudice.

Antithesis: The last line of Richard Wright’s short story “Big Black Good Man” indicates that Jim remained unaware of Olaf’s feelings toward him.

Whenever possible, test your argumentative thesis statement on your classmates — either informally in classroom conversations or formally in a peer-review session.

✓ CHECKLIST Developing an Argumentative Thesis

- Can you formulate an antithesis?
- Does your thesis statement make clear to readers what position you are taking?
- Can you support your thesis with evidence from the text and from research?

Defining Your Terms

You should always define the key terms you use in your argument. For example, if you are using the term *narrator* in an essay, make sure that readers know you are referring to a first-person, not a third-person, narrator. In addition, clarify the difference between an **unreliable narrator**— someone who misrepresents or misinterprets events — and a **reliable narrator**— someone who accurately describes events. Without a clear definition of the terms you are using, readers may have a very difficult time understanding the point you are making.

Defining Your Terms

Be especially careful to use precise terms in your thesis statement. Avoid vague and judgmental words, such as *wrong*, *bad*, *good*, *right*, and *immoral*.

Vague: The poem "Birmingham Sunday (September 15, 1963)" by Langston Hughes shows how bad racism can be.

Clearer: The poem "Birmingham Sunday (September 15, 1963)" by Langston Hughes makes a moving statement about how destructive racism can be.

Considering Your Audience

As you plan your essay, keep your audience in mind. For example, if you are writing about a work that has been discussed in class, you can assume that your readers are familiar with it; include plot summaries only when they are needed to explain or support a point you are making. Keep in mind that you will be addressing an academic audience— your instructor and possibly some students. For this reason, you should be sure to follow the conventions of writing about literature as well as the conventions of standard written English (for information on the conventions of writing about literature, see the checklist in Chapter 2, p. 000.)

When you write an argumentative essay, always assume that you are addressing a skeptical audience. Remember, your thesis is debatable, so not everyone will agree with you — and even if your readers are sympathetic to your position, you cannot assume that they will accept your ideas without question.

The strategies you use to convince your readers will vary according to your relationship with them. Somewhat skeptical readers may need to see only that your argument is logical and that your evidence is solid. More skeptical readers, however, may need to see that you understand their positions and that you concede some of their points. Of course, you may never be able to convince hostile readers that your conclusions are legitimate. The best you can hope for is that these

readers will acknowledge the strengths of your argument even if they remain skeptical about your conclusion.

Refuting Opposing Arguments

As you develop your literary argument, you may need to **refute**—that is, to disprove—opposing arguments by demonstrating that they are false, misguided, or illogical. By summarizing and refuting opposing views, you more opposing arguments seem less credible to readers; thus, you strengthen your case. When an opposing argument is so strong that it cannot be easily dismissed, however, you should concede the strength of the argument and then point out its limitations.

Notice in the following paragraph how a student refutes the argument that Homer Barron, a character in William Faulkner’s short story “A Rose for Emily,” is gay.

| | |
|-------------------|---|
| Opposing argument | A number of critics have suggested that Homer Barron, Miss Emily’s suitor, is gay. Certainly, there is some evidence in the story to support this |
| Concession | interpretation. For example, the narrator points out that Homer “liked the company of men” (Faulkner 000) and that he was not “a marrying man” (Faulkner 000). In addition, the narrator describes Homer as wearing yellow gloves when he took Emily for drives. According to the critic William Greenslade, in the 1890s yellow was associated with homosexuality (24). This evidence, however, does not establish that Homer is gay. During the nineteenth century, many men preferred the company of other men (as many do today). This, in itself, did not mean they were gay. Neither does the fact that Homer wore yellow gloves. According to the narrator, Homer was a man who liked to dress well. It is certainly possible that he wore these gloves to impress Miss Emily, a woman he was trying to attract. |
| Refutation | |

Read and discuss a sample literary argument. Ask students to examine the sample literary argument that begins on the page titled “Sample Literacy Argument Essay” in the academic notebook. Have students read this in class and discuss the structure of the sample paper, including the introduction, the thesis statement, the argument, counter-argument and conclusion. Examine the thesis statement and see how it meets the requirements for a thesis statement set out earlier in class. Ask students to notice that the author of the sample literary argument refers to information from the short story that is being analyzed but also cites other sources. Ask students to notice that the voice in the sample is academic and to examine the works cited page.

Sample Literacy Argument Essay

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CHAPTER 5 • WRITING LITERARY ARGUMENTS

Chase 1

Margaret Chase
Professor Sierra
English 1001
6 May 2005

The Politics of "Everyday Use"

Introduction

Alice Walker's "Everyday Use" focuses on a mother, Mrs. Johnson, and her two daughters, Maggie and Dee, and how they look at their heritage. The story's climax comes when Mrs. Johnson rejects Dee's request to take a hand-stitched quilt with her so that she can hang it on her wall. Knowing that Maggie will put the quilt to "everyday use," Dee is horrified, and she tells her mother and Maggie that they do not understand their heritage. Although many literary critics see Dee's desire for the quilt as materialistic and shallow, a closer examination of the social and historical circumstances in which Walker wrote this 1973 story suggests a more generous interpretation of Dee's actions.

Thesis statement

Background

On the surface, "Everyday Use" is a story about two sisters, Dee and Maggie, and Mrs. Johnson, their mother. Mrs. Johnson tells the reader that "Dee, . . . would always look anyone in the eye. Hesitation was no part of her nature" (000). Unlike her sister, Maggie is shy and introverted. She is described as looking like a lame animal that has been run over by a car. According to the narrator, "She has been like this, chin in on chest, eyes on ground, feet in shuffle" (000), ever since she was burned in a fire.

Chase 2

Unlike Dee, Mrs. Johnson never received an education. After second grade, she explains, the school closed down. She says, "Don't ask me why: in 1927 colored asked fewer questions than they do now" (000). Mrs. Johnson concedes that she accepts the status quo even though she knows that it is unjust. This admission further establishes the difference between Mrs. Johnson and Dee: Mrs. Johnson has accepted her circumstances, while Dee has worked to change hers. Their differences are illustrated by their contrasting dress. As show in Figure 1, Dee and

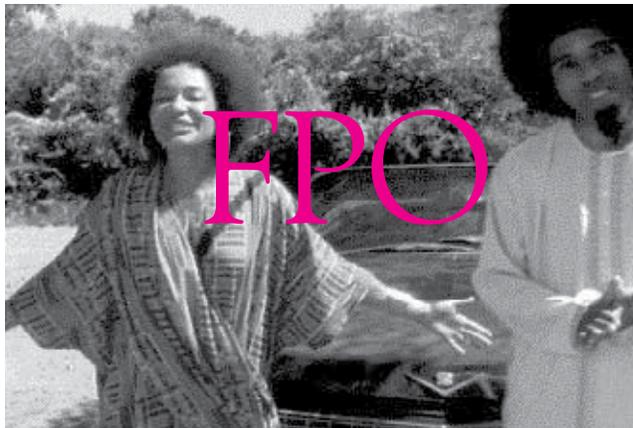


Fig. 1. Dee and Hakim arrive at the family home. "Everyday Use," The Wadsworth Original Film Series in Literature: "Everyday Use," dir. Bruce R. Schwartz, DVD (Boston: Wadsworth, 2005).

Chase 3

her boyfriend Hakim dress in the Afro-American style of the late 1960s, embracing their heritage; Mrs. Johnson and Maggie dress in plain, conservative clothing.

Background continued

When Dee arrives home with her new boyfriend, it soon becomes obvious that character is, for the most part, unchanged. As she eyes her mother's belongings and asks Mrs. Johnson if she can take the top of the butter churn home with her, it is clear that she is still very materialistic. However, her years away from home have also politicized her. Dee now wants to be called "Wangero" because she believes (although mistakenly) that her given name comes from whites who owned her ancestors. She now wears African clothing and talks about how a new day is dawning for African Americans.

Social and historical context used as evidence to support

The meaning and political importance of Dee's decision to adopt an African name and wear African clothing cannot be fully understood without a knowledge of the social and political context in which Walker wrote this story. Walker's own words about this time period explain Dee's behavior and add meaning to it. In her interview with White, Walker explains that the late 1960s was a time of cultural and intellectual awakening for African Americans. In an effort to regain their past, many turned to Africa, adopting the dress, hairstyles, and even the names of their African ancestors. Walker admits that as a young woman she too became interested in adopting an African heritage. (In fact, she herself

Chase 4
was given the name *Wangero* during a visit to Kenya in the late 1960s.) Walker tells White that she considered keeping this new name, but eventually realized that to do so would be to “dismiss” her family and her American heritage. When she researched her American family, she found that her great-great grandmother had walked from Virginia to Georgia carrying two children. “If that’s not a Walker,” she says, “I don’t know what is.” Thus, Walker realized that, over time, African Americans had actually transformed the names they had originally taken from their enslavers. To respect the ancestors she knew,

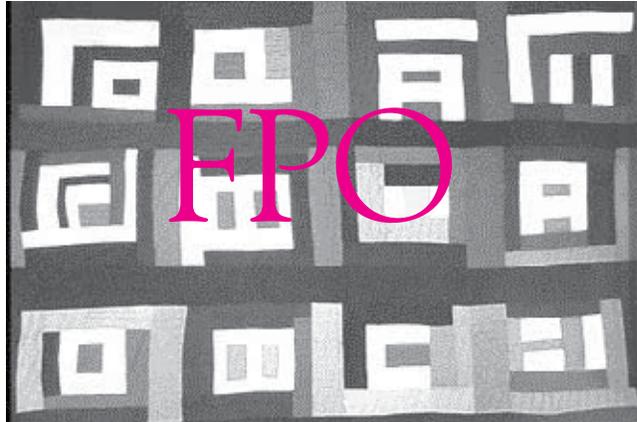


Fig. 2. Traditional hand-stitched quilt. Evelyn C. White, “Alice Walker: Stitches in Time,” interview, *The Wadsworth Original Film Series in Literature: “Everyday Use,”* dir. Bruce R. Schwartz, DVD (Boston: Wadsworth, 2005).

Chase 5

Walker says, she decided it was important to retain her name.

Along with adopting elements of their African heritage, many African Americans also worked to elevate the objects that represented their heritage, such as the quilt shown in Figure 2, to the status of high art. According to Salaam, one way of doing this was to put these objects in museums; another was to hang them on the walls of their homes. Such acts were aimed at convincing whites that African Americans had an old and rich culture and that consequently they deserved not only basic civil rights, but also respect. These gestures were also meant to improve self-esteem and pride within black communities (Salaam 42-43).

Concession and presentation of opposing argument

Admittedly, as some critics have pointed out, Dee is more materialistic than political. For example, although Mrs. Johnson makes several statements throughout the story that suggest her admiration of Dee's defiant character, she also points to incidents that highlight Dee's materialism and selfishness. When their first house burned down, Dee watched it burn while she stood under a tree with "a look of concentration" (000) rather than remorse. Mrs. Johnson knows that Dee hated their small, dingy house, and she knows too that Dee was glad to see it destroyed. Furthermore, Walker acknowledges in an interview with her biographer, Evelyn C. White, that as she was writing the story, she imagined that Dee might even have set the fire that destroyed the house

Chase 6

and scarred her sister. Even now, Dee is ashamed of the tin-roofed house her family lives in, and she has said that she would never bring her friends there. Mrs. Johnson has always known that Dee wanted “nice things” (000); even at sixteen, “she had a style of her own: and knew what style was” (257). However, although these examples indicate that Dee is materialistic and self-serving, they also show positive traits: pride and a strong will. Knowing that she will encounter strong opposition wherever she goes, she works to use her appearance to establish power. Thus, her desire for the quilt can be seen as an attempt to establish herself and her African-American culture in a society dominated by whites.

Mrs. Johnson knows Dee wants the quilt, but she decides instead to give it to Maggie. According to Houston Baker, when Mrs. Johnson chooses to give the quilt to Maggie, she is challenging Dee’s understanding of her heritage. Unlike Dee, Mrs. Johnson recognizes that quilts signify “sacred generations of women who have made their own special kind of beauty separate from the traditional artistic world” (qtd. in Piedmont-Marton 45). According to Baker, Mrs. Johnson realizes that her daughter Maggie, whom she has long dismissed because of her quiet nature and shyness, understands the true meaning of the quilt in a way that Dee never will (Piedmont-Marton 45). Unlike Dee, Maggie has paid close attention to the traditions and skills of her

Refutation
of opposing
argument

Analysis of
Mrs. Johnson’s
final act

Chase 7

mother and grandmother: she has actually learned to quilt. More important, by staying with her mother instead of going to school, she has gotten to know her family. She poignantly underscores this fact when she tells her mother that Dee can have the quilt because she does not need it to remember her grandmother. Even though Maggie's and Mrs. Johnson's understanding of heritage is clearly more emotionally profound than Dee's, it is important not to dismiss Dee's interest in elevating the quilt to the level of high art. The political stakes of defining an object as art in the late 1960s and early 1970s were high, and the fight for equality went beyond basic civil rights.

Conclusion
restating thesis

Although there is much in the story that indicates Dee's materialism, her desire to hang the quilt should not be dismissed as simply a selfish act. Like Mrs. Johnson and Maggie, Dee is a complicated character. At the time the story was written, displaying the quilt would have been not only a personal act, but also a political act—one with important, positive results. The final message of "Everyday Use" may just be that in order to create an accurate view of the quilt (and by extension African-American culture) you need both views—Maggie's and Mrs. Johnson's every-day use and Dee's elevation of the quilt to art.

Chase 8

Works Cited

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Focusing on the prompts. Ask students to work in the academic notebook on the page titled “Responding to Prompts” to answer the following question:

FROM THE STUDENT ACADEMIC NOTEBOOK

Responding to Prompts

Directions: Select one of the three prompts for the literacy argument essay that interests you most. In the space below, answer the following questions: What kind of ideas and thoughts do you have in response to this prompt? What have you seen so far in the novel that seems to connect to this prompt?

(space provided)

Activity Six

Practice in Developing a Thesis Statement (Approx. 35 minutes)

Review the components of a thesis statement: Ask students to look back at the “Planning a Literary Argument” material in their academic notebooks.

Ask students, *What is a thesis statement? What should it contain?* Students should be able to bring up the following:

- A thesis should be about a debatable topic.
- A thesis should contain a strong stand that lays a foundation for the argument.
- Based on their thesis, students should be able to create an antithesis.
- A thesis should use clearly defined terms.
- A thesis should keep the audience in mind.
- A thesis should refute opposing arguments.

Ask students also to talk about how they might ascertain if a thesis statement is proven? (Possible answer: The thesis statement can be supported with information from the text.)

Examine a conversation in Chapter Two. Ask students to review the conversation between Ella and Glen Runciter in Chapter Two of *Ubik*, beginning with “It’s so weird. I think I’ve been dreaming all this time....” (page 12) and continuing through “And night,” Runciter said, “*has come.*” (page 17).

Develop a thesis statement. Working with a partner, students should develop a sample thesis statement that meets the criteria reviewed previously in their academic notebooks on the page titled “Developing a Thesis.” The thesis statements students develop might address what is happening with the identity merging of people in the moratorium, about what is going on with the psis, about the relationship between Ella and Glen Runciter or any number of other relevant topics.

FROM THE STUDENT ACADEMIC NOTEBOOK

Developing a Thesis

Directions: With a partner, review the conversation between Ella and Glen Runciter in Chapter Two of *Ubik*, beginning with “It’s so weird. I think I’ve been dreaming all this time....” (page 12) and continuing through “And night,” Runciter said, “has come.” (page 17).

With your partner, develop a sample thesis statement that provides an explanation of what seems to be going on in the novel, using the space below. Your thesis statement should meet the criteria reviewed previously. The thesis statement you develop might provide an explanation for, (a) what is happening with the identity merging of people in the moratorium, (b) what is going on with the psis, or (c) the relationship between Ella and Glen Runciter, or any number of other relevant topics.

(space provided)

For example, students might create something like the following thesis statement:

In Chapter Two, the author characterizes the relationship between Ella and Glen Runciter as one that presents Ella as dominant over Glen.

Provide an opportunity to revise thesis statements. After pairs of students have completed their practice thesis statements, ask several volunteers to write their statements on the white board or show them on a document camera. Review the thesis statements using the criteria listed above. As a class, make revisions to the thesis statements so that they fit the criteria. Provide time for students to work with their partners to revise their practice thesis statements in order to make them fit the criteria.

Review plot and character development. Ask students to share from their plot summaries/character development and to address patterns and interpretation of those patterns.

Discuss Level 2 questions. Ask two volunteers to provide their Level 2 questions for Chapter Two and facilitate a brief class discussion on those questions.

In all discussions, ensure that students are providing information from the text as evidence for their perspectives by asking them follow-up questions, such as “Can you find a quote from the novel that supports your opinion?”

Assessment:

Outcome 3:

Students will build toward the thinking they need for the final assessment by investigating what the final assessment is asking for as well as learning how to write a thesis statement.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Practice thesis statement provides a reasonable explanation of a problem in the novel. | No | Somewhat | Very |
| Practice thesis statement makes a strong stand, such that an anti-thesis could be created from it. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Seven

Identity in *Ubik*, Chapters One and Two (Approx. 20 minutes)

Ask students to work with a small group or a partner to develop notes in response to a question in their academic notebooks on the page titled “Question about Identity” in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Question about Identity

Directions: With a partner, use your reading log for Chapter Two and the text itself to write notes that will help you respond to the following question:

In Chapter Two, Runciter speaks to his dead wife, Ella, who is in a moratorium. However, midway through their conversation, Ella is “replaced” by Jory, another half-lifer. How do the boundaries of individual identity seem to blur after death? What specific details from the text can you find to support your idea?

(space provided)

Ask students to transfer key ideas from their responses to their avatar parking lots using sticky notes. Have students walk around the room and examine the additions made to students’ parking lot/avatars.

Facilitate a discussion about the role of personal identity in the economy of *Ubik* as well as how death seems to blur identity boundaries in the novel. In the discussion, encourage students to provide textual evidence to maintain a text-dependent discussion.

Assessment:

Outcome 5:

Students will participate in small-group and whole-class discussions on themes of identity in the central text.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Eight

Making Inferences about Characters (Approx. 40 minutes)

Explain to students what it means to make inferences. As students begin to collect and examine evidence from their texts, they have to become familiar with the concept of inferences. An inference is a conclusion reached on the basis of evidence and reasoning. Sometimes authors provide readers with plenty of details about characters; they share what they look like, what their habits are, what they like and dislike. But just as often, many of those details are left up to the reader to determine. The reader can use clues provided by the author to form these conclusions.

Tell students that they will practice this concept of inferences with Chapter Three of *Ubik*, focusing on clues provided about four characters: Joe Chip, Herbert Schoenheit von Vogelsang, Glen Runciter and Pat.

Students should already have completed their reading of Chapter Three and Four, as well as their reading and research logs for those chapters. Ask students to look back through Chapter Three and to skim pages 19-25, looking for information revealing something about Joe Chip. Students should write down quotes and page numbers from the text in the academic notebook on the page titled “Textual Evidence about Joe Chip.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Textual Evidence about Joe Chip

Directions: Look back through Chapter Three and skim pages 19-25, looking for information that tells us something about Joe Chip. In the space below, write down quotes and page numbers from the text that give us information about Joe Chip’s appearance, character traits, living habits, etc.

(space provided)

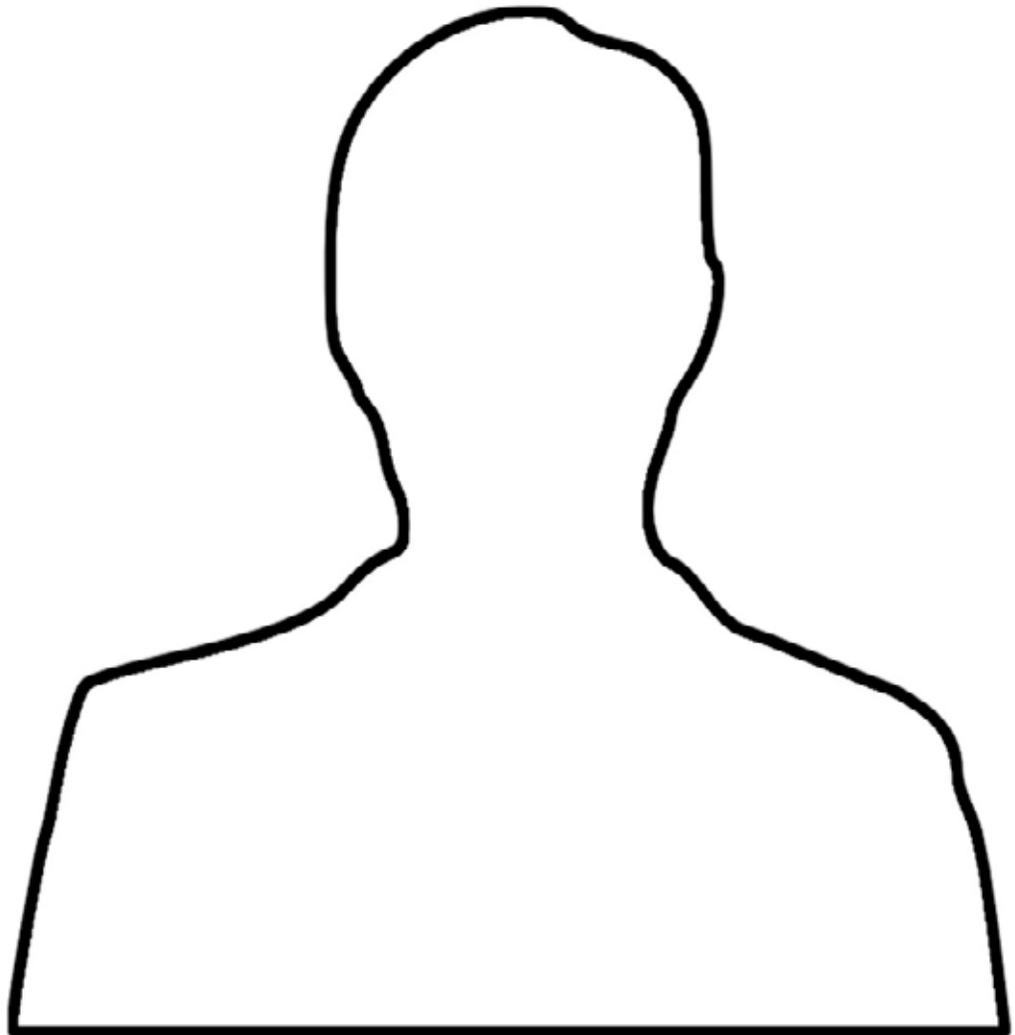
Model inferencing about characters. Put a copy of the “Inferencing Silhouette” on the projector or draw it on the board. Define two terms for students, *explicit details*, which are those drawn word-for-word from the text, and *inferred details*, which are the conclusions that readers draw about characters from explicit details. Explain to students that for this exercise, *explicit details* about a character provided in the text get written **inside** the silhouette; *inferred details* are written in the space **outside** the silhouette.

Write the character’s name, Joe Chip, inside the silhouette. Ask students to volunteer some sample information about Joe Chip and write that information in the appropriate place on the silhouette. For example, a student might volunteer Joe smokes (he “lit a cigarette” page 19) he drinks (“having a hangover” page 19), and he doesn’t sleep well and seems to take pills both to go to sleep and to stay awake (“he had as usual not slept well” page 20; “his week’s supply of stimulants... had run out” page 20). These should be written on the inside of the silhouette. Be sure to ask students to confirm the details—where in the text are these details provided? Use page numbers to indicate where the detail is found in the text. Continue writing details on the inside of the silhouette as they are offered by students.

FROM THE STUDENT ACADEMIC NOTEBOOK

Inferencing Worksheet

Name: _____



Ask students to draw conclusions from some of these details. What can be inferred or concluded about Joe Chip based on these details? Students might suggest that Joe Chip is not particularly interested in being healthy, he can't afford what he needs to be healthy, or other similar conclusions. Continue this process with students offering up examples from the text and drawing inferences until the students seem comfortable with the process of drawing inferences from textual details. Remind students that inferences must proceed logically from information presented in the text.

Divide the class into small groups and ask each group to focus on developing explicit details and inferences for the characteristics of one of the following characters, using Chapters One through Four and their reading and research logs for those chapters.

They should use the page titled “Inferencing Silhouette” that is available in the academic notebook.

- Herbert Schoenheit von Vogelsang
- Glen Runciter
- Pat

When students have completed the process of developing character traits based on inferences, ask each group to present the inferences and the details on which those inferences are based to the class.

Clarify any student questions about inferences and textual evidence. Remind students that any statements they make about a text must be supported with clear textual evidence; sometimes this means the reader must draw his or her own conclusions, but those conclusions must be logically supported by details drawn from the text.

Assessment:

Outcome 4:

Students will make text-based inferences focused on character development.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students provide sufficient details drawn from text, with quotations and page numbers, regarding their assigned character. | No | Somewhat | Very |
| Students use those details to draw logical conclusions/inferences about their assigned character. | No | Somewhat | Very |
| Total Points | 6 | | |

Review plot and character development. Ask students to share from their plot summaries/character development for Chapters Three and Four in their reading and research logs for those chapters and to address patterns and interpretation of those patterns.

Discuss Level 2 questions. Ask two volunteers to provide their Level 2 questions for Chapters Three and Four from their reading and research logs on those chapters and facilitate a brief class discussion on those questions.

In all discussions, ensure that students are providing information from the text as evidence for their perspectives by asking them follow-up questions, such as “Can you find a quote from the novel that supports your opinion”?

Activity Nine

Vocabulary and Concepts from Chapters One to Four (Approx. 100 minutes)

Ask students to open their academic notebooks to the vocabulary work on Chapters Two through Four. Remind students of the vocabulary work that was done previously. Students should have completed their vocabulary work for previous homework, choosing one word from the choice list and one self-selected word from each of the assigned chapters.

If necessary, choose one of the words from the choice list and model the kind of work expected from students. Refer back to the sample provided earlier or use another sample taken from the list of choice words for Chapters Two to Four and project this modeling on the document camera or use the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected, from Chapters Two to Four, for a total of six words each. Ask students to write their six words on index cards and to write both the definition and the context (the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected by presenting the word, its context from *Ubik* and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories, but all of the members of the group must agree to the categories they have developed and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words that they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Assessment

Outcome 1:

Students will learn strategies for determining the meaning of unfamiliar words, using context clues and word parts, as part of an exploration of the world of the novel.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to review the words that they studied in their small group and to pull from those words their TOP FIVE words. The words that they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapters Two to Four. Ask each group to report out the words that they chose and why they chose them (i.e., in what way do their TOP FIVE words connect to or remind them of the content of Chapters Two through Four).

Make sure that the words chosen as TOP FIVE are placed on the *Ubik* vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

Assign reading and work related to Chapters Five through Eight. Provide approximately 50 minutes of class time for students to begin reading Chapters Five through Eight and carrying out the reading and research logs and the vocabulary work on those chapters. For homework, students should complete this work: read Chapters Five through Eight in *Ubik*, complete a reading and research log for each chapter and complete vocabulary charts for these chapters. Students' success in carrying out summary, close reading and interpretation, and developing Level 2 questions will largely depend on how much time in class is spent reviewing the reading and research log, so it is strongly suggested that you spend about ten minutes in every class period reviewing students' responses and providing feedback so that they can see what they need to do to complete this work successfully.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Engaged students in an in-class reading of the opening section of Phillip K. Dick's *Ubik*, focusing on words that are unique to the world created by Dick and word-learning strategies for unfamiliar words.
2. Modeled the process of writing plot and character development summaries, interpretation of words and phrases, and Level 2 questions.
3. Asked students to read a description of a literary argument essay as well as a sample literary argument essay.
4. Asked students to choose one of the three prompts for the culminating literary argument essay to write about what they have seen in the novel thus far that relates to their chosen prompt.
5. Asked students to practice developing a thesis statement related to an excerpt from Chapter Two.
6. Asked students to work with a small group or a partner to develop notes in response to questions about identity from Chapters One to Two and to post key ideas on their avatar parking lots.
7. Modeled inferencing and asked students to develop text-based inferences for characters in in the first four chapters of *Ubik*.
8. Facilitated a whole-class discussion of Chapters One to Four using questions drawn from students' reading and research logs.
9. Facilitated a sorting activity for students' vocabulary work.
10. Assigned and allowed class time for reading Chapters Five through Eight and completing reading and research logs as well as vocabulary on these chapters.

Lesson 3

Consumerism: *Ubik* Chapters Five through Eight

Overview and Rationale:

In Lesson Three, students will work with Chapters Five through Eight in Phillip K. Dick's *Ubik*, focusing on the concept of consumerism as it plays out in this science fiction novel. Students will use their reading and research logs to track their reading, write summaries, develop Level 2 questions and notice and interpret literary patterns within the central text. In addition, students will continue their work toward writing a literary argument essay, with a focus on understanding textual evidence, and will practice gathering and using textual evidence to support claims in literary arguments. Vocabulary work in this lesson will center on the students' self-selected words (two from each chapter) and will involve students in presenting words and definitions within a small group and sorting those words into categories, as well as choosing, as a class, words that particularly relate to the content of Chapters Five through Eight. At the end of this lesson, students will be given class time to begin reading and doing work on Chapters Nine through 12. Supplemental texts for this lesson include the following:

- An excerpt from a chapter by Mark Poster, entitled "Future Advertising: Dick's *Ubik* and the Digital Ad" from *Consumption in an Age of Information* (2005) edited by Sande Cohen and R.L. Rutsky.
- An excerpt from *Feed* by M.T. Anderson (Chapter 22, "Lose the Chemise").
- Excerpts from a chapter entitled, "Writing Literary Arguments."

Tasks/Expected Outcomes:

1. Students will keep a reading and research log during the reading of the central text, which they will use to summarize plot and character development, to note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation and learn to develop Level 2 questions, or questions that require deeper reading, interpretation and drawing conclusions.
2. Students will participate in small and whole-group discussions of the texts, particularly related to the theme of consumerism. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.
3. Students will demonstrate their ability to apply strategies for locating words in a literary text that are unfamiliar to them and determine the meaning of those words, using both context clues and dictionaries.
4. Students will practice skills related to writing a literary argument essay, including the following: identifying types of evidence and selecting appropriate evidence that can be used to support a writer's thesis statement, identifying mini-claims used in a text to support the larger argument, and presenting evidence to support a claim.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (2) Reading/Comprehension of Literary Text/Theme and Genre. Students analyze, make inferences and draw conclusions about theme and genre in different cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to:
 - (A) compare and contrast works of literature that express a universal theme;
 - (C) relate the characters, setting, and theme of a literary work to the historical, social, and economic ideas of its time.
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (7) Reading/Comprehension of Literary Text/Sensory Language. Students understand, make inferences and draw conclusions about how an author’s sensory language creates imagery in literary text and provide evidence from text to support their understanding. Students are expected to analyze how the author’s patterns of imagery, literary allusions, and conceits reveal theme, set tone, and create meaning in metaphors, passages, and literary works.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Copies of Phillip K. Dick's *Ubik*
- Index cards
- Markers
- Access to students' avatars/parking lots

Timeframe:

295 minutes

Targeted Vocabulary:

Vocabulary taken from Chapter Five

- percale (48)
- feral (48)
- stupendous (49)
- optimistic (51)
- careworn (51)
- miserly (53)
- sentient (55)
- elongated (55)
- propensity (57)
- encompassing (60)
- loftiness (61)
- anachronistic (63)
- hypnagogic (63)

Vocabulary taken from Chapter Six

- infiltrated (64)
- psychedelic (67)
- perambulated (68)
- agitated (70)
- respiration (73)
- resignation (77)

Vocabulary taken from Chapter Seven

- saturated (81)
- vicarious (81)
- voyeur (81)
- unctuous (82)
- fiasco (85)
- tyranny (86)
- disjointed (91)
- mandatory (92)
- numismatical (93)
- faceting (93)
- delegate (95)
- oblivion (95)
- manifold (97)

Vocabulary taken from Chapter Eight

- variegated (98)
- hegemony (98)
- ersatz (102)
- antiquated (106)
- obsolescence (109)
- grotesque (110)
- deterioration (111)
- manifestations (112)

Activity One

Re-approaching the Text (Approx. 35 minutes)

Ask two students to volunteer Level 2 questions from their reading and research logs (Part IV of the reading and research log) on the chapters they read for homework (Chapters Five through Eight). Using those student-generated Level 2 questions, facilitate a whole-class discussion of the chapters. This whole-class discussion should bring to light any difficulties with comprehension of the required chapters, as well as whether or not students are doing the reading. Encourage students to pull ideas from their reading and research log (in the academic notebook) as the discussion progresses.

Have students work with a partner to compare and to examine the language/writing pattern and the interpretation of that pattern (Parts II and III of the reading and research log in the academic notebook) on the chapters they read for homework (Chapters Five through Eight). Facilitate a whole-class discussion on interesting language patterns and interpretations that emerge from their work. This whole-class discussion should focus on the craft of the work and how students are using what they notice about the writing of the novel to interpret it.

In both discussions, ensure that students are basing their discussion and their interpretation on the text itself by asking follow-up questions, such as “Where in the novel do you find that information”?

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly related to the theme of consumerism. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|--|--|---|--|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| <p>CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.</p> | <p>Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion.</p> | <p>Student comes to class prepared for discussion and brings evidence from texts into discussion.</p> | <p>Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas.</p> |
| <p>CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.</p> | <p>Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class.</p> | <p>Student poses and responds to questions that make connections among the text and the world.</p> | <p>Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas.</p> |
| Total Points | 10 | | |

Activity Two

Textual Evidence on Consumerism (Approx. 20 minutes)

Ask students to work with a partner or small group to write notes in response to the following questions in their academic notebooks regarding commercialism in *Ubik*.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: With a partner, use your reading logs for Chapters Five through Eight and the text itself to write notes that will help you respond to the following question:

Think about the way commercials and marketing efforts “get inside your brain,” from having a jingle stuck in your head to having a dissatisfactory body image because of seeing models on billboards and TV. What textual evidence can you find to support the idea that Dick’s telepaths seem an allegory for the psychic intrusion of commercialism in our minds?

(space provided)

Ask students to transfer key ideas from their responses to their avatar parking lot. Instruct students to structure their idea as a thesis statement, drawing on the work done in the previous lesson on thesis statements. Have students walk around the room and examine the additions made to students’ parking lot/avatars.

Facilitate a whole-class discussion on the consumerism present in this portion of the text.

Give students feedback on their participation in discussion, using the evaluation rubric provided on the next page.

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly related to the theme of consumerism. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Three

Using Textual Evidence to Support a Thesis (Approx. 35 minutes)

Ask students to silently read a short excerpt in the academic notebook: “Using Evidence Effectively: Supporting Your Literary Argument.”

As students read, they should mark the text (i.e., underlining, highlighting, annotating). Once the reading is completed, ask students to volunteer to quickly summarize what they’ve read for you; answer any questions they may have about the text.

FROM THE STUDENT ACADEMIC NOTEBOOK

USING EVIDENCE EFFECTIVELY Supporting Your Literary Argument

Directions: Read the following excerpts and mark up the text (i.e., underlining, highlighting, annotating).

Many literary arguments are built on **assertions**—statements made about a debatable topic—backed by **evidence** supporting examples in the form of references to the text, quotations and the opinions of literary critics. For example, if you stated that Torvald Helmer, Nora’s husband in Henrik Ibsen’s play *A Doll House*, is as much a victim of society as his wife is, you could support this assertion with relevant quotations and examples from the play. You could also paraphrase, summarize or quote the ideas of literary critics who hold this opinion. Remember, only assertions that are **self-evident** (all plays include characters and dialogue) or **factual** (*A Doll House* was published in 1879) need no supporting evidence. All other kinds of assertions require support.

NOTE: Your thesis statement is an assertion that your entire essay supports. Keep in mind, however, that you can never prove your thesis conclusively—if you could, there would be no argument. The best you can do is provide enough evidence to establish a high probability that your thesis is reasonable.

Students should have pulled from this reading the idea that textual evidence to support thesis statements comes from a variety of different textual details. Students could pull quotes from the text, including dialogue, character thoughts, character actions, sensory descriptions and more. Students could also paraphrase or quote the work of literary critics on the text. Have students create a list of types of evidence; put this list on the board or on a large piece of paper to display in the classroom.

Tell students that we will be practicing collecting evidence to support a thesis statement. Allow students to work in pairs for this activity. Explain to students that in Chapter Five, the characters make a number of “time jumps.” Various characters attempt to explain what happened during the time jump. For example, Francesca Spanish asserts on page 60 that “Someone...just now moved us, all of us, into another world. We inhabited it, lived in it, as citizens of it, and then a vast, all-encompassing spiritual agency restored us to this, our rightful universe.” Joe Chip confirms that Pat Conley did it, but obviously Francesca came to her

conclusion before knowing that information. How did she know? The evidence that we can pull from the text might include the following:

- Francesca says the “voices” revealed this to her (page 60).
- Francesca is described by Mr. Runciter as a schizophrenic who has psychic (or anti-psychic) powers.
- Several of the other characters felt the same shift, so it can reasonably be inferred they all shared a similar experience.

Ask students to choose one character other than Francesca Spanish and summarize his/her explanation for the “time jump,” in the academic notebook on the page titled “Finding Details to Support a Claim.” What evidence does this character use to support his/her explanation? Provide at least three key details from the text; include page numbers. Identify those key details as dialogue, character thoughts, character actions or sensory descriptions.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: In Chapter Five, the characters make a number of “time jumps.” Various characters attempt to explain what happened during the time jump. For example, Francesca Spanish asserts on page 60 that “Someone...just now moved us, all of us, into another world. We inhabited it, lived in it, as citizens of it, and then a vast, all-encompassing spiritual agency restored us to this, our rightful universe.” Joe Chip confirms that Pat Conley did it, but obviously Francesca came to her conclusion before knowing that information. How did she know? Evidence: She says the “voices” revealed this to her (page 60). She is described by Mr. Runciter as a schizophrenic (page 46) who has psychic (or anti-psychic) powers. Several of the other characters felt the same shift, so it can reasonably be inferred that they all shared a similar experience.

Choose one character other than Francesca Spanish and summarize his/her explanation for the “time jump.” What evidence does this character use to support his/her explanation? Provide at least three key details from the text; include page numbers. Identify those key details as dialogue, character thoughts, character actions or sensory descriptions.

(space provided)

At the conclusion of this activity, bring students back together for whole class discussion. Ask for a couple of volunteers to share their explanation and evidence. Explain that the culminating activity—the literary argument that students will write—is essentially asking them to do what they’ve done with these characters: to figure out, based on evidence, what the author is trying to say about a particular aspect of society.

Answer any lingering questions about using textual details for evidence, as well as any questions about the text itself.

Assessment:

Outcome 4:

Students will practice skills related to writing a literary argument essay, including the following: identifying types of evidence and selecting appropriate evidence that can be used to support a writer’s thesis statement, identifying mini-claims used in a text to support the larger argument and presenting evidence to support a claim.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students provide a summary of their selected character’s explanation of the “time jump.” | No | Somewhat | Very |
| Students provide three details from the text that support this explanation. | No | Somewhat | Very |
| Details from the text include both page numbers and a description of the type of detail. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Four

Collecting Evidence to Support a Claim (Approx. 35 minutes)

Remind students that to build an argument they will need to garner effective and appropriate evidence from the text to support their claim, as they have already learned through examination of different characters’ explanations for the “time jump.”

Explain to students that linking the evidence they find together as a chain is also important. A chain of evidence often relies upon “mini-claims,” or smaller ideas that build upon one another to create a solid wall of argument.

Provide students with the following summary of *Feed*, taken from the Ventura text:

“Feed details the experiences of Titus, a teenager of the late twenty-first century, after his body/computer chip integration system is exposed to a virus from a rogue revolutionary group. His girlfriend, Violet, is also exposed to this virus and uses the experience to express to Titus the dehumanizing nature of consumer technology, a point neither can truly grasp nor eradicate.”

Ask students to read Chapter 22, “Lose the Chemise,” from *Feed* in the academic notebook, beginning on the page titled “Excerpt from *Feed*.” Ask students to pay particular attention to Violet’s “project” and the premise upon which she has based this project. Students should mark the text in whatever manner feels most comfortable for them (i.e., highlighting, underlining, circling, taking notes in the margins).

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: Read the following chapter from *Feed* by M. T. Anderson. Pay particular attention to Violet’s “project” and the premise upon which she has based this project. Mark the text in whatever manner you would like (i.e., highlighting, underlining, circling, taking notes in the margins).

Lose the chemise

It was maybe, okay, maybe it was like two days after the party with the “never pukes when he chugalugs” that Violet chatted me first thing in the morning and said she was working on a brand-new project. I asked her what was the old project, and she was like, did I want to see the new one? I said, *Okay, should I come over to su casa? I’ve never been there, and she was like, No, not yet. Let’s meet at the mall.*

I was like, Okay, sure, fine, whatever swings your string, and she was all, Babycakes, you swing my string, which is a nice thing for someone to say to you, especially before you use mouthwash.

So I flew over to the mall near her house through the rain, which was coming down outside in this really hard way. Everyone had on all their lights until they got above the clouds. Up there it was sunny and people were flying very businesslike.

The mall was really busy, there were a lot of crowds there. They were buying all this stuff, like the inflatable houses for their kids, and the dog massagers, and the tooth extensions that people were wearing, the white ones which you slid over your real teeth and they made your mouth just like one big single tooth going all the way across.

Violet was standing near the fountain and she had a real low shirt on, to show off her lesion, because the stars of the *Oh? Wow! Thing!* had started to get lesions, so now people were thinking better about lesions, and lesions even looked kind of cool. Violet looked great in her low shirt, and besides that she was smiling, and really excited for her idea.

For a second we said hello and just laughed about all of the stupid things people were buying and then Violet, she pointed out that, regarding legs to stand on, I didn’t have very much of one, because I was wheeling around a wheelbarrow full of a giant hot cross bun from Bun in a Barrow.

I said, “Yum, yum, yum.”

She was like, “You ready?” I asked her what the idea was.

She said, “Look around you.” I did. It was the mall. She said, “Listen to me.” I listened. She said, “I was sitting at the feed doctor’s a few days ago, and I started to think about things. Okay. All right. Everything we do gets thrown into a big calculation. Like they’re watching us right now. They can tell where you’re looking. They want to know what you want.”

“It’s a mall,” I said.

“They’re also waiting to make you want things. Everything we’ve grown up with—the stories on the feed, the games, all of that—it’s all stream-lining our personalities so we’re easier to sell to. I mean, they do these demographic studies that divide everyone up into a few personality types, and then you get ads based on what

you're supposedly like. They try to figure out who you are, and to make you conform to one of their types for easy marketing. It's like a spiral: They keep making everything more basic so it will appeal to everyone. And gradually, everyone gets used to everything being basic, so we get less and less varied as people, more simple. So the corps make everything even simpler. And it goes on and on."

This was the kind of thing people talked about a lot, like, parents were going on about how toys were stupid now, when they used to be good, and how everything on the feed had its price, and okay, it might be true, but it's also boring, so I was like, "Yeah. Okay. That's the feed. So what?"

"This is my project."

"Is . . . ?"

She smiled and put her finger inside the collar of my shirt. "Listen," she said. "What I'm doing, what I've been doing over the feed for the last two days, is trying to create a customer profile that's so screwed, no one can market to it. I'm not going to let them catalog me. I'm going to become invisible."

I stared at her for a minute. She ran her finger along the edge of my collar, so her nail touched the skin of my throat. I waited for an explanation. She didn't tell me anymore, but she said to come with her, and she grabbed one of the nodules on my shirt—it was one of those nodule shirts—and she led me toward Bebrekker & Karl.

We went into the store, and immediately our feeds were all completely Bebrekker & Karl. We were bannered with all this crazy high-tech fun stuff they sold there. Then a guy walked up to us and said could he help us. I said I didn't know. But Violet was like, "Sure. Do you have those big searchlights? I mean, the really strong ones?"

"Yeah," he said. "We have . . . yeah. We have those." He went over to some rack, and he took these big searchlights off the rack. He showed us some different models. The feeds had specs. They showed us the specs while he talked.

When he went into the back to get another, cheaper searchlight, I said to Violet, "What next?"

She whispered, "Complicating. Resisting."

Bebrekker & Karl were bannering us big. It was, *We've streamlined the Tesla coil for personal use—you can even wear it in your hair! With these new, da do do, and Relax, yawn, and slump! While our greased cybemassage beads travel up and down your back! Guaranteed to make you etc.*, like that.

I was like, "Okay huh?" but the guy came back and he had another searchlight.

He told us, "You can see shit real good with this one? I have one of these on ins' upcar. It's sometimes like—whoa, really—whoa. There was this one time? And I was flying along at night and I shined the light down at the ground, to look at the tops of all the suburb pods? And all over the top of them, it looked like it was moving, like there was a black goo? So I turned up the brightness, and I went down, and I shined it more bright, and it turned out the black moving goo was all these hordes of cockroaches. There were miles of them, running all over the tops

of the domes. They kept on trying to get out of the light, so wherever you shined it, there would be this—”

“I’d like to mount the light on my belly,” Violet said. “Would that be possible?”

He looked at her funny “With a swivel head?”

“Sure. Then I could swivel it.”

“What’s this for?”

“Something special,” she said, in this low voice. She rubbed my arm up and down, sexily.

He was like, “Whoa. I can’t even think.” He gave me the thumbs-up.

She winked at me. It was kind of a turn-on.

She got him to send her all of the feedstats for the lamp, but then she didn’t buy it. She didn’t have it mounted. Instead, she thanked him a real lot, and then she took me out of the store, and I was starting to get the picture and think it was all pretty funny.

We kept going from place to place, asking for weird shit we didn’t buy. She took me to a rug store, and a store with old chests and pieces of eight and shit, and we went to a toy store and she asked them to explain the world of Bleakazoid action figures, which is a dumbass name if I ever heard one, but they explained it all. It was mainly they were these muscular people from a parallel world, which is usually how it is. We didn’t buy anything.

We ran through the big hallway with her tapping her head and saying, “Hear that? The music?” It was pop songs. “They have charts that show which chords are most thumbs-up. Music is marketing. They have lists of key changes that get thirteen-year-old girls screaming. There’s no difference between a song and an advertising jingle anymore. Songs are their own jingles. Step lively. Over here.”

We went to a clothing store and she held up all these stupid dresses, and the girl there was like, *I’m helping a weird kid, so I’m going to be really fake, so she kept smiling fake*, and nodding really serious at all the dresses Violet held up, and she was all, “That will look great,” and Violet said, “I don’t know. D’you think? He’s pretty wide in the chest.”

The girl looked at me, and I was frozen. So I said, “Yeah. I work out.”

Violet asked me, “What are you? What’s your cup size?”

I shrugged and played along. “Like, nine and a half?” I guessed. “That’s my shoe size.”

Violet said, “I think he’d like something slinky, kind of silky.”

I said, “As long as you can stop me from rubbing myself up against a wall the whole time.”

“Okay,” said Violet, holding up her hands like she was annoyed. “Okay, the chemise last week was a mistake.”

I practically started to laugh snot into my hand. We went to some more clothing stores, and we looked at all these dumb sweaters and pretended we liked them, and we looked at makeup that she wouldn’t wear, and a gravel-tumbler, and we

went to a DVS Pharmacy Superstore, and she comparison-shopped for home endoscopy kits.

We were looking at the endoscopy kits when she started whispering to me, “For the last two days, okay? I’ve been earmarking all this different stuff as if I want to buy it—you know, a pennywhistle, a barrel of institutional lard, some really cheesy boy-pop, a sarong, an industrial lawn mower, all of this info on male pattern baldness, business stationery, barrettes . . . And I’ve been looking up house painting for the Antarctic homeowner, and the way people get married in Tonga, and genealogy home pages in the Czech Republic . . . I don’t know, it’s all out there, waiting.”

I picked up one box. “This one is the cheapest. You swallow the pills and they take pictures as they go down.”

She said, “Once you start looking at all this stuff, all of these sites, you realize this obscure stuff isn’t obscure at all. Each thing is like a whole world. I can’t tell you.”

“How’s your like,” I pointed at my head, “how’s your feedware working out?”

“It’s fine. You’re not listening.”

“I’m just wondering.”

She asked me, “What do you think?”

“I liked the guy in Bebrekker & Karl. I wonder if it’s true, about the cockroaches.”

“What do you think about resisting?” she asked me really hard. Her jaw muscles were sticking out.

I said, “It sounds great, as long as I get to wear the chemise.” She laughed.

We went to dinner at a J. P. Barnigan’s Family Extravaganza. We had mozzarella sticks and then I had a big steak. She got a Caesar salad. There were free refills on drinks. Afterward, we were sitting there in the booth, and I asked her whether she wanted a ride home. She said no. I said was she sure, and she said yes.

I said, “What’s doing with your parents?”

“What do you mean?”

“Well, with your house, and why you have me meet you here instead. And why didn’t your dad come to the moon? When we were, you know”

She looked at me funny. She said, “Do you know how much it costs to fly someone to the moon?”

I guessed. “A lot?”

“Yeah. Yeah, a lot. He wanted to come, but it would have been, like, a month of his salary. He saved up for a year to send me. Then I went, and that stuff happened.”

“He saved up for a year for you to go to the moon?”

“Yeah.” She said, “Hey, here’s what you can do. You can drop me at the feed technician’s office. I have an appointment.”

We made out for a minute in the car. Then I flew her a few miles away, to a technician. I left her there. Before I pulled out of the tube by his office, I looked back at her, standing by the door. She had her hands on her elbows. She was pinching the elbow skin and pulling it.

She waited there, pinching and pulling, and then went in.

Ask students to complete the page titled “The Claim Chain” in their academic notebooks. Put a copy up on the document camera as you work through the first four questions on this page with the class as a whole.

Have students locate the first explanation that Violet gives about her project. Students should summarize it in a few sentences and write it in the academic notebook. Here, students might note that Violet says she is trying to create a customer profile that is not rational so that the marketing attempts made by the companies will be ruined.

Have students locate details from the text (character actions) that support Violet’s claim in order to answer the second question on the Claim Chain worksheet. Students might note the following actions as supporting Violet’s project:

- Asking the Brebekker & Karl employee about a searchlight that could be mounted on her stomach.
- Asking in a toy store for explanation of Bleakazoid action figures.
- Asking in a clothing store for a dress that would fit Titus, etc.

Have students locate Violet’s mini-claims in order to answer the third question on the Claim Chain pages. Students might note one of Violet’s mini-claims as follows:

Everyone is being watched by companies all the time.

Have students find details from the text that support this mini-claim in order to answer the fourth question on the Claim Chain pages. Students might note this quote:

“Like they’re watching us right now. They can tell where you’re looking. They want to know what you want” (page 64).

Ask students to work individually or with a partner to complete the last two questions, in which they will summarize another of Violet’s mini-claims and textual evidence to support this mini-claim.

Facilitate a brief class discussion on the pattern used by Anderson to develop Violet’s argument. Students should note that Violet makes a claim and that the claim is supported by evidence (details from the story). Subsequently, she makes another claim that is a sub-claim of the bigger claim, which is supported by more evidence, etc.

Make clear to students that this pattern (of sub-claims and supporting evidence, along with a larger claim with supporting evidence) is similar to the pattern students will use as they work to develop their own literary arguments.

Assessment:

Outcome 4:

Students will practice skills related to writing a literary argument essay, including the following: identifying types of evidence and selecting appropriate evidence that can be used to support a writer’s thesis statement; identifying mini-claims used in a text to support the larger argument and presenting evidence to support a claim.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Students identify mini-claims and evidence from the <i>Feed</i> excerpt. | No | Somewhat | Very |
| Students’ completion of the “Claim Chain worksheet and the subsequent discussion indicate an understanding of the relationship between claims and evidence. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Five

Embedding Evidence and Explanation in an Argument (Approx. 40 minutes)

Explain the “sandwich effect.” Explain to students that the “sandwich effect” is a technique that writers use to connect textual evidence (in the form of quotes or paraphrased material from the text) and explanations to support a mini-claim. The pattern goes like this:

- State the mini-claim.
- Explain it.
- Support it with information that is either quoted directly or paraphrased from the text.
- Explain the paraphrase or quote.
- Then bring in more evidence.

Students sometimes do not understand the need for explaining the connection between the quote and the claim or mini-claim. It is important to stress to them that because people read material in different ways and since they are taking the paraphrase or quote out of the entire context of the work, their explanation helps the reader understand how they are interpreting the text.

Tell students that we will be reading an excerpt from a published literary criticism on Philip K. Dick’s *Ubik*. Explain to students that this is going to be a challenging read, but that they will begin working through it together, examining the author’s thesis statement, mini-claims, and the author’s structures of his mini-claims, evidence and explanations.

We will begin by reading together, the first few pages of Poster’s text, which can be found in the academic notebook on the page titled “Future Advertising: Dick’s *Ubik* and the Digital Ad.” Read these first few pages out loud, instructing students to find what they think is the thesis statement and any mini-claims. Students should underline what they think is the thesis statement and put stars next to what they think is a mini-claim.

FROM THE STUDENT ACADEMIC NOTEBOOK

Future Advertising: Dick’s *Ubik* and the Digital Ad Mark Poster

Directions: Your teacher will read aloud an excerpt of Marc Poster’s chapter, entitled “Future Advertising: Dick’s *Ubik* and the Digital Ad.” Read through the text a second time and underline the thesis statement. Place a star next to mini-claims that Poster puts forward.

Consumption changes significantly in the age of digital information. Acts of consumption—buying, window-shopping, browsing—are routinely recorded, stored and made available for advertisers. Profiles of the lifestyles of consumers are now so finely granulated and accurate that retailers are likely to know better than the consumer what he or she will buy and when the purchase will take place. Automated programs on one’s computer, known as “bots,” have better memories of consumer preferences than does the consumer. Information machines such as TiVo gather data of viewing habits and on that basis anticipate consumer desires for entertainment. The individual finds himself/herself in a brave new world of consumption, prefigured only in the imagination of science fiction writers. I shall investigate the current condition of consumption by reading closely one such work of science fiction, Philip K. Dick’s *Ubik*, a work that presciently depicts the future of advertising.

★ It can be argued that the genre of science fiction is no longer possible. This is so for the simple reason that what some call the overdeveloped nations have so integrated into their social processes scientific achievements, technological novelties, and, above all, the system for the continued, indefinite development of science and technology that the distance has collapsed between what can be imagined in science fiction and what has been realized or can be foreseen to be realized in society. ★ Science fiction requires the sense of a future as separate from the present. But this future is now part of the present expectations of everyday life. We anticipate that nanotechnology will make obsolete industrial labor; that cloning of human beings will initiate ethical dilemmas; that worldwide communication systems will bring about the demise of the nation state. These expectations are the life-world of the present and as such cannot be regarded as a future “other.” With the proliferation of cyborgs, robots, clones, and androids, the age of the humachine has arrived. The future tense will have to be reimagined, probably outside the genre of science fiction. The social imaginary has integrated the research agendas of science and technology to such an extent that the future is imploded into the present.

★ In a sense, there can be no more aliens.

In this spirit I shall explore the relation between Philip K. Dick’s *Ubik* and the mediascape that we call the hyperreal. In particular, I shall examine the culture of

advertising by comparing the representation of commodities in print and digital media. More specifically I shall compare, in the context of *Ubik*, the cultural role of the representation of commodities in print with that in various forms of digital ads. At issue is the difference of print and visual forms, analogue and digital formats. As a genre, science fiction has the advantage of exploring the relation of humans to machines, a relation that has become a general aspect of the human condition. For quite some time, science fiction has been exploring what we now accept as the post-human. ★ With the multiplication and dissemination of increasingly advanced information machines, the Earth has entered a post-human era. Our society has done so under the general regime of the commodity, which, at the cultural level, disseminates itself in the discourse of advertising. Dick's novel explores the *Ubik*quity of the ad and its relation to the formation of a humanity that is synthesized with information machines. In this essay I shall examine Dick's representation of the culture of the ad, with an eye to the light it sheds on the current state of advertising in new media. I shall ask if the digital form of the ad changes anything with respect to the construction of the subject? Does it matter that cyberspace is filled with ads, that ads on television are more and more produced with computer technology? Are we heading toward the world of Dick's *Ubik*?

In a strange confluence of events, Philip K. Dick's *Ubik* was published in 1969, the year of the first transmissions of information across telephone lines between computers, a technology now known as the Internet. Stranger still perhaps, Dick's novel is set in June 1992, some eight months before Mosaic, the first- web browser, was distributed on the Internet, signaling a transformation of the Net into graphic format and foreshadowing its mass adoption. In these coincidences, print media and digital media, separated by centuries of technical development, met, crossed, and went their separate ways.

Give students a few minutes to go back into the text and to underline what they think is the thesis statement and to place stars next to what they think is a mini-claim. In the excerpt above, the thesis statement is underlined and stars are next to what might be considered mini-claims.

Discuss students' choices as a class until everyone can come to a consensus on the thesis statement and any mini-claims. Note that it is expected that students might come up with differing sentences and that discussion of the thesis statement and mini-claims should continue to focus on the text itself, using evidence from the text to support choices.

Ask students to work with a partner or a small group to analyze paragraphs from the Poster chapter in the academic notebook beginning with the page titled "Finding Claims and Evidence in a Literary Argument Essay" to identify claims, evidence and explanations in those paragraphs. Instruct students to mark up the text in the following manner: For each paragraph, **underline evidence, circle explanations, and draw an arrow to the claim** being supported by the evidence. Work through the first paragraph together. In this first sample paragraph, students should underline the quotes from the novel ("Joe Chip twiddled the dial" and so forth); students should circle the interjected explanations ("In Dick's world, the pape can speak," "And it is able to print out one's selections in color and chosen fonts," "It also has the capability of voice

recognition,” etc.); students should draw an arrow to the claim (“Dick is sensitive to changes in media, to new media, to the role of media in people’s lives”).

After working through this process together for the first paragraph, ask students to work independently, with a partner or with a small group to complete the same process for each of the remaining paragraphs.

FROM THE STUDENT ACADEMIC NOTEBOOK

Finding Claims and Evidence in a Literary Argument Essay

Directions: With a partner or small group, read the paragraphs excerpted from Mark Poster’s chapter on the pages that follow. For each paragraph, identify the claim and the evidence that Poster uses to support his claim.

Mark up the text in the following manner: For each paragraph, underline evidence, circle explanations and draw an arrow to claims being supported by the evidence.

MEDIA IN *UBIK*

→ Dick is sensitive to changes in media, to new media, to the role of media in people’s lives. For example, in a passage of no particular importance to the plot he takes the trouble to forecast an electronic newspaper (a “homeopape”) much like what currently exists on the Internet. One can format the homeopape to deliver one’s personally designed newspaper. Here is Dick’s description of the media: “Joe Chip ... twiddled the dial of his recently rented ‘pape machine ... he dialed off *interplan news*, hovered momentarily at *domestic news* and then selected *gossip*.” In Dick’s world, the ‘pape can speak:” “Yes sir,’ the ‘pape machine said heartily.” And it is able to print out one’s selections in color and chosen fonts: “...a scroll of printed matter crept from its slot; the ejected roll, a document in four colors, niftily incised with bold type.” It also has the capability of voice recognition: “This isn’t gossip: Joe Chip said to the ‘pape machine.” In response to the character’s dissatisfaction with the news delivered to him, the machine gives instructions regarding its proper use. “The ‘pape machine said, ‘Set the dial for *low gossip*.” Like today’s intelligent agent programs and help menus, the Dick’s machine provides users with feedback on its best use.” (Dick, 1969: 19-20) Although Dick does not explain how the machine obtains newspaper information, the reader must assume some electronic connection between the machine and a database of current news, in principle much like the Internet’s ability to store and to distribute information to any computer.

THE PRINT MEDIA

The novel consists of seventeen chapters, each starting with an epigraph. The first sixteen epigraphs are advertisements for a product called “Libik.” Here is the epigraph to the first chapter: “Friends, this is clean-up time and we’re discounting all our silent electric Ubiks by this much money. Yes. we’re throwing away the blue-book. And remember: every Ubik on our lot has been used only as directed” (Dick. 1969: 1). Each advertisement is for a different product. They are cars, beer, coffee, salad dressing, headache and stomach medicine, shaving razor, kitchen cleaning aid, a bank, hair conditioner, deodorant spray, sleeping pills, breakfast food, bra, plastic wrap, breath freshener, and cereal, a list of ordinary consumer objects. Each

ad contains a warning to the consumer like “Safe when used as directed!” None of the ads have any direct relation to the chapter they introduce. The chapter preceded by the ad for beer, for instance, contains no mention of beer or any beverage for that matter. Rather the ads appear on the printed page like commercials on radio and television, interrupting the flow of the program, distracting the reader/viewer’s attention from what has come before and what will follow, yet also justifying the text/program, as we shall see. Dick uses the epigraph, a device of the print medium, to emulate electronic broadcast media. In fact the tone of the epigraphs resembles the audio portion of ads in electronic media. The epigraphic voice is informal, plain, and solicitous, more like television than other print media such as magazines and newspapers. Dick’s chapter epigraphs work against the limits and constraints of the conventional print format in which they serve as emblems or metonymies for the text that ensues, distinguishing themselves by their complete irrelevance to the body of the chapter.

In their discontinuity with the chapters, the ads however do inject commodity culture (in its print-mediated form) into the work. They provide a mood of commercialism, a spirit of the commodity that operates outside the story (for the most part) but nonetheless informs a general cultural character to the work. The ads address the reader as a member of a mediated (capitalist) culture. Further in that direction are the frequent small reminders of a money economy: for example, in apartments, doors and small appliances (such as coffee makers) require coins to operate. Dick leaves nothing to the reader’s imagination concerning the capitalist nature of the world of *Ubik*. Yet this capitalism has a decidedly informational quality. Runciter Associates, once again, is a security firm that provides antidotes to information piracy. True enough, the thieves are not mechanical but psionic, individuals with extraordinary psychic abilities. The effect however is very much the same as the security problems in late capitalism or postmodern society where information machines penetrate protected physical space to retrieve private data. The “psis,” as Dick calls them, substitute easily for computerized databases hooked into networks, listening devices, global positioning systems, satellite photography, and the rest, culminating in a society where nothing can be hidden or secret.

The epigraphs then are an integral part of a general set up in which information is central to the social system, whether as advertising or as security issues. Although not the first writer to discover this insight, Dick senses that culture is becoming political and becoming mediated. It is also becoming vulnerable and at risk.

Once students have completed this work, talk with students about the structure of the paragraphs they have read, as well as the individual sentences and how they connect to each other. What observations do students have about this structure on a paragraph level? On a sentence level? (For example, do they notice the use of particular transitions? Are clauses commonly used? Make a list of these observations and put them on the board.)

Facilitate a brief discussion about what they garnered from the argument in relation to *Ubik*. How does Poster’s presentation of evidence support what the class indicated was his thesis statement? Do students consider that Poster’s claims and mini-claims are supported sufficiently by the evidence? If so, how? If not, how might his evidence be restructured?

Assessment:

Outcome 4:

Students will practice skills related to writing a literary argument essay, including the following: identifying types of evidence and selecting appropriate evidence that can be used to support a writer’s thesis statement, identifying mini-claims used in a text to support the larger argument and presenting evidence to support a claim.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students identify the thesis statement and mini-claims from the Poster chapter excerpt (Paragraph 2). | No | Somewhat | Very |
| Students identify claims, evidence, and explanations from the Poster chapter excerpt (Paragraph 3). | No | Somewhat | Very |
| Discussion indicates that students are developing an understanding of how to structure claims, evidence, and explanation in an argument. | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Six

Considering the Prompt on Consumerism (Approx. 40 minutes)

Ask students to turn to the academic notebook on the page titled “Consumerism Prompt” and to read the consumerism prompt for the literary argument essay, which is the culminating project for this unit.

FROM THE STUDENT ACADEMIC NOTEBOOK

Consumerism Prompt

Directions: Read the prompt below (this is the “consumerism” prompt for the literary argument essay). Be prepared to ask any questions you have in a discussion.

Philip K. Dick and other authors featured in this unit express views on consumerism and its impact on society. Examine their multiple viewpoints. Take a position on the viewpoint you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.

Tell students they will be examining the epigrams (which are essentially commercials) to help them think about commercialism in the novel. Split students into small groups and assign each group a chapter from *Ubik* (do NOT assign the final chapter). Have them quickly read the opening *Ubik* quote in each chapter and summarize the product being marketed. Create a list on the board of these products. Have them then examine the final chapter’s opening. How does the description of *Ubik* change in this chapter? What point do students think Dick is making with this change?

Students might notice that the tone of the epigrams changes with the introduction of the epigram for Chapter 17, such that instead of an advertisement the epigram takes

on a godlike tone. Students might discuss the connection between a higher power and consumerism; perhaps Dick is trying to say that the products being marketed take on a godlike stance in our society, or that the god speaking in the epigram in Chapter 17 is the market itself.

Share the following statement with students:

Dick's former wife Tessa remarked that "Ubik is a metaphor for God. Ubik is all-powerful and all-knowing, and Ubik is everywhere. The spray can is only a form that Ubik takes to make it easy for people to understand it and use it. It is not the substance inside the can that helps them, but rather their faith in the promise that it will help them."

Ask students to discuss this question: What comparisons or allegories can you draw to faith and hope being marketed through products in modern society? Draw students' attention in this discussion to popular television or online commercials, advertising, etc., and discuss how marketing for products is designed to make them appear to painlessly solve common problems. For some samples, examine the commercials described here: http://www.cracked.com/article_15768_as-seen-tv-10-most-laughably-misleading-ads.html

Ask students to take a few minutes to look back at the commercialism prompt and to write down a few notes on commercialism, based on this discussion, and then have students write those notes on their avatars.

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly related to the theme of consumerism. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Seven

Practice Developing Thesis Statements, Claims and Evidence (Approx. 45 minutes)

Tell students that we’re going to take what we’ve learned throughout this lesson and use it to begin making meaning of what is going on at this point in the book. Good readers construct meaning as they go; they take relevant details from the text and use those details to figure out what is happening and to make predictions for what will happen next. That’s particularly appropriate and useful for students at this point because they as readers and their characters are in the same position right now—some very confusing things have happened, and everyone has to figure out what’s going on and what will possibly happen next.

As students attempt to make sense of the world of the novel, they will also practice developing thesis statements, mini-claims, evidence and explanations of evidence.

In pairs, students should work together in the academic notebook on the page titled “Thesis Mini-Claims and Evidence” to do the following:

- Develop a thesis that answers the question Chip is struggling with: What has happened, and who is responsible?
- Develop three “mini-claims” that support the thesis.
- For each mini-claim, provide evidence using the sandwich effect: mini-claim, explanation, quote/paraphrase, explanation.

FROM THE STUDENT ACADEMIC NOTEBOOK

Thesis, Mini-Claims and Evidence

Directions: In the space below, work with your partner to develop a thesis, three mini-claims that support your thesis, and evidence to support your mini-claims, using the “sandwich effect.”

1. Develop a thesis that answers the question Chip is struggling with: What has happened, and who is responsible?
2. Develop three “mini-claims” that support the thesis.
3. For each mini-claim, provide evidence using the “sandwich effect:” mini-claim, explanation, quote/paraphrase, explanation.

(space provided)

Ask students to volunteer to present their thesis, mini-claims and evidence. As a class, review both the content and the format of the information. Ensure students understand the process of developing a theme and a mini-claim and presenting evidence to support the mini-claim.

Assessment:

Outcome 4:

Students will practice skills related to writing a literary argument essay, including the following: identifying types of evidence and selecting appropriate evidence that can be used to support a writer’s thesis statement, identifying mini-claims used in a text to support the larger argument and presenting evidence to support a claim.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students’ thesis statement is arguable and can be supported with evidence from the text. | No | Somewhat | Very |
| Students’ mini-claims are arguable and can be used to support the thesis statement. | No | Somewhat | Very |
| Students’ evidence is taken from the text and is presented using the “sandwich effect.” | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Eight

Vocabulary Work (Approx. 100 minutes)

Ask students to open their academic notebooks to the vocabulary work on *Ubik* Chapters Five through Eight. Remind students of the vocabulary work that was done previously. Students should have completed their vocabulary work for previous homework, choosing one word from the choice list and one self-selected word from each of the assigned chapters.

If necessary, choose one of the words from the choice list and model the kind of work we expect from students, referring back to the sample provided earlier or using another sample taken from the list of choice words for Chapters Five through Eight, and projecting this modeling on the document camera or using the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected, from Chapters Five through Eight for a total of eight words each. Ask students to write their eight words on index cards, and to write both the definition and the context (i.e., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *Ubik* and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories but all of the members of the group must agree to the categories they have developed and each category must have at least two words in it. Give students

a large sheet of chart paper or other material on which they can write their categories

and the words that they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Assessment:

Outcome 3:

Students will demonstrate their ability to apply strategies for locating words in a literary text that are unfamiliar to them and determine the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to review the words that they studied in their small group and to pull from those words their TOP FIVE words. The words they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapters Five through Eight. Ask each group to report out the words they chose and why they chose them, (i.e., in what way do their TOP FIVE words connect to or remind them of the content of Chapters Five through Eight).

Make sure that the words chosen as TOP FIVE are placed on the *Ubik* Vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

Assign reading and work related to Chapters Nine through 12. Provide approximately 50 minutes of class time for students to begin reading Chapters Nine to 12 and carrying out the Reading and research logs and the vocabulary work on those chapters. For homework, students should complete this work: read Chapters Nine to 12 in *Ubik*, complete a reading and research log for each chapter and complete vocabulary charts for these chapters. Students' success in carrying out summary, close reading and interpretation and developing Level 2 questions will largely depend on how much time in class is spent reviewing the reading and research log, so it is strongly suggested that you spend about ten minutes in every class period reviewing students' responses and providing feedback so that they can see what they need to do to complete this work successfully.

Assessment:

Outcome 1:

Students will keep a reading and research log during the reading of the central text, which they will use to summarize plot and character development, to note rhetorical patterns, make inferences, and evaluate how those patterns influence interpretation, and to learn to develop Level 2 questions or questions that require deeper reading, interpretation and drawing conclusions.

Reading and Research Log Assessment

Rate each item on a scale of one to five, with five highest and one lowest.

The log provides evidence that the student has read and comprehended the portion of the text assigned.

-----1-----2-----3-----4-----5----->

The log presents an accurate and complete summary of the portion of the text assigned, without omitting important ideas or including unnecessary details.

-----1-----2-----3-----4-----5----->

The log provides evidence that the student is noticing and interpreting word choices and other rhetorical patterns.

-----1-----2-----3-----4-----5----->

The log provides evidence that the student is capable of producing appropriate Level 2 questions.

-----1-----2-----3-----4-----5----->

Writing in the log is competent, both in terms of its organizational structure and in its use of standard English usage and punctuation.

-----1-----2-----3-----4-----5----->

TOTAL: /25

Teacher
Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Facilitated a two-part discussion of Chapter Five through Eight of *Ubik*, including both plot and character development, as well as students' close reading and interpretation.
2. Facilitated students' small group work taking notes on a question related to consumerism, having a brief discussion and posting their notes on their avatars.
3. Facilitated students' reading of a short excerpt from "Writing a Literary Argument" on types of evidence and then pulling textual evidence for Francesca Spanish's explanation for the time jump that occurs in Chapter Five.
4. Facilitated students' work with the excerpt from *Feed* and their practice in linking together claims, mini-claims and evidence.
5. Facilitated students' work with the excerpt from the chapter by Mark Poster and students' analysis of a structure for embedding evidence in a literary argument.
6. Examined the consumerism prompt for the literary argument essay, as well as the epigrams from *Ubik* and the quote regarding *Ubik* as a metaphor for God.
7. Facilitated students' practice on developing a thesis, mini-claims and evidence regarding the question of what is happening in the novel and who is responsible.
9. Facilitated a sorting activity for students' vocabulary work.
10. Assigned and allowed class time for reading Chapters Nine through 12 and completing reading and research logs as well as vocabulary on these chapters.

Lesson 4

Humanity: *Ubik* Chapters Nine through 12

Overview and Rationale:

In Lesson 4, students will build on the work previously done in this unit regarding the use of textual evidence. While reading Chapters Nine through 12 in Phillip K. Dick's *Ubik*, students will focus on the theme of "humanity." Students will use their reading and research logs to track their reading, write summaries, develop Level 2 questions and notice and interpret literary patterns within the central text. Using these student-generated materials, teachers will facilitate discussions of Chapters Nine through 12. In addition, students will continue their work toward writing a literary argument essay, with a reinforcement of the thesis, mini-claim and evidence structure previously provided. Students will demonstrate their ability to select evidence and embed evidence in writing by reading a transcript of an interview with author Philip K. Dick and working independently to write a paragraph that provides evidence from the interview to support a thesis statement. Vocabulary work in this lesson will center on students' self-selected words and words they choose from vocabulary lists for each chapter. After examining both contextual and definitional information for those words, students will present words and definitions within a small group and sort those words into categories. Subsequently, the class will choose its top five words from those studied, focusing on those words that are most closely connected to the concepts in Chapters Nine through 12. Students will be provided time in class to begin their reading, writing and vocabulary work with Chapters 13 through 17, and will complete this for homework.

Tasks/Expected Outcomes:

1. Students will keep a reading and research log during the reading of the central text, which they will use to summarize plot and character development, to note rhetorical patterns, make inferences, and evaluate how those patterns influence interpretation, and to learn to develop Level 2 questions or questions that require deeper reading, interpretation, and drawing conclusions.
2. Students will participate in small and whole-group discussions of the texts, particularly related to the theme of humanity. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.
3. Students will demonstrate their ability to apply strategies for locating words in a literary text that are unfamiliar to them and determine the meaning of those words, using both context clues and dictionaries.
4. Students will be able to identify types of evidence and select appropriate evidence that can be used to support a writer's thesis statement; students will be able to identify the mini-claims used in a text to support the larger argument and will understand how evidence is presented for a claim.

5. Students will independently select appropriate evidence that can be used to support a thesis statement and will write a paragraph in which that evidence is appropriately embedded, based on their reading of an interview with author Philip K. Dick.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (2) Reading/Comprehension of Literary Text/Theme and Genre. Students analyze, make inferences and draw conclusions about theme and genre in different cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to:
 - (A) compare and contrast works of literature that express a universal theme;
 - (C) relate the characters, setting, and theme of a literary work to the historical, social, and economic ideas of its time.
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (7) Reading/Comprehension of Literary Text/Sensory Language. Students understand, make inferences and draw conclusions about how an author's sensory language creates imagery in literary text and provide evidence from text to support their understanding. Students are expected to analyze how the author's patterns of imagery, literary allusions, and conceits reveal theme, set tone, and create meaning in metaphors, passages, and literary works.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Copies of Phillip K. Dick's *Ubik*
- Index cards
- Markers
- Access to students' avatars/parking lots

Timeframe:

230 minutes

Targeted Vocabulary:

Vocabulary taken from Chapter Nine

- periphery (117)
- lubricating (120)
- obsolete (121)
- commodities (121)
- philosophical (121)
- caustically (122)
- introspection (123)
- retrograde (124)
- congealed (125)
- entropy (125)
- dissolution (125)
- synthetic (129)

Vocabulary taken from Chapter 10

- inexorably (131)
- devolved (134)
- ineffectual (136)
- disparity (136)
- sardonic (136)
- phantasmagoria (137)
- metamorphoses (138)
- latent (138)
- degeneration (139)
- senile (143)
- habituation (145)
- phantasm (147)
- elixir (149)

Vocabulary taken from Chapter 11

- erratic (152)
- semaphore (158)
- isolationist (158)
- baritone (161)
- manifestations (162)

Vocabulary taken from Chapter 12

- potent (169)
- acute (169)
- indelible (170)
- proprietor (171)
- oscillation (172)
- amplitude (172)
- esthetically (174)

Activity One

Re-approaching the Text (Approx. 35 minutes)

Ask two students to volunteer Level 2 questions from their reading and research logs (Part IV of the reading and research log) on the chapters they read for homework (Chapters Nine through 12). Using those student-generated Level 2 questions, facilitate a whole-class discussion of the chapters. This whole-class discussion should bring to light any difficulties with comprehension of the required chapters, as well as whether or not students are doing the reading. Encourage students to pull ideas from their reading and research log (in the academic notebook) as the discussion progresses.

Have students work with a partner to compare and to examine the language/writing pattern and the interpretation of that pattern (Parts II and III of the reading and research log in the academic notebook) on the chapters they read for homework (Chapters Nine through 12). Facilitate a whole-class discussion on interesting language patterns and interpretations that emerge from their work. This whole-class discussion should focus on the craft of the work and how students are using what they notice about the writing of the novel to interpret it.

In both discussions, ensure that students are basing their discussion and their interpretation on the text itself by asking follow-up questions, such as “Where in the novel do you find that information?”

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly related to the theme of humanity. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Two

Considering the Prompt on Humanity (Approx. 20 minutes)

Ask students to turn to the academic notebook on the page titled “Humanity Prompt” and to read the humanity prompt for the literary argument essay, which is the culminating project for this unit.

FROM THE STUDENT ACADEMIC NOTEBOOK

Humanity Prompt

Directions: Read the prompt below (this is the “humanity” prompt for the literary argument essay). Be prepared to ask any questions you have in a discussion.

How does the technology in *Ubik* shape society’s views on what it means to be human? Are these views different when considered on an individual basis?

(space provided)

Discuss the prompt with the students, answering any questions they may have about the requirements of the prompt.

Remind students of the work they did in the last lesson on developing thesis statements, mini-claims and sandwiching evidence with explanations to support mini-claims.

Ask students to work with a partner to develop a thesis statement, three mini-claims and evidence to support those mini-claims related to the way in which the technology in Joe Chip’s apartment, the vehicle he drives and the can/bottle of *Ubik* are all “reverting” to earlier forms. On the page titled “Developing a Thesis, Mini-Claims and Evidence” in their academic notebooks, students should be able to develop a thesis statement that presents an interpretation of these changes, along with three mini-claims and evidence to support those claims.

Ask several pairs of students to volunteer to read their thesis statements, mini-claims and evidence. Provide feedback as a class to these volunteers. Allow time for all students to revise their work, based on the feedback provided.

Assessment:

Outcome 4:

Students will be able to identify types of evidence and select appropriate evidence that can be used to support a writer’s thesis statement; students will be able to identify the mini-claims used in a text to support the larger argument and will understand how evidence is presented for a claim.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students’ thesis statement is arguable and can be supported with evidence from the text. | No | Somewhat | Very |
| Students’ mini-claims are arguable and can be used to support the thesis statement. | No | Somewhat | Very |
| Students’ evidence is taken from the text and is presented using the “sandwich effect.” | No | Somewhat | Very |
| Total Points | 9 | | |

Activity Three

Textual Evidence on Humanity (Approx. 20 minutes)

Ask students to work with a partner or small group to write notes in response to one of the questions in their academic notebooks on the page titled “Questions About Humanity in *Ubik*” regarding the theme of humanity in *Ubik*.

FROM THE STUDENT ACADEMIC NOTEBOOK

Questions About Humanity in *Ubik*

Directions: In the space below, work with a partner or small group to take notes on textual evidence that might frame a response to one of the following questions:

In Chapters Nine and 10, Joe Chip receives messages in the form of graffiti, television newscasts, commercials and headlines in newspapers. Why do you think Philip K. Dick chose to make these particular formats the carriers for the messages Joe Chip receives?

In Chapters Nine and 10, Joe Chip can’t seem to decide whether Runciter is dead and everyone else is alive, or Runciter is alive and everyone else is dead. What evidence can you pull from these chapters that supports either perspective?

(space provided)

Ask students to transfer key ideas from their responses to their avatar parking lot. Instruct students to structure their idea as a thesis statement, drawing on the work done in the previous lesson on thesis statements. Have students walk around the room and examine the additions made to students’ parking lot/avatars.

Facilitate a whole-class discussion on the theme of humanity present in this portion of the text.

Give students feedback on their participation in discussion, using the evaluation rubric provided below.

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly related to the theme of humanity. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Four

Selecting and Presenting Evidence (Approx. 35 minutes)

Explain to students that one aspect of humanity that has not been discussed is the background of the author, Philip K. Dick. In this activity, students will read an interview with the author and will use the information in that interview to write a paragraph that embeds evidence and explanation for a thesis statement. Students should also be aware that information from this interview might be useful evidence for their literary argument essay.

Review with students the prompt following the interview with Philip K. Dick in the academic notebook: “Philip K. Dick’s experiences with law-enforcement and his view on religion and philosophy have strong impacts on his novels.” Tell students that they should look for evidence to support this thesis as they read the interview.

Ask students to read the interview with Philip K. Dick on the pages titled “An Interview with America’s Most Brilliant Science-Fiction Writer (Philip K. Dick) in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

**An Interview With America’s Most Brilliant Science-Fiction Writer
(Philip K. Dick) by Joe Vitale**

[source: *The Aquarian*, No. 11, October 11-18, 1978; *PKD OTAKU*, No. 4, 2002]

Directions: Read the interview with Philip K. Dick. After you have read the interview, work independently to write a paragraph—in the space below—that presents evidence drawn from the interview to support the thesis statement provided below.

AQUARIAN: When did you decide that you wanted to be a science fiction writer?

DICK: Well, I knew I wanted to be a writer of some sort very early in my life. My mother was an editor for the U.S. Department of Labor but her ambition was to write and sell stories and novels. It was from her that I got the idea that writing was a very important thing.

I started on my first novel when I was 13 years old. It was called *Return to Lilliput* and was never completed.

I got interested in science fiction, however, totally by mistake. I was interested in science when I was a boy.

I wanted to be a paleontologist. One day I went to the local candy store to buy a copy of *Popular Science* and came across something by mistake called *Stirring Science Stories*. I didn’t really know what it was but it only cost 15 cents (a nickel more than a comic book). What it turned out to be, of course, was a science fiction magazine (at that time called *Pseudo-Science*). And, boy, there were some really great stories in there! People went back in time, other people fell over a wall that only had one side so when they fell over they were back on the first side again, others traveled to the center of the universe where there was a gigantic flat plane where you could walk around.



AQUARIAN: A point that was discussed at length in a *Rolling Stone* article about you in 1975 was the break-in at your house in San Rafael in November 1971. Your home was burglarized, your file cabinets blown open and many of your personal papers stolen. The crime has never really been solved and you have stated that you think it was perpetrated by people who were trying to discredit you. Has any new evidence about the burglary surfaced in the intervening years? Are you more certain now about exactly what happened and why?

DICK: That whole thing is something that fills me with a great deal of anxiety. I try not to think about it.

No new evidence has surfaced since then. I don't think any will. The only thing that's happened since then is that a producer came down to visit me one time from Hollywood and said, "I've researched you and know you were driven out of Marin County (which is where the break-in took place)." And I said, "really?" And he said, "Yeah, you were a dope guru to high school kids and someone took a shot at you." And I said, "Gee, that's really interesting. I always wondered why the cops told me to get out of Marin County or I'd be shot in the back some night or worse." Obviously that's what the cops thought I was. It's like in my novel, *Flow My Tears, The Policeman Said* (1974), where the cops know more about you than you know yourself. I didn't know I was a dope guru to high school kids. I had lectured to high schools in Marin County. I had never discussed dope. But maybe they put together the fact that I've dealt with drugs thematically in my work and the fact that high school kids were always coming to my house and concluded that I was a pusher.

I remember after the burglary the police questioned me as to whether I was "teaching" the kids things. I had posters on my walls from the Russian Revolution, which I thought were very beautiful aesthetically, but they did say things like, "Workers of the World Unite. You have nothing to lose but your chains."

I mean, it's a very frightening thing when the head of a police department tells you that you better leave the county because you have enemies, and you don't know who these enemies are or why you've incurred their wrath.

I moved to Canada for a while and then down here to Orange County. I've cut my ties with just about everyone I knew in Marin County. I don't know if I'll ever find out what really happened. This whole thing is still very traumatic for me.

AQUARIAN: It seems that, throughout your career, you've always put yourself in a vulnerable position by opposing powerful forces within the country. Back in the 1950s, you published several short stories and novels that could have been labeled "subversive." In fact, you were one of the only science fiction writers doing those kind of stories. Didn't they get you in trouble with the authorities?

DICK: They did more than that. They got me many friendly visits from Mr. Smith and Mr. Scruggs of the FBI. They were members of the famous "Red Squad."

They came to my house every week for what seemed like ever and ever and ever. And they asked many questions about my life and my writings and my political philosophy.

This, of course, made me very angry and very frightened. They asked me all about my wife, about her political philosophy, about what student groups she belonged to.

I mean I honestly expected to be called before the House Un-American Activities Committee. But I guess they didn't consider science fiction writers that important.

AQUARIAN: Do you think there's any connection between that and the break-in at your house?

DICK: I really don't know. In the early Sixties I *did* write a novel about a phony war between the United States and Russia that's carried out with the sole purpose of keeping the citizens of those countries underground while the leaders lived in palatial splendor above ground. (*The Penultimate Truth*, 1964) In the novel, some Americans and some Russians are able to get above ground and find out what's really going on and they become friends.

Now maybe certain people thought this was too close to the truth and that I had some kind of information. Maybe that's why they wanted to get my files. I don't know.

At least Mr. Smith and Mr. Scruggs had the decency to identify themselves. I wish whoever it was that broke into my house had left a note saying "We are so-and-so, and we can be reached at the following number if you have any questions."

Years later I wrote away for my FBI file under the "Freedom of Information Act." Do you know what I had in it? Things like "... has a long beard and **frequented** the University of Vancouver." "Frequented the University of Vancouver." I delivered a lecture there! I was granted an honorary doctorate and was a guest of the faculty club. They made it sound like I hung out in the shadows selling dope.

AQUARIAN: Since drugs have cropped up in the discussion, it's no secret that many of your novels have been seen as "drug-oriented" or as outgrowths of your own drug experiences. Since one of your most enduring themes has been the breakdown between illusion and reality, has drug taking been a positive influence in this regard?

DICK: No, absolutely not. There's nothing good about drugs. Drugs kill you and they break down your head. They eat your head. In "White Rabbit," Grace Slick says, "feed your head." But I say, "What are you really feeding it?" You're feeding it itself. Drugs cause the mind to feed on itself.

Look, I'll be honest with you. There was a time in my life when I thought drugs could be useful, that maybe if you took enough psychedelics you could see beyond the illusion of the world to the nature of ultimate reality. Now I think all you see are the patterns on the rug turning into hideous things.

A friend of mine had a shower curtain with tigers on it. You know, one of those prints. During an LSD trip once, the tigers started moving and tried to eat him. So he ran outside into the back yard and burned the shower curtain.

That epitomizes drugs to me: some guy in his back yard burning his shower curtain.

I used to think that drugs put you in touch with something. Now I know that the only thing they put you in touch with is the rubber room of a psychiatric hospital.

My drug experiences have not manifested themselves in my work. Many critics have said that *The Three Stigmata of Palmer Eldritch* (1965) was the

first “LSD novel.” I wrote that after reading a magazine article on hallucinogenics by Aldous Huxley.

Drugs have taken the lives of some very, very dear friends of mine.

AQUARIAN: Then what is the major influence on your work?

DICK: Philosophy and philosophical inquiry. I studied philosophy during my brief career at the University of California at Berkley. I’m what they call an “acosmic pan-enthiest,” which means that I don’t believe that the universe exists. I believe that the only thing that exists is God and he is more than the universe. The universe is an extension of God into space and time.

That’s the premise I start from in my work, that so-called “reality” is a mass delusion that we’ve all been required to believe for reasons totally obscure.

Bishop Berkely believed that the world doesn’t exist, that God directly impinges on our minds the sensation that the world exists. The Russian science fiction writer Stanislaw Lem poses that if there was a brain being fed a simulated world, is there any way the brain could tell it was a simulated world? The answer, of course, is no. Not unless there was a technological foul-up.

Imagine a brain floating in a tank with millions and millions of electrodes attached to specific nerve centers. Now imagine these electrodes being selectively stimulated by a computer to cause the brain to believe that it was walking down Hollywood Boulevard chomping on a hamburger and checking out the chicks.

Now, if there was a technological foul-up, or if the tapes got jumbled, the brain would suddenly see Jesus Christ pass by down Hollywood Boulevard on his way to Golgotha, pursued by a crowd of angry people, being whipped along by seven Roman Centurions.

The brain would say, “Now hold on there!” And suddenly the entire image would go “pop” and disappear.

I’ve always had this funny feeling about reality. It just seems very feeble to me sometimes. It doesn’t seem to have the substantiality that it’s suppose to have.

I look at reality the way a rustic looks at a shell game when he comes into town to visit the fair. A little voice inside me says, “now wait just a second there...”

AQUARIAN: Religion and religious inquiry also occupy a very prominent place in your writing.

DICK: I’ve always been interested in religion. In man’s relationship with is god, what he chooses to worship. I was raised a Quaker but converted to Episcopalianism very early in my life.

The new novel I’m currently working on for Bantam Books has its basis in theology and what I’ve had to do, in short, is to create a new religion right from scratch.

It reminds me of something a girl said to me a couple of weeks ago. She said, “You’re really smart, too bad you’re not religious.” (Laughs) And here I am doing nothing all day but reading the Bible, the Apocrypha, the writings of Gnosticism, histories of Christianity. I’ll tell you, I could go out and get a degree in theology right now!

It seems like a natural progression of sorts. I got badly burned in the political arena. I was hounded by Mr. Smith and Mr. Scruggs. I would literally get thrown out of Socialist and Communist Party meetings when I was in college for disagreeing with party doctrine. And so I turn to religion, and I find incredible bigotry. Two thousand years of history and the names change but the activity remains the same. Somebody was always throwing someone else into prison for his beliefs or burning him at the stake.

I believe that the establishment churches have lost the keys to the kingdom. They don't even know what the Kingdom of God is.

It's like some guy who loses the keys to his car. He knows he had them a second ago but now they're gone. The churches, however, don't even know what the car looks like anymore. They can't even give a description of it to the cop.

Organized religion is crooked, dumb, and it's lost the keys. I mean, it's OK to be crooked and dumb, we're all crooked and dumb. But the tragedy is that they've lost the keys. They can't even point us in the right direction much less take us there.

The whole question of religion is very melancholic. It makes me very sad really. I mean, I've read so much and still, I haven't found God. We have a "deus abscondatus," a hidden God. As Plato says, "God exists but He is hard to find."

I've spent the majority of my life studying and reading and seeking God, but, of course, the thing is you can't find God. God has to find you. I've learned that.

AQUARIAN: To abandon your themes for a moment and talk about your style, your writing has always been concerned with people rather than technology. Other science fiction writers concentrate on the nature of alien environments, methods of time and space travel, etc., but you're more concerned with human beings, their interactions, their everyday affairs. How do you account for this?

DICK: During the time when I was first beginning to write, I was kind of experimenting with different characters. I was looking for a type of person who would express my innermost observations, ideas, desires.

I was reading a lot of English and American literature, all the novels of Huxley, all the novels of Orwell, Maugham, Thomas Wolfe, D.H. Lawrence. And when I was reading Sinclair Lewis' *Babbit*, I found my character. Babbit. You know, Babbit walks around saying things like, "My car is not gonna start today. I know it, I know it." Everybody else just gets into their cars and turns the keys and they don't think about it. Not Babbit. And so I said, "There's my character. That's him."

You can say I'm like the Nineteenth Century French novelists. I write about the human predicament. And it doesn't matter if it's centuries in the future, the predicament is still the same.

I'm with the little man. I wouldn't be with the "superman" characters for all the money in the world. You know, the characters in Ayn Rand and Heinlein who have such a contempt for everybody. Because one day that little man is gonna rise up and punch the superman out and I want to be there when it happens.

AQUARIAN: In terms of broad acceptance, science fiction has undergone quite a change in the last few years. Always considered a popular, inferior brand of writing,

it has now been accepted, not only by the masses but by the academic community. Science fiction courses are now part of almost every English department, people are doing theses and doctoral dissertations on science fiction. What do you think of all this?

DICK: I hate it. I just hope we can survive it.

You know, we've survived complete obscurity. We survived complete condescension, the "are you people really doing anything serious?" attitude. I hope we can survive acceptance. It's really the most dangerous thing.

You know, sometimes I think it's all a plot, to praise you and accept you and treat you like a serious literary form. Because in that way they can guarantee your demise.

The only thing that's worse than being treated as "not serious" is being treated as "serious." I'd much rather be ignored. And this "scholarly" science fiction criticism is the worst.

You know, if they can't destroy you by ignoring you, they can destroy you by annexing you.

They, the literary critics, write these incredibly turgid articles which see all this "meaning" in your writing. The end result, I guess, is to drive all your readers away screaming.

AQUARIAN: What is the most important quality for a writer to have?

DICK: A sense of indignation. As I said, science fiction was effective for so many years because it was a rebel art form. It wasn't accepted. The idea was to offend people. But not just with garbage. Just because something is offensive crap doesn't necessarily mean it's any good.

But there is nothing else, really, for a writer to do. He must offend people if he's going to be effective. It's like someone once said about opera. "Stab a tenor and he sings." Stab a writer—or step on his toes—and he'll write. It's an automatic reflex reaction. A writer writes because it's his response to the world. It's a natural process, like respiration.

But above all, a writer must have a capacity for indignation. The capacity for indignation is the most important thing for a creative person. Not the aesthetic capacity but the capacity for indignation. And especially indignation at the treatment afforded other people.

It's like the trials of the dissidents that are going on now in Russia, or when you see a blind and deaf baby on TV like I did last night.

To see some of the things that are going on in the world and to feel indignant, at God, at the Soviet Union, at the United States, at the military, *that* is the greatest capacity in the world. To see a blind and deaf baby and to feel anger, to feel fury, at the starving of children and the arrest of political dissidents. **That** is the basis of the writer.

Ask students to work independently to write a paragraph that uses what they have learned about pulling evidence from the text and embedding that evidence with explanation to support a thesis.

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing a Paragraph to Support a Thesis

Directions: In the space below, write a paragraph supporting the following thesis:

“Philip K. Dick’s experiences with law-enforcement and his views on religion and philosophy have strong impacts on his novels.”

(space provided)

Alternatively the teacher may ask students to develop their own thesis statement based on this interview or may develop a different thesis statement for students.

After students have completed their paragraphs, ask for students to volunteer their paragraphs. Display those paragraphs on the white board or document camera and ask the class to read them and to provide feedback on students’ selection of evidence, embedding evidence in the paragraph, and providing explanation of evidence.

Assessment:

Outcome 5:

Students will independently select appropriate evidence that can be used to support a thesis statement and will write a paragraph in which that evidence is appropriately embedded, based on their reading of an interview with author Philip K. Dick.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Students’ paragraphs include appropriate evidence drawn from the interview. | No | Somewhat | Very |
| Students’ paragraphs appropriately embed evidence accompanied with explanation. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Five

Textual Evidence on Humanity Revisited (Approx. 20 minutes)

Facilitate a brief discussion on the notion of “half-life” that is present in *Ubik*. What is half-life? What do we know about half-life from the novel so far? What is left unexplained about half-life? Are the individuals in half-life alive or dead?

Ask students to work with a partner or small group to write notes in response to one of the questions in their academic notebooks on the page titled “Questions about Humanity in *Ubik* – 2” regarding the theme of humanity in *Ubik*. Assign each group a specific question to respond to.

FROM THE STUDENT ACADEMIC NOTEBOOK

Questions about Humanity in *Ubik* – 2

Directions: In the space below, work with a partner or small group to take notes on textual evidence that might frame a response to one of the following questions:

Question #1: Examine the conversation between Mr. Bliss and Joe Chip, on the way to Runciter’s funeral. Joe Chip thinks the following to himself, during the conversation (page 158):

“There is no way we can adapt to their viewpoint, their moral, political, sociological environment. To them we’re professional agitators, more alien than the Nazis, probably even more of a menace than the Communist Party. We’re the most dangerous agitators that this time segment has yet had to deal with. Bliss is absolutely right.”

Explain this perspective. In what way are the telepaths “the most dangerous agitators that this time segment has yet had to deal with”? Would the same be true if the group of telepaths were transported to our time?

Question #2: In what way might Pat Conley be considered responsible for the deaths that have taken place thus far? How might their form of death be explained?

(space provided)

Instruct students to structure their idea as a thesis statement, drawing on the work done in the previous lesson on thesis statements. Have students post their thesis statements and participate in a gallery walk, so that all students can view them. Subsequently, give students the opportunity to add information to their avatars.

Facilitate a whole-class discussion on the theme of humanity present in this portion of the text.

Give students feedback on their participation in discussion, using the evaluation rubric provided.

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly related to the theme of humanity. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Six

Vocabulary Work (Approx. 100 minutes)

Ask students to open their academic notebooks to the vocabulary work on Chapters Nine through 12. Remind students of the vocabulary work that was done previously. Students should have completed their vocabulary work for previous homework, choosing one word from the choice list and one self-selected word from each of the assigned chapters.

For this activity, teachers should use their best judgment, depending on students' success with the vocabulary in *Ubik*. If students are capable of handling the vocabulary knowledge independently, teachers may choose to skip the sorting work that is part of this activity. If students continue to struggle with the vocabulary load from these chapters, teachers should guide them through the sorting activity, which should build their knowledge of words and their ability to use word knowledge in context.

If necessary, choose one of the words from the choice list and model the kind of work expected from students, referring back to the sample provided earlier or using another sample taken from the list of choice words for Chapters Nine through 12 and projecting this modeling on the document camera or using the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected, from Chapters Nine through 12 for a total of eight words each. Ask students to write their eight words on index cards and to write both the definition and the context (i.e., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *Ubik*, and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories, but all of the members of the group must agree to the categories they have developed and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words that they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Assessment:

Outcome 3:

Students will demonstrate their ability to apply strategies for locating words in a literary text that are unfamiliar to them and determine the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to review the words that they studied in their small group and to pull from those words their TOP FIVE words. The words that they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapters Nine through 12. Ask each group to report out the words that they chose and why they chose them (i.e., in what way do their TOP FIVE words connect to or remind them of the content of Chapters Nine through 12).

Make sure that the words chosen as TOP FIVE are placed on the *Ubik* vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

Assign reading and work related to Chapters 13 through 17. Provide approximately 50 minutes of class time for students to begin reading Chapters 13 through 17 and carrying out the reading and research logs and the vocabulary work on those chapters. For homework students should complete this work: read Chapters 13 through 17 in *Ubik*, complete a reading and research log for each chapter and complete vocabulary charts for these chapters. Students' success in carrying out summary, close reading and interpretation, and developing Level 2 questions will largely depend on how much time in class is spent reviewing the reading and research log, so it is strongly suggested that you spend about ten minutes in every class period reviewing students' responses and providing feedback so that they can see what they need to do to complete this work successfully.

Assessment:

Outcome 1:

Students will keep a reading and research log during the reading of the central text, which they will use to summarize plot and character development, to note rhetorical patterns, make inferences, and evaluate how those patterns influence interpretation, and to learn to develop Level 2 questions or questions that require deeper reading, interpretation and drawing conclusions.

Reading and Research Log Assessment

Rate each item on a scale of one to five, with five highest and one lowest.

The log provides evidence that the student has read and comprehended the portion of the text assigned.

----- 1 ----- 2 ----- 3 ----- 4 ----- 5 ----->

The log presents an accurate and complete summary of the portion of the text assigned, without omitting important ideas or including unnecessary details.

----- 1 ----- 2 ----- 3 ----- 4 ----- 5 ----->

The log provides evidence that the student is noticing and interpreting word choices and other rhetorical patterns.

----- 1 ----- 2 ----- 3 ----- 4 ----- 5 ----->

The log provides evidence that the student is capable of producing appropriate Level 2 questions.

----- 1 ----- 2 ----- 3 ----- 4 ----- 5 ----->

Writing in the log is competent, both in terms of its organizational structure and in its use of standard English usage and punctuation.

----- 1 ----- 2 ----- 3 ----- 4 ----- 5 ----->

TOTAL: /25

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Facilitated a two-part discussion of Chapters Nine through 12 of *Ubik*, including both plot and character development, as well as students' close reading and interpretation.
2. Examined with students the humanity prompt for the literary argument essay.
3. Asked students to work with a partner to develop a thesis statement, three mini-claims and evidence to support those mini-claims on the way in which technology is "reverting" to earlier forms.
4. Asked students to volunteer to read their thesis statements, mini-claims, and evidence and facilitated class review; provided students with time to revise their work.
5. Facilitated students' small group work taking notes on questions related to humanity, a brief discussion and posting their notes on their avatars.
6. Asked students to read the interview with Philip K. Dick.
7. Facilitated a brief discussion on "half-life."
8. Facilitated a sorting activity for students' vocabulary work on Chapters Nine through 12.
9. Facilitated students' choice of their top five vocabulary words for Chapters Nine through 12.
10. Assigned and allowed class time for reading Chapters 13 through 17 and completing reading and research logs as well as vocabulary on these chapters.

Lesson 5

Concluding and Resolving the Novel

Overview and Rationale:

In this lesson, students will work with Chapters 13 through 17 of Phillip K. Dick's *Ubik*, which will provide a conclusion, if not a resolution, to the storyline of the novel. Students will use their reading and research logs to track their reading, write summaries, develop Level 2 questions and to notice and interpret literary patterns within the central text. Using these student-generated materials, teachers will facilitate discussions of Chapters 13 through 17, focusing on resolving the puzzles presented by the conclusion of the novel. In addition, students will continue their work toward writing a literary argument essay by taking a stand on an arguable claim from Chapters 13 through 17 and supporting it with as many mini-claims and as much textual evidence as they can find. This practice will be preparatory to developing their own claim and writing their own literary argument in Lesson 7. Vocabulary work in this lesson will center on the students' self-selected words (two from each chapter) and will involve students in presenting words and definitions within a small group and sorting those words into categories, as well as choosing their top five words as they relate to the content of these chapters.

Tasks/Expected Outcomes:

1. Students will keep a reading and research log during the reading of the central text, which they will use to summarize plot and character development, to note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation and to learn to develop Level 2 questions or questions that require deeper reading, interpretation and drawing conclusions.
2. Students will participate in small and whole-group discussions of the texts, particularly focusing on resolving the puzzles presented by the novel. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.
3. Students will demonstrate their ability to apply strategies for locating words in a literary text that are unfamiliar to them and determine the meaning of those words, using both context clues and dictionaries.
4. As preparation for writing a literary argument essay, students will draw on their knowledge of the thesis statement/mini-claim/evidence structure as well as their reading and interpretation of the novel to prepare a concise statement of an argument drawn from Chapters 13 through 17 of *Ubik*.
5. Students will address the conclusion of the novel and develop text-supported explanations for the events that conclude the storyline.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
- (2) Reading/Comprehension of Literary Text/Theme and Genre. Students analyze, make inferences and draw conclusions about theme and genre in different cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to:
 - (A) compare and contrast works of literature that express a universal theme;
 - (C) relate the characters, setting, and theme of a literary work to the historical, social, and economic ideas of its time.
- (5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:
 - (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters;
- (6) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to analyze the effect of ambiguity, contradiction, subtlety, paradox, irony, sarcasm, and overstatement in literary essays, speeches, and other forms of literary nonfiction.
- (7) Reading/Comprehension of Literary Text/Sensory Language. Students understand, make inferences and draw conclusions about how an author's sensory language creates imagery in literary text and provide evidence from text to support their understanding. Students are expected to analyze how the author's patterns of imagery, literary allusions, and conceits reveal theme, set tone, and create meaning in metaphors, passages, and literary works.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:

- (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 - 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 - 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Copies of Phillip K. Dick's *Ubik*

Timeframe:

170 minutes

Targeted Vocabulary:

Vocabulary taken from Chapter 13

- coagulated (179)
- psychosomatic (181)
- ingot (181)
- inertia (182)
- lithely (182)
- sedately (183)
- infiltrate (184)
- pedantic (185)
- tropism (185)
- alchemy (185)
- malevolence (186)
- harbingers (187)
- polymorphic (187)
- expenditure (188)
- substantiality (188)
- constituents (190)

Vocabulary taken from Chapter 14

- convulsed (193)
- fragmentary (193)
- conjunction (193)
- inherent (194)
- solicitous (194)
- retrograde (195)
- malignant (195)
- sadistic (195)
- encephalograms (199)
- arduous (200)

Vocabulary taken from Chapter 15

- enervation (203)
- leer (205)
- chitinous (206)
- residual (207)
- tangible (208)

Vocabulary taken from Chapter 16

- atavisms (212)
- excrete (215)
- deformation (216)
- neolithic (216)
- idiosyncrasy (216)
- somberly (217)
- succumb (218)
- nullify (218)
- verity (218)
- aversion (222)
- transcendental (222)
- centripetal (224)

Vocabulary taken from Chapter 17

- rapidity (227)
- intuition (227)

Activity One

Re-approaching the Text (Approx. 35 minutes)

Ask two students to volunteer Level 2 questions from their reading and research logs (part IV) on the chapters they read for homework (Chapters 13 through 17). Using those student-generated Level 2 questions, facilitate a whole-class discussion of Chapters 13 through 17. This whole-class discussion should bring to light any difficulties with comprehension of the required chapters, as well as whether or not students are doing the reading. Encourage students to pull ideas from their reading and research log (in the academic notebook) as the discussion progresses.

Have students work with a partner to compare and to examine the language/writing pattern and the interpretation of that pattern (parts II and III of the reading and research log in the academic notebook) on the chapters they read for homework (Chapters 13 through 17). Facilitate a whole-class discussion on interesting language patterns and interpretations that emerge from their work. This whole-class discussion should focus on the craft of the work and how students are using what they notice about the writing of the novel to interpret it.

In both discussions, ensure that students are basing their discussion and their interpretation on the text itself by asking follow-up questions, such as “Where in the novel do you find that information?”

Assessment:

Outcome 1:

Students will keep a reading and research log during the reading of the central text, which they will use to summarize plot and character development, to note rhetorical patterns, make inferences, and evaluate how those patterns influence interpretation, and to learn to develop Level 2 questions or questions that require deeper reading, interpretation and drawing conclusions.

Reading and Research Log Assessment

Rate each item on a scale of one to five, with five highest and one lowest.

The log provides evidence that the student has read and comprehended the portion of the text assigned.

-----1-----2-----3-----4-----5----->

The log presents an accurate and complete summary of the portion of the text assigned, without omitting important ideas or including unnecessary details.

-----1-----2-----3-----4-----5----->

The log provides evidence that the student is noticing and interpreting word choices and other rhetorical patterns.

-----1-----2-----3-----4-----5----->

The log provides evidence that the student is capable of producing appropriate Level 2 questions.

-----1-----2-----3-----4-----5----->

Writing in the log is competent, both in terms of its organizational structure and in its use of standard English usage and punctuation.

-----1-----2-----3-----4-----5----->

TOTAL: /25

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly focusing on resolving the puzzles presented by the novel. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Activity Two

Supporting a Claim with Mini-claims and Evidence (Approx. 50 minutes)

Tell students that they are going to combine their knowledge of the book with their knowledge of how to select and present evidence for a claim and to develop mini-claims In this activity, students will work independently in their academic notebooks on the page titled “Supporting a Claim” to develop mini-claims and evidence to support an arguable claim related to Chapters 13 through 17 of *Ubik*. In their writing, students should take a stand on the statement and support the claim with as many mini-claims as they possibly can, referring to the text of the novel for their evidence.

Before asking the students to begin selecting evidence from the text and writing, the teacher should model this process with one of the arguable claims. Whether or not the modeling of this process is carried out and how much time is spent on that modeling is the teacher’s choice and should be carried out based on how competent students are with selecting and embedding evidence for a claim.

FROM THE STUDENT ACADEMIC NOTEBOOK

Supporting a Claim

Directions: In the space below, develop mini-claims and evidence to support one of the following arguable/debatable statements. Support your stance with as many mini-claims and as much supporting evidence as you can, referring to the text of the novel for your evidence.

- When Joe Chip suspects he is “dying” like the others, Pat tells him it is psychological, not physical, and she is correct.
- *Ubik* (the product) represents BELIEF in something more or better and the power of that belief.
- It’s actually Runciter in cold-pak. Joe and the others are alive and trying to communicate with him.
- *Ubik* (the product) must have a purely psychological effect. Ella’s “physical” explanation of what it “does” cannot be correct.
- Jory is actually a representation of Hollis in cold-pak.

(space provided)

Alternatively, teachers can choose to have students carry out the same process related to one of the three prompts that make up the culminating writing assignment for the novel. Having students work during this lesson to prepare for their culminating essay will provide for more time in the final lesson, which students can use to complete a more thorough revision and editing process.

After students have completed their work on developing mini-claims and evidence to support a claim, choose one of the arguable statements to discuss. Ask students to share their mini-claims, either in support of or against the claim as well as the evidence they found in the text. The teacher should list these on the board or project them

on a document camera, listing mini-claims on one side and evidence on the other, or otherwise separating the two.

Once the mini-claims and evidence are listed, group students by the prompt they have selected. **Ask students to work with a partner to categorize like mini-claims together in the academic notebook** on the page titled “Categorizing Mini-Claims.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Categorizing Mini-Claims

Directions: With a partner, examine the mini-claims that you and your fellow students created. Group the mini-claims into categories in the space below.

(space provided)

Have partners report their groupings of these mini-claims and come to a class consensus on how the mini-claims should be grouped. Indicate the groupings on the list of mini-claims using symbols or colors; for example, circle one similar group in green and put blue boxes around another group of related mini-claims.

Ask students to work with a partner to review the evidence collected previously, using the academic notebook on the page titled “Reviewing Evidence.” Students should note any gaps or contradictions in the evidence collected, what evidence seems particularly compelling, and what evidence goes with which mini-claim. Have partners report on their evaluations of the evidence.

FROM THE STUDENT ACADEMIC NOTEBOOK

Reviewing Evidence

Directions: With a partner, review the evidence that your class has collected. In the space below, note any gaps or contradictions in the evidence collected, what evidence seems particularly compelling, and what evidence goes with which mini-claim.

Gaps or contradictions?

What evidence is particularly compelling?

What evidence goes with what mini-claim?

(space provided)

Ask students to work with a partner in the academic notebook to develop a counter-argument for the arguable/debatable statement and how they might refute that counter-argument.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions: In the space below, develop a counter-argument for the statement your class has been working on, as well as how you might refute that counter-argument.

Counter-Argument:

Potential Refutation:

(space provided)

Revisit the initial claim. Facilitate a whole-class discussion asking the students to draw a conclusion about whether they agree or disagree with the claim based on the mini-claims and evidence found and discussed. Remind students that this process of collecting, organizing and evaluating evidence, as well as developing a counter-argument and potential refutation for a counter-argument, is what they will be doing in preparation for writing the literary argument essay.

Ask students to work as a class to use the template below to articulate and organize their response to this claim. They should complete this template together for the arguable statement the whole class worked on. Ensure the completion of this template is done where the whole class can see it, either on a document camera or white board.

Although some readers claim _____, I believe _____ because _____ [state over-arching reason(s) here]. My point is made when _____ [insert textual evidence here, in as many sentences as needed]. Though I concede that _____, I maintain that _____.

After the class is clear on the structure of this template, students should work individually to complete the same template for the arguable statement they initially worked on in the academic notebook on the page titled “Writing a Simplified Argument Structure.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing a Simplified Argument Structure

Directions: Working on your own, use the argument template to complete a simplified argument structure for the statement on which you worked independently to develop reasons and evidence. Write your statement in the space below.

Although some readers claim _____,
I believe _____ because _____
_____ [state over-arching reason(s) here].
My point is made when _____ [insert textual evidence here, in as
many sentences as needed]. Though I concede that _____,
I maintain that _____.

(space provided)

Ask students to share their simplified argument structures and discuss how they will prepare students for writing a literary argument essay. Remind students that this is an organizational template and not the exact structure for their writing.

Assessment:

Outcome 4:

As preparation for writing a literary argument essay, students will draw on their knowledge of the thesis statement/mini-claim/evidence structure as well as their reading and interpretation of the novel to prepare a concise statement of an argument drawn from Chapters 13 through 17 of *Ubik*.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students' concise argument statement fits the structure of the model provided. | No | Somewhat | Very |
| Students' concise argument statement contains an appropriate thesis, mini-claims and evidence. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Three

Concluding (or Resolving) the Novel (Approx. 30 minutes)

Ask students to re-read Chapter 17 with an eye toward figuring out what's going on in this chapter and what light these events shed on the previous interpretation of the events of the novel. When the re-reading is completed, ask students to work with a partner to write a two-sentence explanation of what happens in Chapter 17, using the academic notebook on the page titled "Re-Reading Chapter 17." To explain the task, you might ask questions such as the following:

- Why is Joe Chip's picture on the money in Runciter's pocket?
- What changes does this make in your interpretation of what's going on in the novel?
- What actually happened to Runciter? To Joe Chip and the others? To Jory? To Ella?

FROM THE STUDENT ACADEMIC NOTEBOOK

Re-Reading Chapter 17

Directions: Re-read Chapter 17, with an eye toward figuring out what's going on in this chapter and what light these events shed on the previous interpretation of the events of the novel. When the re-reading is complete, work with a partner to write a two-sentence explanation that contains your best thinking on what happens in Chapter 17, using the space below.

(space provided)

Once students have completed their two-sentence explanations, ask several of them to volunteer to write their explanations on the board or project them on a document camera. Facilitate a whole-class discussion on these explanations, consistently asking students to refer back to the text for evidence to support their explanations. As a conclusion to the discussion, the teacher might ask students to vote on the explanation that has been put forward that is seen as the most likely, based on evidence from the text.

Assessment:

Outcome 2:

Students will participate in small and whole-group discussions of the texts, particularly focusing on resolving the puzzles presented by the novel. Students are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.

| Evaluation Rubric | | | |
|---|---|--|---|
| CCSS for Speaking/Listening | Basic (0-3 points) | Proficient (4 points) | Distinguished (5 points) |
| CCSS.ELA.Literacy.SL.11-12.1a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | Student comes to class unprepared for discussion and does not bring evidence from texts into the discussion. | Student comes to class prepared for discussion and brings evidence from texts into discussion. | Student comes to class prepared for discussion and is a vital part of a well-reasoned exchange of ideas. |
| CCSS.ELA-Literacy.SL.11-12.1c Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | Student is not a vital part of the discussion, in that he or she is inattentive, doesn't take notes, and/or never volunteers to share knowledge with the class. | Student poses and responds to questions that make connections among the text and the world. | Student participates effectively in the discussion and brings others into the discussion by asking for clarification, verification, or challenging ideas. |
| Total Points | 10 | | |

Assessment:

Outcome 5:

Students will address the conclusion of the novel and develop text-supported explanations for the events that conclude the storyline.

| Evaluation Rubric | | | |
|--|----------|----------|------|
| Students' two-sentence explanations are reasonable based on the information presented in Chapter 17. | No | Somewhat | Very |
| Students' two-sentence explanations draw evidence from the novel and use it to provide a conclusion. | No | Somewhat | Very |
| Total Points | 6 | | |

Activity Four

Vocabulary Work (Approx. 50 minutes)

Ask students to open their academic notebooks to the vocabulary work on Chapters 13 through 17. Remind students of the vocabulary work that was done previously. Students should have completed their vocabulary work for previous homework, choosing one word from the choice list and one self-selected word from each of the assigned chapters.

If necessary, choose one of the words from the choice list and model the kind of work expected from students, referring back to the sample provided earlier or using another sample taken from the list of choice words for Chapters 13 through 17, and projecting this modeling on the document camera or using the white board.

Students should already have completed charts on two words, one from the choice list and one that they have self-selected, from Chapters 13 through 17 for a total of 10 words each. Ask students to write their 10 words on index cards and to write both the definition and the context (i.e., the sentence from the chapter in which the word is provided) on the back.

Students will then work with a small group of approximately three to four students to introduce their group members to the meaning of the words they collected, by presenting the word, its context from *Ubik*, and its definition, as well as their own understanding of the word in its context. After each student in the small group has presented his/her words, ask the students to participate in an open sort.

Remind students about the process of carrying out an open sort. Students can develop their own categories, but all of the members of the group must agree to the categories they have developed, and each category must have at least two words in it. Give students a large sheet of chart paper or other material on which they can write their categories and the words that they placed in those categories. This sorting process requires that students talk about the meanings of the words and gives them meaningful exposure to the words and their use in the text.

Ask each group to report out to the whole class on the categories they developed and how the words they have selected fit in those categories.

Assessment:

Outcome 4:

Students will demonstrate their ability to apply strategies for locating words in a literary text that are unfamiliar to them and determine the meaning of those words, using both context clues and dictionaries.

| Evaluation Rubric | | | |
|---|----------|----------|------|
| Identifies vocabulary words, context from which the words are taken, and notes their denotative meaning and their meaning in the context of the passage(s). | No | Somewhat | Very |
| Rates their understanding of the words. | No | Somewhat | Very |
| Writes in readable prose. | No | Somewhat | Very |
| Total Points | 9 | | |

Ask students to review the words that they studied in their small group and to pull from those words their TOP FIVE words. The words that they choose as their TOP FIVE should be those that carry particular importance in terms of the content of Chapters 13 through 17. Ask each group to report out the words that they chose and why they chose them, (i.e., in what way do their TOP FIVE words connect to or remind them of the content of Chapters 13 through 17).

Make sure that the words chosen as TOP FIVE are placed on the *Ubik* Vocabulary word wall chart paper or bulletin board so that they are visible by the entire class.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Facilitated a two-part discussion of Chapters 13 through 17 of *Ubik*, including both plot and character development, as well as students' close reading and interpretation.
- 2. Modeled the process of developing mini-claims and evidence to support an arguable claim related to Chapters 13 through 17 of *Ubik*.
- 3. Asked students to work independently to develop mini-claims and evidence to support an arguable claim related to Chapters 13 through 17 of *Ubik*.
- 4. Facilitated students' work on organizing mini-claims, reviewing evidence, developing a counter-argument, and writing a structural outline (using a template) for a literary argument, using one of the arguable claims related to Chapters 13 through 17 of *Ubik*.
- 5. Asked students to re-read Chapter 17 and to write a two-sentence explanation of the resolution of the novel.
- 6. Facilitated a discussion on students' two-sentence explanations.
- 9. Facilitated a sorting activity for students' vocabulary work on Chapters 13 through 17.
- 10. Facilitated students' choice of their top five vocabulary words for Chapters 13 through 17.

Lesson 6

Writing a Literary Argument

Overview and Rationale:

At this point in the unit, students have completed their reading of the central text, *Ubik*, by Philip K. Dick. In the process of reading the central text, students have also prepared for the kind of writing they will need to do in the literary argument essay. They are now ready to move on to writing a literary argument essay based on one of the essay prompts for this unit. Instruction in this lesson begins with a review of the assignment and the prompts. Students are then asked to develop a timeline for their writing project. After being given time to go through their academic notebooks and to collect notes that connect to their chosen prompt, students will be asked to look for gaps in the information they have collected and will be given time in the library or media center to collect additional research. Students will then be asked to write a summary paragraph of their stance and will use a graphic organizer to create an outline. Students will write a draft of their literary argument essay. Teachers will provide feedback on the students' drafts. Students will work with a peer to undertake a close-edit of their literary argument essays, using a checklist of essay-, sentence-, and word-level concerns. Students will revise, edit and turn in final drafts of their literary argument essays.

Tasks/Expected Outcomes:

1. Students will plan for their writing of a literary argument essay and do pre-writing activities to prepare for this writing, including reviewing the assignment prompt, creating a project timeline, collecting appropriate information from their class materials, noting gaps in this information, finding additional resources, writing a summary paragraph and creating an outline.
2. Students will write a draft of a literary argument essay on one of three prompts relating to *Ubik*.
3. Students will revise and edit their draft of a literary argument essay on one of three prompts relating to *Ubik* and will turn in their final drafts for feedback and scoring.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author's use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers' questions and contradictory information; and
- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;

- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Copies of Phillip K. Dick's *Ubik*

Timeframe:

250 minutes

Activity One

Literary Essay Planning and Pre-writing (Approx. 105 minutes)

Review with students the assignment requirements and the prompts, which can be found in the academic notebook on the page titled “Literary Argument Essay.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Literary Argument Essay

Directions: Review the literary argument essay assignment below.

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading *Ubik*, by Philip K. Dick and other informational texts, and conducting independent research, write an essay in which you address one of the prompts below (or an approved topic of your choosing) and argue the thesis. Be sure to acknowledge opposing views. Support your position with evidence from the texts.

Prompts

- a) Philip K. Dick and other authors featured in this unit express views on consumerism and its impact on society. Examine their multiple viewpoints. Take a position on the viewpoint you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- b) How do Philip K. Dick and the other authors featured in this unit portray characters' attempts to maintain a sense of personal identity in a technological society? Take a position on the technique used to portray personal identity you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- c) How does the technology in these texts shape society's views on what it means to be human? Are these views different when considered on an individual basis? Take a position on the impact of technology on humanity and explain why. Support your argument with specific, relevant evidence from the texts.

If students worked through the process of developing a thesis statement, collecting and evaluating evidence and creating an outline in Lesson 5, they can skip appropriate sections of this lesson and move into drafting, revision and editing.

Tell students that any writing project will have a timeline involved. Model for students a common or sample timeline for this particular writing project (see academic notebook page titled “Timeline for Writing Literary Argument Essay”). Ask students to fill in their own estimates of how long each task will take and to refer back to this timeline throughout the project. Note that students will be working at different paces, so in this particular project, teachers will need to have flexibility within the class' timeline.

FROM THE STUDENT ACADEMIC NOTEBOOK

Literary Argument Essay

Directions: Use the graphic organizer below to create a timeline for your project.

| | How and when will I do this? | What resources do I need? |
|----------------------------------|------------------------------|---------------------------|
| Review Assignment | | |
| Collect notes and look for holes | | |
| Collect additional research | | |
| Write a summary paragraph | | |
| Create an outline | | |
| Write a rough draft | | |
| Revise and edit | | |
| Submit final draft | | |

Students should have their academic notebooks and a highlighter available. Students should also refer back to the information that they have posted on their avatar parking lots throughout this unit. Model for students the process of reading through a page of notes, checking for relevance to a prompt and highlighting selected sections, using a document camera or other technology tool.

Ask students to choose one of the prompts and to read through their academic notebooks and avatar parking lot material, highlighting any information contained there that relates in any way to their chosen prompt. Once the process of highlighting is complete, students should write a short response to the following questions in their academic notebooks on the page titled “Evaluating Source Material”: *a) What sources do I have available for responding to this prompt? b) What holes are there in the information that I have? c) Where might I find additional information to fill in holes?*

FROM THE STUDENT ACADEMIC NOTEBOOK

Evaluating Source Material

Directions: Once you have completed highlighting notes throughout your academic notebook and materials written on your avatar parking lot, write a response to the following questions in the space below:

- a) What sources do I have available for responding to this prompt?
- b) What holes are there in the information that I have?
- c) Where might I find additional information to fill in holes?

(space provided)

Ask students to share their written responses so that they can hear/know what each other is doing and encourage them to help each other when appropriate.

Take students to the library/media resource center so that they can find additional source material for their literary argument essay.

Tell students to use the template used previously to write a summary paragraph that includes a thesis statement and sequences the key points they plan to make in their literary argument essay. The writing of this summary paragraph may show students they need more research, they should focus the evidence they have, or they are on the right track. Students should use the template used previously to write their summary paragraphs in the academic notebook on the page titled “Writing a Summary Paragraph.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing a Summary Paragraph

Directions: In the space below, write a summary paragraph, using the template provided.

Although some readers claim _____,
I believe _____ because
_____ [state over-arching reason(s) here].

My point is made when _____ [insert textual evidence here, in as
many sentences as needed]. Though I concede that _____,
I maintain that _____.

(space provided)

Once students have completed their summary paragraphs, ask them to review the timeline they created in light of their summary paragraphs. Do they need additional research? Or can they move on?

Walk students through the short outline of the “Classical Argument Structure” in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Classical Argument Structure

- I. Introduction to general topic which leads to a clear thesis.
- II. A moment of definition, background and/or precedence (this is a section which clarifies and gives history on the topic or your stance on it).
- III. Support 1: This is typically the most logical reason why one should support your claim.
 - a. Include evidence.
 - b. Backing for evidence.
- IV. Support 2: This is typically a side of the argument most don't think about. Perhaps it is a little known effect of the issue that interests and compels your reader to continue with you while you argue your point.
 - a. Include evidence.
 - b. Backing for evidence.
- V. Support 3: This is typically the strongest support of your claim. It is generally positioned last to deliver the most impact. It may include a staggering fact, testimony or statistic. It also might include a very emotional appeal that the audience can relate to. You want this to build into a very strong, winning conclusion.
 - a. Include evidence.
 - b. Backing for evidence.
- VI. Concession: One way ethos (ethical appeal) is maintained is through presenting yourself as a fair and knowledgeable writer. In order to most effectively illustrate this, writers will give a nod or concession to opposing viewpoints. For example, if you were arguing against the death penalty, this may be a place where you recognize legitimate reasons for why one might consider the death penalty. It is also a good idea to cite outside sources in this section. This does not weaken your argument. Rather, it shows you are aware of multi-perspectives on this issue and aren't afraid or apprehensive to note them because you will also refute them.

**Concession does not have to follow in this order. Some writers include concession after the “definition” section so that they can dedicate their supports one through three to the refutation.*

 - a. Consider evidence, and
 - b. Backing for evidence.
- VII. Refutation: In this section, you refute the concession. Even though you concede to an outside perspective, you remind your readers that either: a) there may be

some kind of logical error in the other perspective, or b) that, even though this outside perspective may be valid, the harm or benefits do not outweigh those of your perspective.

- a. Include evidence.
- b. Backing for evidence.

VIII. Conclusion: Unlike the traditional “summary” conclusion this is the space wherein you want to really drive home your claim. You may recap your essay here, but the last note needs to strongly appeal to your audience to consider your perspective. Think of it as a moment of “grand standing” or the rallying end of a speech.

Additional Notes:

You can have more than three supports.

Your support sections do not have to be each one paragraph. Perhaps the first support is two paragraphs, the second is one, and the third is three. Try to vary the support paragraphs so that they do not feel formulaic.

You can use first person, but AVOID 2ND PERSON: NO YOU, YOUR.

Your paper does not have to strictly follow this guide—this simply touches on the elements of a classical argument.

(http://ap.madecky.lakegeneva.badger.groupfusion.net/modules/locker/files/get_group_file.phtml?gid=87845&fid=15184475)

Subsequently, ask students to work in the academic notebook on the page titled “Literary Argument Outline” to create an outline using the Literary Argument Outline Form for their paper. The outline form is based on the Classical Argument Structure document.

FROM THE STUDENT ACADEMIC NOTEBOOK

Literary Argument Outline

Directions: Using the format below, create an outline for your literary argument essay.

Selected Prompt (*on which you will base your thesis*):

Summary Paragraph Containing Thesis Statement:

Introduction to Your General Topic:

Definition, Background and/or Precedence:

Support 1 (*include evidence and backing for the evidence*):

Support 2 (*include evidence and backing for the evidence*):

Support 3 (*include evidence and backing for the evidence*):

Additional Support (*include evidence and backing for the evidence*):

Concession:

Refutation:

Conclusion:

(*space provided*)

Assessment:

Outcome 1:

Students will plan for their writing of a literary argument essay and do pre-writing activities to prepare for this writing, including reviewing the assignment prompt, creating a project timeline, collecting appropriate information from their class materials, noting gaps in this information, finding additional resources, writing a summary paragraph and creating an outline.

| Evaluation Rubric | | | |
|--|-----------|----------|------|
| Student creates a “doable” timeline that paces reading and writing processes. | No | Somewhat | Very |
| Student examines existing materials for gaps and finds resources to fill those gaps. | No | Somewhat | Very |
| Student writes a concise summary statement that establishes a controlling idea and identifies key points that support development of information and/or explanation. | No | Somewhat | Very |
| Students’ outline contains appropriate reasons and evidence, as well as a concession, refutation and conclusion. | No | Somewhat | Very |
| Total Points | 12 | | |

Activity Two

Writing a Draft (Approx. 90 minutes)

Using their outline, students will construct an initial draft of a literary argument essay with an emerging line of thought and structure, including appropriate embedding of quotations and other evidence, with appropriate citation. Although the preparatory work for the draft has been completed in the academic notebook, the remainder of the work will be conducted either on a computer or on students’ own paper.

Ask students to work in class and complete for homework an initial draft. Remind students that they should use the outline and other planning work already completed for the draft and that their draft should include evidence, such as quotations, with appropriate citation. Refer students back to the work done previously on embedding quotations and other evidence (the “sandwich effect”), as well as the argument structure carried out throughout the reading of the novel.

As students work in class, the teacher should periodically conference with students to confirm that they are completing the writing as directed, to answer questions, etc. Any additional time needed can be carried out at home. In order to provide students with adequate and appropriate feedback on their drafts, the teacher should be prepared to read and comment on the students’ drafts and to analyze patterns of writing problems that can be addressed through mini-lessons on writing in the remainder of this lesson.

Assessment:

Outcome 2:

Students will write a draft of a literary argument essay on one of three prompts relating to *Ubik*.

| Evaluation Rubric | | | |
|--|-----------|----------|------|
| Draft provides an opening that includes a controlling idea and an opening strategy relevant to the prompt. | No | Somewhat | Very |
| Draft addresses all elements of the prompt. | No | Somewhat | Very |
| Draft includes evidence with appropriate citation. | No | Somewhat | Very |
| Draft is written in readable prose. | No | Somewhat | Very |
| Total Points | 12 | | |

Activity Three

Revision and Editing (Approx. 55 minutes)

Help students understand the importance of revision, by clarifying the difference between revision and editing. (Revision applies to changes in wording, transitions, big picture ideas, etc., while editing applies to spelling, punctuation, mechanics and usage issues).

Model the revision process by using one of the students' papers (or your own, if you are writing with the students) and showing students how to go about revising. Use the rubric as part of this process. Depending on the student, this revision may require: a) additional resources and library time to find those resources, b) rewriting and restructuring, with time to peer and/or teacher conference, and c) careful editing, with helpful direction from the teacher on grammar/mechanics/usage issues.

Provide students with feedback on their individual drafts. As necessary, teach mini-lessons focused on areas of weakness in the drafts.

Ask students to work with a partner to do a final proofing and editing of their drafts, using peer conferring. They should work through the pages titled "Editing and Revision Checklist – Literary Argument Essay" in the academic notebook. If needed, refer students to the pages titled "MLA In-Text Citations: The Basics" in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

MLA In-Text Citations: The Basics

Guidelines for referring to the works of others in your text using MLA style is covered in your language textbook as well as on several on-line sources. All provide extensive examples, so it's a good idea to consult them if you want to become even more familiar with MLA guidelines or if you have a particular reference question. The On-Line Writing Lab at Purdue University website is <http://owl.english.purdue.edu/owl/resource/557/02/>. The following information comes from that website.

Basic In-Text Citation Rules

In MLA, referring to the works of others in your text is done by using a parenthetical citation. Immediately following a quotation from a source or a paraphrase of a source's ideas, you place the author's name followed by a space and the relevant page number(s).

Human beings have been described as “symbol-using animals” (Burke 3).

When a source has no known author, use a shortened title of the work instead of an author name. Place the title in quotation marks if it's a short work, or italicize or underline it if it's a longer work.

Your in-text citation will correspond with an entry in your Works Cited page, which, for the Burke citation above, will look something like this:

Burke, Kenneth. Language as Symbolic Action: Essays on Life, Literature, and Method. Berkeley: U of California P, 1966.

We'll review how to make a Works Cited page later, but right now it's important to know that parenthetical citations and Works Cited pages allow readers to know which sources you consulted in writing your essay, so that they can either verify your interpretation of the sources or use them in their own scholarly work.

Multiple Citations

To cite multiple sources in the same parenthetical reference, separate the citations by a semi-colon:

...as has been discussed elsewhere (Burke 3; Dewey 21).

When Citation is *Not* Needed

Common sense and ethics should determine your need for documenting sources. You do not need to give sources for familiar proverbs, well-known quotations or common knowledge. Remember, this is a rhetorical choice, based on audience. If you're writing for an expert audience of a scholarly journal, he'll have different expectations of what constitutes common knowledge.

In-Text Citations: Author-Page Style

MLA format follows the author-page method of in-text citation. This means that the author's last name and the page number(s) from which the quotation or paraphrase is taken must appear in the text, and a complete reference should appear on your

Works Cited page. The author's name may appear either in the sentence itself or in parentheses following the quotation or paraphrase, but the page number(s) should always appear in the parentheses, not in the text of your sentence. For example:

Wordsworth stated that Romantic poetry was marked by a “spontaneous overflow of powerful feelings” (263).

Romantic poetry is characterized by the “spontaneous overflow of powerful feelings” (Wordsworth 263).

Wordsworth extensively explored the role of emotion in the creative process (263).

The citation, both (263) and (Wordsworth 263), tells readers that the information in the sentence can be located on page 263 of a work by an author named . If readers want more information about this source, they can turn to the Works Cited page, where, under the name of Wordsworth, they would find the following information:

Wordsworth, William. Lyrical Ballads. London: Oxford U.P., 1967.

Anonymous Work/Author Unknown

If the work you are citing to has no author, use an abbreviated version of the work's title. (For non-print sources, such as films, TV series, pictures, or other media, or electronic sources, include the name that begins the entry in the Works Cited page). For example:

An anonymous Wordsworth critic once argued that his poems were too emotional (“Wordsworth Is a Loser” 100).

Citing Authors with Same Last Names

Sometimes more information is necessary to identify the source from which a quotation is taken. For instance, if two or more authors have the same last name, provide both authors' first initials (or even the authors' full name if different authors share initials) in your citation. For example:

Although some medical ethicists claim that cloning will lead to designer children (R. Miller 12), others note that the advantages for medical research outweigh this consideration (A. Miller 46).

Citing Multiple Works by the Same Author

If you cite more than one work by a particular author, include a shortened title for the particular work from which you are quoting to distinguish it from the others.

Lightenor has argued that computers are not useful tools for small children (“Too Soon” 38), though he has acknowledged elsewhere that early exposure to computer games does lead to better small motor skill development in a child's second and third year (“Hand-Eye Development” 17).

Citing Indirect Sources

Sometimes you may have to use an indirect source. An indirect source is a source cited in another source. For such indirect quotations, use “qtd. in” to indicate the

source you actually consulted. For example:

Ravitch argues that high schools are pressured to act as “social service centers, and they don’t do that well” (qtd. in Weisman 259).

Citing the Bible

In your first parenthetical citation, you want to make clear which Bible you’re using (and underline or italicize the title), as each version varies in its translation, followed by book (do not italicize or underline), chapter and verse. For example:

Ezekiel saw “what seemed to be four living creatures,” each with faces of a man, a lion, an ox, and an eagle (New Jerusalem Bible, Ezek. 1.5-10).

All future references can then just cite book, chapter and verse, since you’ve established which edition of the Bible you will be using.

Formatting Quotations

When you directly quote the works of others in your paper, you will format quotations differently depending on their length. Below are some basic guidelines for incorporating quotations into your paper.

Short Quotations

To indicate short quotations (fewer than four typed lines of prose or three lines of verse) in your text, enclose the quotation within double quotation marks. Provide the author and specific page citation (in the case of verse, provide line numbers) in the text, and include a complete reference on the Works Cited page. Punctuation marks such as periods, commas, and semicolons should appear after the parenthetical citation. Question marks and exclamation points should appear within the quotation marks if they are a part of the quoted passage but after the parenthetical citation if they are a part of your text. For example:

According to some, dreams express “profound aspects of personality” (Foulkes 184), though others disagree.

According to Foulkes’s study, dreams may express “profound aspects of personality” (184).

Is it possible that dreams may express “profound aspects of personality” (Foulkes 184)?

Mark breaks in short quotations of verse with a slash, /, at the end of each line of verse: (a space should precede and follow the slash)

Cullen concludes, “Of all the things that happened there / That’s all I remember” (11-12).

Long Quotations

Place quotations longer than four typed lines in a free-standing block of text, and omit quotation marks. Start the quotation on a new line, with the entire quote indented one inch from the left margin; maintain double-spacing. Only indent the

first line of the quotation by a half inch if you are citing multiple paragraphs. Your parenthetical citation should come **after** the closing punctuation mark. When quoting verse, maintain original line breaks. (You should maintain double-spacing throughout your essay.) For example:

Nelly Dean treats Heathcliff poorly and dehumanizes him throughout her narration: They entirely refused to have it in bed with them, or even in their room, and I had no more sense, so, I put it on the landing of the stairs, hoping it would be gone on the morrow. By chance, or else attracted by hearing his voice, it crept to Mr. Earnshaw's door, and there he found it on quitting his chamber. Inquiries were made as to how it got there; I was obliged to confess, and in recompense for my cowardice and inhumanity was sent out of the house. (Bronte 78)

Adding or Omitting Words In Quotations

If you add a word or words in a quotation, you should put brackets around the words to indicate that they are not part of the original text.

Jan Harold Brunvand, in an essay on urban legends, states: “some individuals [who retell urban legends] make a point of learning every rumor or tale” (78).

If you omit a word or words from a quotation, you should indicate the deleted word or words by using ellipsis marks, which are three periods (...) preceded and followed by a space. For example:

In an essay on urban legends, Jan Harold Brunvand notes that “some individuals make a point of learning every recent rumor or tale ... and in a short time a lively exchange of details occurs” (78).

Ask students to rewrite and edit their drafts, using the feedback they received from the teacher and from their peers.

Students should submit their final draft before or on the due date for scoring and feedback.

Assessment:

Outcome 3:

Students will revise and edit their draft of a literary argument essay on one of three prompts relating to *Ubik* and will turn in their final drafts for feedback and scoring.

Rubric for Literary Argument Essay

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|---|-----|---|-----|---|-----|---|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. D: Addresses additional demands superficially. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. D: Addresses additional demands sufficiently. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. D: Addresses additional demands with thoroughness and makes a connection to claim. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. | | Establishes a claim. | | Establishes a credible claim. | | Establishes and maintains a substantive and credible claim or proposal. |
| Reading/ Research | Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation. | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation. | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Reviewed with students the assignment and the prompts to which they will respond.
2. Facilitated students' development of a timeline for their writing project.
3. Gave students time to go through their academic notebooks and collect notes that connect to their chosen prompt.
4. Asked students to look for holes or gaps in the evidence they have collected and gave them time in the library or media center to collect additional research.
5. Asked students to write a summary paragraph of their literary argument essay and to create an outline.
6. Asked students to write a draft of their literary argument essay.
7. Ensured that students received peer and teacher feedback on their drafts.
8. Facilitated students' revision and editing of their draft, based on peer and teacher feedback.
9. Scored and provided feedback on students' revised drafts.

Unit 2

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SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

English Unit 2

The Academic Notebook



Name



Unit 2

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Course Overview

Welcome to the second English literacy unit of the SREB Readiness Course- Literacy Ready. What does English literacy mean? English literacy is based on an understanding that texts—both literary and informational—provide a terrain for interrogating the meanings of human experiences and that literary texts are open to dialogue between and among readers and texts. When reading texts and writing about them in English classes, both in high school and in college, students should be able to

- decipher rhetorical strategies and patterns,
- make inferences from details,
- analyze how an author’s choices contribute to its overall structure and meaning as well as its aesthetic impact,
- draw on prior knowledge to construct interpretations,
- use the text to reflect on the human condition or the reader’s life,
- collect evidence for interpretations, and
- present the interpretation and evidence in a literary argument.

In this course, you will take part in several activities aimed at improving your literacy, specifically as literacy is used in English. While certainly the content covered in this course is important, a principal purpose of this course is to equip you with the tools necessary to be more successful in your college coursework. To that end, the creators of the course have developed this academic notebook.

Purposes of the Academic Notebook

The academic notebook has several roles in this course. First, you will keep a record of your reading of the central text, *Ubik* by Philip K. Dick by making entries for assigned readings on the pages labeled as “reading and research log.” The idea behind the reading and research log pages is to provide you with a collection site for the development of your interpretation, your literary argument as you read the novel and additional supplemental texts. The notes that you take in the reading and research log will be used at the end of the unit as preparation for a literary argument essay, in which you will present your interpretation based on the text and the supporting evidence for your interpretation.

A second role of the notebook is to provide you with a space in which you can make note of new vocabulary that you encounter in the text and collect information about the meanings of those words. To carry out this role, you will use vocabulary charts to make note of words that are new to you, write the context in which you find the word, rate your understanding of the word, and write a dictionary definition for the word as well as your own understanding of that definition.

The final role of the notebook is that of an assessment tool. Your instructor may periodically take up the notebooks and review your work to insure that you are remaining on task and to assist you with any material that is causing you difficulty. At the end of this six-week module, your instructor will review the contents of this notebook as part of your overall grade. Thus, it is important that you take this work seriously as this notebook becomes the record of your activity in this course.

You will notice that a good deal of the work involved in this course will need to be done as homework. For some of you, this increased amount and difficulty of homework may be a challenge. As the purpose of this course is to prepare you for the types of reading and writing you will do in college, and as college courses typically require significant amounts of homework, it is important that you commit yourself to maintaining consistency in your homework.

Lesson 1

Ubiquitous Computing and Avatars: A Gateway

In this lesson, you will . . .

- Explore the nature of disciplinary literacy in English/language arts classes, as well as the goals and purpose of the course.
- Use your beliefs about technological, cultural and individual development in an activity designed to establish both the themes of the unit and relevance to your life.
- Examine an extended definition for *technology* and do online research on *ubiquitous computing*.
- Examine *Ubik* book covers and make predictions about the novel using the information on the definition of *technology* and on *ubiquitous computing* that you found.

Directions:

Read the article that starts on the next page, which provides an extended definition of “technology.” As you read, underline or highlight any information that you consider essential to a definition of “technology.”

(<http://samphosam.wordpress.com/2012/05/14/home/>)

A Closer Look: Definition of Technology



The most general definition of technology is the application of science or knowledge to commerce and industry. Many fields of science have benefited from technology, as well as commerce and industry over the many centuries of human history. Perhaps the earliest known use of technology was in the Stone Age when the first knife or shovel was made from a piece of stone or obsidian. Technology has obviously come a long way since then.

Technology and inventiveness are closely related. Based on a defined need, the invention of a solution to the problem generates technology. Technology is, simply, the application of knowledge to solve problems or invent useful tools.

History of Technology

Technology has always been around, going back even to the Stone Age. The development of simple tools from wood or shards of rock show some of the first applications of knowledge to create technology to solve a problem. The discovery of fire, which provided a way to cook food and create heat and light, was also a step along the road of technology. These technological developments allowed people to accomplish tasks more easily and quickly.

As knowledge increased, history entered into the Bronze Age. The Bronze Age shows the evolving ability of man to work with metal and the ability to form stronger tools. The introduction of the wheel allowed people greater ability to travel and communicate.

Advances continued just as rapidly into the Iron Age where people developed the ability to work with harder metals than copper and tin. They developed the art of smelting iron and removing it from ore found in the earth. The Iron Age allowed for rapid increases in many branches of technology. Weapons making, development of tools that benefit

civilization and greater ability to perform tasks, such as manufacturing and transportation, are just a few of the technological developments of the Iron Age.

While each Age builds on the developments of the previous ones, new knowledge is obtained along the way. This new set of knowledge and the knowledge base of the past allow for new applications to the needs of society. The breakthroughs of science and technology have been applied in many ways to commerce and industry. Some of the spin-offs of these breakthroughs eventually filter down to provide benefits for the average person. The best example of this is products that were invented during the space program, which have allowed engineers and other scientists to use these to new products and materials in manufacturing.

Advanced Technology

Technology, the application of science, is not limited to only physical applications and physical tools. Benefits can be achieved through the application of new methods of thinking or new insights into the general knowledge base. One of the biggest applications of this type is computers and the Internet. While computers are tangible items, their ability to perform basic thinking processes much faster enables business and commerce to proceed much more efficiently.

The Internet has no tangible component and yet it has changed the life of virtually every person on the planet. Information is available to anyone with access in the matter of moments and is up to date and provides real time information about events around the world. Even communication has been revolutionized by the Internet. Not only can letters be sent through the Internet, but pictures, audio and video information can also be sent as well.

The people that have the most to do with technology are engineers that apply scientific information and principles to solve problems. These solutions are technology. The type of technology developed can be classified into groups based on the branch of science from which they grew. Some examples of these are medical technology, nuclear technology and computer technology. Blends of different fields further the diversity of technology and benefit various branches of science in unexpected ways. Nuclear imaging is one an example of this type of blending. As the understanding of nuclear science advanced, instruments were developed to allow doctors to see inside the human body and watch what was going on. Ultrasound, MRI and CAT scans are just a few of these technologies.

Exploring Ubiquitous Computing

Directions: Working with a partner, use a search engine to investigate the phrase “ubiquitous computing.” In the space below, write down three websites that you find, as well as the most interesting pieces of information about ubiquitous computing on those websites.

Website #1: _____

URL: _____

Interesting Information:

Website #2: _____

URL: _____

Interesting Information:

Website #3: _____

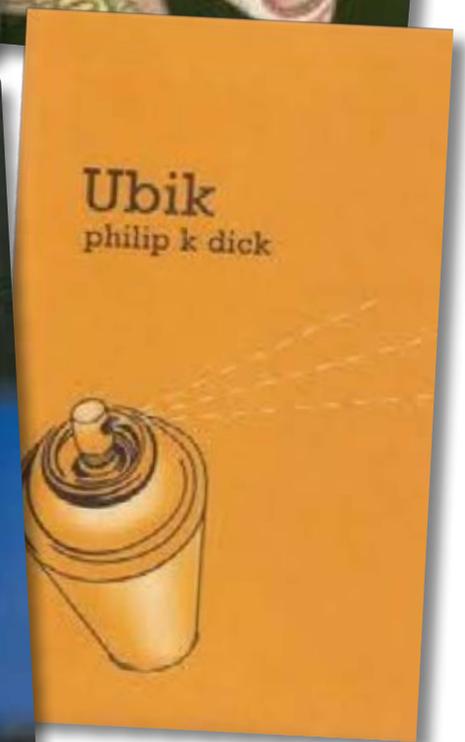
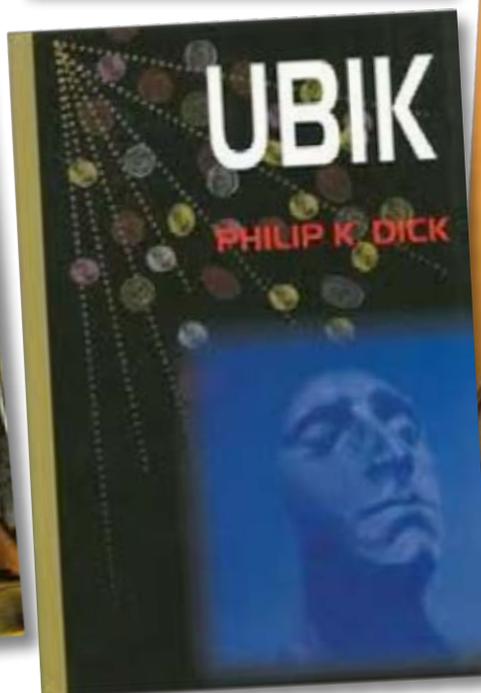
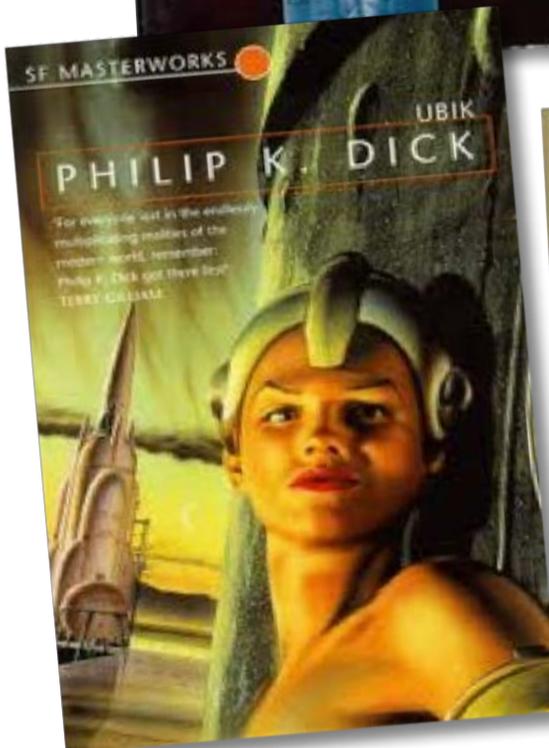
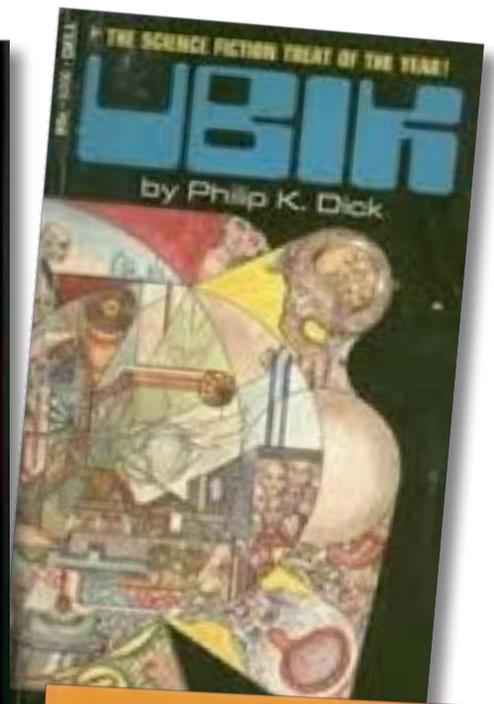
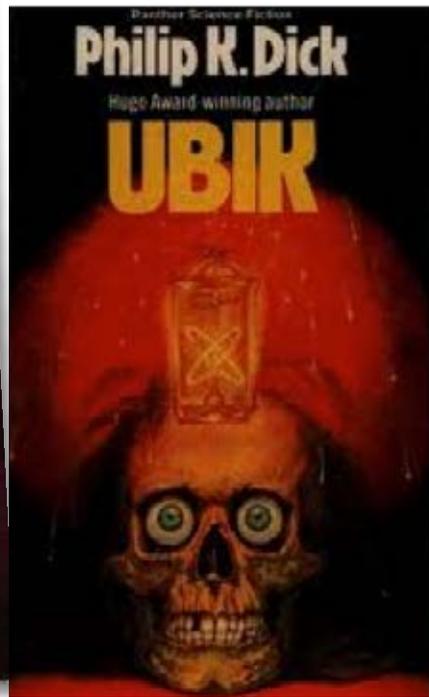
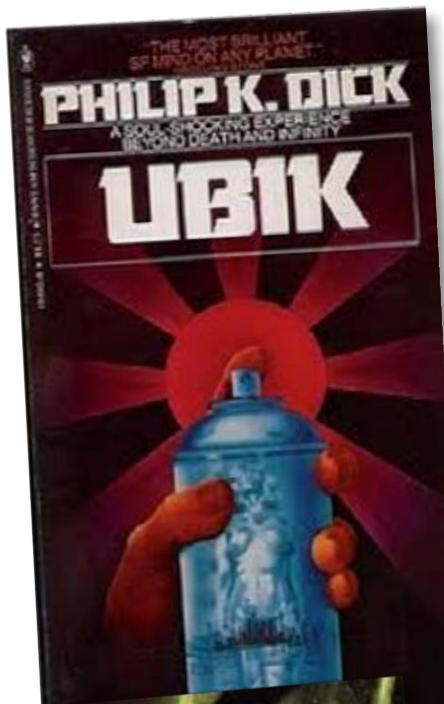
URL: _____

Interesting Information:

Making Predictions

Directions:

Examine the photographs below, all of which are book covers for editions of Philip K. Dick's novel, *Ubik*. Based on the work we have done thus far on the words "technology" and "ubiquitous computing," as well as the variety of images presented on these book covers, what do you think this novel will be about? On the next page, make a prediction and explain your prediction.



Lesson 2

Identity: *Ubik* Chapters One to Four

In this lesson, you will . . .

- Learn strategies for determining the meaning of unfamiliar words, using context clues and word parts as part of an exploration of the world of the novel.
- Keep a reading and research log during the reading of the central text, which you will use to summarize plot and character development to note rhetorical patterns, make inferences, and evaluate how those patterns influence interpretation. You will also learn to develop Level 2 questions, or questions that require deeper reading, interpretation and drawing conclusions.
- Build toward the thinking you need for the final assessment, by investigating what the final assessment is asking for as well as learning how to write a thesis statement.
- Make text-based inferences, focused on character development.
- Participate in small-group and whole-class discussions on themes of identity in the central text.

Close Reading and Interpretation: Student Practice

Directions: In the space below, write a paragraph in which you provide an interpretation of one of the patterns you noticed in your reading of Chapter One (see the previous page of the academic notebook). Answer these questions:

Why might the author have chosen to use that pattern?

How does the author's word choice impact your interpretation of the novel?

Level 1 and Level 2 Questions

Directions: Level 1 questions deal with surface information; these types of questions can help you to make sure that you understand what is going on in terms of basic plot points. Level 2 questions require that you dig deeper, make inferences, and draw conclusions and make interpretations about what you are reading. Complete your reading of *Ubik*, Chapter One silently and write a Level 2 question for the chapter in the space below.

Vocabulary from Philip K. Dick's *Ubik*, Chapter Two

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Two. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

effluvium (10)

theologians (13)

proximity (16)

nebulous (10)

vainglory (15)

metaphysical (18)

luminous (11)

proxima (15)

| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
|--|---|
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ _____ | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter Three

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Three. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|------------------|--------------------|------------------|-----------------|
| incised (19) | gratuity (24) | lobotomy (26) | aggregate (32) |
| conapt (20) | erratic (25) | stultifying (27) | eradicated (32) |
| homeostatic (23) | caveat emptor (25) | apparatus (30) | indices (33) |
| perpetuity (23) | miasma (26) | feasible (32) | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter Four

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Four. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

manifestation (37)

hidebound (40)

ponder (42)

incongruous (38)

subsidiary (41)

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Literary Argument Essay

Directions: Review the literary argument essay assignment below.

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading *Ubik*, by Philip K. Dick and other informational texts, and conducting independent research, write an essay in which you address one of the prompts below (or an approved topic of your choosing) and argue the thesis. Be sure to acknowledge opposing views. Support your position with evidence from the texts.

Prompts

- a) Philip K. Dick and other authors featured in this unit express views on consumerism and its impact on society. Examine their multiple viewpoints. Take a position on the viewpoint you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- b) How do Philip K. Dick and the other authors featured in this unit portray characters' attempts to maintain a sense of personal identity in a technological society? Take a position on the technique used to portray personal identity you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- c) How does the technology in these texts shape society's views on what it means to be human? Are these views different when considered on an individual basis? Take a position on the impact of technology on humanity and explain why. Support your argument with specific, relevant evidence from the texts.

Rubric for Literary Argument Essay

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|---|-----|---|-----|---|-----|---|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. D: Addresses additional demands superficially. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. D: Addresses additional demands sufficiently. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. D: Addresses additional demands with thoroughness and makes a connection to claim. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. | | Establishes a claim. | | Establishes a credible claim. | | Establishes and maintains a substantive and credible claim or proposal. |
| Reading/ Research | Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation. | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation. | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

CHAPTER 5

WRITING LITERARY ARGUMENTS

Most of the essays you write about literature are **expository**— that is, you write to give information to readers. For example, you might discuss the rhyme or meter of a poem or examine the interaction of two characters in a play. (Most of the student essays in this book are expository.) Other essays you write may be **literary arguments** that is, you take a position on a debatable topic and attempt to change readers' minds about it. The more persuasive your argumentative essay, the more likely readers will be to concede your points and grant your conclusion.

When you write a literary argument, you follow the same process you do when you write any essay about a literary topic. However, because the purpose of an argument is to convince readers, you need to use some additional strategies to present your ideas.

Planning a Literary Argument

Choosing a Debatable Topic

Frequently, an instructor will assign a topic or specify a particular literary work for you to discuss. Your first step will be to decide exactly what you will write about. Because an argumentative essay attempts to change the way readers think, it must focus on a **debatable topic**, one about which reasonable people may disagree. **Factual statements**— statements about which reasonable people do *not* disagree — are therefore inappropriate as topics for argument.

Factual Statement: Linda Loman is Willy Loman's long-suffering wife in Arthur Miller's play Death of a Salesman.

Debatable Topic: More than a stereotype of the long-suffering wife, Linda Loman in Arthur Miller's play Death of a Salesman is a multidimensional character.

In addition to being debatable, your topic should be narrow enough for you to develop within your page limit. After all, in an argumentative essay, you will have

to present your own ideas and supply convincing support while also pointing out the strengths and weaknesses of opposing arguments. If your topic is too broad, you will not be able to discuss it in enough detail.

Finally, your topic should be interesting. Keep in mind that some topics — such as the significance of the wall in Robert Frost’s poem “Mending Wall” — have been written about so often that you will probably not be able to say anything very new or interesting about them. Instead of relying on an overused topic, choose one that enables you to write something original.

Developing an Argumentative Thesis

After you have chosen your topic, your next step is to state your position in an **argumentative thesis** — one that takes a strong stand. Properly worded, this thesis statement will lay the foundation for the rest of your argument.

One way to make sure that your thesis actually does take a stand is to formulate an **antithesis** — a statement that takes an arguable position opposite from yours. If you can construct an antithesis, you can be certain that your thesis statement takes a stand. If you cannot, your thesis statement needs further revision to make it argumentative thesis.

Thesis Statement: The last line of Richard Wright’s short story “Big Black Good Man” indicates that Jim was fully aware all along of Olaf’s deep-seated racial prejudice.

Antithesis: The last line of Richard Wright’s short story “Big Black Good Man” indicates that Jim remained unaware of Olaf’s feelings toward him.

Whenever possible, test your argumentative thesis statement on your classmates — either informally in classroom conversations or formally in a peer-review session.

✓ CHECKLIST Developing an Argumentative Thesis

- Can you formulate an antithesis?
- Does your thesis statement make clear to readers what position you are taking?
- Can you support your thesis with evidence from the text and from research?

Defining Your Terms

You should always define the key terms you use in your argument. For example, if you are using the term *narrator* in an essay, make sure that readers know you are referring to a first-person, not a third-person, narrator. In addition, clarify the difference between an **unreliable narrator**— someone who misrepresents or misinterprets events — and a **reliable narrator**— someone who accurately describes events. Without a clear definition of the terms you are using, readers may have a very difficult time understanding the point you are making.

Defining Your Terms

Be especially careful to use precise terms in your thesis statement. Avoid vague and judgmental words, such as *wrong*, *bad*, *good*, *right*, and *immoral*.

Vague: The poem "Birmingham Sunday (September 15, 1963)" by Langston Hughes shows how bad racism can be.

Clearer: The poem "Birmingham Sunday (September 15, 1963)" by Langston Hughes makes a moving statement about how destructive racism can be.

Considering Your Audience

As you plan your essay, keep your audience in mind. For example, if you are writing about a work that has been discussed in class, you can assume that your readers are familiar with it; include plot summaries only when they are needed to explain or support a point you are making. Keep in mind that you will be addressing an academic audience— your instructor and possibly some students. For this reason, you should be sure to follow the conventions of writing about literature as well as the conventions of standard written English (for information on the conventions of writing about literature, see the checklist in Chapter 2, p. 000.)

When you write an argumentative essay, always assume that you are addressing a skeptical audience. Remember, your thesis is debatable, so not everyone will agree with you — and even if your readers are sympathetic to your position, you cannot assume that they will accept your ideas without question.

The strategies you use to convince your readers will vary according to your relationship with them. Somewhat skeptical readers may need to see only that your argument is logical and that your evidence is solid. More skeptical readers, however, may need to see that you understand their positions and that you concede some of their points. Of course, you may never be able to convince hostile readers that your conclusions are legitimate. The best you can hope for is that these

readers will acknowledge the strengths of your argument even if they remain skeptical about your conclusion.

Refuting Opposing Arguments

As you develop your literary argument, you may need to **refute**—that is, to disprove—opposing arguments by demonstrating that they are false, misguided, or illogical. By summarizing and refuting opposing views, you more opposing arguments seem less credible to readers; thus, you strengthen your case. When an opposing argument is so strong that it cannot be easily dismissed, however, you should concede the strength of the argument and then point out its limitations.

Notice in the following paragraph how a student refutes the argument that Homer Barron, a character in William Faulkner’s short story “A Rose for Emily,” is gay.

Opposing
argument

A number of critics have suggested that Homer Barron, Miss Emily’s suitor, is gay. Certainly, there is some evidence in the story to support this

Concession

interpretation. For example, the narrator points out that Homer “liked the company of men” (Faulkner 000) and that he was not “a marrying man” (Faulkner 000). In addition, the narrator describes Homer as wearing yellow gloves when he took Emily for drives. According to the critic William Greenslade, in the 1890s yellow

Refutation

was associated with homosexuality (24). This evidence, however, does not establish that Homer is gay. During the nineteenth century, many men preferred the company of other men (as many do today). This, in itself, did not mean they were gay. Neither does the fact that Homer wore yellow gloves. According to the narrator, Homer was a man who liked to dress well. It is certainly possible that he wore these gloves to impress Miss Emily, a woman he was trying to attract.

Sample Literary Argument Essay

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CHAPTER 5 • WRITING LITERARY ARGUMENTS

Chase 1

Margaret Chase
Professor Sierra
English 1001
6 May 2005

The Politics of "Everyday Use"

Introduction

Alice Walker's "Everyday Use" focuses on a mother, Mrs. Johnson, and her two daughters, Maggie and Dee, and how they look at their heritage. The story's climax comes when Mrs. Johnson rejects Dee's request to take a hand-stitched quilt with her so that she can hang it on her wall. Knowing that Maggie will put the quilt to "everyday use," Dee is horrified, and she tells her mother and Maggie that they do not understand their heritage. Although many literary critics see Dee's desire for the quilt as materialistic and shallow, a closer examination of the social and historical circumstances in which Walker wrote this 1973 story suggests a more generous interpretation of Dee's actions.

Thesis statement

Background

On the surface, "Everyday Use" is a story about two sisters, Dee and Maggie, and Mrs. Johnson, their mother. Mrs. Johnson tells the reader that "Dee, . . . would always look anyone in the eye. Hesitation was no part of her nature" (000). Unlike her sister, Maggie is shy and introverted. She is described as looking like a lame animal that has been run over by a car. According to the narrator, "She has been like this, chin in on chest, eyes on ground, feet in shuffle" (000), ever since she was burned in a fire.

Chase 2

Unlike Dee, Mrs. Johnson never received an education. After second grade, she explains, the school closed down. She says, "Don't ask me why: in 1927 colored asked fewer questions than they do now" (000). Mrs. Johnson concedes that she accepts the status quo even though she knows that it is unjust. This admission further establishes the difference between Mrs. Johnson and Dee: Mrs. Johnson has accepted her circumstances, while Dee has worked to change hers. Their differences are illustrated by their contrasting dress. As show in Figure 1, Dee and

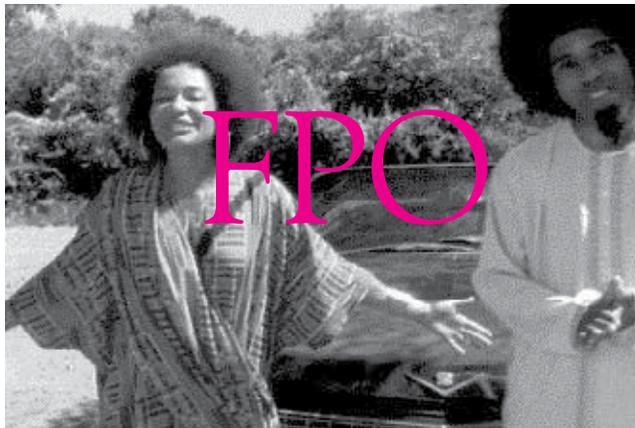


Fig. 1. Dee and Hakim arrive at the family home. "Everyday Use," The Wadsworth Original Film Series in Literature: "Everyday Use," dir. Bruce R. Schwartz, DVD (Boston: Wadsworth, 2005).

Chase 3

her boyfriend Hakim dress in the Afro-American style of the late 1960s, embracing their heritage; Mrs. Johnson and Maggie dress in plain, conservative clothing.

Background continued

When Dee arrives home with her new boyfriend, it soon becomes obvious that character is, for the most part, unchanged. As she eyes her mother's belongings and asks Mrs. Johnson if she can take the top of the butter churn home with her, it is clear that she is still very materialistic. However, her years away from home have also politicized her. Dee now wants to be called "Wangero" because she believes (although mistakenly) that her given name comes from whites who owned her ancestors. She now wears African clothing and talks about how a new day is dawning for African Americans.

Social and historical context used as evidence to support

The meaning and political importance of Dee's decision to adopt an African name and wear African clothing cannot be fully understood without a knowledge of the social and political context in which Walker wrote this story. Walker's own words about this time period explain Dee's behavior and add meaning to it. In her interview with White, Walker explains that the late 1960s was a time of cultural and intellectual awakening for African Americans. In an effort to regain their past, many turned to Africa, adopting the dress, hairstyles, and even the names of their African ancestors. Walker admits that as a young woman she too became interested in adopting an African heritage. (In fact, she herself

Chase 4
was given the name *Wangero* during a visit to Kenya in the late 1960s.) Walker tells White that she considered keeping this new name, but eventually realized that to do so would be to “dismiss” her family and her American heritage. When she researched her American family, she found that her great-great grandmother had walked from Virginia to Georgia carrying two children. “If that’s not a Walker,” she says, “I don’t know what is.” Thus, Walker realized that, over time, African Americans had actually transformed the names they had originally taken from their enslavers. To respect the ancestors she knew,



Fig. 2. Traditional hand-stitched quilt. Evelyn C. White, “Alice Walker: Stitches in Time,” interview, *The Wadsworth Original Film Series in Literature: “Everyday Use,”* dir. Bruce R. Schwartz, DVD (Boston: Wadsworth, 2005).

Chase 5

Walker says, she decided it was important to retain her name.

Along with adopting elements of their African heritage, many African Americans also worked to elevate the objects that represented their heritage, such as the quilt shown in Figure 2, to the status of high art. According to Salaam, one way of doing this was to put these objects in museums; another was to hang them on the walls of their homes. Such acts were aimed at convincing whites that African Americans had an old and rich culture and that consequently they deserved not only basic civil rights, but also respect. These gestures were also meant to improve self-esteem and pride within black communities (Salaam 42-43).

Concession and presentation of opposing argument

Admittedly, as some critics have pointed out, Dee is more materialistic than political. For example, although Mrs. Johnson makes several statements throughout the story that suggest her admiration of Dee's defiant character, she also points to incidents that highlight Dee's materialism and selfishness. When their first house burned down, Dee watched it burn while she stood under a tree with "a look of concentration" (000) rather than remorse. Mrs. Johnson knows that Dee hated their small, dingy house, and she knows too that Dee was glad to see it destroyed. Furthermore, Walker acknowledges in an interview with her biographer, Evelyn C. White, that as she was writing the story, she imagined that Dee might even have set the fire that destroyed the house

Chase 6

and scarred her sister. Even now, Dee is ashamed of the tin-roofed house her family lives in, and she has said that she would never bring her friends there. Mrs. Johnson has always known that Dee wanted "nice things" (000); even at sixteen, "she had a style of her own: and knew what style was" (257). However, although these examples indicate that Dee is materialistic and self-serving, they also show positive traits: pride and a strong will. Knowing that she will encounter strong opposition wherever she goes, she works to use her appearance to establish power. Thus, her desire for the quilt can be seen as an attempt to establish herself and her African-American culture in a society dominated by whites.

Mrs. Johnson knows Dee wants the quilt, but she decides instead to give it to Maggie. According to Houston Baker, when Mrs. Johnson chooses to give the quilt to Maggie, she is challenging Dee's understanding of her heritage. Unlike Dee, Mrs. Johnson recognizes that quilts signify "sacred generations of women who have made their own special kind of beauty separate from the traditional artistic world" (qtd. in Piedmont-Marton 45). According to Baker, Mrs. Johnson realizes that her daughter Maggie, whom she has long dismissed because of her quiet nature and shyness, understands the true meaning of the quilt in a way that Dee never will (Piedmont-Marton 45). Unlike Dee, Maggie has paid close attention to the traditions and skills of her

Refutation
of opposing
argument

Analysis of
Mrs. Johnson's
final act

Chase 7

mother and grandmother: she has actually learned to quilt. More important, by staying with her mother instead of going to school, she has gotten to know her family. She poignantly underscores this fact when she tells her mother that Dee can have the quilt because she does not need it to remember her grandmother. Even though Maggie's and Mrs. Johnson's understanding of heritage is clearly more emotionally profound than Dee's, it is important not to dismiss Dee's interest in elevating the quilt to the level of high art. The political stakes of defining an object as art in the late 1960s and early 1970s were high, and the fight for equality went beyond basic civil rights.

Conclusion
restating thesis

Although there is much in the story that indicates Dee's materialism, her desire to hang the quilt should not be dismissed as simply a selfish act. Like Mrs. Johnson and Maggie, Dee is a complicated character. At the time the story was written, displaying the quilt would have been not only a personal act, but also a political act—one with important, positive results. The final message of "Everyday Use" may just be that in order to create an accurate view of the quilt (and by extension African-American culture) you need both views—Maggie's and Mrs. Johnson's every-day use and Dee's elevation of the quilt to art.

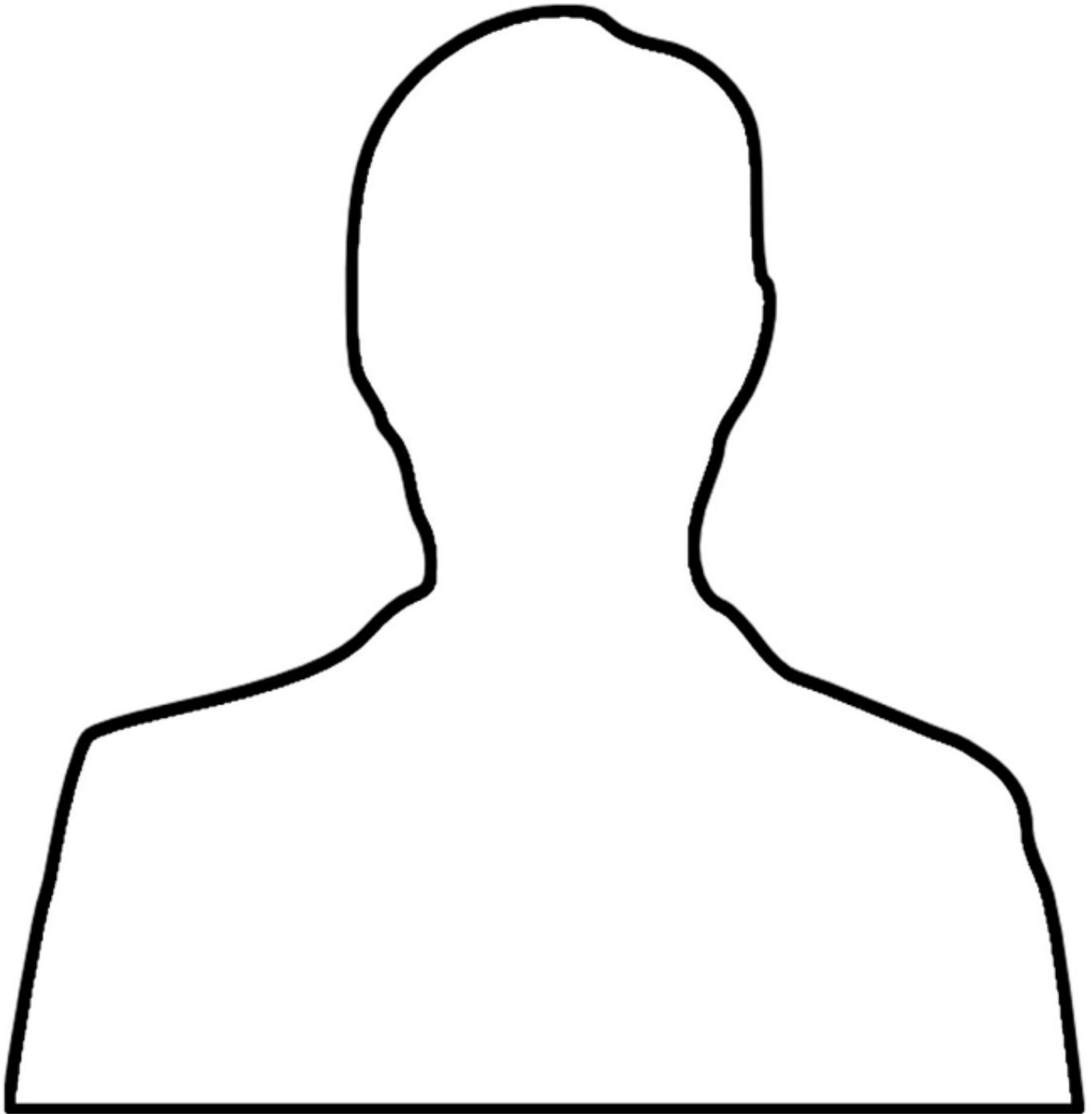
Chase 8

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Inferencing Silhouette

Name: _____



Vocabulary from Philip K. Dick's *Ubik*, Chapter Five

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Five. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

- | | | | |
|-----------------|---------------|-------------------|--------------------|
| percale (48) | careworn (51) | elongated (55) | loftiness (61) |
| feral (48) | miserly (53) | propensity (57) | anachronistic (63) |
| stupendous (49) | sentient (55) | encompassing (60) | hypnagogic (63) |
| optimistic (51) | | | |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> <hr/> | |

| | |
|--|---|
| Word I have chosen from Chapter Five: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter Six

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Six. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

infiltrated (64)

perambulated (68)

respiration (73)

psychedelic (67)

agitated (70)

resignation (77)

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

| | |
|--|---|
| Word I have chosen from Chapter Six: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter Seven

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Seven. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|----------------|-----------------|-------------------|---------------|
| saturated (81) | fiasco (85) | mandatory (92) | delegate (95) |
| vicarious (81) | tyranny (86) | numismatical (93) | oblivion (95) |
| voyeur (81) | disjointed (91) | faceting (93) | manifold (97) |
| unctuous (82) | | | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

| | |
|--|---|
| Word I have chosen from Chapter Seven: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter Eight

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Eight. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

variegated (98)

ersatz (102)

obsolescence (109)

deterioration (111)

hegemony (98)

antiquated (106)

grotesque (110)

manifestations (112)

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

| | |
|--|---|
| Word I have chosen from Chapter Eight: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> | |

Lesson 3

Consumerism: *Ubik* Chapters Five to Eight

In this lesson, you will . . .

- Keep a reading and research log during the reading of the central text, which you will use to summarize plot and character development, note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation, and learn to develop Level 2 questions, or questions that require deeper reading, interpretation and drawing conclusions.
- Participate in small and whole-group discussions of the texts, particularly related to the theme of consumerism. You are expected to come to class prepared, to refer to the text for evidence, and to ask questions of other students.
- Demonstrate your ability to apply strategies for locating words in a literary text that are unfamiliar to you and determine the meaning of those words, using both context clues and dictionaries.
- Practice skills related to writing a literary argument essay, including the following: identifying types of evidence and selecting appropriate evidence that can be used to support a writer's thesis statement; identifying mini-claims used in a text to support the larger argument; and presenting evidence to support a claim.

USING EVIDENCE EFFECTIVELY

Supporting Your Literary Argument

Directions: Read the following excerpts and mark up the text (i.e., underlining, highlighting, annotating).

USING EVIDENCE EFFECTIVELY

Supporting Your Literary Argument

Many literary arguments are built on **assertions**—statements made about a debatable topic—backed by **evidence** supporting examples in the form of references to the text, quotations and the opinions of literary critics. For example, if you stated that Torvald Helmer, Nora’s husband in Henrik Ibsen’s play *A Doll House*, is as much a victim of society as his wife is, you could support this assertion with relevant quotations and examples from the play. You could also paraphrase, summarize, or quote the ideas of literary critics who hold this opinion. Remember, only assertions that are **self-evident** (All plays include characters and dialogue) or **factual** (*A Doll House* was published in 1879) need no supporting evidence. All other kinds of assertions require support.

NOTE: Your thesis statement is an assertion that your entire essay supports. Keep in mind, however, that you can never prove your thesis conclusively—if you could, there would be no argument. The best you can do is provide enough evidence to establish a high probability that your thesis is reasonable.

Excerpt from *Feed*

Directions: Read the following chapter from *Feed* by M. T. Anderson. Pay particular attention to Violet’s “project” and the premise upon which she has based this project. Mark the text in whatever manner you would like (i.e., highlighting, underlining, circling, taking notes in the margins).

Lose the chemise

Notes

It was maybe, okay, maybe it was like two days after the party with the “never pukes when he chugalugs” that Violet chatted me first thing in the morning and said she was working on a brand-new project. I asked her what was the old project, and she was like, did I want to see the new one? I said, *Okay, should I come over to su casa? I’ve never been there, and she was like, No, not yet. Let’s meet at the mall.*

I was like, Okay, sure, fine, whatever swings your string, and she was all, Babycakes, you swing my string, which is a nice thing for someone to say to you, especially before you use mouthwash.

So I flew over to the mall near her house through the rain, which was coming down outside in this really hard way. Everyone had on all their lights until they got above the clouds. Up there it was sunny and people were flying very businesslike.

The mall was really busy, there were a lot of crowds there. They were buying all this stuff, like the inflatable houses for their kids, and the dog massagers, and the tooth extensions that people were wearing, the white ones which you slid over your real teeth and they made your mouth just like one big single tooth going all the way across.

Violet was standing near the fountain and she had a real low shirt on, to show off her lesion, because the stars of the *Oh? Wow! Thing!* had started to get lesions, so now people were thinking better about lesions, and lesions even looked kind of cool. Violet looked great in her low shirt, and besides that she was smiling, and really excited for her idea.

For a second we said hello and just laughed about all of the stupid things people were buying and then Violet, she pointed out that, regarding legs to stand on, I didn’t have very much of one, because I was wheeling around a wheelbarrow full of a giant hot cross bun from Bun in a Barrow.

I said, “Yum, yum, yum.”

She was like, “You ready?” I asked her what the idea was.

I guessed. "A lot?"

Notes

"Yeah. Yeah, a lot. He wanted to come, but it would have been, like, a month of his salary. He saved up for a year to send me. Then I went, and that stuff happened."

"He saved up for a year for you to go to the moon?"

"Yeah." She said, "Hey, here's what you can do. You can drop me at the feed technician's office. I have an appointment."

We made out for a minute in the car. Then I flew her a few miles away, to a technician. I left her there. Before I pulled out of the tube by his office, I looked back at her, standing by the door. She had her hands on her elbows. She was pinching the elbow skin and pulling it.

She waited there, pinching and pulling, and then went in.

Future Advertising: Dick's *Ubik* and the Digital Ad Mark Poster

Directions: Your teacher will read aloud an excerpt of Marc Poster's chapter, entitled "Future Advertising: Dick's *Ubik* and the Digital Ad." Read through the text a second time and underline the thesis statement. Place a star next to mini-claims that Poster puts forward.

Consumption changes significantly in the age of digital information. Acts of consumption—buying, window-shopping, browsing—are routinely recorded, stored and made available for advertisers. Profiles of the lifestyles of consumers are now so finely granulated and accurate that retailers are likely to know better than the consumer what he or she will buy and when the purchase will take place. Automated programs on one's computer, known as "bots," have better memories of consumer preferences than does the consumer. Information machines such as TiVo gather data of viewing habits and on that basis anticipate consumer desires for entertainment. The individual finds himself/herself in a brave new world of consumption, prefigured only in the imagination of science fiction writers. I shall investigate the current condition of consumption by reading closely one such work of science fiction, Philip K. Dick's *Ubik*, a work that presciently depicts the future of advertising.

It can be argued that the genre of science fiction is no longer possible. This is so for the simple reason that what some call the overdeveloped nations have so integrated into their social processes scientific achievements, technological novelties, and, above all, the system for the continued, indefinite development of science and technology that the distance has collapsed between what can be imagined in science fiction and what has been realized or can be foreseen to be realized in society. Science fiction requires the sense of a future as separate from the present. But this future is now part of the present expectations of everyday life. We anticipate that nanotechnology will make obsolete industrial labor; that cloning of human beings will initiate ethical dilemmas; that worldwide communication systems will bring about the demise of the nation state. These expectations are the life-world of the present and as such cannot be regarded as a future "other." With the proliferation of cyborgs, robots, clones, and androids, the age of the humachine has arrived. The future tense will have to be reimagined, probably outside the genre of science fiction. The social imaginary has integrated the research agendas of science and technology to such an extent that the future is imploded into the present.

In a sense, there can be no more aliens. In this spirit I shall explore the relation between Philip K. Dick's *Ubik* and the mediascape that we call the hyperreal. In particular, I shall examine the culture of advertising by comparing the representation of commodities in print and digital media. More specifically I shall compare, in the context of *Ubik*, the cultural role of the representation of commodities in print with that in various forms of digital ads. At issue is the difference of print and visual forms, analogue and digital formats. As a genre, science fiction has the advantage of exploring the relation of humans to machines, a relation that has become

a general aspect of the human condition. For quite some time, science fiction has been exploring what we now accept as the post-human. With the multiplication and dissemination of increasingly advanced information machines, the Earth has entered a post-human era. Our society has done so under the general regime of the commodity, which, at the cultural level, disseminates itself in the discourse of advertising. Dick's novel explores the Ubiquity of the ad and its relation to the formation of a humanity that is synthesized with information machines. In this essay I shall examine Dick's representation of the culture of the ad, with an eye to the light it sheds on the current state of advertising in new media. I shall ask if the digital form of the ad changes anything with respect to the construction of the subject? Does it matter that cyberspace is filled with ads, that ads on television are more and more produced with computer technology? Are we heading toward the world of Dick's *Ubik*?

In a strange confluence of events, Philip K. Dick's *Ubik* was published in 1969, the year of the first transmissions of information across telephone lines between computers, a technology now known as the Internet. Stranger still perhaps, Dick's novel is set in June 1992, some eight months before Mosaic, the first- web browser, was distributed on the Internet, signaling a transformation of the Net into graphic format and foreshadowing its mass adoption. In these coincidences, print media and digital media, separated by centuries of technical development, met, crossed, and went their separate ways.

Finding Claims and Evidence in a Literary Argument Essay

Directions: With a partner or small group, read the paragraphs excerpted from Mark Poster’s chapter on the pages that follow. For each paragraph, identify the claim and the evidence that Poster uses to support his claim.

Mark up the text in the following manner: for each paragraph, underline evidence, circle explanations and draw an arrow to claims being supported by the evidence.

MEDIA IN *UBIK*

Dick is sensitive to changes in media, to new media, to the role of media in people’s lives. For example, in a passage of no particular importance to the plot he takes the trouble to forecast an electronic newspaper (a “homeopape”) much like what currently exists on the Internet. One can format the homeopape to deliver one’s personally designed newspaper. Here is Dick’s description of the media: “Joe Chip ... twiddled the dial of his recently rented ‘pape machine ... he dialed off *interplan news*, hovered momentarily at *domestic news* and then selected *gossip*.” In Dick’s world, the ‘pape can speak: “‘Yes sir,’ the ‘pape machine said heartily.” And it is able to print out one’s selections in color and chosen fonts: “...a scroll of printed matter crept from its slot; the ejected roll, a document in four colors, niftily incised with bold type.” It also has the capability of voice recognition: “This isn’t gossip: Joe Chip said to the ‘pape machine.” In response to the character’s dissatisfaction with the news delivered to him, the machine gives instructions regarding its proper use. “The ‘pape machine said, ‘Set the dial for *low gossip*.” Like today’s intelligent agent programs and help menus, the Dick’s machine provides users with feedback on its best use. (Dick, 1969: 19-20) Although Dick does not explain how the machine obtains newspaper information, the reader must assume some electronic connection between the machine and a database of current news, in principle much like the Internet’s ability to store and to distribute information to any computer.

THE PRINT MEDIA

The novel consists of seventeen chapters, each starting with an epigraph. The first sixteen epigraphs are advertisements for a product called “Libik.” Here is the epigraph to the first chapter: “Friends, this is clean-up time and we’re discounting all our silent. electric Ubiks by this much money. Yes. we’re throwing away the blue-book. And remember: every Ubik on our lot has been used only as directed” (Dick. 1969: 1). Each advertisement is for a different product. They are cars, beer, coffee, salad dressing, headache and stomach medicine, shaving razor, kitchen cleaning aid, a bank, hair conditioner, deodorant spray, sleeping pills, breakfast food, bra, plastic wrap, breath freshener, and cereal, a list of ordinary consumer objects. Each ad contains a warning to the consumer like “Safe when used as directed!” None of the ads have any direct relation to the chapter they introduce. The chapter preceded by the ad for beer, for instance, contains no mention of beer or any beverage for that matter. Rather the ads appear on the printed page like commercials on radio and television, interrupting the

flow of the program, distracting the reader/viewer's attention from what has come before and what will follow, yet also justifying the text/program, as we shall see. Dick uses the epigraph, a device of the print medium, to emulate electronic broadcast media. In fact the tone of the epigraphs resembles the audio portion of ads in electronic media. The epigraphic voice is informal, plain, and solicitous, more like television than other print media such as magazines and newspapers. Dick's chapter epigraphs work against the limits and constraints of the conventional print format in which they serve as emblems or metonymies for the text that ensues, distinguishing themselves by their complete irrelevance to the body of the chapter.

In their discontinuity with the chapters, the ads however do inject commodity culture (in its print-mediated form) into the work. They provide a mood of commercialism, a spirit of the commodity that operates outside the story (for the most part) but nonetheless informs a general cultural character to the work. The ads address the reader as a member of a mediated (capitalist) culture. Further in that direction are the frequent small reminders of a money economy: for example, in apartments, doors and small appliances (such as coffee makers) require coins to operate. Dick leaves nothing to the reader's imagination concerning the capitalist nature of the world of *Ubik*. Yet this capitalism has a decidedly informational quality. Runciter Associates, once again, is a security firm that provides antidotes to information piracy. True enough, the thieves are not mechanical but psionic, individuals with extraordinary psychic abilities. The effect however is very much the same as the security problems in late capitalism or postmodern society where information machines penetrate protected physical space to retrieve private data. The "psis," as Dick calls them, substitute easily for computerized databases hooked into networks, listening devices, global positioning systems, satellite photography, and the rest, culminating in a society where nothing can be hidden or secret.

The epigraphs then are an integral part of a general set up in which information is central to the social system, whether as advertising or as security issues. Although not the first writer to discover this insight, Dick senses that culture is becoming political and becoming mediated. It is also becoming vulnerable and at risk.

Vocabulary from Philip K. Dick's *Ubik*, Chapter Nine

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter Nine. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|-------------------|---------------------|---------------------|-------------------|
| periphery (117) | commodities (121) | introspection (123) | entropy (125) |
| lubricating (120) | philosophical (121) | retrograde (124) | dissolution (125) |
| obsolete (121) | caustically (122) | congealed (125) | synthetic (129) |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> <hr/> <hr/> | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 10

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 10. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|-------------------|----------------------|--------------------|-------------------|
| inexorably (131) | sardonic (136) | latent (138) | habituation (145) |
| devolved (134) | phantasmagoria (137) | degeneration (139) | phantasm (147) |
| ineffectual (136) | metamorphoses (138) | senile (143) | elixir (149) |
| disparity (136) | | | |

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 11

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 11. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

erratic (152)

isolationist (158)

manifestations (162)

semaphore (158)

baritone (161)

| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
|--|---|
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ _____ | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 12

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 12. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

potent (169)

proprietor (171)

amplitude (172)

acute (169)

oscillation (172)

esthetically (174)

indelible (170)

| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
|--|---|
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ _____ | |

Lesson 4

Humanity: *Ubik* Chapters Nine to 12

In this lesson, you will . . .

- Keep a reading and research log during the reading of the central text, which you will use to summarize plot and character development, note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation and to learn to develop Level 2 questions, or questions that require deeper reading, interpretation and drawing conclusions.
- Participate in small and whole-group discussions of the texts, particularly related to the theme of humanity. You are expected to come to class prepared, to refer to the text for evidence and to ask questions of each other.
- Demonstrate your ability to apply strategies for locating words in a literary text that are unfamiliar to you and determine the meaning of those words, using both context clues and dictionaries.
- Be able to identify types of evidence and select appropriate evidence that can be used to support a writer's thesis statement; you will be able to identify the mini-claims used in a text to support the larger argument and will understand how evidence is presented for a claim.
- Independently select appropriate evidence that can be used to support a thesis statement and will write a paragraph in which that evidence is appropriately embedded, based on your reading of an interview with author Philip K. Dick.

An Interview With America's Most Brilliant Science-Fiction Writer (Philip K. Dick) by Joe Vitale

[source: *The Aquarian*, No. 11, October 11-18, 1978; *PKD OTAKU*, No. 4, 2002]

Directions: Read the interview with Philip K. Dick. After you have read the interview, work independently to write a paragraph—on the page following the interview—that presents evidence drawn from the interview to support the thesis statement provided below.

AQUARIAN: When did you decide that you wanted to be a science fiction writer?

DICK: Well, I knew I wanted to be a writer of some sort very early in my life. My mother was an editor for the U.S. Department of Labor but her ambition was to write and sell stories and novels. It was from her that I got the idea that writing was a very important thing.

I started on my first novel when I was 13 years old. It was called *Return to Lilliput* and was never completed.

I got interested in science fiction, however, totally by mistake. I was interested in science when I was a boy. I wanted to be a paleontologist. One day I went to the local candy store to buy a copy of *Popular Science* and came across something by mistake called *Stirring Science Stories*. I didn't really know what it was but it only cost 15 cents (a nickel more than a comic book). What it turned out to be, of course, was a science fiction magazine (at that time called *Pseudo-Science*). And, boy, there were some really great stories in there! People went back in time, other people fell over a wall that only had one side so when they fell over they were back on the first side again, others traveled to the center of the universe where there was a gigantic flat plane where you could walk around.

AQUARIAN: A point that was discussed at length in a *Rolling Stone* article about you in 1975 was the break-in at your house in San Rafael in November 1971. Your home was burglarized, your file cabinets blown open and many of your personal papers stolen. The crime has never really been solved and you have stated that you think it was perpetrated by people who were trying to discredit you. Has any new evidence about the burglary surfaced in the intervening years? Are you more certain now about exactly what happened and why?

DICK: That whole thing is something that fills me with a great deal of anxiety. I try not to think about it.

No new evidence has surfaced since then. I don't think any will. The only thing that's happened since then is that a producer came down to visit me one time from Hollywood and said, "I've researched you and know you were driven out of Marin County (which is where the break-in took place)." And I said, "really?" And he said, "Yeah, you were a dope guru to high school kids and someone took a shot at you." And I said, "Gee, that's really interesting. I always wondered why the cops told me to get out of Marin County or I'd be shot in the back some night or worse."



Obviously that's what the cops thought I was. It's like in my novel, *Flow My Tears, The Policeman Said* (1974), where the cops know more about you than you know yourself. I didn't know I was a dope guru to high school kids. I had lectured to high schools in Marin County. I had never discussed dope. But maybe they put together the fact that I've dealt with drugs thematically in my work and the fact that high school kids were always coming to my house and concluded that I was a pusher.

I remember after the burglary the police questioned me as to whether I was "teaching" the kids things. I had posters on my walls from the Russian Revolution, which I thought were very beautiful aesthetically, but they did say things like, "Workers of the World Unite. You have nothing to lose but your chains."

I mean, it's a very frightening thing when the head of a police department tells you that you better leave the county because you have enemies, and you don't know who these enemies are or why you've incurred their wrath.

I moved to Canada for a while and then down here to Orange County. I've cut my ties with just about everyone I knew in Marin County. I don't know if I'll ever find out what really happened. This whole thing is still very traumatic for me.

AQUARIAN: It seems that, throughout your career, you've always put yourself in a vulnerable position by opposing powerful forces within the country. Back in the 1950s, you published several short stories and novels that could have been labeled "subversive." In fact, you were one of the only science fiction writers doing those kind of stories. Didn't they get you in trouble with the authorities?

DICK: They did more than that. They got me many friendly visits from Mr. Smith and Mr. Scruggs of the FBI. They were members of the famous "Red Squad."

They came to my house every week for what seemed like ever and ever and ever. And they asked many questions about my life and my writings and my political philosophy.

This, of course, made me very angry and very frightened. They asked me all about my wife, about her political philosophy, about what student groups she belonged to.

I mean I honestly expected to be called before the House Un-American Activities Committee. But I guess they didn't consider science fiction writers that important.

AQUARIAN: Do you think there's any connection between that and the break-in at your house?

DICK: I really don't know. In the early Sixties I *did* write a novel about a phony war between the United States and Russia that's carried out with the sole purpose of keeping the citizens of those countries underground while the leaders lived in palatial splendor above ground. (*The Penultimate Truth*, 1964) In the novel, some Americans and some Russians are able to get above ground and find out what's really going on and they become friends.

Now maybe certain people thought this was too close to the truth and that I had some kind of information. Maybe that's why they wanted to get my files. I don't know.

At least Mr. Smith and Mr. Scruggs had the decency to identify themselves. I wish whoever it was that broke into my house had left a note saying “We are so-and-so, and we can be reached at the following number if you have any questions.”

Years later I wrote away for my FBI file under the “Freedom of Information Act.” Do you know what I had in it? Things like “... has a long beard and **frequented** the University of Vancouver.” “Frequented the University of Vancouver.” I delivered a lecture there! I was granted an honorary doctorate and was a guest of the faculty club. They made it sound like I hung out in the shadows selling dope.

AQUARIAN: Since drugs have cropped up in the discussion, it’s no secret that many of your novels have been seen as “drug-oriented” or as outgrowths of your own drug experiences. Since one of your most enduring themes has been the breakdown between illusion and reality, has drug taking been a positive influence in this regard?

DICK: No, absolutely not. There’s nothing good about drugs. Drugs kill you and they break down your head. They eat your head. In “White Rabbit,” Grace Slick says, “feed your head.” But I say, “What are you really feeding it?” You’re feeding it itself. Drugs cause the mind to feed on itself.

Look, I’ll be honest with you. There was a time in my life when I thought drugs could be useful, that maybe if you took enough psychedelics you could see beyond the illusion of the world to the nature of ultimate reality. Now I think all you see are the patterns on the rug turning into hideous things.

A friend of mine had a shower curtain with tigers on it. You know, one of those prints. During an LSD trip once, the tigers started moving and tried to eat him. So he ran outside into the back yard and burned the shower curtain.

That epitomizes drugs to me: some guy in his back yard burning his shower curtain.

I used to think that drugs put you in touch with something. Now I know that the only thing they put you in touch with is the rubber room of a psychiatric hospital.

My drug experiences have not manifested themselves in my work. Many critics have said that *The Three Stigmata of Palmer Eldritch* (1965) was the first “LSD novel.” I wrote that after reading a magazine article on hallucinogenics by Aldous Huxley.

Drugs have taken the lives of some very, very dear friends of mine.

AQUARIAN: Then what is the major influence on your work?

DICK: Philosophy and philosophical inquiry. I studied philosophy during my brief career at the University of California at Berkeley. I’m what they call an “acosmic pan-enthiest,” which means that I don’t believe that the universe exists. I believe that the only thing that exists is God and he is more than the universe. The universe is an extension of God into space and time.

That’s the premise I start from in my work, that so-called “reality” is a mass delusion that we’ve all been required to believe for reasons totally obscure.

Bishop Berkely believed that the world doesn't exist, that God directly impinges on our minds the sensation that the world exists. The Russian science fiction writer Stanislaw Lem poses that if there was a brain being fed a simulated world, is there any way the brain could tell it was a simulated world? The answer, of course, is no. Not unless there was a technological foul-up. Imagine a brain floating in a tank with millions and millions of electrodes attached to specific nerve centers. Now imagine these electrodes being selectively stimulated by a computer to cause the brain to believe that it was walking down Hollywood Boulevard chomping on a hamburger and checking out the chicks.

Now, if there was a technological foul-up, or if the tapes got jumbled, the brain would suddenly see Jesus Christ pass by down Hollywood Boulevard on his way to Golgotha, pursued by a crowd of angry people, being whipped along by seven Roman Centurions.

The brain would say, "Now hold on there!" And suddenly the entire image would go "pop" and disappear.

I've always had this funny feeling about reality. It just seems very feeble to me sometimes. It doesn't seem to have the substantiality that it's suppose to have.

I look at reality the way a rustic looks at a shell game when he comes into town to visit the fair. A little voice inside me says, "now wait just a second there..."

AQUARIAN: Religion and religious inquiry also occupy a very prominent place in your writing.

DICK: I've always been interested in religion. In man's relationship with is god, what he chooses to worship. I was raised a Quaker but converted to Episcopalianism very early in my life.

The new novel I'm currently working on for Bantam Books has its basis in theology and what I've had to do, in short, is to create a new religion right from scratch.

It reminds me of something a girl said to me a couple of weeks ago. She said, "You're really smart, too bad you're not religious." (Laughs) And here I am doing nothing all day but reading the Bible, the Apocrypha, the writings of Gnosticism, histories of Christianity. I'll tell you, I could go out and get a degree in theology right now!

It seems like a natural progression of sorts. I got badly burned in the political arena. I was hounded by Mr. Smith and Mr. Scruggs. I would literally get thrown out of Socialist and Communist Party meetings when I was in college for disagreeing with party doctrine. And so I turn to religion, and I find incredible bigotry. Two thousand years of history and the names change but the activity remains the same. Somebody was always throwing someone else into prison for his beliefs or burning him at the stake.

I believe that the establishment churches have lost the keys to the kingdom. They don't even know what the Kingdom of God is.

It's like some guy who loses the keys to his car. He knows he had them a second ago but now they're gone. The churches, however, don't even know what the car looks like anymore. They can't even give a description of it to the cop.

Organized religion is crooked, dumb, and it's lost the keys. I mean, it's OK to be crooked and dumb, we're all crooked and dumb. But the tragedy is that they've lost the keys. They can't even point us in the right direction much less take us there.

The whole question of religion is very melancholic. It makes me very sad really. I mean, I've read so much and still, I haven't found God. We have a "deus abscondatus," a hidden God. As Plato says, "God exists but He is hard to find."

I've spent the majority of my life studying and reading and seeking God, but, of course, the thing is you can't find God. God has to find you. I've learned that.

AQUARIAN: To abandon your themes for a moment and talk about your style, your writing has always been concerned with people rather than technology. Other science fiction writers concentrate on the nature of alien environments, methods of time and space travel, etc., but you're more concerned with human beings, their interactions, their everyday affairs. How do you account for this?

DICK: During the time when I was first beginning to write, I was kind of experimenting with different characters. I was looking for a type of person who would express my innermost observations, ideas, desires.

I was reading a lot of English and American literature, all the novels of Huxley, all the novels of Orwell, Maugham, Thomas Wolfe, D.H. Lawrence. And when I was reading Sinclair Lewis' *Babbit*, I found my character. Babbit. You know, Babbit walks around saying things like, "My car is not gonna start today. I know it, I know it." Everybody else just gets into their cars and turns the keys and they don't think about it. Not Babbit. And so I said, "There's my character. That's him."

You can say I'm like the Nineteenth Century French novelists. I write about the human predicament. And it doesn't matter if it's centuries in the future, the predicament is still the same.

I'm with the little man. I wouldn't be with the "superman" characters for all the money in the world. You know, the characters in Ayn Rand and Heinlein who have such a contempt for everybody. Because one day that little man is gonna rise up and punch the superman out and I want to be there when it happens.

AQUARIAN: In terms of broad acceptance, science fiction has undergone quite a change in the last few years. Always considered a popular, inferior brand of writing, it has now been accepted, not only by the masses but by the academic community. Science fiction courses are now part of almost every English department, people are doing theses and doctoral dissertations on science fiction. What do you think of all this?

DICK: I hate it. I just hope we can survive it.

You know, we've survived complete obscurity. We survived complete condescension, the "are you people really doing anything serious?" attitude. I hope we can survive acceptance. It's really the most dangerous thing.

You know, sometimes I think it's all a plot, to praise you and accept you and treat you like a serious literary form. Because in that way they can guarantee your demise.

The only thing that's worse than being treated as "not serious" is being treated as "serious." I'd much rather be ignored. And this "scholarly" science fiction criticism is the worst.

You know, if they can't destroy you by ignoring you, they can destroy you by annexing you.

They, the literary critics, write these incredibly turgid articles which see all this "meaning" in your writing. The end result, I guess, is to drive all your readers away screaming.

AQUARIAN: What is the most important quality for a writer to have?

DICK: A sense of indignation. As I said, science fiction was effective for so many years because it was a rebel art form. It wasn't accepted. The idea was to offend people. But not just with garbage. Just because something is offensive crap doesn't necessarily mean it's any good.

But there is nothing else, really, for a writer to do. He must offend people if he's going to be effective. It's like someone once said about opera. "Stab a tenor and he sings." Stab a writer—or step on his toes—and he'll write. It's an automatic reflex reaction. A writer writes because it's his response to the world. It's a natural process, like respiration.

But above all, a writer must have a capacity for indignation. The capacity for indignation is the most important thing for a creative person. Not the aesthetic capacity but the capacity for indignation. And especially indignation at the treatment afforded other people.

It's like the trials of the dissidents that are going on now in Russia, or when you see a blind and deaf baby on TV like I did last night.

To see some of the things that are going on in the world and to feel indignant, at God, at the Soviet Union, at the United States, at the military, *that* is the greatest capacity in the world.

To see a blind and deaf baby and to feel anger, to feel fury, at the starving of children and the arrest of political dissidents. **That** is the basis of the writer.

Vocabulary from Philip K. Dick's *Ubik*, Chapter 13

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 13. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

| | | | |
|---------------------|------------------|-------------------|----------------------|
| coagulated (179) | lithely (182) | tropism (185) | polymorphic (187) |
| psychosomatic (181) | sedately (183) | alchemy (185) | expenditure (188) |
| ingot (181) | infiltrate (184) | malevolence (186) | substantiality (188) |
| inertia (182) | pedantic (185) | harbingers (187) | constituents (190) |

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> <hr/> | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 14

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 14. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

convulsed (193)

solicitous (194)

encephalograms (199)

fragmentary (193)

retrograde (195)

arduous (200)

conjunction (193)

malignant (195)

inherent (194)

sadistic (195)

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 15

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 15. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

enervation (203)

chitinous (206)

tangible (208)

leer (205)

residual (207)

| | |
|--|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): <hr/> <hr/> | |
| Dictionary definition: <hr/> <hr/> | |
| What in the world does that mean? <hr/> <hr/> | |
| My sense of the word, including the context and the dictionary definition, in my own words: <hr/> <hr/> <hr/> <hr/> | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 16

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 16. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

atavisms (212)

idiosyncrasy (216)

verity (218)

excrete (215)

somberly (217)

aversion (222)

deformation (216)

succumb (218)

transcendental (222)

neolithic (216)

nullify (218)

centripetal (224)

| | |
|---|---|
| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Vocabulary from Philip K. Dick's *Ubik*, Chapter 17

Directions:

Choose ONE of the words from the list in the box below and ONE unfamiliar word from Chapter 17. For each of your words, complete the chart below. Remember to use the context of the word (the sentence in which it is found) to help you understand the dictionary definition.

Choice words and the page numbers on which they can be found:

rapidity (227)

intuition (227)

| Word from the list: | My understanding of this word is (circle one): Excellent Fair Poor |
|---|---|
| Context (including page number): _____ _____ | |
| Dictionary definition: _____ _____ | |
| What in the world does that mean? _____ _____ | |
| My sense of the word, including the context and the dictionary definition, in my own words: _____ _____ _____ _____ | |

Lesson 5

Concluding and Resolving the Novel

In this lesson, you will . . .

- Keep a reading and research log during the reading of the central text, which you will use to summarize plot and character development, to note rhetorical patterns, make inferences, evaluate how those patterns influence interpretation and to learn to develop Level 2 questions, or questions that require deeper reading, interpretation and drawing conclusions.
- Participate in small and whole-group discussions of the texts, particularly focusing on resolving the puzzles presented by the novel. You are expected to come to class prepared, to refer to the text for evidence and to ask questions of other students.
- Demonstrate your ability to apply strategies for locating words in a literary text that are unfamiliar to you and determine the meaning of those words, using both context clues and dictionaries.
- As preparation for writing a literary argument essay, draw on your knowledge of the thesis statement/mini-claim/evidence structure, as well as your reading and interpretation of the novel to prepare a concise statement of an argument drawn from Chapters 13-17 of *Ubik*.
- Address the conclusion of the novel and develop text-supported explanations for the events that conclude the storyline.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a space for students to take notes or complete assignments.

Categorizing Mini-Claims

Directions: With a partner, examine the mini-claims that you and your fellow students created. Group the mini-claims into categories in the space below.

Reviewing Evidence

Directions: With a partner, review the evidence that your class has collected. In the space below, note any gaps or contradictions in the evidence collected, what evidence seems particularly compelling and what evidence goes with which mini-claim.

Gaps or contradictions:

What evidence is particularly compelling?

What evidence goes with what mini-claim?

Writing a Simplified Argument Structure

Directions: Working on your own, use the argument template to complete a simplified argument structure for the statement on which you worked independently to develop reasons and evidence. Write your statement in the space below.

Although some readers claim

I believe

because [state over-arching reason(s) here]

My point is made when [insert textual evidence here, in as many sentences as needed]

Though I concede that

I maintain that

Lesson 6

Writing a Literary Argument

In this lesson, you will . . .

- Plan for your writing of a literary argument essay and do pre-writing activities to prepare for this writing, including reviewing the assignment prompt, creating a project timeline, collecting appropriate information from their class materials, noting gaps in this information, finding additional resources, writing a summary paragraph and creating an outline.
- Write a draft of a literary argument essay on one of three prompts relating to *Ubik*.
- Revise and edit your draft of a literary argument essay on one of three prompts relating to *Ubik* and turn in your final drafts for feedback and scoring.

Literary Argument Essay

Directions: Review the literary argument essay assignment below.

How is the exponential increase of information that we process in all forms of media affecting the way we live? After reading *Ubik*, by Philip K. Dick and other informational texts, and conducting independent research, write an essay in which you address one of the prompts below (or an approved topic of your choosing) and argue the thesis. Be sure to acknowledge opposing views. Support your position with evidence from the texts.

Prompts

- a) Philip K. Dick and other authors featured in this unit express views on consumerism and its impact on society. Examine their multiple viewpoints. Take a position on the viewpoint you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- b) How do Philip K. Dick and the other authors featured in this unit portray characters' attempts to maintain a sense of personal identity in a technological society? Take a position on the technique used to portray personal identity you find most convincing and explain why. Support your argument with specific, relevant evidence from the texts.
- c) How does the technology in these texts shape society's views on what it means to be human? Are these views different when considered on an individual basis? Take a position on the impact of technology on humanity and explain why. Support your argument with specific, relevant evidence from the texts.

Timeline for Writing Literary Argument Essay

Directions: Use the graphic organizer below to create a timeline for your project.

| | How and when will I do this? | What resources do I need? |
|----------------------------------|------------------------------|---------------------------|
| Review Assignment | | |
| Collect notes and look for holes | | |
| Collect additional research | | |
| Write a summary paragraph | | |
| Create an outline | | |
| Write a rough draft | | |
| Revise and edit | | |
| Submit final draft | | |

Evaluating Source Material

Directions: Once you have completed highlighting notes throughout your academic notebook and materials written on your avatar parking lot, write a response to the following questions in the space below:

a) What sources do I have available for responding to this prompt?

b) What holes are there in the information that I have?

c) Where might I find additional information to fill in holes?

Classical Argument Structure

- I. Introduction to general topic which leads to a clear thesis.
- II. A moment of definition, background and/or precedence (this is a section which clarifies and gives history on the topic or your stance on it).
- III. Support 1: This is typically the most logical reason why one should support your claim.
 - a. Include evidence.
 - b. Backing for evidence.
- IV. Support 2: This is typically a side of the argument most don't think about. Perhaps it is a little known effect of the issue that interests and compels your reader to continue with you while you argue your point.
 - a. Include evidence.
 - b. Backing for evidence.
- V. Support 3: This is typically the strongest support of your claim. It is generally positioned last to deliver the most impact. It may include a staggering fact, testimony or statistic. It also might include a very emotional appeal that the audience can relate to. You want this to build into a very strong, winning conclusion.
 - a. Include evidence.
 - b. Backing for evidence.
- VI. Concession: One way ethos (ethical appeal) is maintained is through presenting yourself as a fair and knowledgeable writer. In order to most effectively illustrate this, writers will give a nod or concession to opposing viewpoints. For example, if you were arguing against the death penalty, this may be a place where you recognize legitimate reasons for why one might consider the death penalty. It is also a good idea to cite outside sources in this section. This does not weaken your argument. Rather, it shows you are aware of multi-perspectives on this issue and aren't afraid or apprehensive to note them because you will also refute them.

**Concession does not have to follow in this order. Some writers include concession after the "definition" section so that they can dedicate their supports one through three to the refutation.*

 - a. Consider evidence, and
 - b. Backing for evidence.
- VII. Refutation: In this section, you refute the concession. Even though you concede to an outside perspective, you remind your readers that either: a) there may be some kind of logical error in the other perspective, or b) that, even though this outside perspective may be valid, the harm or benefits do not outweigh those of your perspective.
 - a. Include evidence.
 - b. Backing for evidence.
- VIII. Conclusion: Unlike the traditional "summary" conclusion this is the space wherein you want to really drive home your claim. You may recap your essay here, but the last note needs to strongly appeal to your audience to consider your perspective. Think of it as a moment of "grand standing" or the rallying end of a speech.

Additional Notes:

You can have more than three supports.

Your support sections do not have to be each one paragraph. Perhaps the first support is two paragraphs, the second is one, and the third is three. Try to vary the support paragraphs so that they do not feel formulaic.

You can use first person, but AVOID 2ND PERSON: NO YOU, YOUR.

Your paper does not have to strictly follow this guide—this simply touches on the elements of a classical argument.

http://ap.madecky.lakegeneva.badger.groupfusion.net/modules/locker/files/get_group_file.phtml?gid=87845&fid=15184475)

Support 3 (*include evidence and backing for the evidence*):

Additional Support (*include evidence and backing for the evidence*):

Concession:

Editing & Revision Checklist – Literary Argument Essay

Paper's Author

Paper's Editor

Directions for the editor: Answer all questions to the best of your ability. The writer's grade somewhat depends on you. If you have questions or you are not sure about something, ask your teacher. You need to read the paper several times. Do not skip sentences. Do not skim. Read very closely. Even read aloud quietly, so you can hear problems.

Directions for the author (after the peer editing process): Make any changes necessary to gain a yes answer to all questions.

Title:

- | | | | | |
|--------------------------|-----|--------------------------|----|---|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 1. Is there a title? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 2. If "Yes," is the title specific and supported by the paper? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 3. Is the title centered? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 4. The title should not be not underlined, italicized, or quoted. Did the writer do this correctly? |

Introduction (Controlling Idea/Focus):

- | | | | | |
|--------------------------|-----|--------------------------|----|--|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 1. Is there an attention-getter? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 2. Is there background information about the topic? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 3. Is there a good transition between the attention-getter and essential information? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 4. Is there a thesis statement? Mark the thesis statement on the paper. Put a bracket next to it on the left side. |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 5. Is the thesis supported by the topic sentences throughout the paper? |

Body Paragraph #1 (Reading/Research, Conventions, Development, Organization):

- | | | | | |
|--------------------------|-----|--------------------------|----|---|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 1. Is there a topic sentence and is it the first or second sentence in the paragraph? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 2. Does the writer introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase. |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 3. Does the writer provide citations after each quote or paraphrase? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence? |

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Body Paragraph #2 (Reading/Research, Conventions, Development, Organization):

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Does the writer introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Does the writer provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Body Paragraph #3 (Reading/Research, Conventions, Development, Organization):

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Does the writer introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Does the writer provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Body Paragraph #4 (Reading/Research, Conventions, Development, Organization):

- Yes No 1. Is there a topic sentence and is it the first or second sentence in the paragraph?
- Yes No 2. Does the writer introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase.
- Yes No 3. Does the writer provide citations after each quote or paraphrase?
- Yes No 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence?

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Subsequent Body Paragraphs (Reading/Research, Conventions, Development, Organization):

- | | | | | |
|--------------------------|-----|--------------------------|----|---|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 1. Is there a topic sentence and is it the first or second sentence in the paragraph? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 2. Does the writer introduce all quotes and paraphrases by setting up their context? This means that there might be a little summary before the quote so that the reader knows the origin of the quote or paraphrase. |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 3. Does the writer provide citations after each quote or paraphrase? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 4. After the quote, is there some kind of explanation of how the quote supports the topic sentence? |

Make sure the body paragraph does not start or end with a quote. Help your partner with transitions.

Conclusion (Content Understanding):

- | | | | | |
|--------------------------|-----|--------------------------|----|---|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 1. Does the writer refer to the thesis in some way without directly restating it? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 2. Does the writer avoid introducing new information in the conclusion? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 3. Is the author's concluding sentence meaningful and memorable? |

Works Cited Page (Conventions):

- | | | | | |
|--------------------------|-----|--------------------------|----|--|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 1. Is the title Works Cited centered at the top? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 2. Has the author used at least four different sources? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 3. Are all of the author's sources those required for this assignment (one book, two periodicals, one web - .edu or .gov)? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 4. Is only the first line of each source left aligned with the side of the paper? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 5. Are the sources in alphabetical order? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 6. As much as you can tell, is each source listed in the correct format? |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | 7. Is the entire page double-spaced? |

Grammar/Mechanics Checklist (Conventions):

1. Read through the entire paper and look at all of the words that end with –s. Check and make sure that the writer didn't forget to make a possessive –s. On the paper, put 's (apostrophe s) any where it is needed.
2. Read through the entire paper and look for any sentence that begins with the following words: **when, because, since, if, although, after, even though, while, in order that.** First, make sure these sentences are not fragments. Second, **make sure there is a comma after the subordinate clause.**
3. Check for sentences beginning with the word **“So.”** Get rid of the word. It probably isn't needed. Do the same for sentences beginning with **“And”** or **“But.”**
4. Circle any use of the words **“you,” “your,” “me,” “I,” “we,”** and so on. Suggest how the writer can avoid these words.
5. Read through the entire paper. Mark all uses of the words **“they”** and **“their,”** and make sure that the antecedents are plural. Also check to make sure there is a clear antecedent for these words.
6. Mark all uses of the words **“this,” “that,” “these,”** or **“those.”** Remind the writer to follow these words with specific nouns.
7. Read the entire paper and make sure that all sentences make sense. Mark sentences that don't make sense and suggest how the writer can change them.
8. Read the entire paper again and make sure that all words are **spelled correctly.** Circle words that are questionable. Check for common misspelled words: *then, than, effect, affect, its, it's, their, there, to, too, two.*
9. Check all quotes. Make sure that they are not by themselves and that they have correct MLA citations. Make sure that the sentences are punctuated correctly. And make sure that the page numbers are done right.
10. Make sure that titles are properly designated by *italics*, **underlining**, or **quotation marks.**
11. Read through the entire paper and check every time the writer uses the word **that.** Make sure it shouldn't be **who.**
12. Check every comma in the paper, and make sure that it is not bringing together two complete sentences.
13. Check all of the following words: **and, but, so, for, or.** Make sure that there isn't a comma needed. Ask your teacher if you are not sure. If these words are bringing together two complete sentences, then use a comma before the conjunction.
14. Anytime you see a **colon (:)** or a **semi-colon (;)**, make sure that it is used correctly.
15. Read the paper one last time and make sure that there are no other mistakes that you can identify. Check for transitions, double negatives, verb forms, subject-verb agreement, and so on. Help the writer get an A.
16. Check to make sure that the entire paper is in **consistent tense** (no shifting from past to present, etc.).
17. Check all verbs ending with –ing, and make sure you can't change it. You are looking for passive verbs: some form of the verb *be* + the past participle of the verb.
Example: “Many options *were tried* by the soldiers.” can be changed to “The soldiers *tried* many options.” Check to make sure that passive sentences couldn't be better if they were *active.*

MLA In-Text Citations: The Basics

Guidelines for referring to the works of others in your text using MLA style is covered in your language textbook as well as on several on-line sources. All provide extensive examples, so it's a good idea to consult them if you want to become even more familiar with MLA guidelines or if you have a particular reference question. The On-Line Writing Lab at Purdue University website is <http://owl.english.purdue.edu/owl/resource/557/02/>. The following information comes from that website.

Basic In-Text Citation Rules

In MLA, referring to the works of others in your text is done by using a parenthetical citation. Immediately following a quotation from a source or a paraphrase of a source's ideas, you place the author's name followed by a space and the relevant page number(s).

Human beings have been described as “symbol-using animals” (Burke 3).

When a source has no known author, use a shortened title of the work instead of an author name. Place the title in quotation marks if it's a short work, or italicize or underline it if it's a longer work.

Your in-text citation will correspond with an entry in your Works Cited page, which, for the Burke citation above, will look something like this:

Burke, Kenneth. Language as Symbolic Action: Essays on Life, Literature, and Method. Berkeley: U of California P, 1966.

We'll review how to make a Works Cited page later, but right now it's important to know that parenthetical citations and Works Cited pages allow readers to know which sources you consulted in writing your essay, so that they can either verify your interpretation of the sources or use them in their own scholarly work.

Multiple Citations

To cite multiple sources in the same parenthetical reference, separate the citations by a semi-colon:

...as has been discussed elsewhere (Burke 3; Dewey 21).

When Citation is *Not* Needed

Common sense and ethics should determine your need for documenting sources. You do not need to give sources for familiar proverbs, well-known quotations or common knowledge. Remember, this is a rhetorical choice, based on audience. If you're writing for an expert audience of a scholarly journal, he'll have different expectations of what constitutes common knowledge.

In-Text Citations: Author-Page Style

MLA format follows the author-page method of in-text citation. This means that the author's last name and the page number(s) from which the quotation or paraphrase is taken must appear in the text, and

a complete reference should appear on your Works Cited page. The author's name may appear either in the sentence itself or in parentheses following the quotation or paraphrase, but the page number(s) should always appear in the parentheses, not in the text of your sentence. For example:

Wordsworth stated that Romantic poetry was marked by a “spontaneous overflow of powerful feelings” (263).

Romantic poetry is characterized by the “spontaneous overflow of powerful feelings” (Wordsworth 263).

Wordsworth extensively explored the role of emotion in the creative process (263).

The citation, both (263) and (Wordsworth 263), tells readers that the information in the sentence can be located on page 263 of a work by an author named. If readers want more information about this source, they can turn to the Works Cited page, where, under the name of Wordsworth, they would find the following information:

Wordsworth, William. Lyrical Ballads. London: Oxford U.P., 1967.

Anonymous Work/Author Unknown

If the work you are citing to has no author, use an abbreviated version of the work's title. (For non-print sources, such as films, TV series, pictures, or other media, or electronic sources, include the name that begins the entry in the Works Cited page). For example:

An anonymous Wordsworth critic once argued that his poems were too emotional (“Wordsworth Is a Loser” 100).

Citing Authors with Same Last Names

Sometimes more information is necessary to identify the source from which a quotation is taken. For instance, if two or more authors have the same last name, provide both authors' first initials (or even the authors' full name if different authors share initials) in your citation. For example:

Although some medical ethicists claim that cloning will lead to designer children (R. Miller 12), others note that the advantages for medical research outweigh this consideration (A. Miller 46).

Citing Multiple Works by the Same Author

If you cite more than one work by a particular author, include a shortened title for the particular work from which you are quoting to distinguish it from the others.

Lightenor has argued that computers are not useful tools for small children (“Too Soon” 38), though he has acknowledged elsewhere that early exposure to computer games does lead to better small motor skill development in a child's second and third year (“Hand-Eye Development” 17).

Citing Indirect Sources

Sometimes you may have to use an indirect source. An indirect source is a source cited in another source. For such indirect quotations, use “qtd. in” to indicate the source you actually consulted.

For example:

Ravitch argues that high schools are pressured to act as “social service centers, and they don’t do that well” (qtd. in Weisman 259).

Citing the Bible

In your first parenthetical citation, you want to make clear which Bible you’re using (and underline or italicize the title), as each version varies in its translation, followed by book (do not italicize or underline), chapter and verse. For example:

Ezekiel saw “what seemed to be four living creatures,” each with faces of a man, a lion, an ox, and an eagle (New Jerusalem Bible, Ezek. 1.5-10).

All future references can then just cite book, chapter and verse, since you’ve established which edition of the Bible you will be using.

Formatting Quotations

When you directly quote the works of others in your paper, you will format quotations differently depending on their length. Below are some basic guidelines for incorporating quotations into your paper.

Short Quotations

To indicate short quotations (fewer than four typed lines of prose or three lines of verse) in your text, enclose the quotation within double quotation marks. Provide the author and specific page citation (in the case of verse, provide line numbers) in the text, and include a complete reference on the Works Cited page. Punctuation marks such as periods, commas, and semicolons should appear after the parenthetical citation. Question marks and exclamation points should appear within the quotation marks if they are a part of the quoted passage but after the parenthetical citation if they are a part of your text. For example:

According to some, dreams express “profound aspects of personality” (Foulkes 184), though others disagree.

According to Foulkes’s study, dreams may express “profound aspects of personality” (184).

Is it possible that dreams may express “profound aspects of personality” (Foulkes 184)?

Mark breaks in short quotations of verse with a slash, /, at the end of each line of verse: (a space should precede and follow the slash)

Cullen concludes, “Of all the things that happened there / That’s all I remember” (11-12).

Long Quotations

Place quotations longer than four typed lines in a free-standing block of text, and omit quotation



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Science Unit 1. Nutrition

Unit 1

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Unit 1

Course Overview

Overview and Rationale:

In this unit, students are introduced to disciplinary literacy in the sciences. Students will learn strategies for reading multiple types of text including science textbooks, research articles and news articles. They will also learn a variety of ways to write about science from personal reflection to public consumption and to comprehend science information in multiple representations including animations, diagrams, charts and tables.

How to Use This Unit:

We have designed this unit to be somewhat flexible. The pacing guide is based on 250 minutes of instruction per week. Lessons are not based on specific instructional minutes; they are designed conceptually. Thus, one lesson may run for 50 minutes and another 250 minutes. For each lesson you will find a list objectives and goals as well as a listing of activities and resources needed.

Students will use the academic notebook during each lesson. This notebook will provide a means to record notes, vocabulary and complete lesson activities. Thus, it will serve as a way to assess student learning. Students should be encouraged to add to their vocabulary collection each week. Additionally, students should complete the weekly reflections in the academic notebook to think about both the science and the literacy skills they are learning.

Students will complete multiple assessments; some graded, some ungraded. The three major assessments are: 1) a lab report, 2) group and individual quiz and 3) an informational pamphlet.

Unit Objectives:

1. Students will develop skills to critically examine science claims using multiple sources of information.
2. Students will understand the processes involved in evaluating science claims.
3. Students will learn about the components of science literacy.
4. Students will learn strategies for approaching both general and discipline specific vocabulary.
5. Students will explain the processes involved reading in the sciences.
6. Students will integrate ideas from lecture, lab, and text.
7. Students will to read and follow directions for a lab procedure, gather and record data, and summarize findings and conclusions.

8. Students will transform science information from visual to written form and vice versa.
9. Students will summarize, analyze and verbalize scientific stances.
10. Students will write informative and explanatory texts citing specific examples, using data-driven information and concrete details.

Week 1

Lesson 1: Evaluating Science Claims (125 minutes)

1. Students will be introduced to the course and to the idea of disciplinary literacy. They will learn to look for long noun phrases and multiple representations in science text.
2. Students will participate in our gateway activity on evaluating science claims. They will watch a video on an energy drink, read two text excerpts and one article abstract on an energy drink. They will use guiding questions to introduce them to the ways to evaluate science claims in the news by examining scientific evidence.
3. Students will compare and contrast the claims by creating a chart of their findings.

Lesson 2: Close Reading in the Sciences: Nutrition (125 minutes)

1. Students will learn about and practice close reading with a college-level science chapter on nutrition (Belk and Maier Chapter Three). Students will read and respond to text-dependent questions on Belk and Maier 3.1.
2. Students will learn the annotation strategy of text marking as a way to read closely and monitor comprehension of text.
3. Students will learn about how to approach both general and discipline-specific vocabulary using prefixes, roots and suffixes.
4. Students reflect on the processes involved while reading in the sciences.

Week 2

Lesson 3: Analogies in Science (125 minutes)

1. Students will begin to learn the concept of transforming science information. They will use a model of enzymes as puzzle pieces to understand the complexity of activation energy and induced fit.
2. Students will read and annotate Belk and Maier 4.1 on enzymes and metabolism.
3. Students will apply the concepts they learned about enzymes to solve and explain a case study on enzyme deficiency.

Lesson 4: The Complexity of Calories Part 1 (125 minutes)

1. Students will read and annotate Belk and Maier 4.1 section on calories. They will continue to learn about transforming science information by drawing a diagram of metabolic rate based on text information.
2. Students will conduct a lab on determining calorie content in food. They will learn to read and follow lab directions, gather and record data and write a lab report. During week two they will conduct the lab.
3. Students will complete the weekly reflection.

Week 3

Lesson 4: The Complexity of Calories Part 2 (75 minutes)

4. Students will analyze the results of the lab using their data chart.
5. Students will write up the results of their lab using a structured lab-reporting format.

Lesson 5: Transforming Science Information (100 minutes)

1. Students will read and annotate Belk and Maier 3.2 on transport across membranes. They will focus on understanding how the concepts function.
2. To aid their understanding they will view animations of the science processes as they read.
3. Students will learn to transform animations from visual to text and back to a visual representation.
4. Students will apply the principles of transformation of information to a static diagram in Belk and Maier.

Lesson 6: Synthesizing Knowledge Gained from Text Part 1 (75 minutes)

1. Students will read and annotate Belk and Maier 4.3.
2. Students will read an article on BMI.
3. Students will learn to take notes using the Cornell Method.
4. Students will complete the weekly reflection.

Week 4

Lesson 6: Synthesizing Knowledge Gained from Text Part 2 (75 minutes)

5. Students will take notes on a lecture about insulin.
6. Students will synthesize their knowledge on the complexity of calories by working in groups discussing reasons why counting calories may not be enough to maintain health.

Lesson 7: Taking Science Quizzes (175 Minutes)

1. Students will be introduced the concept of group quizzes as a way to learning and discussing science concepts at deeper levels.
2. Students will generate their own quiz review using two strategies—talk-throughs and reciprocal questioning—over the Belk and Maier Chapter Three and Four materials.
3. Using the strategies developed during week three, students will conduct the quiz review in small groups in class.
4. Students will take the quiz. First they will take it individually and then in their small group.
5. Students will reflect on the quiz addressing both their learning and their conceptual understanding.
6. Students will complete the weekly reflection.

Week 5

Lesson 8: Introduction to Science Research (150 minutes)

1. Students will be introduced to the final project where they will create an informational pamphlet about a nutrition-related topic.
2. Students will view sample pamphlets and will discuss the elements of effective pamphlets.
3. Students will learn the elements of reading scientific articles.
4. Students will learn strategies for conducting library searches.
5. Students will go to the library to research their topic.

Lesson 9: Research and Writing in Science Part 1 (100 minutes)

1. Taking notes from science articles.
2. Students will create an outline of the pamphlet.
3. Students will complete the weekly reflection.

Week 6

Lesson 9: Research and Writing in Science Part 2 (150 minutes)

4. Students will create an outline of the pamphlet.
5. Students will work on drafting, developing and editing their final project.

Lesson 10: Final Project Presentations (100 minutes)

1. Students will present the pamphlets to the class.
2. Students will have time for any state/local assessments.

Lesson 1

Evaluating Science Claims

Overview and Rationale:

This lesson introduces students to the purpose of the unit. They will begin to learn about disciplinary literacy in science, the ways scientists think when reading and writing and the literacy conventions that are specific to the sciences. These ideas will be reinforced throughout the unit as instructors model literacy processes and as students have an opportunity to try new ways to read, write, and learn in science. It is important for students to understand that they will be responsible for learning the science as they learn new strategies for reading and writing in the sciences.

This lesson also engages students in evaluating science claims. They will watch a short video on energy drinks and then read several articles about a particular energy drink called Oxygizer. This activity is designed to pique student interest as well as introduce the topic of evaluating science claims from multiple contexts. Students will learn several strategies for evaluating science claims. Students will learn to pay attention to where science evidence is coming from as well as to the science claims that are made. They will also think about the sample population, the data collected, and the way science is reported in the news. This way of thinking about science will allow students to begin to think about the structure and sequence involved in presenting scientific evidence. This way of viewing data is akin to what scientists do as they read claims derived from research.

Tasks/Expected Outcomes:

1. Students will be introduced to the two levels of thinking required in this unit: thinking like a scientist and thinking about learning in the sciences.
2. Students will learn about the components of science literacy.
3. Students will develop the skills to critically examine science claims.
4. Students will evaluate claims by using multiple sources of information.
5. Students will be able to explain the processes involved in evaluating science claims.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
 - (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s

message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (B) write procedural and work-related documents (e.g., résumés, proposals, college applications, operation manuals) that include:
 - (i) a clearly stated purpose combined with a well-supported viewpoint on the topic;
 - (ii) appropriate formatting structures (e.g., headings, graphics, white space);
 - (iii) relevant questions that engage readers and address their potential problems and misunderstandings;
 - (iv) accurate technical information in accessible language; and
 - (v) appropriate organizational structures supported by facts and details (documented if appropriate);
 - (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author's use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers' questions and contradictory information.
- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
 - (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and

- (C) critique the research process at each step to implement changes as the need occurs and is identified.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.

4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
1. Formulate research questions.
 2. Explore a research topic.
 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
2. Evaluate the validity and reliability of sources.
 3. Synthesize and organize information effectively.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Belk and Maier Chapter Three and Four
- 5-hour energy video — <http://www.brandfailure.com/5-hour-energy-commercial/>

Timeframe:

125 minutes

Targeted Vocabulary:

Words that Help You Discuss the Discipline

- science literacy
- theory
- Scientific method

Discipline Specific Vocabulary

- double-blind study
- oxygenated water beverage

General Academic Vocabulary

- skepticism
- slake

Activity One

Introduction to the Unit (Approx. 50 minutes)

Explain to students that in this unit students will learn both science content and reading and writing strategies to help them learn the content. They will also learn about disciplinary literacy, which are the specialized skills and strategies that scientists use. The goal of this unit is to help students prepare for college and career readiness in science.

In pairs, ask students to discuss the following questions:

1. What are some of some of the problems/challenges you have had with learning science in the past?
2. What do you think students need to know to learn science?

Discuss student responses as a whole class. Make sure that students understand that learning science is not “smarts” or some innate talent.

In general, students need to have some prior knowledge of science, an understanding of the way science is conducted and some effective ways to read, write, and understand science. These effective strategies are a part of learning disciplinary literacy in science. In this unit we will learn a variety of ways to make science learning more effective.

Ask students to open their academic notebook:

Turn to the course overview. Ask students to read these two paragraphs together. (Read aloud.)

FROM THE STUDENT ACADEMIC NOTEBOOK

Course Overview

Welcome to the first disciplinary literacy science unit of the SREB Readiness Course- Literacy Ready. What does disciplinary literacy in science mean? According to Shanahan & Shanahan (2012), disciplinary literacy refers to the specialized skills and strategies needed to learn at higher levels in each discipline. That means that how people approach reading and writing in the sciences would differ from how they approach it in history, English, mathematics or other fields. It also means that students need to learn more than the content in any particular discipline—they also need to learn how reading and writing are used within that field. So, disciplinary literacy in science in this unit will introduce you to the knowledge, skills and tools used by scientists.

You will learn to “make explicit connections among the language of science, how science concepts are rendered in various text forms, and resulting science knowledge” by learning ways to “develop the proficiencies needed to engage in science inquiry, including how to read, write, and reason with the language, texts, and dispositions of science” (Pearson, Moje, Greenleaf, 2010). These ideas are the principal focus of this unit. While certainly the content covered in this course is important, a primary purpose of this unit is to equip you with the tools necessary to be more successful in your college coursework. You will take part in many reading and writing activities aimed at improving your disciplinary literacy in science. To that end, the creators of the course have developed this Academic Notebook.

Ask students to examine a “juicy sentence” in-depth.

First, ask students to examine this quote “[literacy in science] makes explicit connections among the language of science, how science concepts are rendered in various text forms, and resulting science knowledge.”

Unpack this sentence. Ask, what does explicit connections mean? What do you think the language of science deals with? How does it differ from the language of, say history or mathematics? What are they talking about when they say that science concepts are rendered in various text forms? What does the word rendered mean? What kinds of these text forms have you encountered before (diagrams, charts, animations, etc)? Why does this result in science knowledge?

Ask students to think about this process. Ask, how did focusing on this juicy sentence impact your understanding? How does this differ from ways you have read in the past? (Skimming, reading but not really focusing or comprehending. This time I really had to pay attention). This unpacking of ideas and reading parts more than one time is a way to do “close reading,” a strategy students will use throughout this unit.

Discuss with students the idea that some of disciplinary ways that science is written and represented can make reading a challenge. Discuss two common science writing practices to look for in science text: Long noun phrases and multiple representations. These ideas will be developed further throughout this unit.

Long noun phrases: Ask students to find the noun in the following sentence:

Glass crack growth rate is associated with applied stress magnitude.

(Students might say glass but the first noun is actually a noun phrase *glass crack growth rate*.)

Then ask them to find the second noun phrase (applied stress magnitude).

Science is filled with these noun phrases that helps with the precision of ideas that is very important to scientists. Some other examples to share are:

- gene replacement therapy,
- primate genome sequences, and
- the polymerase chain reaction laboratory technique.

Ask students to turn to Lesson One in their academic notebook. Here they will find a section from the chapter on diet and nutrition. Ask students to work with a partner to find the noun phrases in this section.

FROM THE STUDENT ACADEMIC NOTEBOOK

Carbohydrates as Nutrients. Foods such as bread, cereal, rice, and pasta, as well as fruits and vegetables, are rich in sugars called carbohydrates. Carbohydrates are the major source of energy for cells. Energy is stored in the **chemical bonds** between the carbons, hydrogens, and oxygens that comprise **carbohydrate molecules**. Carbohydrates can exist as **single-unit monomers** or can be bonded to each other to produce **longer-chain polysaccharide polymers**.

The **single-unit simple sugars** are digested and enter the bloodstream quickly after ingestion. Sugars found in milk, juice, honey, and most refined foods are simple sugars. Fructose, the sugar found in **corn syrup**, is shown in figure 3.1 a.

When **multisubunit sugars** are composed of many different **branching chains of sugar monomers**, they are called **complex carbohydrates**. Complex carbohydrates are found in vegetables, breads, legumes, and pasta.

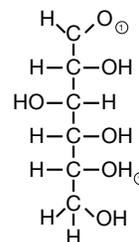
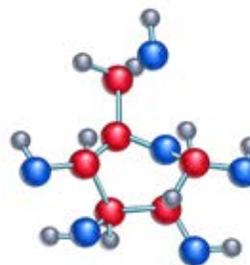
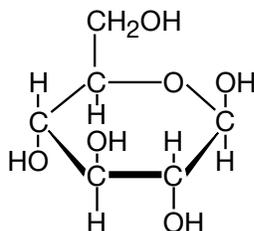
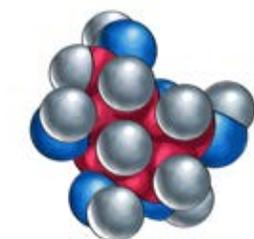
(Belk and Maier pages 56-57)

Tell students that being able to identify entire concepts by using a noun phrase is an essential skill for reading science and a skill we will continue to work on. At this point we want students to read these as a single phrase rather than as separate terms. They need to start linking the ideas together as they read.

Ask students to examine the four molecules in your notebook. Ask, what do these images have in common?

FROM THE STUDENT ACADEMIC NOTEBOOK

What do these images have in common?



Students may identify that these are all the same molecule (glucose). Discuss briefly why one might find all of these depictions within a single science textbook.

Space filling models are used to show how much room a molecule occupies.

Ball and stick models can help us understand bond patterns and we can pinpoint exactly which atoms are bonded or nonbonded.

The other two figures show the structural formula of the molecule. The one on the right is showing the structural formula (notice how it shows the carbon “backbone” and the one on the left (that looks like a ring) is showing the condensed structure of glucose.

Be sure that students understand that there is no one “right” way to represent molecules—which type a scientist uses depends on what s/he is trying to portray. However, students need to be able to see that they are all representing the same thing. You also need to be able to transform the information into other forms (for example, you should be able to view the molecule and write out the chemical structure).

In this unit we will learn several ways to transform science information from visual to text and back again. This will be an important idea to remember as we work through the unit.

Ask students to take a look at the rest of the academic notebook to help familiarize you with how you will use it in this unit.

Turn to the table of contents. Students will see that there are 10 overall lessons in this unit. The entire unit will span six weeks.

Students will have an exam during Lesson Six. Be sure to discuss that this will be a science exam, not a strategies exam. That means that even though students are learning reading and writing strategies for learning sciences, the exam will assess how well they learned the *science*—there will not be any questions about the strategies themselves.

Students will also have a final project at the end of the unit. Students will learn more about this as it gets closer, but basically they will research a topic related to diet and nutrition and create an informational pamphlet about it.

Ask students to turn to the section about the purpose of the notebook. Ask, “What is the purpose?” Answers: 1) tools and information for learning, 2) place to record work, and 3) assessment tool—it will be collected periodically for grading.

Ask students to turn to lesson one in their academic notebook. Ask them to pair with a partner to take turns reading this short article on how scientists think from *Science Daily* to each other.

FROM THE STUDENT ACADEMIC NOTEBOOK

How Scientists Think: Fostering Creativity In Problem Solving

Sep. 22, 2009—Profound discoveries and insights on the frontiers of science do not burst out of thin air but often arise from incremental processes of weaving together analogies, images, and simulations in a constrained fashion. In cutting-edge science, problems are often ill-defined and experimental data are limited.

To develop an understanding of the system under investigation, scientists build real-world models and make predictions with them. The models are tentative at first, but over time they are revised and refined, and can lead the community to novel problem solutions. Models, thus, play a big role in the creative thinking processes of scientists.

Dr. Nancy J. Nersessian has studied the cognitive processes that underlie scientific creativity by observing scientists at work in their laboratories. She says, “Solving problems at the frontiers of science involves complex cognitive processes. In reasoning with models, part of the process occurs in the mind and part in the real-world manipulation of the model. The problem is not solved by the scientist alone, but by the scientist—model combination. This is a highly creative cognitive process.” Her research is published in an upcoming issue of *Topics in Cognitive Science*.

Her study of the working methods of scientists helps in understanding how class and instructional laboratory settings can be improved to foster creativity, and how new teaching methods can be developed based on this understanding. These methods will allow science students to master model-based reasoning approaches to problem solving and open the field to many more who do not think of themselves as traditional “scientists.” (<http://www.sciencedaily.com/releases/2009/09/090921162150.htm>)

Get students to talk about how this information can help us in thinking about science learning. Ask, if you had to pick only one word from this short article that you think is the most important, what would it be? Take a minute to think and write your word on a post-it note.

Post all words around the room. Ask students to examine all the words to select two that relate—they do NOT have to select their original word. Ask students to explain their choices to a partner, discussing why they think these words are the most important from this selection. Then ask them to write out their reasoning in their academic notebook.

Discuss the ways students were asked to think about reading and science in this lesson:

- What did you learn about science learning that you did not know before?
- How do you think learning disciplinary strategies for reading and writing in science will help you in this course and beyond?

Activity Two

Reading Science Claims (Approx. 75 minutes)

Students will view a short TV commercial for 5-Hour Energy —

<http://www.brandfailure.com/5-hour-energy-commercial/>.

After watching the ad, first ask students to name the claims made in the commercial. Listed below are the claims students may discuss.

- Seventy-three percent of doctors would recommend a low calorie energy supplement to their healthy patients who use energy supplements.
- Has four calories.
- Is used nine million times per week.
- Three-thousand doctors asked about it.

Ask students to value those claims by asking critical questions about the veracity of the findings.

Ask the following text dependent questions:

Why is the first claim suspect? (Doctors recommend a low calorie energy supplement to patients who are already using them? Doctors are not necessarily recommending this particular product).

What do we need to know about the fact that it is used nine million times (how many users? (Nine million? One million?))

Discuss how students can ask critical questions and design experiments to evaluate claims made by advertisers.

Students will read Oxygizer articles from Belk and Maier Chapters Two and Three (Savvy Reader featurettes) using a close reading approach.

FROM THE STUDENT ACADEMIC NOTEBOOK

Savvy Reader Detox Drinks



A CLEAR WINNER IN THE FEEL-GOOD STAKES | BY CAROLINE STACEY |
THE INDEPENDENT (LONDON) | JANUARY 3, 2004

So you thought water was just a drink? Think again. It's a lifestyle choice. We can all safely drink our litre or more a day straight from the tap. But where's the cachet or the profit in that? It's almost as free as air. And wonderful and hydrating though tap water is, the latest bottled waters offer so much more—to make you sportier, healthier, and less hungover.

With Oxygizer you pay for air and water together. It's oxy-

genated, but not fizzy. Bottled in the Tyrolean mountains by a company based in Innsbruck, Austria, it describes itself as “a sip of fresh air.” Already big in the Middle East—where water's a more precious commodity than it is here—it has been launched in Europe and now in the UK.

Oxygizer doesn't just slake a thirst, it provides the body with extra oxygen too. A litre contains

150 mg of oxygen, around 25 times more than what's in a litre of tap water. This apparently helps remove toxins and ensures a stronger immune system, as well as assisting the respiratory system so you recover better from exercise. Some claim detox benefits, it helps hangovers, and even enhances flavours to make food taste better.

- 1 List the claims made by this article. Is there enough information presented in this article to back up the claims made?
- 2 Use the appropriate questions in the checklist provided in Chapter 1, Table 1.2, to evaluate this newspaper article. What types of information are missing from this article?
- 3 Is any data presented to substantiate the claim that oxygenated water improves health?

Start with the first Oxygizer article in the academic notebook. Read the first paragraph together. Ask students to find claims.

- Water is a lifestyle choice—no profit in drinking tap water, bottled water offers much more.

Ask students to read the next two paragraphs in pairs. Have the pairs jot down the claims they find:

- Oxygizer is water and oxygen—describes itself as a sip of fresh air.
- Doesn't just “slake” thirst, also gives extra oxygen to body, removes toxins and ensures a stronger immune system, assists respiratory system so you can recover from exercise better, detox benefits, enhances flavors, makes food taste better.

After students list their findings in a whole class discussion. Ask, what the author of this article thinks about this product's claims? How does she present these ideas?

Ask, what does the word “slake” mean? (To quench, to satisfy) If you didn't know the meaning, how can you use the context in the sentence, “Oxygizer doesn't just slake a thirst, it provides the body with extra oxygen too,” to help you figure out the meaning? (Slake a thirst seems to be doing something to the thirst and that fact that it provides oxygen too seems to indicate that slake is doing something positive to thirst—maybe quenching it.)

Students will examine both the claims and the research abstract from the article that the developers of the drink used to substantiate their claims.

First, ask students to read the first sentence of the abstract in the academic notebook. Ask, what is the hypothesis of the study?

(That oxygenated water can support physical working capacity.) What does this mean? How do you know that?

Discuss that there is a lot of science that students might not be able to understand in this abstract as it is written for science researchers, but that is okay at this point. Direct students to read in a more targeted way. Ask students to find the following: 1) how the study was conducted, 2) what the results were, and 3) what the conclusions were. Ask students to work together to find out how the study was conducted. (Double blind cross-over study with 10 subjects. Two weeks drinking oxygenated water, two weeks drinking the opposite type.) Ask students to discuss what guided them to the results. (Results showed no significant...) Even if students cannot understand the exact meaning of the rest of the sentence, they can determine that this study did not show an influence on performance.

Ask students to discuss the conclusions. No significant influence and oxygenated water does not enhance aerobic performance.

FROM THE STUDENT ACADEMIC NOTEBOOK

Abstract

It has been asserted that the consumption of oxygenated water can support physical working capacity. As this has not been accurately investigated yet, we analyzed effects of a two-week period of daily O₂-water ingestion on spiroergometric parameters and lactate metabolism in healthy adults. Twenty men (24 ± 2.5 years of age) with comparable aerobic abilities performed four exhaustive bicycle spiroergometric tests. Applying a double-blind crossover study design 10 subjects drank 1.5 liters of highly oxygenated water every day during the two weeks between the initial two tests whereas the other group consumed 1.5 liters untreated water from the same spring. After a two-week wash-out period subjects underwent a second period consuming the opposite type of water. Spiroergometric parameters and lactate kinetics between both groups at submaximal and maximal levels were analyzed using a MANOVA. Results showed no significant influence on aerobic parameters or lactate metabolism, neither at submaximal nor at maximal levels (all p-values ≥ 0.050). Merely increments of V·EO₂ at submaximal levels were demonstrable (p = 0.048). We conclude that the consumption of oxygenated water does not enhance aerobic performance or lactate kinetics in standardized laboratory testing.

Does Oxygenated Water Support Aerobic Performance and Lactate Kinetics?

V. Leibetseder, G. Strauss-Blasche, W. Marktl, C. Ekmekcioglu. Int J Sports Med 2006; 27(3): 232-235
DOI: 10.1055/s-2005-865633

Ask students to read the second Oxygizer article from Belk and Maier in the academic notebook. Discuss how scientists evaluate claims using the Oxygizer article from Chapter Three. Explain that scientists are often skeptical about new findings. Have the students consider the two statements in the Oxygizer article:

- “Using a randomized double-blind study, these tests have proven the effective influence and effect of Oxygizer on the body’s performance capability.”
- “Results showed no significant influence on aerobic parameters or lactate metabolism, neither at submaximal nor at maximal levels. We conclude that the consumption of oxygenated water does not enhance aerobic performance.”

Ask students to identify the noun phrases in these sentences (randomized double-blind study, performance capability, aerobic parameters, lactate metabolism, aerobic performance). Discuss the meanings of the phrases as a class.

Then, ask the students to use these two statements to explain why it is helpful to develop a general level of skepticism about most product claims.

Ask students to reread the articles using the *Science in the News* checklist that examines how to approach reading ads about the sciences.

FROM THE STUDENT ACADEMIC NOTEBOOK

Savvy Reader **Oxygizer** Improves Performance?



The Savvy Reader feature in Chapter 2 introduced you to the oxygenated water beverage Oxygizer. In addition to making many other claims, the author of the newspaper article wrote that drinking Oxygizer would “assist the respiratory system so you recover better from exercise.” The following is an excerpt from the website of the company that produces Oxygizer: “Oxygizer improves performance during periods of high physical stress and the resulting regenerative phase. Univ. Prof. Dr. Wolfgang Marktl (Head of Science at the Institute of Medical Physiology at Vienna University) and his research team have completed their scientific tests. Using a randomised double-blind study, these tests have proven the effective influence and effect of Oxygizer on the body’s performance capability.”

This is pretty compelling writing and may convince some to purchase this oxygenated water. However, let’s also look at an excerpt from the actual scientific study performed by Dr. Marktl and published in the *International Journal of Sports Medicine* in March 2006. “Results showed no significant influence on aerobic parameters or lactate metabolism, neither at submaximal nor at maximal levels. We conclude that the consumption of oxygenated water does not enhance aerobic performance.”

- 1 Does it appear that the author of the newspaper article read the actual study or the promotional material only?
- 2 How are claims made in the newspaper and on websites different from claims made by authors of articles published in scientific journals?
- 3 The Oxygizer website also includes some data (<http://www.oxygizer.com/default.aspx?lngld=2>) that seem to support their claims. Private companies can hire their own scientists to perform studies that often have results that differ from those of government and university-sponsored scientists. Would you be more skeptical of results produced by scientists hired by the company whose product they are testing or scientists who work for the government or a University?
- 4 Carefully consider the following two sentences from the Oxygizer website: “Univ. Prof. Dr. Wolfgang Marktl (Head of Science at the Institute of Medical Physiology at Vienna University) and his research team have completed their scientific tests. Using a randomised double-blind study, these tests have proven the effective influence and effect of Oxygizer on the body’s performance capability.” Each of these sentences, read separately, is true. Dr. Marktl and his team did complete their tests, and the Oxygizer scientists did produce data showing increased performance capability. However, placed adjacent to each other, these sentences seem to be indicating that Dr. Marktl’s university-sponsored research came up with results that were actually produced by the Oxygizer scientists. Do you think this is a willful attempt to deceive potential customers? Most people don’t have time to do such a thorough analysis of every newspaper article they read. This is why it is helpful to develop a general level of skepticism about most product claims.

FROM THE STUDENT ACADEMIC NOTEBOOK

Savvy Reader (continued)

TABLE 1.2 A guide for evaluating science in the news. For each question, check the appropriate box.

| Question | Possible answers | |
|--|---|--|
| | Preferred answer | Raises a red flag |
| 1. What is the basis for the story? | Hypothesis test <input type="radio"/> | Untested assertion <i>No data to support claims in the article.</i> <input type="radio"/> |
| 2. What is the affiliation of the scientist? | Independent (university or government agency) <input type="radio"/> | Employed by an industry or advocacy group <i>Data and conclusions could be biased.</i> <input type="radio"/> |
| 3. What is the funding source for the study? | Government or nonpartisan foundation (without bias) <input type="radio"/> | Industry group or other partisan source (with bias) <i>Data and conclusions could be biased.</i> <input type="radio"/> |
| 4. If the hypothesis test is a correlation: Did the researchers attempt to eliminate reasonable alternative hypotheses? | Yes <input type="radio"/> | No <i>Correlation does not equal causation. One hypothesis test provides poor support if alternatives are not examined.</i> <input type="radio"/> |
| If the hypothesis test is an experiment: Is the experimental treatment the only difference between the control group and the experimental group? | Yes <input type="radio"/> | No <i>An experiment provides poor support if alternatives are not examined.</i> <input type="radio"/> |
| 5. Was the sample of individuals in the experiment a good cross section of the population? | Yes <input type="radio"/> | No <i>Results may not be applicable to the entire population.</i> <input type="radio"/> |
| 6. Was the data collected from a relatively large number of people? | Yes <input type="radio"/> | No <i>Study is prone to sampling error.</i> <input type="radio"/> |
| 7. Were participants blind to the group they belonged to and/or to the "expected outcome" of the study? | Yes <input type="radio"/> | No <i>Subject expectation can influence results.</i> <input type="radio"/> |
| 8. Were data collectors and/or analysts blinded to the group membership of participants in the study? | Yes <input type="radio"/> | No <i>Observer bias can influence results.</i> <input type="radio"/> |
| 9. Did the news reporter put the study in the context of other research on the same subject? | Yes <input type="radio"/> | No <i>Cannot determine if these results are unusual or fit into a broader pattern of results.</i> <input type="radio"/> |
| 10. Did the news story contain commentary from other independent scientists? | Yes <input type="radio"/> | No <i>Cannot determine if these results are unusual or if the study is considered questionable by others in the field.</i> <input type="radio"/> |
| 11. Did the reporter list the limitations of the study or studies on which he or she is reporting ? | Yes <input type="radio"/> | No <i>Reporter may not be reading study critically and could be overstating the applicability of the results.</i> <input type="radio"/> |

Ask students to discuss how the different approaches to reading these articles affected how they focused their attention. First they read for claims, then they read an original research abstract for procedure, then they re-read to find out whether the journalist used good science in reporting. Ask, how did this work to enhance their understanding?

Assessments:

Outcome 1: Students will develop skills to critically examine science claims.

Outcome 2: Students will evaluate claims using multiple sources of information.

- Individual chart of energy drink claims (in the academic notebook)

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Accomplishes task by selecting relevant evidence. | No | Somewhat | Yes |
| • Accurately evaluates claims. | No | Somewhat | Yes |
| • Draws conclusions using the data and evidence. | No | Somewhat | Yes |

Outcome 3: Students will be able to explain the processes involved in evaluating science claims.

- Teacher’s analysis of discussion quality and participation

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Participates fully in the discussion. | No | Somewhat | Yes |
| • Adds meaningful information or insights. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Discussed science learning.
- 2. Introduced disciplinary literacy.
- 3. Discussed “juicy sentence.”
- 4. Provided an overview of the course.
- 5. Introduced the academic notebook.
- 6. Read and discussed how scientists think.
- 7. Reflected on activity one.
- 8. Viewed and discussed 5-hour energy video.
- 9. Read Oxygizer articles.
- 10. Discussed finding science claims.
- 11. Read Oxygizer research article abstract.
- 12. Discussed evaluating claims using Oxygizer articles.
- 13. Introduced and used “science in the news” checklist.
- 14. Asked students to compare/contrast claims on chart.

Lesson 2

Close Reading in the Sciences: Nutrition

Overview and Rationale:

Students will learn text annotation as a way for students to mark the text while they read. Annotations can be used in *any* field, because *what* is annotated can be tailored to the specific requirements of the discipline. In science, they should focus on the elements of the text that are important to scientists: processes, systems, models and explanations, diagrams, interactions, descriptions, classifications, evidence, and so on. Paying attention to these elements will help students to understand important scientific information. Students will also start to think about the following four types of vocabulary as they read each text:

1. **Discipline specific vocabulary:** These are content area words like *polymer* or *macromolecule* that help students understand the content they are reading—these are often the boldface words in science texts.
2. **Words that help you discuss the discipline:** These are words that discipline experts use when they practice the discipline such as *hypothesis*, *theory*, *model*, *process* and *evidence*.
3. **General academic vocabulary:** These are difficult words that can be used in any discipline, like *expediency*, *plethora* and *enumerate*.
4. **General vocabulary used in a discipline-specific way:** These are words that have general meanings and specific meanings in a discipline. “Class” in history means something different than “class” in science.

Tasks/Expected Outcomes:

1. Students will explain the processes involved while reading in the sciences.
2. Students will learn about how to approach both general and discipline-specific vocabulary.
3. Students will learn about and practice close reading with a college-level science chapter on nutrition.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 6. Analyze imagery in literary texts.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.

1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
2. Apply knowledge of roots and affixes to infer the meanings of new words.
3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Belk and Maier Chapters Three and Four
- Annotation example
- Access to a dictionary (online is fine)

Timeframe:

125 minutes

Targeted Vocabulary:**Words that Help You Discuss the Discipline**

- annotation
- theory

Discipline-Specific Vocabulary

- macronutrients
- nutrients
- multisubunit

Activity One**Preparing to Annotate (Approx. 10 minutes)**

Ask students how scientists go about their work. What are scientists looking for when reading? What are their goals when conducting an experiment? What are their goals when writing up results? What does this mean for the ways students should approach reading, writing, and thinking in the sciences?

Be sure to discuss that precision of language is important, as is understanding procedures and processes. Scientists use scientific terms to describe other scientific terms, not to be deliberately confusing, but to be very precise in the description.

Activity Two**Reading for Scientific Thinking (Approx. 15 minutes)**

Students will be introduced to the types of reading they will engage in as a part of this course.

Have students begin to examine Belk and Maier Chapter Three. Guide the reading by first focusing on the photos for the chapter and impact of those images on the reader. Model one or two responses to help them understand what you are asking (Why is everyone eating?). Ask students to read the title of Belk and Maier Chapter Three. Ask, what does the title tell you this chapter will be about? Is this something you are familiar with? Now let's look at the learning outcomes on the second page. What are the outcomes explaining? Have you heard these terms before? What is the purpose of this chapter (What is the author trying to teach you)?

Now turn to Belk and Maier Chapter Four. Examine the title and learning outcomes again. Tell students that we will be reading the two chapters in a slightly different order starting with Belk and Maier 3.1, moving to 4.1, then 3.2 and finally 4.3.

Tell students that their focus will be to learn the science material, be able to support their knowledge by citing specifics from text sources and to learn new strategies for learning the material. Explain to them that in this unit, they will learn how to read in multiple passes with different goals (vocabulary, making notes, etc.).

Students will also learn strategies for annotating their text to pull out the most relevant information, and they will share their annotations with a partner and in a full class discussion. Students will read this chapter as well as other science materials in the nutrition unit.

Activity Three

Annotation and Close Reading (Approx. 90 minutes)

Ask students to turn to Lesson Two in their academic notebooks.

Go through the materials in the academic notebook by asking students to work in pairs reading about the basics of annotation. They should be reading for an understanding of the concepts of reading in the sciences, the specifics of text annotation, and the reasons why a person would want to annotate. Ask students to circle or underline key ideas in the text as they read.

FROM THE STUDENT ACADEMIC NOTEBOOK

Reading Science Text

(Adapted from Nist-Olejnik & Holschuh, 2013).

In science textbooks you will find many new terms and definitions. Often, the terms introduced in early chapters will be used later in the text to define other terms. So you need to be sure you understand the new terms as they appear to avoid trouble understanding future reading. Science textbooks also discuss proven principles and theories in terms of their relationship to each other. Therefore, it is important to be aware of and understand how the theories connect and how they explain the science concepts you are learning.

Concepts in science textbooks are usually presented sequentially, which means the concepts build on each other. Your best plan is to test yourself as you read to make sure you fully understand each concept. It is also helpful to create reading goals to monitor what you are learning. This means that rather than focusing on getting through a chapter, focus on learning concepts every time you read. Adopt a scientific approach and ask yourself questions such as:

What data supports this concept or theory?

What other theories is this concept related to?

How does this phenomenon work? What is the scientific process involved?

Why does this phenomenon occur?

What does it show us?

It is also important to pay attention to the diagrams in each chapter. They are there to help you picture the science process so that you can see what is happening. Understanding diagrams is crucial to doing well in most science courses.

Gearing Up for Reading

To gear up for reading, start by reading the chapter title and thinking about what you already know about that concept. Focus on primary and secondary headings to understand how the chapter is organized and how the ideas are related together. If your text has an outline of topics at the beginning of each chapter, use it to help you think about the key points. If not, skim through the chapter for key terms and think about how they are related to the appropriate heading or subheading. Pay special attention to diagrams and figures, and think about how they relate to the overall focus of the chapter. Finally, read the chapter objectives and guiding questions if your textbook has these features.

What and How to Annotate During Reading

Because of the large amount of new terminology involved in learning science, it is important for you to read your science textbooks before class. In this way, you will be familiar with the terms and concepts discussed in the text and you will be able to build your understanding of the concepts as you listen in class. It is also a good idea to connect the concepts discussed in class with the concepts described in your text by comparing your lecture notes to your text annotations each time you read. This will help you follow the flow of the concepts and will help you understand how the ideas are connected.

When you annotate your science text, you need to match your annotations to the course expectations. For example, if you are expected to think at higher levels, be sure your annotations include more than just the bold-faced terms. If you are expected to be able to explain science processes, be sure your annotations help you learn to do just that.

In general, it is a good idea to limit the amount of material you annotate. Annotate big concepts and save the details for your rehearsal strategies. A big mistake that students make when annotating science is that they tend to annotate too much. It is also essential to focus on putting the ideas into your own words. This will help you monitor your understanding of what you have read and will keep you from copying exactly from the text. In addition, look for experiments and results or conclusions drawn from scientific theories, and seek to make connections between the experiments and the concepts they generate.

Science texts often contain diagrams or charts to explain concepts. Because science exams usually contain questions about the concepts described in diagrams or charts, you must be able to read and understand each one. As you read your text, annotate the diagrams and take the time to reflect on what they are depicting. A good self-testing strategy to make sure you fully understand the concept is to cover up the words in the diagram and try to talk through the information. If you can explain how the concept works, you've shown that you understand it. If you find that you cannot explain it, reread your annotations or the diagram text to be sure you understand the key points.

In the annotation example, notice how the annotations focus on explaining the concepts rather than just memorizing the terms.

Example of Annotations in a Science Textbook

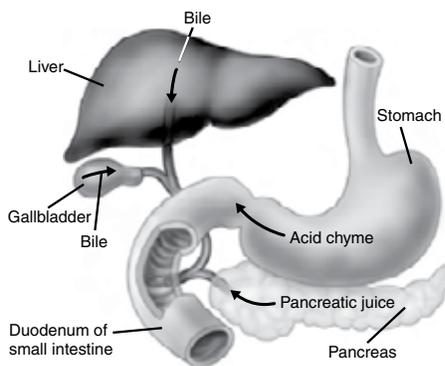


Figure 22.12
The duodenum.
Acid chyme squirted from the stomach into the duodenum (the beginning of the small intestine) is mixed with pancreatic juice, bile from the liver and gallbladder, and intestinal juice produced by the duodenal lining itself. As peristalsis propels the mix along the small intestine, hydrolases break food molecules down to their monomers.

The duodenum receives digestive juices from the pancreas, liver, and gallbladder (Figure 22.12). The **pancreas** is a large gland that secretes pancreatic juice into the duodenum via a duct. Pancreatic juice neutralizes the stomach acids that enter the duodenum and contains hydrolases that participate in the chemical digestion of carbohydrates, fats, proteins, and nucleic acids.

Bile is a juice produced by the **liver**, stored in the **gallbladder**, and secreted through a duct into the duodenum. Bile contains no digestive enzymes but does have substances called bile salts that make fats more accessible to lipase. Fats, including those from the cheese of the pizza we're following, are a special problem for the digestive system because they do not dissolve in water. The fats in chyme start out as relatively large globules. Only those molecules on the surface of the globules are in contact with the lipase dissolved in the surrounding solution. Agitation from the rhythmic contraction of muscles in the intestinal wall breaks the fat globules into small droplets, but without the help of bile salts, those droplets would quickly fuse again into larger globules that would be difficult to digest. Through a process called emulsification, bile salts essentially coat the tiny fat droplets and prevent them from fusing. Similarly, emulsification by a chemical additive helps keep oil permanently mixed with vinegar in some commercial salad dressings.

The intestinal lining itself also aids in enzymatic digestion by producing a variety of hydrolases. The cumulative activities of all these hydrolytic enzymes break the different classes of food molecules completely down into monomers, which are now ready for absorption into the body.

Absorption of Nutrients Wait a minute! The previous sentence said that nutrients "are now ready for absorption by the body." Aren't these nutrients already in the body? Not really. The alimentary canal is a tunnel running through the body, and its cavity is continuous with the great outdoors. The doughnut analogy in Figure 22.13 should convince you that this is so. Until nutrients actually cross the tissue lining of the alimentary canal to enter the bloodstream, they are still outside the body. If it were not for nutrient absorption, we could eat and digest huge meals but still starve to death, in a sense.

Most digestion is complete by the time our pizza meal reaches the end of the duodenum. The next several meters of small intestine (called the jejunum and the ileum) are specialized for nutrient absorption. The structure of the intestinal lining, or epithelium, fits this function (Figure 22.14). The surface area of this epithelium is huge—roughly 300m², equal to the floor space of a one bedroom apartment. The intestinal lining not only has large folds, like the stomach, but also fingerlike outgrowths called villi, which makes the epithelium something like the absorptive surface of a fluffy bath towel. Each cell of the epithelium adds even more surface by having microscopic projections called microvilli. Across this expansive surface of intestinal epithelium, nutrients are transported into the network of small blood vessels and lymphatic vessels in the core of each villus.

Digestion Sm Intestine

- when food reaches sm int. it has been thru mech. and chem. digestion
- hydrolysis is initiated

Duodendum

1st ft. of sm int.

- where food is broken into monomers
- gets digest. juice from pancreas (pancreatic juice via duct—neutralizes stomach acid & contains hydrolases for chem digest), liver (bile), gallbladder (where bile is stored and via duct)

- Bile salts—make fats accessible to lipase thru emulsification—bile salts coat fat droplets to keep them separated (like oil and water in dressing) Int. lining produces hydrolases to get food ready for absorption

Absorption

Nutrients don't really 'enter' body until entering bloodstream. Nut abs occurs in jejunum and ileum (next parts of sm int.) Epithelium—int. lining (huge—300m², folded, and has villi). Very absorptive. Each cell has microvilli—all help transport nutrients

The Annotation System of Text Marking

- What is Annotation?
- Writing brief summaries in the textbook's margin.
- Enumerating multiple ideas (i.e., causes, effects, reasons characteristics).
- Sketching pictures or charts to explain difficult processes/concepts.
- Writing possible test questions.
- Noting puzzling or confusing ideas that need clarification.
- Underlining key ideas.

Why Should I Annotate?

It will improve your concentration so you will not become distracted and have to reread.

It can provide an immediate self-check for your understanding of the textbook's key ideas.

It will help you remember more.

It can assist you in test preparation.

It will negate the need of time spent in rereading the chapters.

It will help you state ideas in your words.

What Should I Annotate?

- Definitions.
- Lists, features, causes, effects, reasons, characteristics.
- Diagrams and processes.
- Examples of main idea.
- Good summaries.
- Possible test questions.
- Something you do not understand.

In a whole-class discussion, ask students to summarize what annotation is and what they are expected to annotate when they read in the sciences. Be sure that students understand that annotation should focus in the information they need to remember and that (except for definitions) the annotations should be in their own words. Also, if the text does not leave enough room to write in the margins, they can use sticky notes or strips of paper placed in the book's binding. If they are very careful to keep track of chapter and page numbers, they can also write their annotations in a notebook. However, when they review their annotations they will need to look at both the annotation AND the text so that they can refer to diagrams and other text materials as they study.

Students will begin to read and annotate Belk and Maier Chapter Three. Work through the introduction of Belk and Maier Chapter Three together. Read page 55 aloud. Ask questions such as:

What is important to remember and note from the first introduction? (That two-thirds of Americans take some kind of nutritional supplement.) Does any of this need to be annotated at this point? (No, because it is an introduction to what is coming.) Examine the two questions in the introduction: 1. Can these products make up for a poor diet?; 2. Are these products necessary if we eat a healthy diet? Ask, why did the author include these questions?

Ask students to work in pairs to find one word that is the most important for understanding the introduction.

Ask students to look at the vocabulary in the next three paragraphs and ask the following questions. Are there any unfamiliar words that you can find? (Give students time to read and search.) What does the word longevity mean? This is not a

science-specific word. Can you figure it out from context? If you did not know the word, how could that impact your understanding of this section?

Ask students to think about the different types of vocabulary they will encounter in most science texts. They will be on the lookout for all four types as they read in this course. As they read, ask them to circle or underline words that fit into one of these four types of words. Remind students that the science-specific terms will need to be understood within the larger science concept. We will discuss several strategies to help them learn both the vocabulary and the concept throughout the unit.

FROM THE STUDENT ACADEMIC NOTEBOOK

Discipline specific vocabulary: These are content area words like *polymer* or *macromolecule* that help students understand the content they are reading—these are often the boldface words in science texts.

Words that help you discuss the discipline: These are words that discipline experts use when they practice the discipline such as *hypothesis*, *theory*, *model*, *process* and *evidence*.

General academic vocabulary: These are difficult words that can be used in any discipline, like *expediency*, *plethora* and *enumerate*. (And milieu and laden that we just found)

General vocabulary used in a discipline-specific way. These are words that have general meanings and specific meanings in a discipline. “Class” in history means something different than “class” in science.

Ask students to turn to the first section in Belk and Maier under the heading 3.1 Nutrients. Ask students to read the section to your self (up to Carbohydrates as Nutrients). Don’t annotate anything yet—just think about what is important to note here. Ask students to find a “juicy sentence to share with the class.” (Tell students that they can underline or circle if it helps them focus as they read.)

Remind students to think about the following questions as they read in science:

- What data support this concept or theory?
- What other theories is this concept related to?
- How does this phenomenon work? What is the scientific process involved?
- Why does this phenomenon occur?
- What does it show us?

In this section, they may find the following words:

1. nutrients, macronutrients, dehydration, evaporation
2. structure, function
3. substances, disperse, deficit
4. building-block.

Discuss the passage with students by asking the following text-dependent questions: What are nutrients? (Ask student to reply by using the text definition) “The substances in food that provide structural materials or energy.” Ok, but what does this mean? It means that the body can break down the materials to use or as a source of energy. In which type of vocabulary category would the word *nutrient* be?

What are macronutrients? Nutrients that we need a lot of—water, carbohydrates, proteins and fats.

How would you annotate those two ideas? Generate some student ideas and talk about how to paraphrase. Instead of writing out full sentences, you would write:

Nutrients = food substances that give us structural materials or sources of energy.

Macronutrients = H₂O, carbs, proteins, fats needed in large amounts.

Discuss how annotation pulls out the important points and includes enough detail to understand the concept. That is the goal of annotating. If students were to just write out the word nutrient without any explanation, they would not have enough information to help them recall the ideas.

Ask students to reread the section on water and nutrition with a partner. Discuss together what would be important to annotate and how they would write it out. Once they have finished annotating this section, ask them to note the concepts and the vocabulary they find. Ask them to discuss how dehydration is tied to the larger concept of macro-nutrients. Talk about the importance of connecting vocabulary terms to larger sentence concepts.

Ask students to share the first thing they annotated. (Something about survival without water is limited to a few days. Ask for several ways that this way actually annotated to see that there is no one right way to annotate, but that some are more complete than others).

Move through the rest of this section asking questions about what students felt was important to note, why they felt that way, and how the information helps us understand the ideas related to water and nutrition.

Ask students to read the carbohydrate as nutrients section to themselves. Ask the following questions: Why are carbohydrates so important? What do they do for the body? What information in the text gave you that knowledge?

What is the difference between a single-unit monomer and a single unit sugar in this section? Can you see how the author is using them interchangeably in this case? This is something to keep an eye out for in the rest of the chapter. You will often find that the text uses multiple descriptors for the same idea.

What kind of vocabulary have you found thus far? Discuss types one through four.

After discussing the key concepts in this section, ask students to re-read and annotate the Carbohydrate and nutrients section and share their annotation with a partner.

(Ask, “Are you finding some of those long noun phrases?” Complex carbohydrates, multisubunit sugar)

Then share out as a class asking similar guiding questions as above to check if students are annotating important ideas and understanding the concepts as they read.

Ask: “Why do we need carbohydrates? Why does the body use complex carbohydrates differently than simple carbohydrates (be sure students talk about chemical bonds, storage, and fiber in their response)? Use the text to support your answer.”

Ask students to think about some of the vocabulary they have been reading so far.

Many science terms use Greek and Latin roots with common prefixes and suffixes. By learning some of these roots, students can often determine the meaning of a word. Ask students to look at the word dehydration.

Prefix= de (down, out, apart)

Root = hydr (water)

Suffix= tion (state or quality)

There is a list of common science prefixes, root words and suffixes in your academic notebook. Ask students to use the chart to figure out the meaning of **Multisubunit** sugar:

(multi= many, sub = under, below, unit = measure of quantity, a single quantity regarded as a whole)

Many under quantities? What does this mean? There are multiple subunits involved—so several of these units that can be whole unto themselves. Multisubunit is used to describe this idea of many subunits working together.

SCIENTIFIC ROOT WORDS, PREFIXES, AND SUFFIXES

(<http://www.succeedinscience.com/apbio/assignments/generalinfo/rootwords.pdf>)

| | | | | | |
|--|---|--|--|---|--|
| a-; an- ab- -able | not; without; lacking; deficient away from; out from capable of | cente- centi- centr- | pierce hundredth center | -err- erythro- -escent | wander; go astray red becoming |
| ac- -aceous | to; toward of or pertaining to | cephal- cerat- | head horn | eso- eu- | inward; within; inner well; good; true; normal |
| acou-; acous - | hear | cerebr- | brain | eury- | widen |
| ad- aden- adip- | to; toward gland fat | cervic- chel- chem- | neck claw dealing with chemicals | ex- extra- -fer- | out of; away from beyond; outside bear; carry; produce |
| aero- agri- -al | air field; soil having the character of | chir- chlor- chondr- chrom-; -chrome | hand green cartilage color | ferro- fibr- -fid; fiss- -flect; -flex | iron fiber; thread split; divided into bend |
| alg-; -algia | pain | chron- | time | flor- | flower |
| alto- ambi- ameb- amni- amphi-; am- pho- amyl- ana- andro- anemo- ang- angi- ante- anter- antho- anti- anthropo- -ap-; -aph- apo-; ap- aqu- archaeo- -ary; -arium | high both change; alternation fetal membrane both starch up; back; again man; masculine wind choke; feel pain blood vessel; duct before; ahead of time front flower against; opposite man; human touch away from water primitive; ancient place for something | -chym- -cid-; -cis - circa-; circum- cirru- co- cocc- coel- coll- coni- contra- corp- cort-; cortic- cosmo- cotyl- counter- crani- cresc-; cret- crypt- -cul-; -cule cumul- cuti- cyan- -cycle; cycl- -cyst- cyt-; -cyte dactyl- de- deca- deci- deliquesc- demi- dendr- dent- derm- di-; dipl- (Latin) di-; dia- (Greek) dia- (Latin) digit- din- dis- | juice cut; kill; fall around; about hairlike curls with; together seed; berry hollow glue cone against body outer layer world; order; form cup against skull begin to grow hidden; covered small; diminutive heaped skin blue ring; circle sac; pouch; bladder cell; hollow container finger away from; down ten tenth become fluid half tree tooth skin two; double through; across; apart day finger; toe terrible apart; out | flu-; fluct-; flux foli- fract- -gam- gastr- geo- -gen; -gine -gene- -gest- -glen- -glob- gloss- gluc-; glyc- glut- gnath- -gon -grad- -gram; graph grav- -gross- gymno- gyn- gyr- -hal-; -hale halo- hapl- hecto- -helminth- hem- hemi- hepar-; hepat- herb- hetero- hex- hibern- hidr- hipp- hist- holo- homo- (Latin) | flow leaf break marriage stomach land; earth producer; former origin; birth carry; produce; bear eyeball ball; round tongue sweet; sugar buttock jaw angle; corner step record; writing heavy thick naked; bare female ring; circle; spiral breathe; breath salt simple hundred worm blood half liver grass; plants different; other six winter sweat horse tissue entire; whole man; human |
| -blast- | sprout; germ; bud | | | | |

LESSON 2

Literacy Ready . Science Unit 1

| | | | | | |
|---------------------|------------------------------|------------------|-------------------------------|--------------------|-------------------------------|
| brachi- | arm | dorm- | sleep | homo- (Greek) | same; alike |
| brachy - | short | dors- | back | hort- | garden |
| brady- | slow | du-; duo- | two | hydr- | water |
| branchi- | fin | -duct | lead | hygr- | moist; wet |
| brev- | short | dynam- | power | hyper- | above; beyond; over |
| bronch- | windpipe | dys- | bad; abnormal; difficult | hyph- | weaving; web |
| cac- | bad | ec- | out of; away from | hypno- | sleep |
| calor- | heat | echin- | spiny; prickly | hypo- | below; under; less |
| capill- | hair | eco- | house | hyster- | womb; uterus |
| capit- | head | ecto- | outside of | -iac | person afflicted with disease |
| carcin- | cancer | -elle | small | -iasis | disease; abnormal condition |
| cardi- | heart | -emia | blood | -ic | (adjective former) |
| carn- | meat; flesh | en-; endo-; ent- | in; into; within | ichthy- | fish |
| carp- | fruit | -en | made of | ign- | fire |
| carpal- | wrist | encephal- | brain | in-; il-; im-; ir- | not |
| cata- | breakdown; downward | enter- | intestine; gut | in-; il-; im-; ir- | to; toward; into |
| caud- | tail | entom- | insects | in- | very; thoroughly |
| -cell- | chamber; small room | -eous | nature of; like | -ine | of or pertaining to |
| cen-; -cene | now; recent | epi- | upon; above; over | infra- | below; beneath |
| inter- intra- | between within; inside | -oma omni- | abnormal condition; tumor all | sacchar- sapr- | sugar rotten |
| -ism | a state or condition | onc- | mass; tumor | sarc- | flesh |
| iso- | equal; same | oo- | egg | saur- | lizard |
| -ist | person who deals with... | ophthalm- | eye | schis -; schiz- | split; divide |
| -itis | inflammation; disease | opt- | eye | sci- | know |
| -ium | refers to a part of the body | orb- | circle; round; ring | scler- | hard |
| -kary- | cell nucleus | -orium; -ory | place for something | -scop- | look; device for seeing |
| kel- | tumor; swelling | ornith- | bird | -scribe; -script | write |
| kerat- | horn | orth- | straight; correct; right | semi- | half; partly |
| kilo- | thousand | oscu- | mouth | sept- | partition; seven |
| kine- | move | -osis | abnormal condition | -septic | infection; putrefaction |
| lachry- | tear | oste- | bone | sess- | sit |
| lact- | milk | oto- | ear | sex- | six |
| lat- | side | -ous | full of | -sis | condition; state |
| leio- | smooth | ov- | egg | sol- | sun |
| -less | without | oxy- | sharp; acid; oxygen | solv- | loosen; free |
| leuc-; leuk- | white; bright; light | pachy - | thick | som-; somat-; - | body |
| lign- | wood | paleo- | old; ancient | somn- | sleep |
| lin- | line | palm- | broad; flat | son- | sound |
| lingu- | tongue | pan- | all | spec-; spic- | look at |
| lip- | fat | par-; para- | beside; near; equal | -sperm- | seed |
| lith-; -lite | stone; petrifying | path-; -pathy | disease; suffering | -spher- | ball; round |
| loc- | place | -ped- | foot | spir-; -spire | breathe |
| -log- | word; speech | -ped- | child | -spor- | seed |
| -logist | one who studies... | pent- | five | stat-; -stasis | standing; placed; staying |
| -logy | study of... | per- | through | stell- | stars |
| lumin- | light | peri- | around | sten- | narrow |
| -lys-; -lyt-; -lyst | decompose; split; dissolve | permea- | pass; go | stern- | chest; breast |

LESSON 2

Literacy Ready . Science Unit 1

| | | | | | |
|----------------|----------------------------|-----------------|---------------------------|---------------|----------------------------|
| macr- | large | phag- | eat | stom-; -stome | mouth |
| malac- | soft | pheno- | show | strat- | layer |
| malle- | hammer | -phil- | loving; fond of | stereo- | solid; 3-dimensional |
| mamm- | breast | phon-; -phone | sound | strict- | drawn tight |
| marg- | border; edge | -phore; pher- | bear; carry | styl- | pillar |
| mast- | breast | photo- | light | sub- | under; below |
| med- | middle | phren- | mind; diaphragm | super-; sur- | over; above; on top |
| meg- | million; great | phyc- | seaweed; algae | sym-; syn- | together |
| mela-; melan- | black; dark | phyl- | related group | tachy- | quick; swift |
| -mer | part | -phyll | leaf | tarso- | ankle |
| mes- | middle; half; intermediate | physi- | nature; natural qualities | tax- | arrange; put in order |
| met-; meta- | between; along; after | phyt-; -phyte | plant | tele- | far off; distant |
| -meter; -metry | measurement | pino- | drink | telo- | end |
| micro- | small; millionth | pinni- | feather | terr- | earth; land |
| milli- | thousandth | plan- | roaming; wandering | tetr- | four |
| mis- | wrong; incorrect | plasm-; -plast- | form; formed into | thall- | young shoot |
| mito- | thread | platy- | flat | -the-; -thes- | put |
| mole- | mass | pleur- | lung; rib; side | -thel- | cover a surface |
| mono- | one; single | pneumo- | lungs; air | -therm- | heat |
| mort- | death | -pod | foot | -tom- | cut; slice |
| -mot- | move | poly- | many; several | toxico- | poison |
| morph- | shape; form | por- | opening | top- | place |
| multi- | many | port- | carry | trache- | windpipe |
| mut- | change | post- | after; behind | trans- | across |
| my- | muscle | pom- | fruit | tri- | three |
| myc- | fungus | pre- | before; ahead of time | trich- | hair |
| mycel- | threadlike | prim- | first | -trop- | turn; change |
| myria- | many | pro- | forward; favoring; before | -troph- | nourishment; one who feeds |
| moll- | soft | proto- | first; primary | turb- | whirl |
| nas- | nose | pseudo- | false; deceptive | -ul-; -ule | diminutive; small |
| necr- | corpse; dead | psych- | mind | ultra- | beyond |
| nemat- | thread | pter- | having wings or fins | uni- | one |
| neo- | new; recent | pulmo- | lung | ur- | urine |
| nephro- | kidney | puls- | drive; push | -ura | tail |
| -ner- | moist; liquid | pyr- | heat; fire | vas- | vessel |
| neur- | nerve | quadr- | four | vect- | carry |
| noct-; nox- | night | quin- | five | ven-; vent- | come |
| -node | knot | radi- | ray | ventr- | belly; underside |
| -nom-; -nomy | ordered knowledge; law | re- | again; back | -verge | turn; slant |
| non- | not | rect- | right; correct | vig- | strong |
| not- | back | ren- | kidney | vit-; viv- | life |
| nuc- | center | ret- | net; made like a net | volv- | roll; wander |
| ob- | against | rhag-; -rrhage | burst forth | -vor- | devour; eat |
| ocul- | eye | rhe-; -rrhea | flow | xanth- | yellow |
| oct- | eight | rhin- | nose | xero- | dry |
| odont- | tooth | rhiz- | root | xyl- | wood |
| -oid | form; appearance | rhodo- | rose | zo-; -zoa | animal |
| olf- | smell | roto- | wheel | zyg- | joined together |
| oligo- | few; little | rubr- | red | zym- | yeast |

Make students aware that when they find an unfamiliar word, they should revisiting this list of roots, prefixes and suffixes to help figure it out.

Ask students to take a look at another important feature in science texts; the diagram. First, ask students to tie the concept of multisubunit sugar to the diagram. How does it relate to what is being presented in figure 3.1? In science, diagrams are often the most important points shown in visual form. So, students can't just skip over them. Instead, they will learn multiple ways to use diagrams in this unit. As a class, examine figure 3.1 to discuss what might be important to annotate in the diagrams. (Students need to understand the examples of simple and complex carbohydrates both in written and visual form.)

Ask students to continue annotating the rest of 3.1. Pause after each section to ask text-specific questions.

In the fats as nutrients section, discuss what a fat is (lipid using roots and suffix- lip= fat, id= type of), what types of foods have fat, types of fats, and why the body can use fats). Examine figure 3.4. Ask students why the differences in carbon bonding matters? What is it doing to the fat and how does it change the nutrition?

Micronutrients: Ask students to think about the root "micro" to help define this term. As a class examine the charts tables (3.1, 3.2, 3.3)—is this something you would need to memorize? (No.) Why not? How might you use them (as a reference or to show examples). Does this mean you can skip them? (No, we should read the descriptions at the top of each chart and look at the examples to help us understand the concepts.) And, we will be using the charts in one of the upcoming lessons.

Ask students to annotate the micronutrients section on their own (stop at section 3.2.) Have them annotate in class if time, or at home. Collect the annotations to give students feedback on how they are doing using the annotation checklist.

Assessment:

Outcome 1: Students will learn about and practice close reading with a college-level science chapter on nutrition.

- Student text annotation.

Annotation Checklist

- Your annotations are perfect! Keep up the good work.
- You have missed many key ideas. Go back and annotate them.
- You need to put your annotations in your own words—do not copy from the book!
- Be briefer in your annotations. You do not need to write in full sentences
- You have ignored the graphic aids. Annotate them.
- You need to note the specific examples—they could reappear on the exam.
- You need to enumerate the specific facts, characteristics, causes, events, etc., in the margin or in the text. Get the details, too!
- Your annotations need to focus on the key ideas more and less on details.
- You are underlining too much—work more on writing your summaries in the margin.
- You are annotating too much! It will take you forever to do a chapter.
- You are annotating too little! You do not have enough information annotated to use as a study aid.
- You need to develop some symbols of your own and use them.
- You need to develop a method for organizing your annotations.
- Please annotate these sections or pages again.

p. _____ p. _____

p. _____ p. _____

Activity Four

Reflect on the Lesson (Approx. 10 minutes)

Students will write a reflection on learning at two levels in the weekly reflection section of their academic notebook. They will respond to questions on what they learned about science and what they learned about literacy.

FROM THE STUDENT ACADEMIC NOTEBOOK

WEEK 1

Reflect on your experience:

1. Think about the science. What would scientists pay attention to if they were looking at a new energy drink on the market?

2. Think about your learning. How will this experience change the way you approach reading in the sciences?

3. Think about how using annotation impacted the way you read in science. What do you like about the strategy? What do you dislike about it?

Assessments:

Outcome 2: Students will learn how to approach both general and discipline-specific vocabulary.

- Group discussion of vocabulary

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Participates fully in the discussion. | No | Somewhat | Yes |
| • Adds meaningful information or insights. | No | Somewhat | Yes |

Outcome 3: Students will be able to explain the processes involved reading in the sciences.

- Class discussion

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Participates fully in the discussion. | No | Somewhat | Yes |
| • Adds meaningful information or insights. | No | Somewhat | Yes |

- Weekly Reflection

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Reflects on the science learned. | No | Somewhat | Yes |
| • Reflects on the learning of science. | No | Somewhat | Yes |
| • Shows a deep understanding of both the science and the learning. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Discussed reading in the sciences.
2. Introduced Belk and Maier Chapters Three and Four.
3. Discussed the concept of text annotation.
4. Shared annotation examples.
5. Discussed the components of annotation.
6. Practiced annotations as a whole class, in pairs, and individually.
7. Discussed using prefixes, roots, and suffixes for vocabulary learning.
8. Collected students annotations.
9. Provided feedback on annotations.
10. Asked students to complete the weekly reflection.

Lesson 3

Analogies in Science

Overview and Rationale:

In this lesson, students will engage in a chemical reaction simulation activity to dramatize the role of enzymes and to discuss the role of analogies in science. They will also read and annotate Belk and Maier Chapter Four, Section 4.1 on enzymes and read an article from the Mayo Clinic about lactose intolerance. Students will explain a case study on effects of enzyme deficiencies using their knowledge from the enzyme activity, the charts in their texts and supplemental readings on the topic.

Tasks/Expected Outcomes:

1. Students will understand the role of analogies in science.
2. Students will read across texts in multiple representations and make connections between text, diagram, and animation information.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- 15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;

- (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
- (v) anticipates and responds to readers' questions and contradictory information.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Belk and Maier Chapters Three and Four
- Lactose intolerance article (Mayo Clinic)
- Lactose intolerance animation — http://www.dsm.com/le/en_US/maxilact/images/animation.htm
- Enzyme reactant pair cards
- Final project directions
- 3x5 note cards

Timeframe:

125 minutes

Targeted Vocabulary:

Discipline Specific Vocabulary

- activation energy
- active site
- enzyme
- induced fit
- metabolize
- substrate

General Academic Vocabulary

- specificity
- corroboration

Activity One

Chemical Reaction Simulation Activity (Approx. 50 minutes)

Students will complete an analogy activity that will serve as a chemical reaction simulation, both with and without enzymes present. This activity will occur in three rounds.

First, students will respond to the opening questions in their academic notebook:

FROM THE STUDENT ACADEMIC NOTEBOOK

Now that you have learned about the nutrients your body needs to maintain itself and about the various foods that supply those nutrients, please respond to the following questions:

What has to happen to the food we eat in order to supply our cells with the nutrients they need?

What do you know about how this happens?

After students respond individually (about five minutes), discuss digestion as a whole group to elicit their background knowledge about digestion. Lead the discussion to help students understand that digestion is a series of chemical reactions. You can then explain that students will participate in a chemical reaction analogy activity that will help them understand the role of enzymes in our digestion and metabolism. Explain that analogies are often used in science to help make concepts more concrete. Analogies are where one compares two things—for example, in science we might compare blood and blood vessels to water and water pipes or the DNA helix is like a twisted ladder. The word *analogy* has a specialized meaning in science in that it is also used to mean a model—so, for example, when you use styrofoam balls to create a model of the solar system, you are also creating an *analogy* of that system (also called an *analogical model*). We are using analogy in both senses in this lesson. One thing that science learners need to know is that an analogy is never a perfect match—blood through blood vessels is not exactly like water through pipes. As students use analogy, they need to be sure they understand how the science is really working. Otherwise, analogy can lead to misconceptions.

First round: To help students understand the reactant pairs sometimes find each other without an enzyme present (but that it takes longer).

As students complete the opening questions, tape index cards from the reactant pair cards randomly on the backs of students. Once you have introduced the lesson, explain to students that the cards represent reactants in a chemical reaction in this simulation activity (but be sure to note that they are not portraying actual reactants in a chemical reaction, but that they using these common substances as an analogy for actual reactants). The objective is for them to find their “partner” reactants (i.e. salt and pepper, peanut butter and jelly), so that they can form the desired product. They should mingle among their classmates, asking each other questions about what is taped to their back (only yes or no questions—“Am I used in cooking? Am I a part of the solar system? Would you find me in a house?) until they find their partner, linking arms to form the product. The teacher will set a timer at the start of the activity, and will stop the timer when all the reactions are complete (everyone has found their partner). Ask students to complete the reflection questions following this activity in their academic notebook. The first round should help students understand that the substrates sometimes find each other randomly.

Second Round: To help students understand the role of the enzyme to help reactant pairs find each other.

While students reflect on the first round of the simulation, the teacher can tape the second round of index cards (cut into the shape of puzzle pieces) on the backs of some students. In this second round, students will have the same reactant pairs (salt, pepper, etc.) but this time they will be cut into puzzle pieces. However, some students will be given the parts that are left after cutting out the images (not taped on their backs). These students will act as enzymes that help the substrates find each other. They will be able to see what shapes they will fit with. When the simulation begins, the enzymes can then go find the reactants that they fit with, and bring those reactants together faster to make the product. Again, the teacher will set the timer at the start of the activity, and will stop the timer when all the reactions are complete (all reactants have linked to form the products). Ask students to complete the reflection questions following this activity in their academic notebook.

Third Round: To help students understand the process with actual enzymes, substrates, and products.

In this round, some students will not be reactants, but instead will act as enzymes. The enzymes will be called up to the front of class to receive their “puzzle pieces.” Explain to students that using an enzyme as a puzzle piece is an analogy. Other people call enzymes and substrates a “lock and key.”

Cut out each of the following numbered enzyme pairs and corresponding paragraphs. Cut the enzyme pairs and paragraphs apart. Glue the enzyme pairs on the front of the card, and the corresponding paragraph on the back of the card. Cut each card into two pieces so that no two pieces are identical. (The two halves should form a puzzle-like piece.) The process of finding each other will happen as it did during round two where the enzymes find their corresponding substrates. Ask students to reflect in their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Chemical Reaction Simulation

Round 1:

Total Time to complete all chemical reactions: _____

In this simulation, each person represented a reactant. How did they find the other reactant that they were meant to undergo a chemical reaction with? How does this serve as an analogy for chemical reactions? How would you describe the rate of this reaction?

Round 2:

Total Time to complete all chemical reactions: _____

How were the parameters of the “chemical reaction” changed in this round? Based on this information, how do you think enzymes speed up chemical reactions?

Round 3:

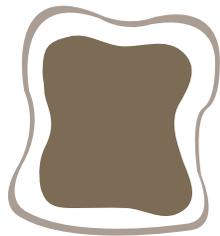
Total Time to complete all chemical reactions: _____

How did using actual enzyme-substrate combinations compare to our analogy with everyday objects? How did the analogy rounds help you understand the basic concept of the role of enzymes in chemical reactions?

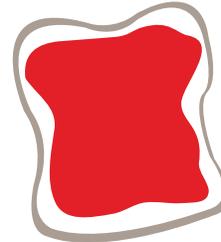
Form a hypothesis to predict what might happen if the enzyme were absent in one of the enzyme/substrate system.

CARDS for Enzyme Reactant Pairs

ROUND 1: Cut out the pairs and tape one on each student's back. They will then ask each other yes/no questions to find their match.



PEANUT BUTTER



JELLY



SALT



PEPPER



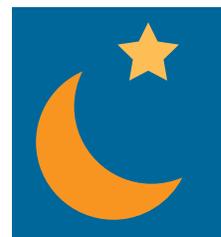
FORK



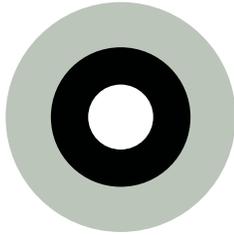
KNIFE



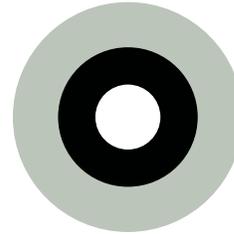
DAY



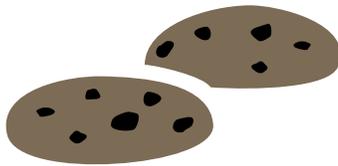
NIGHT



FRONT WHEEL



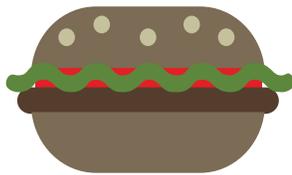
REAR WHEEL



COOKIES



MILK



BURGER



FRIES



HAMMER



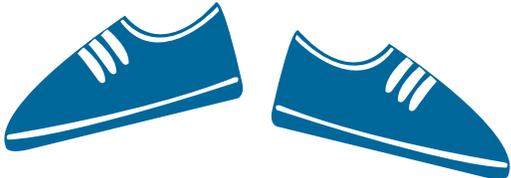
NAIL



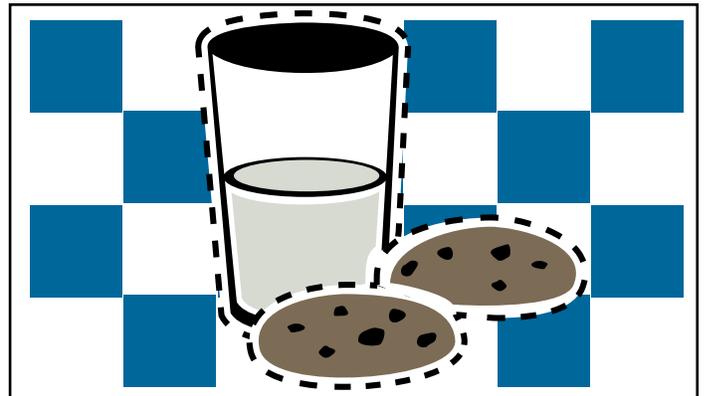
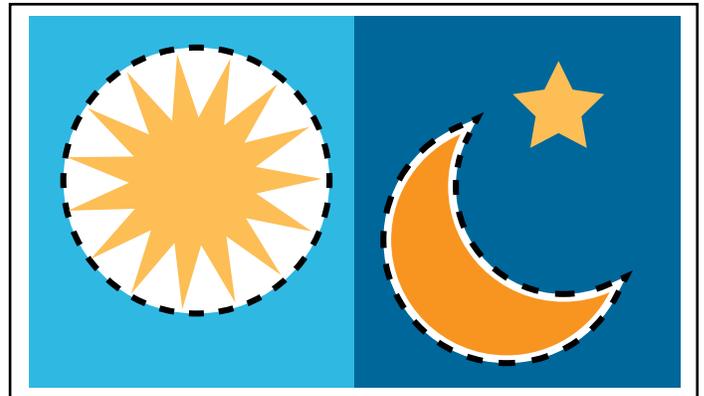
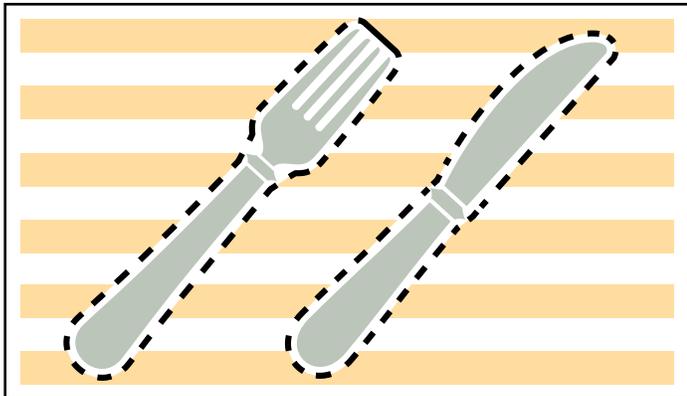
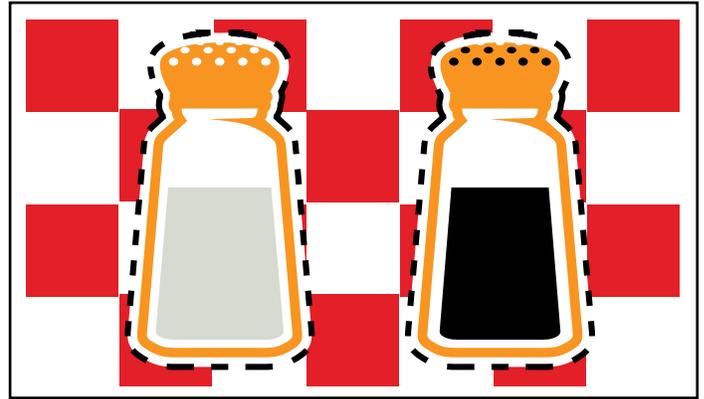
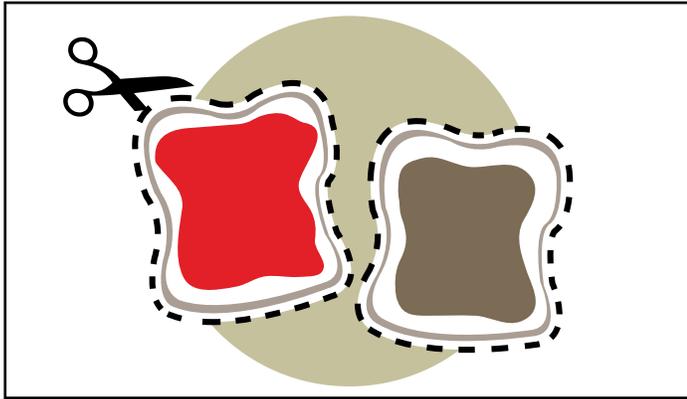
THUNDER

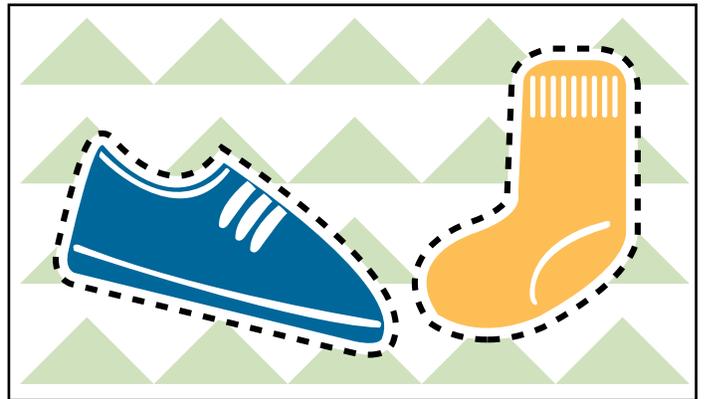
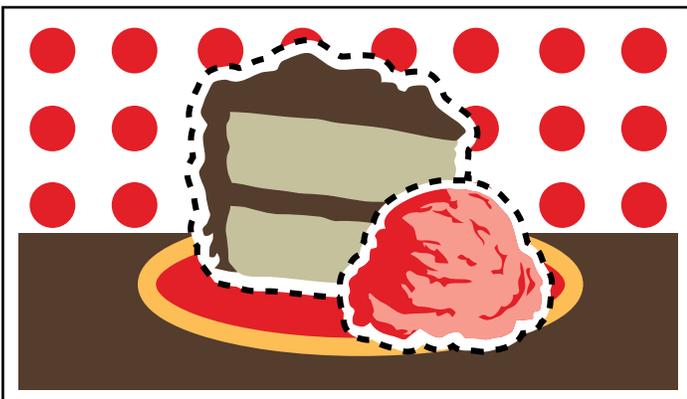
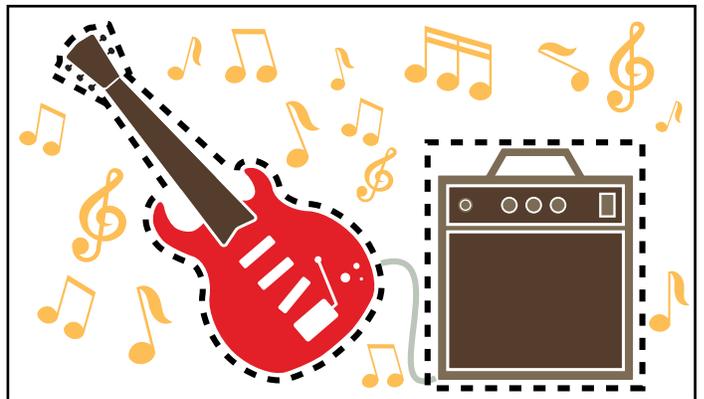
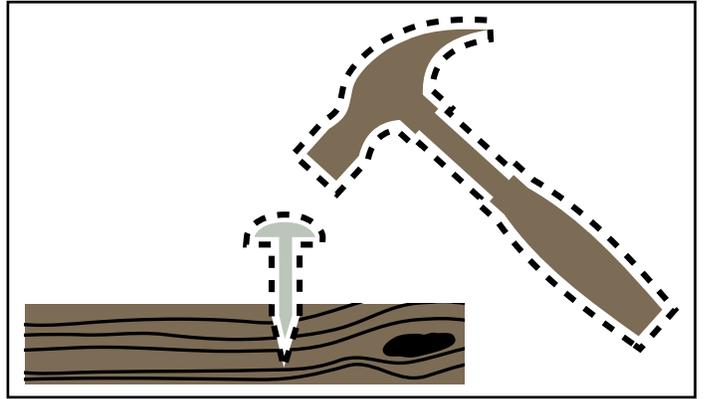
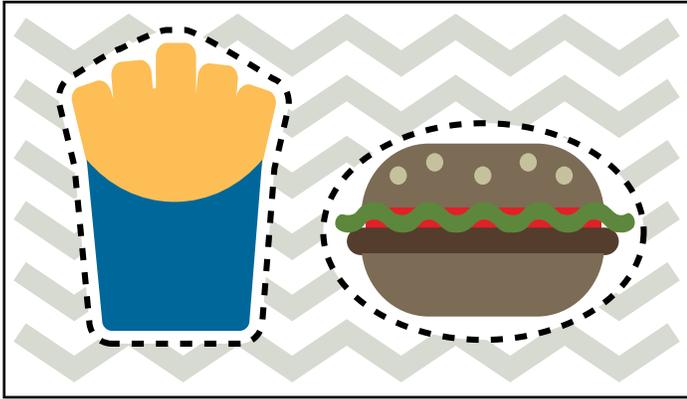


LIGHTNING

| | |
|---|---|
|  <p>ROCK</p> |  <p>ROLL</p> |
|  <p>SUN</p> |  <p>MOON</p> |
|  <p>CAKE</p> |  <p>ICE CREAM</p> |
|  <p>SHOES</p> |  <p>SOCKS</p> |

ROUND 2: Cut out the pairs and tape one on each student's back. They will then ask each other yes/no questions to find their match it. The parts that are left after cutting out the images will be given to the student acting as the enzyme that helps the puzzle pieces find each other.





ROUND 3: In this round students will use actual enzymes and substrates to create products. Cut the partners into puzzle pieces so that the enzymes, substrates, and products will be able to find each other.

Adapted from wveis.k12.wv.us/teach21.

INSTRUCTIONS:

1. Cut out each of the following numbered enzyme pairs and corresponding paragraphs.
2. Cut the enzyme pairs and paragraphs apart.
3. Glue the enzyme pairs on the front of an index card, and the corresponding paragraph on the back of the card.
4. Cut each card into two pieces so that no two pieces are identical. (The two halves should form a puzzle-like piece.)

| | |
|---|---|
| <p>1.</p> <p>Rennin Casein found as protein in milk</p> | <p>Little Miss Muffett sat on a tuffet, eating her curds and whey. What was she eating? The enzyme rennin is found in the fourth stomach of young ruminant such as suckling calves.</p> <p>Rennin acts on the Casein at a pH of 4.7 and produces paracasein or curds. The soft clumps of cottage cheese are the curds and the watery liquid is the whey. The paracasein precipitate will occur if you add acid to milk to lower the pH. In humans, the stomach pH of 2.0 would have the same effect as the rennin. Human infants do not have this enzyme.</p> |
| <p>2.</p> <p>Peptidases Proteins</p> | <p>Peptidase enzymes break down the protein molecules into smaller peptides and amino acids. Digestion of protein is complete with in a few hours, but without peptidase the process would take about 50 years.</p> |

| | |
|---|--|
| <p>3. Diastase Starch</p> | <p>Diastase breaks down starch into a disaccharide maltose. Barley seeds contain an extracellular enzyme diastase which digests stored starch and makes energy available for the embryo during seed germination. Diastase is now called amylase.</p> |
| <p>4. Lactase Lactose or milk sugar</p> | <p>Lactase is broken down into two simple sugars, glucose and galactose. A deficiency of lactase enzyme is fairly common, especially among infants of Middle Eastern, Oriental and African descent. When the individual eats lactose the results are stomach cramps, gas and diarrhea. Lactose production diminishes with age. Some experts estimate that as many as one out of three adult Americans suffer from a degree of lactose intolerance.</p> |
| <p>5. Plasmin Blood Clot</p> | <p>After blood clots serve their function they are dissolved and reabsorbed into the blood stream. Plasmin is responsible for clot breakdown. A different enzyme Thrombin changes fibrinogen to fibrin as the clot occurs.</p> |
| <p>6. Luciferase Luciferin + ATP</p> | <p>One of the earliest gene transplants between species was between a fire fly and a tobacco plant. The enzyme luciferase reacts with luciferin and ATP and gives off energy in the form of a greenish-yellow light. The result in the tobacco plant was a glow in the dark plant.</p> |

7.

Hexokinase

Glucose

The first of nine enzymes needed to split a six-carbon sugar of glucose into two three-carbon molecules with a release of ATP energy. The complete conversion of glucose to carbon dioxide and water requires 18 enzymes. Many catalytic reactions consist of a series of enzymes.

8.

Sucrase

Glucose + Fructose

Simple sugars (monosaccharides) like glucose and fructose can be linked together to form longer chains of sugars (polysaccharides). The combination of glucose and fructose forms a disaccharide called sucrose, or what we know of as simple table sugar.

9.

Catalase

Hydrogen Peroxide

The bi-product of some cellular reactions is hydrogen peroxide, which is actually toxic to cells. Catalase is an enzyme that helps to break down the toxic hydrogen peroxide to water and oxygen. This reaction is actually why hydrogen peroxide can act as an antiseptic, as bacteria don't have the catalase enzyme to help them break down this toxin!

10.

DNA nucleotides

DNA Polymerase

The long twisted ladder model of DNA that we are all aware of is actually built of many small pieces (monomers) called DNA nucleotides linked together. DNA Polymerase acts to link these nucleotides (remember the A's, T's, C's and G's?) to form the sequence of DNA that makes you who you are!

After all three rounds, lead a whole group discussion about this chemical reaction simulation, so that students can share their thoughts about the reflection questions. Guide the discussion to include the realization that digestion is simply a series of chemical reactions, but if left to happen randomly would take a very long time. Enzymes speed up chemical reactions by bringing reactants together so that they can form the products faster.

Assessment:

Outcome 1: Students will understand the role of analogies in science.

- Analysis of enzyme activity in academic notebook

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides meaningful analysis of the three rounds of the simulation. | No | Somewhat | Yes |
| • Adds meaningful information or insights to class discussion. | No | Somewhat | Yes |

Activity Two

Annotation of Text and Model Analysis (Approx. 50 minutes)

Students will read and annotate Belk and Maier Chapter Four Section 4.1, stopping before the section on *Calories and Metabolic Rate*. As they read, they are trying to corroborate their learning from the chemical reaction simulation activity. Students will do a close read of the two paragraphs on enzymes, looking for the ways the text explains the function of enzymes.

They should also focus on key scientific terminology regarding the function of enzymes as they read (i.e. activation energy, induced fit, substrate and specificity). Ask them to think about the long noun phrases as well (such as enzyme-catalyzed reaction) as a way to understand the process. Ask students to write a definition of each term on 3x5 cards and then work in pairs to use the cards to show the relationship between the ideas. They can manipulate the cards by laying them out on a table to show the process in a visual way. When they annotate, they need to focus on connecting ideas together. Discuss with students that in science they are learning vocabulary along with concepts. It would be counterproductive for them to simply memorize bold-faced terms, as they need to demonstrate their understanding of vocabulary by being able to use it to explain science processes.

Ask students to use their vocabulary and concept knowledge to explain the diagram on page 75 (Figure 4.2). Ask students to pair up to explain the diagram to each other—they should be able to explain the following ideas: cleaving, substrate, binds, active site, stress and subunit—by talking through the process depicted in the diagram. Students should use both the information contained in the figure captions and the information from the section on enzymes as they make sense of the diagram. Explain to students that science reading often involves this back and forth attention between the diagram and the corresponding text. Being able to switch from one to another as they read will help them understand the process being depicted in the diagram.

As a whole class, discuss the role of enzymes as a process of metabolic reactions. Specifically, ask students to explain the role of activation energy, induced fit and specificity. Ask students if they can think of an analogy (other than puzzle pieces) to explain the process.

Ask students to complete the model analysis questions in their academic notebook. These questions ask students to analyze the chemical reaction simulation, and synthesize their understanding of enzymes following both the discovery-learning activity and the reading.

FROM THE STUDENT ACADEMIC NOTEBOOK

Chemical Reaction Simulation: Model Analysis and Synthesis

Having discussed this simulation as a class and read about enzymes in your textbook, use the following questions to help you analyze the chemical reaction simulation modeling activity and to guide you to synthesis regarding the function of enzymes.

1. How did the simulation activity help you to visualize chemical reactions? Do you think the simulation of reactants finding each other is a fair analogy of chemical reactions happening in the cell? Why or why not?

2. Consider the total time necessary to complete all of the chemical reactions in round one versus round two. Why are enzymes necessary in order for cells to survive?

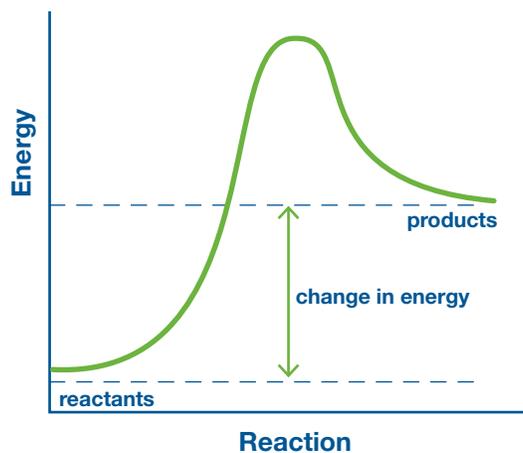
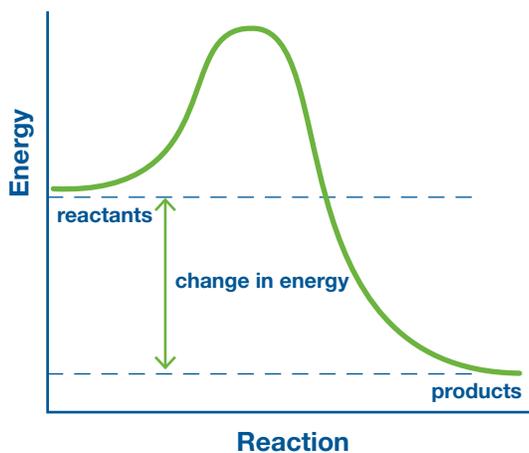
3. You read in your text that enzymes speed up chemical reactions by decreasing activation energy. What served as the analogy for activation energy in the chemical reaction simulation activity? Do you think this is a fair analogy of activation energy? Why or why not?

4. You read about the specificity of enzymes. What served as the analogy for specificity in the chemical reaction simulation activity? Do you think this is a fair analogy of specificity? Why or why not?

5. After having read about the function of enzymes in your text, do you feel that the chemical reaction simulation serves as a fair model of enzyme activity? What was good about the model? What principles about enzymes were left out of the model?

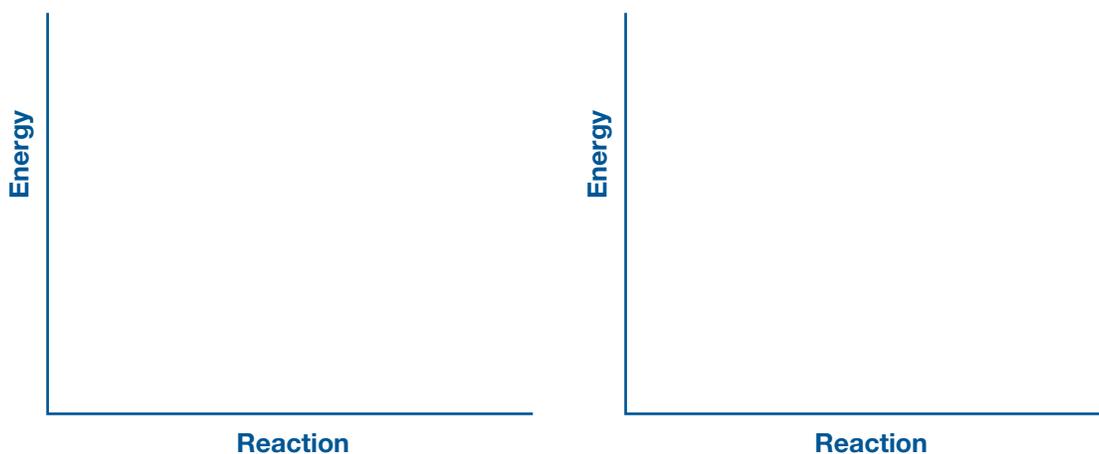
6. Scientists use analogies to try to explain complex or abstract processes. However, no analogy is perfect. Can you think of a way to improve upon the chemical reaction simulation model of enzyme activity?

7. The graphs below represent the energy pathway of two different chemical reactions in a cell—one that is anabolic (reactants combine to form one product) and one that is catabolic (reactant splits to form more than one product).



a. Can you infer which reaction is anabolic and which is catabolic? Explain your reasoning.

b. Both of these reactions are shown without an enzyme present. Infer what the energy pathway would look like in these reactions if an enzyme were active. Draw that energy pathway on top of the graphs below.



c. Based on this information, do you think enzymes are necessary for both anabolic and catabolic reactions, or only one type of reaction? Explain your reasoning.

Assessment

Outcome 1: Students will understand the role of analogies in science.

- Analysis of enzyme activity in academic notebook

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides meaningful responses to the model and synthesis questions. | No | Somewhat | Yes |
| • Adds meaningful information or insights to class discussion. | No | Somewhat | Yes |
| • Student responses are well structured. | No | Somewhat | Yes |
| • Responses provide evidence for conclusion. | No | Somewhat | Yes |

Activity Three

Synthesis and Application (Approx. 25 minutes)

Students will view an animation on lactose intolerance and discuss how visualization can help make sense of science processes.

(http://www.dsm.com/le/en_US/maxilact/images/animation.htm)

Distribute the Mayo Clinic Article. Students will use an article describing the enzyme deficiency of lactose intolerance from the Mayo Clinic to help solve a case study.

The text will serve as a resource to help them find information, rather than as a primary text. This means that they will not need to read and annotate as they do in their text-book. Instead, as students attempt to solve the case, they should pay careful attention to the various ways of identifying lactose intolerance symptoms and causes. They need to also think about how this information relates to what they know about enzymes.

Discuss that enzymes are crucial in all metabolic reactions. Lactose intolerance is just one example of a disorder caused by a malfunctioning enzyme. There are many disorders caused by faulty or missing enzymes. Ask students to reflect on the importance of macro and micronutrients, as well as enzymes, in a person's overall health.

Ask students to pull together the information from the text, the article, and the animation to respond to the case study on lactose intolerance using the guiding questions in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Lactose Intolerance Case Study

Hannah, a 21 year-old female, used to enjoy going out and eating with friends. Over the past year, she has noticed that within an hour after she eats, she experiences bloating, abdominal cramping, gas, and diarrhea. These symptoms do not occur after every meal, for example, eating in her favorite sushi restaurant is fine as are the meals at the BBQ restaurant. Other foods always seem to bother her such as pizza or burgers. Because Hannah does not know when she will experience the symptoms, she always makes sure she eats somewhere close to home.

Why might one suspect lactose deficiency in this case?

What information helped you solve this case?

Draw and label two diagrams: 1) showing the digestion of lactose when lactase is present, and 2) showing the process for someone with lactose deficiency.

(space provided in academic notebook)

Assessment:

Outcome 2: Students will be able to read across texts in multiple representations and make connections between text, diagram and animated information.

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides meaningful analysis of case study. | No | Somewhat | Yes |
| • Incorporates information from the text, diagrams, and animations. | No | Somewhat | Yes |
| • Responses provide evidence to support conclusions. | No | Somewhat | Yes |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced the enzyme activity.
- 2. Asked students to respond to opening questions in the academic notebook.
- 3. Conducted the three rounds of the enzyme activity.
- 4. Asked students to respond to activity questions in the academic notebook.
- 5. Led whole-class discussion on results and findings of the activity.
- 6. Asked students to annotate Belk and Maier 4.1 on enzymes.
- 7. Asked students to explain Figure 4.2 (page 75) in pairs.
- 8. Discussed the role of vocabulary and content in science.
- 9. Asked students to complete the model analysis and synthesis in their academic notebooks.
- 10. Discussed the application of the ideas using the lactose intolerance case study.
- 11. Read mayo clinic article.
- 12. Viewed animation on lactose intolerance.
- 13. Asked students to respond to case study questions in academic notebook.

Lesson 4

The Complexity of Calories

Overview and Rationale:

In this lesson, students delve deeply into the topic of calories in a variety of ways. The purpose of this lesson is to integrate material from articles, text and lab to be able to understand the topic from multiple perspectives. Students will read about calories in their textbook, conduct and write up results for a calorie lab and read an article from *Scientific American*. Students will also learn to write a complete, data-based science lab report of their findings

Tasks/Expected Outcomes:

1. Students will integrate ideas from lecture, lab and text to understand the role of calories.
2. Students will develop a hypothesis for a lab experiment, read and follow directions for a lab procedure, gather and record data and write a lab report.
3. Students will analyze data and confirm, modify or reject hypotheses.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and

- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (B) write procedural and work-related documents (e.g., résumés, proposals, college applications, operation manuals) that include:
 - (i) a clearly stated purpose combined with a well-supported viewpoint on the topic;
 - (ii) appropriate formatting structures (e.g., headings, graphics, white space);
 - (iii) relevant questions that engage readers and address their potential problems and misunderstandings;
 - (iv) accurate technical information in accessible language; and
 - (v) appropriate organizational structures supported by facts and details (documented if appropriate);
 - (C) write an interpretation of an expository or a literary text that:
 - (i) advances a clear thesis statement;
 - (ii) addresses the writing skills for an analytical essay including references to and commentary on quotations from the text;
 - (iii) analyzes the aesthetic effects of an author’s use of stylistic or rhetorical devices;
 - (iv) identifies and analyzes ambiguities, nuances, and complexities within the text; and
 - (v) anticipates and responds to readers’ questions and contradictory information.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
 - (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
 - (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.

4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Bushwick, S. (July 25, 2011) Feel the burn: How do scientists count calories? *Scientific American* (<http://blogs.scientificamerican.com/observations/2011/07/25/feel-the-burn-how-do-scientists-count-calories/>)
- Student lab report examples
- Belk and Maier Chapter Four, Section One
- Academic notebook

Timeframe:

200 minutes

Targeted Vocabulary:

Discipline Specific Vocabulary

- adenosine triphosphate (ATP)
- bomb calorimetry
- calorimeter
- kcal
- metabolic rate

General Vocabulary

- perusing
- rigorous
- puree
- render
- ablaze

Activity One

Reading Across Text (Approx. 50 minutes)

Ask students to read Belk and Maier Chapter Four, Section One on calories. As they read, they will focus on integrating material. Ask students to work in pairs as they read and annotate. They should switch off reading paragraphs. As they annotate, students are to consider making visual annotations (diagrams, drawings) to explain the science concepts in addition to text-based annotations.

After reading, ask students the following text-based questions:

- Explain how enzymes relate to metabolic rate.
- Why do people’s metabolic rate differ?
- What does that mean for energy balance in terms of caloric intake? What is the role of ATP?
- Where in the text do you find evidence to support your stance?

Ask students to read the article from *Scientific American* on how calories are measured and on how calories are reported in packaged goods. They should take notes on the article in their academic notebook, using the guiding text-based questions on the ways scientists and restaurants count and report calories. Remind students to use the text annotation strategies previously learned in this unit.

FROM THE STUDENT ACADEMIC NOTEBOOK

How did the scientists measure calories from restaurants?

a. Explain the procedure used to prepare the food.

b. Explain the procedure used to measure the food.

2. What is the difference between metabolizable energy and gross energy?

3. Based on what you read in this article, why do you think the researchers found differences between the calories reported by restaurants and their own results? Identify the location in the text that supports your explanation.

Discuss student responses as a whole class. At this point, ask students to support their responses with evidence from the text.

Activity Two

Conducting a Lab (Approx. 75 minutes)

Students will conduct a lab to determine the amount of chemical energy stored in food by burning it and capturing the heat given off in a homemade calorimeter.

One goal is to understand the importance of being able to read and follow directions for a lab procedure and write appropriate reports/follow up.

Introduce the writing prompt: After reading informational texts (Belk and Maier, Chapter Four, Section One, Scientific American article), sample lab reports and lab procedures, developing a hypothesis and conducting an experiment examining the chemical energy stored in food, write a laboratory report in which you explain your procedures, and results and confirms or rejects your hypothesis. What conclusions do you have?

Ask students to do a Quick Write on what things they will have to do to be successful in completing this task. Ask students to examine the sample lab report in their academic notebook. Have them look at the different parts of the lab to see what is expected of them.

Discuss the role and importance of each of the sections using the lab strong/weak chart in their academic notebook. Show students the examples of lab reports and ask them to figure out what was strong and weak about each one.

Discuss the lab write ups as a class. Ask, what made a strong report? What made a weak report? Ask students to work in pairs to generate a hypothesis based on the reading and structure of the lab.

Ripening Banana

Introduction:

The purpose of the experiment that we conducted in class was to test our hypothesis on how to make a banana ripen faster than just setting it on the counter. During the process, we were also trying to figure out what causes a banana to ripen. The background knowledge that we had was about ethylene gas. Ethylene gas is naturally produced by the banana, causing it to ripen. If you were to expose more ethylene gas to the banana than natural it would then ripen faster. I also knew that if you hold something cold on a banana, it will eventually form a brown spot. This is what I based my hypothesis upon.

Hypothesis:

My hypothesis was; if a banana is placed in a plastic bag in the refrigerator, then it will ripen faster than a banana sitting on a countertop. This was my hypothesis because I thought the plastic bag would trap the ethylene gas produced by the banana, speeding up the ripening process. I also thought that exposing the fruit to the cold in a refrigerator would also help it to ripen.

Materials/methods:

Our experiment lasted a total of 7 days. The experimental group consisted of the banana that was placed in a bag and into the fridge. The control group was the bananas that sat on the countertop. The independent variables were the plastic bag and the refrigerator, while the dependant variable was the ripeness of the banana. The constant in this experiment was that we used the same type of bananas for the experimental and control groups. I conducted my experiment as follows;

- 1) I came up with and if, then statement that explained my hypothesis about which conditions would cause a banana to ripen faster than a banana sitting on a counter.
- 2) I took an unripe banana, wrote my name on it, drew a picture of it on my chart, described its present characteristics, and placed it in a bag and into the refrigerator.
- 3) Mr. Farrar placed a group of unripe bananas on the counter top, with the word 'control' written on each one.
- 4) I drew a picture of the control banana on my chart and described its current characteristics.

- 5) Every day for a week (except for the weekend) I compared the experimental banana with the control banana. Each time I drew a picture of the bananas on my chart and described their characteristics for the day.

Results:

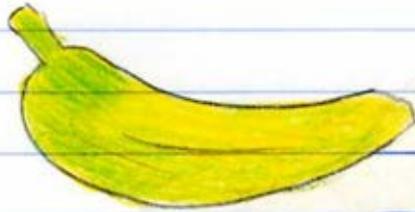
During this experiment I observed that the bananas got riper and riper each day. On day one both the control and experimental banana were yellow and green and hard to the touch. By day two they were beginning to form brown specs and lose their green color, but they were still relatively hard. On day three they had almost completely lost their green and were turning a tint of brown, and were beginning to get soft. By day 7 the bananas had lost their green, but the ripeness of each banana was different. My experimental group was still yellow with a light brown tint covering the whole banana. It was soft to the touch and was beginning to have a rotten smell. The control group on the other hand was a brighter shade of yellow, but had giant dark brown spots covering it. The bananas were mushy to the touch and had a rotten odor. The attached chart shows the data I collected each day of the experiment.

Conclusion:

I think the hypothesis I made came out to be false. The control banana was darker in color, was softer, and smelled rotten compared to my experimental banana. I think the results turned out the way they did because my banana was not exposed to enough ethylene gas. If I wanted it to ripen faster I should have put it with another fruit, or put it in with straight ethylene gas. I also think that by putting the banana into the refrigerator preserved the banana, instead of speeding up the process. If I wanted it to ripen quicker I should have placed it on the counter, like the control, or placed it into the freezer. My experiment did not go 'wrong', but there were a few flaws. First of all, the control bananas were connected at the stem, while the experimental banana was not. Being with other bananas could have sped up the process, due to more exposure to ethylene gas. Second, the bananas started out at different stages of ripeness. The control group had almost already lost all of its green and the beginning of the experiment. My experimental banana started out much more greener in color. Finally, I was actually testing more than one variable in my experiment. I placed my banana in a bag, and in a refrigerator. To get more accurate results on what causes a banana to ripen faster, I should have either just placed the fruit in a plastic bag, or just in the fridge (without being in a bag). Things I would do differently next time would be to make sure my constants are the same, and be sure to only test one variable. As for our next experiment, I think it would be fun to work with some sort of live plant or animal.

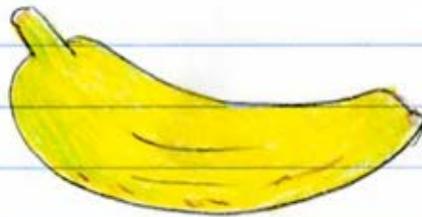
Banana Experimental

Day 1



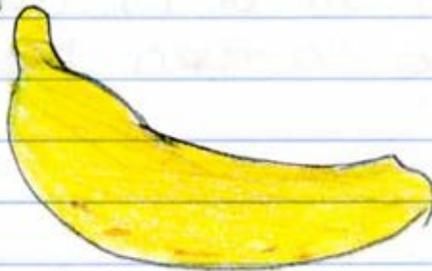
Banana is green and unripe and is hard.

Day 2



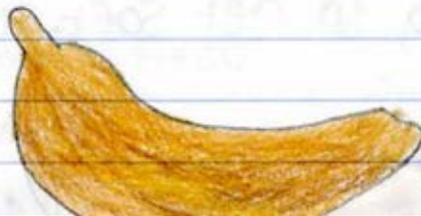
Banana is a little less green with a few brown specs.

Day 3



Banana has almost totally lost its green and is turning a tint of brown and beginning to get soft.

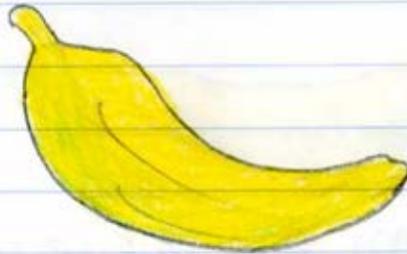
Day 7



Banana is brown with a tint of yellow, a little mushy + touch, and is beginning to sm

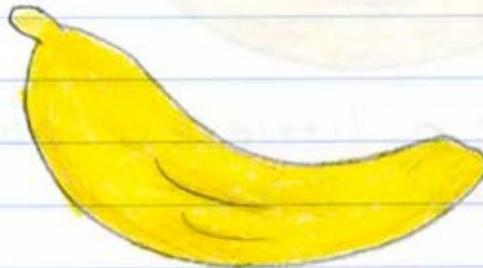
Banana Control

Day 1



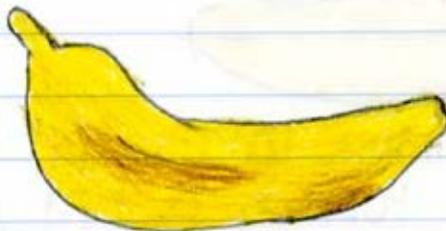
Banana is yellow with some green still on it and is hard.

Day 2



Banana has lost all of its green and is beginning to turn brown.

Day 3



Banana is turning even more brown and is starting to get soft, and have a rotten smell.

Day 7



Banana is yellow with dark brown patches and is soft, and rotten sm

Ripening Fruit Lab Report

An experiment was conducted to find out what factors might affect the ripening of bananas. The purpose of this experiment was to compare an experimental group of bananas with a control group. Background knowledge that I had on the ripening of fruits only consisted of ethylene gas, which wasn't used anymore in this experiment than what was already in each banana. My hypothesis was: if a colder temperature makes a banana ripen faster, then a banana in a fridge will ripen faster than one at room temperature.

The experiment: A group of bananas left on the counter at room temperature served as the control group. The experimental group was placed in a fridge and the effects were recorded for 3 days. At the beginning of the experiment, all bananas were green and unripe.

The findings of this experiment are recorded on the table below.

| Group | Day 1 | Day 2 | Day 3 | Day 4 |
|--------------|--|---|--|---|
| Control | Mostly green, but yellow is becoming more prominent. Firm to the touch | Completely yellow with only green at the tips. Still firm | Yellow with few brown spots forming. Banana is getting softer | Mostly brown spots cover the banana, but yellow can still be seen. Soft and over-ripe |
| Experimental | Yellow with green at the tips. Firm to the touch. | Yellow, with brown spots forming. Softer. | Yellow with more and more brown spots covering the banana. Softer. | Completely brown and very soft to the touch. |

As you can see, my hypothesis proved correct. If you're looking for a banana to eat as quickly as possible, you should put it in a fridge. However, if you want a banana to keep from rotting, you should leave it at room temperature. There might be problems in the experiment however. The temperature of the control group varied during the night when air conditioning was turned off, and the bananas of the control group were left in a bunch. Another variable to think about is ethylene gas. The banana in the fridge was surrounded by other bananas

which probably made for a higher concentration of ethylene gas. Other than this, I cannot explain why a colder temperature would speed up ripening. If I were to conduct this experiment again, those factors would be changed to match.

The main principle of doing this experiment was to find out the factors affecting the ripening speed of fruit. When I was developing my hypothesis, I used some background knowledge to help me. The first thing I knew, was that ethylene gas was a hormone produced by most fruits. As well as this, I concluded that molecules speed up in warmer temperatures and that they slow down in cooler temperatures. Using this knowledge, I started my hypothesis.

My hypothesis: If a banana is exposed to cooler temperatures, then the ethylene would be produced at a slower rate (because of molecules slowing down), thus causing the banana to ripen at a slower rate.

To conduct this experiment, I decided to place my banana in a fridge, because the temperature in a fridge is much cooler than the temperature in Mr. Farrar's classroom. These cooler temperatures would slow down the production of ethylene, and slow down the ripening process. The experimental group is the single banana placed in the fridge, and the control group is the bunch of bananas on Mr. Farrar's desk in the classroom. My independent variable is the banana in the fridge. My dependent variable is qualitative; the change in color every other day that I would record my data. The constants would be the room temperature, fridge temperature, and lastly the position/location of the bananas. To perform this experiment, these are the steps I took: 1. First I made a quick prediction; "the banana in the fridge will ripen slower than the ones on Mr. Farrar's desk." 2. Now I carefully placed my banana in the fridge, on the top shelf. 3. Next I made sure to memorize the position and place of the banana in the fridge. 4. I wrote down the room number where my banana was. 5. Each day I took observations, I would record the date, and I would carefully write down the change in color. 6. At the last observation day, after my last observations, I determined whether my prediction was true or false, and then I quickly determined whether my hypothesis was falsified or not falsified.

I recorded information on bananas on 9-2-09, 9-4-09, and 9-8-09. I took my data by observing the changes in color of each of the bananas. First I would record the change in color of my banana in the fridge. Next I would record the change in color in the bunch of bananas on Mr. Farrar's desk.

Data Description:

9-2-09 (experiment started)

My banana= Greenish yellow with some brown specks.

Bunch of bananas= Greenish yellow with some brown specks.

Main results:

9-4-09

My banana= Yellow in color, a lot more brown specks, and a brown tint to the edges.

Bunch of bananas= Only a tiny bit more brown specks -less specks than the banana in the fridge. All of the bananas are yellow (no more green).

9-8-09

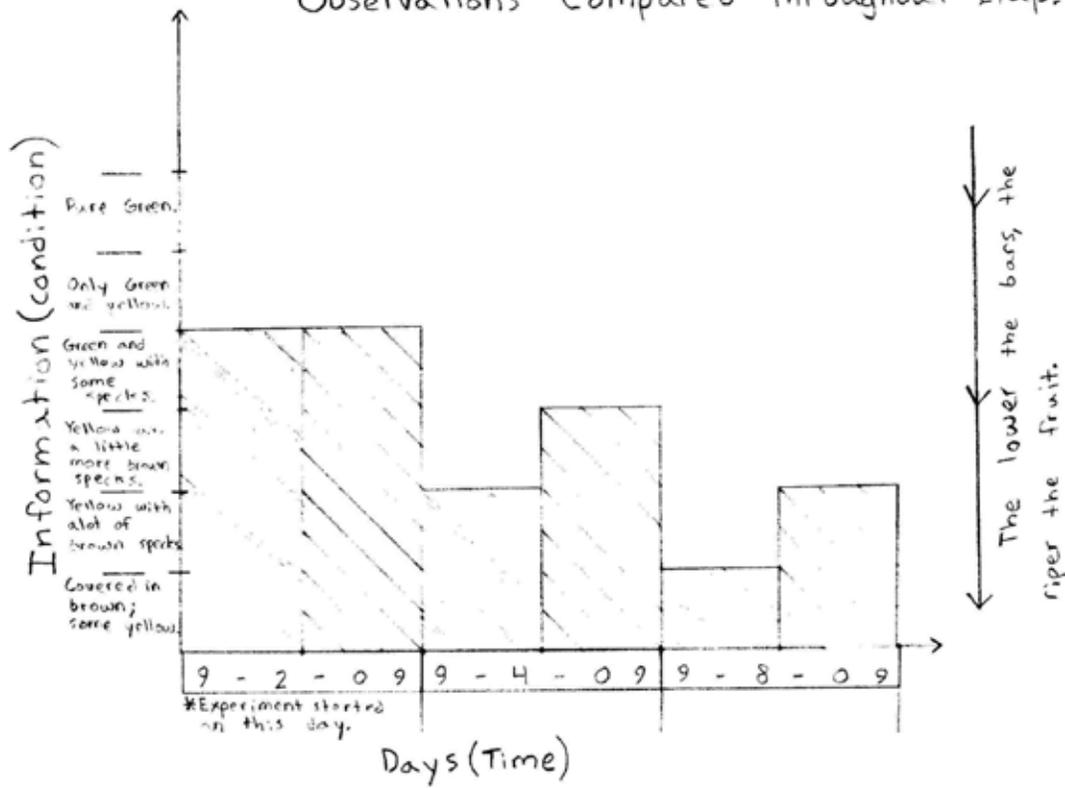
My banana= Extreme results: Covered in brown, and only a tiny tint of yellow. It looks as if it took a mud bath.

Bunch of bananas= Mostly yellow, with more brown specks. -Way more yellow than the experimental group.

>My banana in the fridge actually ripened faster than the bunch of bananas.

My Data Table:

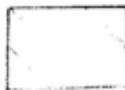
Observations Compared Throughout Elapsed Time



*key:



= Experimental group; The banana in the fridge.



= Control group; The bunch of bananas on the desk.

I must reject my hypothesis because the data collected does not support it. However, there were other factors that may have influenced the outcome of the experiment. I think the banana ripened faster because it was trapped with the ethylene in the small fridge. As well as this there were more than ten other bananas from other students in this same fridge. When I obviously placed my banana on the top fridge rack, some of the other students placed their bananas on the bottom rack, and I infer that the ethylene gas rose up, (since it is lighter than air) and increased the speed of my banana ripening. There is no way to prove my hypothesis completely wrong from this experiment because it is obvious that there were other factors that caused it to ripen faster. If I were to do this experiment over, rather than the small confined fridge, I would find some way to keep it cooler than the room temperature and at the same time allow it to release its ethylene, rather than having it trapped with its ethylene.

Ripening Fruit Lab Report

Ripening Fruit Lab Report

Introduction:

The purpose of this experiment is to determine certain factors that affect the ripening speed of bananas. Bananas turn yellow as they ripen and become soft and sweet. When a banana is not ripe it has a green tint and the fruit itself is very firm and hard. At the beginning of this experiment, I also knew about an important factor called ethylene gas. Ethylene gas is a major cause of fruit ripening speed. Ethylene is a chemical hormone produced by a lot of fruits. It is a colorless gas with the Chemical Formula $H_2C=CH_2$. Ethylene is a fairly light gas; meaning it is lighter than air. Because Ethylene gas is lighter than air, it diffuses very rapidly. When Ethylene comes in contact with fruit, the fruit ripens quickly in comparison to fruit that is not exposed to Ethylene. Also, oxygen is needed for this reaction to take place. Bananas are heavily affected by ethylene gas.

My Hypothesis:

If I put one banana in a cardboard box and a bunch of bananas on the counter, both in the same room, then the banana in the cardboard box will ripen faster than the bunch left out on the counter.

I came up with the Hypothesis when thinking about ethylene gas. I thought about how placing a banana in a cardboard box might disrupt the diffusion of ethylene gas and thus cause the banana to ripen faster than the control group.

Materials/Methods:

I tested my hypothesis by isolating a single variable. I did this by putting a bunch of bananas on Mr. Farrer's desk (control group), and one banana in a 2'x 3'x 1' standard corrugated cardboard box that was located on the other side of the room as Mr. Farrer's desk. I then placed the banana inside of the box and taped the box closed insuring that no light was getting into the box (experimental group).

The job of constants in an experiment is to help isolate an independent variable for testing. Constants were very easy to manage during this experiment due to the fact that the control group and the experimental group were both in the same room. This means that both groups were exposed to a roughly constant 72°F air temperature, humidity, and sound. Because of the placing of both groups in the same room, I know that it is perfectly reasonable to conclude that the only variable that was different between the two groups was the

Ripening Fruit Lab Report

independent variable, which I believe was successfully isolated and allowed me to bring forth an accurate conclusion.

In this experiment, the independent variable was the placing of the banana in the cardboard box. The dependent variable was ripening speed of the bananas. In short, the dependent variable was determined by the independent variable. So, in my experiment, I was testing whether or not putting a banana would speed up the ripening speed of the banana.

Every day possible, I collected data on both the control group and the experimental group. I collected data through taking pictures, observing the bananas with my senses, and recording features displayed by the bananas on paper. I then created an easy to read chart with pictures and observations for both the control group and the experimental group that I observed at certain benchmark times (i.e.. 24 Hours, 48 Hours). This display of data definitely allowed me to analyze my results and infer a reasonable conclusion.

Results:

Each and every day possible, I collected data on the different groups of bananas. I took pictures and noted down certain traits that each group displayed. My results are as followed...

Start of Experiment:

CS- Control Group = the group of bananas was mostly yellow with a slight green shading at both the top of the bananas and at the bottom of the bananas. The bananas were firm but yet slightly squished with a firm grip.

ES- Experimental Group = the banana was mostly yellow with barely any green shading at both the top of the banana or at the bottom of the banana. The banana was firm but yet slightly squished with a firm grip.

24 Hours into the Experiment:

C24- Control Group = By this time, most if not all of the green had faded from the bananas. The bananas were softer than before, but they were still fairly firm. Each banana in the bunch was fully yellow except for maybe 10 or so very tiny brown dots each with less than a 2 mm radius.

E24- Experimental Group= By this time, the banana was 90% yellow. On one side of the banana, there was a very light thick brown line running from the top of the banana to the

Ripening Fruit Lab Report

bottom. The banana had a few soft spots only located on the brown dots. Directly beneath the stem of the banana, a heavy dark brown line circled the top of the banana.

48 Hours into the Experiment:

C48- Control Group = After 48 hours of sitting on a desk the bunch of bananas still had a dominant yellow shade; Although, even more brown dots speckled the bananas. The stems on the bananas had turned a medium brown color but the skin protecting the fruit was a light yellow color with no large brown lines or marks.

E48- Experimental Group = After 48 hours of being in a closed cardboard box, the banana showed significant progress along the ripening path. The banana was very, very soft to the touch and was now leaking sticky liquid. Now, only 40% of the banana was "yellow" while the other 60% was brown. The brown spots had only gotten bigger and darker. New, thin brown lines were appearing on the edges of the banana.

144 Hours into the Experiment:

C144 - Control Group = At this point in the experiment, the bananas were very ripe. The top and bottoms of the bananas were completely brown. Light splotches of brown almost covered all of the bananas. The bananas were very soft to the touch and could easily be mashed by one hard hand squeeze. The brown dots grew a large amount and almost every brown dot or mark was at least 3 cm wide.

E144- Experimental Group = At this point in the experiment, the banana that was placed in the box appeared as though it was rotting. A brown shade covered 90% of the banana and left only measly 10% yellow. The banana was so soft that if you even placed a finger on the banana your finger would sink into the banana and your finger would have sticky liquid all over it. The lines on the banana had intensified into even thicker darker lines that ran down the edges of the banana.

(turn page to view data table with pictures)

Ripening Fruit Lab Report

| Group | Start of Experiment | 24 hours | 48 hours | 144 Hours |
|--------------|---|--|---|---|
| Control |  (Reference notes CS) |  (Reference notes C24) |  (Reference notes C48) |  (Reference notes C114) |
| Experimental |  (Reference notes ES) |  (Reference notes E24) |  (Reference notes E48) |  (Reference notes E144) |

Ripening Fruit Lab Report

Conclusion:

Through my experiment, it can be inferred that putting a banana in a cardboard box will indeed increase the ripening speed of a banana. I feel that I should accept my hypothesis because throughout the experiment, the experimental group that was placed inside of the cardboard box ripened faster than the control group that was left on Mr. Farrer's desk. I can infer with my data that the small box that the banana was placed in provided a dark and still environment for the banana which allowed the banana to ripen faster than the control group. Also, the cardboard box might have disrupted the natural diffusion of ethylene gas that the banana produced so as a result, the banana ripened faster because it was exposed more to ethylene gas. Towards the end of the experiment, the experimental banana began to ripen so fast that the banana was rotting. There were many things that I admit were wrong with this experiment that I had no control over. 1st off, the control group was comprised of a bunch of bananas; Where the experimental group was comprised of only one banana. This could have offset the ripening speed of the bananas. Secondly, data was only collected on the start of the experiment, the 24 hour mark, the 48 hour mark, and the 144 hour mark. This was because of the fact that a long 3 day weekend interrupted data collection during this experiment. So, I was un-able to collect data for the 72, 96, and 120 hour time frames. During the 72, 96, and 120 hour mark, data could have been collected that would lead to a changing of my conclusion. Lastly, the bananas in the experiment might have come from different banana trees. If this were the case, the bananas might have different genetic code that effects the ripening speed each banana.

If I were to repeat this experiment, I would definitely make sure to plan ahead by incorporating weekends into my data collection schedule. Also, I would make sure that the same numbers of bananas were put in each group to insure data accuracy. Lastly I would insure that the bananas in my experiment all came from the same banana tree so I could be sure that the independent variable was the sole cause of the dependent variable. I would definitely want to repeat this experiment to help better support my hypothesis that if I put one banana in a cardboard box, and a bunch of bananas on the counter both in the same room, then the banana in the cardboard box will ripen faster than the bunch left out on the counter.

FROM THE STUDENT ACADEMIC NOTEBOOK

Effects of proximity on plant growth

Jane Doe

1/12/09

Mrs. Salyer

Introduction

Plants need sunlight, water, nutrients from soil and Carbon Dioxide in order to complete photosynthesis and grow. Factors can affect growth rate, such as fertilizers added to soil or water, intensity of light and amount of space between growing seedlings to name a few. In this experiment, the amount of space between growing seedlings will be used to determine the affect on plant growth.

Hypothesis

If plants have more space to grow, then they will grow taller than those that are crowded by other seedlings. This hypothesis was based on prior knowledge about plant growth including the need for plants to take up nutrients from the soil and spread roots to establish growth. If a plant is crowded by other seedlings, the plants can't spread roots as far, they compete for nutrients, and inhibit growth by coming into contact with one another.

Materials and Procedure

- 3 pots labeled A, B, C
 - potting soil
 - water
 - bean seeds
 - sunny window with temperature maintained at ~70 degrees Celsius
 - metric ruler (to measure height in mm)
1. Each pot is filled $\frac{3}{4}$ full with potting soil by gently packing soil into pot.
 2. Place 1 bean seed in pot A $\frac{1}{2}$ way into soil.
 3. Place 3 bean seeds in pot B $\frac{1}{2}$ way into soil.
 4. Place 6 bean seeds in pot C $\frac{1}{2}$ way into soil.
 5. Each pot is watered with 50 mL of tap water every other day.
 6. Height (mm) measurements are taken every Friday for 10 weeks.

Results

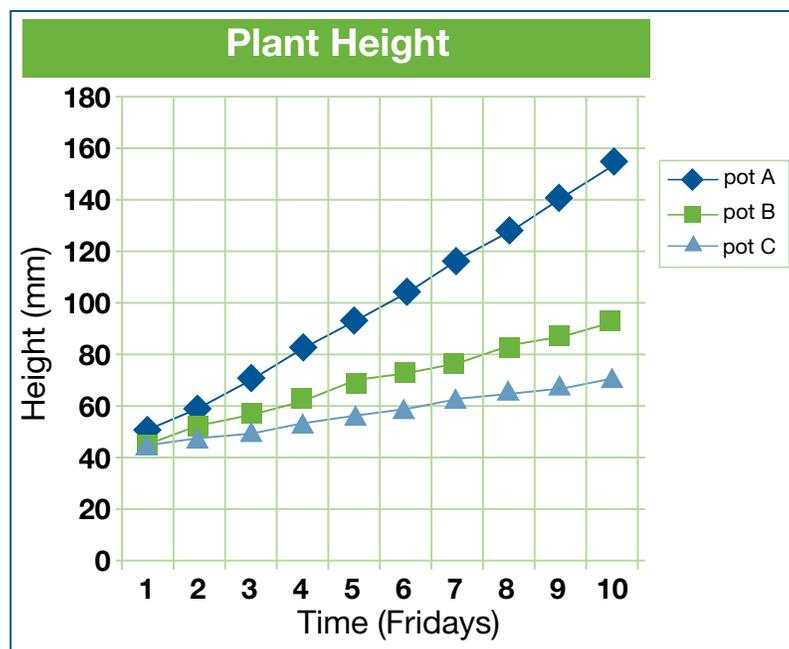
After one week of growth Pot A, which had 1 plant, was at 59 mm while B and C had plants that reached only 56 and 54 mm respectively. Through the 10-week trial the plants in Pot A grew to a maximum height of 155 mm on week 10. Plants in pot B reached 99 mm and plants in C reached 78 mm. The plants grew at a rate of about 9 mm per week for pot A, about 5 mm per week for pot B, and 3 mm per week for pot C. Refer to data table for complete data set.

Plant Height Data

| Time (Friday) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Pot A (mm) | 59 | 68 | 78 | 89 | 100 | 110 | 121 | 132 | 143 | 155 |
| Pot B (mm) | 56 | 62 | 67 | 72 | 77 | 81 | 85 | 90 | 94 | 99 |
| Pot C (mm) | 54 | 57 | 60 | 63 | 65 | 68 | 71 | 74 | 76 | 78 |

Analysis

According to the data, proximity of seedlings had a direct effect on plant growth. Pot A, which had only 1 bean plant, grew taller each week and reached a higher maximum height at 155mm. The graph supports this by showing a larger increase and a higher slope for the data for pot A. Pot B had plants that reached a greater height than pot C. Again this is represented by the graph showing the line for pot B with a slightly steeper slope than the line for pot C. This data supports the hypothesis made that plants would grow better (taller) if more space was available.



Conclusion

The experiment performed was testing bean plant proximity and the relationship to growth. Varying numbers of beans were used in similar pots and under similar conditions to test the growth in bean height over a ten-week period. The data supported the hypothesis that fewer beans per pot would yield better growth. The beans in pot A, which had only 1 bean, grew at a faster rate and reached a greater height (155mm) than beans in pot B or pot C. Data collection could have been better at indicating plant growth if other factors would have been taken into account. For instance, if number of leaves and stems, coloration, width of leaves, or number of blooms had been measured the experiment would have been more comprehensive.

Lab Report – Strong and Weak Points

Include the strong components, stay away from the weak ones!

| Meets | Strong | Weak |
|------------------------|---|--|
| Introduction | <ul style="list-style-type: none"> • The purpose was....(purpose statement). • Background knowledge (ethylene gas). • All sections of lab report are labeled. | <ul style="list-style-type: none"> • Not enough detail. • Don't use personal pronouns. • Not including purpose or background info. |
| Hypothesis | <ul style="list-style-type: none"> • Use If...then.... statement. • A true prediction of what is going to happen in the experiment. | <ul style="list-style-type: none"> • Not including because statement. |
| Methods/ Procedures | <ul style="list-style-type: none"> • Experimental and control group are identified. • Procedures are numbered. • IV, DV, and constants are identified. • Complete sentences. • Very clear to the reader. | <ul style="list-style-type: none"> • Don't use personal pronouns. • Could someone replicate your experiment step-by-step? • Skipping steps, assuming the reader knows what you are doing. • Not organized. |
| Data | <ul style="list-style-type: none"> • Labels!! • Data table is used to organize data • Specific observations – using senses • Graphs used if possible (not for qualitative data) • Units! | <ul style="list-style-type: none"> • Not specific about type of data collected. • Data table is not organized. |
| Analysis | <ul style="list-style-type: none"> • The hypothesis was accepted/r ejected because... • Explains <u>why</u> you got the data you did. • What made you decide whether the hypothesis was accepted/rejected? | <ul style="list-style-type: none"> • Not labeling sections. • Not referring to the data. • Not referring back to the hypothesis. |
| Conclusion | <ul style="list-style-type: none"> • Lists possible errors in the experiment (Human errors? Experimental error?) • How valid or trustworthy was the experiment? • A concise summary of the experiment. • Any possible next steps? | <ul style="list-style-type: none"> • Not considering all the errors or how to improve the experiment. • Only restating everything that has been said before. |

Ask students to conduct the lab. See the Calorie Lab handout for specific directions, materials and supplies.

First, ask students to read the directions. In small groups, ask them to explain the objectives and purposes of the lab. Discuss as a whole class.

Discuss what makes a good hypothesis and have students create a hypothesis for their lab groups. Utilize the If...Then format from the sentence starters to create the hypothesis in the lab. Have students refer to “good hypotheses” identified when looking at the sample lab reports early in the lesson.

Then, discuss the procedures the class will use in setting up the experiment.

FROM THE STUDENT ACADEMIC NOTEBOOK

Lab: Determining Calorie Content in Foods (Burning Calories)

Related Reading: Calories and Metabolic Rate - Belk and Maier Chapter Four.

Literacy Skills:

- Develop a hypothesis based on readings and lab procedure.
- Read and follow directions for a lab procedure.
- Gather and record data.
- Write a lab report.

Connections: During the remaining days/weeks of the unit, debate/discuss nutrients and whether counting calories is sufficient for good nutrition.

Objective: The **scientific goal** of this experiment is to determine the amount of chemical energy stored in food by burning it and capturing the heat given off in a homemade calorimeter. The **literacy goal** is to understand the importance of being able to read and follow directions for a lab procedure and write appropriate reports/follow up.

Introduction: You know that the energy that keeps your brain and body going comes from the food you eat. Your digestive system and the cells in your body break down the food and gradually oxidize the resulting molecules to release energy that your cells can use and store.

In this experiment you will learn a method for measuring how much chemical energy is stored in different types of food. You will oxidize the food much more rapidly, by burning it in air. You will use a homemade calorimeter to capture and measure the heat energy released by burning. The basic idea of a calorimeter is to capture the released heat energy with a reservoir of water, which has a high capacity for absorbing heat. The temperature of the water reservoir is measured at the beginning and at the end of the experiment. The increase in the temperature (in °C) times the mass of the water (in g) will give you the amount of energy captured by the calorimeter, in calories. We can write this in the form of an equation:

$$Q_{\text{water}} = mc\Delta T$$

Where:

- **Q_{water}** is the heat captured, in calories (cal);
- **m** is the mass of the water, in grams (g);
- **c** is the specific heat capacity of water, which is 1 cal/g°C (1 calorie per gram per degree Celsius); and
- **ΔT** is the change in temperature (the final temperature of the water minus the initial temperature of the water), in degrees Celsius (°C).

(Example problem in notes below)

Notes:

A calorie (lowercase “c”) is actually defined by the heat capacity of water. One calorie is the amount of energy that will raise the temperature of a gram of water by 1°C. When we talk about food energy, we also use the word “Calorie,” (note uppercase “C”) but it is a different unit. It is the amount of energy needed to raise the temperature of a kilogram (= 1000 grams) of water by 1°C. So a Calorie is the same as 1000 calories. Or, to put it another way, 1 Calorie = 1 kcal. So in this experiment, for food Calories we will be careful to always use an uppercase “C”.

Materials and Equipment:

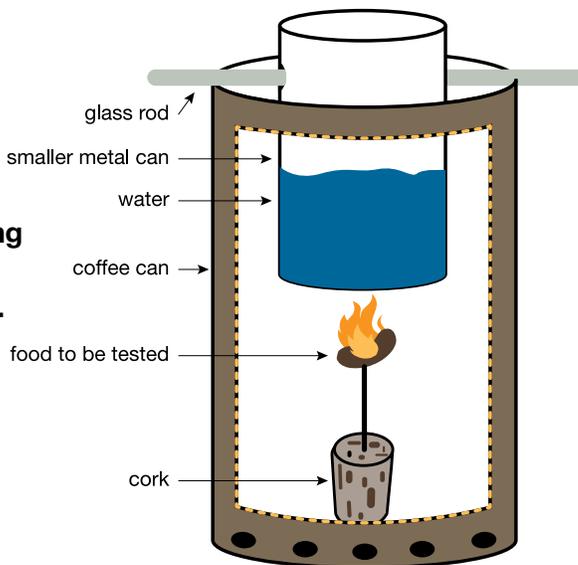
- homemade calorimeter (for diagram and instructions on assembling, see Experimental Procedure below) requires:
 - two tin cans, one larger than the other
 - wood dowel, pencil or other rod-shaped support
 - cork
 - needle or wire paper clip
 - hammer and nail
- graduated cylinder
- water (preferably distilled)
- thermometer (calibrated in °C, range 20–100 or greater)
- safety glasses
- lighter or matches
- scale (calibrated in grams, for determining energy content per gram of food)
- food items to test (dry items will obviously work better), for example:
 - roasted cashew nuts, peanuts or other whole nuts
 - pieces of popcorn
 - marshmallows
 - small pieces of bread
 - dry pet food

Experimental Procedure:

Safety notes: Make sure you work on a non-flammable surface. Keep long hair tied back. Be careful handling the items used in this experiment as they may be hot! Wear safety glasses.

1. Constructing the calorimeter.
(http://www.sciencebuddies.org/science-fair-projects/project_ideas/Chem_p017.shtml?from=Home)
 - a. Select two cans to build your calorimeter. They should nest inside one another. The smaller

Figure 1. Diagram of Homemade Calorimeter



- can needs to sit high enough so that you can place the cork, needle and food item beneath it.
- Remove the top and bottom from a coffee (or similar-sized) can, so that you have a cylinder open on both ends.
 - Use a hammer and nail to make holes around the bottom of the can (to allow air in to sustain the flame).
 - Punch holes at opposite sides of the smaller can near the top for the support to pass through. The diagram labels the support as a glass rod, but you can use a wood dowel, a pencil or a metal rod for the support. Your support needs to be longer than the width of your large can.
 - Grasp the needle (or wire) and push its blunt end into the cork. You will impale the food to be tested on the sharp end of the needle. (If you use wire, you can bend it into a support or wrap it around the food item to be tested. Don't use insulated wire!)
 - The smaller can will hold the water to be heated by burning the food samples. Use the graduated cylinder to measure how much water you use; the can should be about half-full. Put the supporting rod in place through the two holes.

Figure 2. A top down view of the homemade calorimeter is shown here.



2. Weigh each of the food items to be tested and record the weight in your data chart. (An alternate method is to weigh the cork, needle and food assembly before and after burning; see step 12.)
3. Fill the small can about half-way with a measured amount of distilled water (100 mL or so).
4. Measure the initial temperature (T_i) of the water (record it in your data chart).
5. Impale the food item on the needle (or wrap the wire around it).
6. Have your calorimeter pieces close at hand and ready for use.
7. Place the cork on a non-flammable surface. Light the food item (the nuts may take awhile to catch fire).

8. When the food catches fire, immediately place the large can around the cork, then carefully place the smaller can in place above the flame. Carefully observe the food as it burns and record the qualitative data in your data chart.
9. Allow the food item to burn itself out.
10. Carefully remove the small can by holding the ends of the supporting rod, and place it on a flat, heat-proof surface. The can will be hot, so be careful.
11. Carefully stir the water and measure the final temperature (Tf). Make sure the thermometer has reached a steady level before recording the value. (Record it in your data chart.)
12. When the burnt food item has cooled, carefully remove it from the needle (or wire) and weigh the remains. (An alternate method is to weigh the cork, needle and food assembly before burning and again after burning; see step 2.) (Record it in your data chart.)
13. Repeat steps two to 13 for all of the food items. It's a good idea to repeat the measurement with multiple samples of each food item, to insure consistent results.
14. Analyze your data. Calculate the energy released per individual food item (in calories and Calories), and the energy per unit weight of each food item (in calories/gram and Calories/gram). From your individual results, calculate average values for each food type. (Record it in your data chart.)

Questions:

Which food type released the most energy per gram?

Can you calculate the average energy (in Calories) for each type of food item you tested?

(Space provided in academic notebook.)

DATA: Create a neatly organized data table in the space below. Include a labeled spot for qualitative observations underneath the table.

(Space provided.)

Lab Analysis:

Write up the results of your findings. Be sure to address the following points in your 1-2 page analysis:

- What were the results of your experiments? What was surprising in these results?
- Were you able to determine the entire calorie content of the food item? Why or why not?
- Do you think the number of calories you calculated is likely to be lower or higher than it really is? Explain why.
- What is the original source of energy in all the food we tested?

(Space provided.)

ALTERNATE PROCEDURE – This is a simpler apparatus yielding less accurate results but much easier to set up.

Suspend an empty soda can from a ring clamp on a ring stand using a support rod inserted through the flip top of the soda can. Place the food sample on a needle and cork assembly beneath the soda can as described above, or hot-glue a large paper clip to the inside of a jar lid and stretch it up to make a platform for the food. Measure water and pour into soda can just as in the small can used above. Proceed as above.

Other versions of homemade calorimeters can be found at this website:

(<http://www.bing.com/images/search?q=Making+A+Calorimeter&FORM=IQFRDR>)



Notes:

A Note on Units:

A calorie (lowercase “c”) is actually defined by the heat capacity of water. One calorie is the amount of energy that will raise the temperature of a gram of water by 1°C. When we talk about food energy, we also use the word “Calorie,” (note uppercase “C”) but it is a different unit. It is the amount of energy needed to raise the temperature of a kilogram (= 1000 grams) of water by 1°C. So a Calorie is the same as 1000 calories. Or, to put it another way, 1 Calorie = 1 kcal. So in this experiment, for food Calories we will be careful to always use an uppercase “C”.

Eating a balanced diet is fundamental to good health. This experiment will give you a chance to learn about how much energy your cells can extract from different types of food. It is important to remember though, that energy is only one measure of nutritional value. As you are doing your background research on this project, try to find out about other measures of a balanced diet in addition to food energy.

Sample problem: Let’s work through an example to make sure that the equation is clear. (We’ll use made-up numbers for the example. You’ll have to try the experiment for yourself to get actual measurements.) So let’s say that we start out with 100 g of water in the calorimeter ($m = 100 \text{ g}$). The initial temperature of the water is 20°C. After burning up some small piece of food, we measure the water temperature again, and find that the final temperature is 24°C. Now we have all of the information we need to

calculate the amount of heat captured by the calorimeter:

$$\begin{aligned}Q_{\text{water}} &= mc\Delta T \\ &= 100 \text{ g} \times \frac{1 \text{ cal}}{\text{g}^\circ\text{C}} \times (24^\circ\text{C} - 20^\circ\text{C}) \\ &= 100 \cancel{\text{g}} \times \frac{1 \text{ cal}}{\cancel{\text{g}^\circ\text{C}}} \times (4^\circ\cancel{\text{C}}) \\ &= 100 \times 1 \text{ cal} \times 4 \\ &= 400 \text{ cal}\end{aligned}$$

Now you can see why the specific heat capacity of water has such strange units (cal/g°C). Notice that the grams (g) from the mass of the water and the degrees Celsius (°C) from the change in temperature cancel out with the grams (g) and degrees Celsius (°C) in the denominator of the units for specific heat. That way you are left with units of calories (cal), which is what you want.

Terms to know:

- calorie (cal)
- kilocalorie (kcal)
- Calorie
- calorimeter
- oxidation
- Recommended Dietary Allowance

Related Questions:

- The reference level for a normal diet is 2,000 **Calories**. How many **calories** is this?
- What are the basic chemical structures of fats, sugars and proteins?
- Do these types of molecules differ in the amount of energy they contain?
- Which of your food items do you think will release the most energy? Why?
- What is meant by a “balanced” diet? Why is it important?

The U.S. Department of Agriculture is a good online source of information about nutrition. The links below are for general information, key nutritional recommendations and special pages with information for kids:

(<http://www.choosemyplate.gov/weight-management-calories/calories.html>)

(<http://www.health.gov/dietaryguidelines/2010.asp>)

Variations

Do background research to find out the approximate proportions of the different basic food chemicals (fats, carbohydrates, proteins) in each of the food items you tested.

Can you draw any conclusions about the relative amounts of energy available in these different types of chemicals?

Do background research to find out the chemical composition of candle wax (paraffin). Design an experiment to determine the amount of energy released per gram of candlewax.

Credits

USC Biology Department, 2004. “ ‘Burning Calories’: The Energy in Food,” Biology Department, University of Southern California. Accessed online at:

http://bioweb.usc.edu/courses/2004-fall/documents/bisc150-lab_burningcal.pdf.

Gardner, R., 1999. *Science Projects About Kitchen Chemistry*. Berkeley Heights, NJ: Enslow Publishers, 40–42.

Andrew Olson, Ph.D., Science Buddies. Accessed online at:

http://www.sciencebuddies.org/science-fair-projects/project_ideas/Chem_p017.shtml?from=Home.

The U.S. Department of Agriculture is a good online source of information about nutrition. The links below are for general information, key nutritional recommendations and special pages with information for kids:

- <http://www.mypyramid.gov/guidelines/index.html>.
- <http://www.health.gov/dietaryguidelines/dga2005/recommendations.htm>.
- <http://www.mypyramid.gov/kids/index.html>.

After students complete the lab, ask them to discuss the differences between the calorimeter they used in the experiment and the bomb calorimeter used in the experiment they read about in *Scientific American*. How do the two methods differ? What do they have in common? Which is more accurate? Why? What information from the readings support your results?

Activity Three

Analyzing Data and Writing a Lab Report (Approx. 75 minutes)

Ask students to write a lab report following the model in their academic notebook. To help them get started, discuss the sentence starter examples in their notebook. Have students use the academic notebook entries as a guide for the report. They will need blank paper to compose the full lab report.

FROM THE STUDENT ACADEMIC NOTEBOOK

Lab Report Sentence Starters

Introduction

- In the investigation...
- The purpose is to determine...
- The experiment is designed to test...
- Information about _____ includes...

Hypothesis

- If _____ (IV) _____ then _____ (DV) _____ because _____ (background information) _____.

Procedures/Methods

1. Measure _____ mL of _____ using a graduated cylinder.
2. Then measure _____ mL of _____ and mix in _____.

Data

- Usually in a table format;
- May also include a graph (line, bar, circle, etc) when appropriate;
- Includes both measured data (quantitative) and descriptive data (qualitative).

Analysis

- The data indicated that ...
- That data supported the hypothesis that _____ because _____.
- The data rejected the hypothesis that _____ because _____.
- The hypothesis that _____ was supported by data as seen in the table by _____.
- The purpose was to _____. The data indicates this was accomplished by _____.
- This occurred because _____.
- The reason this happened was probably because _____.

Conclusion

- In this experiment _____.
- The data _____ supported/rejected the hypothesis that _____.
- Errors in the experiment included _____.
- The experiment could be improved by _____.

Provide time for students to work on the lab report in class. About mid-way through the working time, ask students to discuss their progress in pairs. Ask students to refer to the scoring rubric as they discuss their work.

1. What is the strength of your lab report so far?
2. What do you still need to accomplish?
3. How are you using your data and your knowledge about calories from the readings in your reporting?
4. What questions or confusions do you have about completing the lab?

Assessments:

Outcome 1: Students will integrate ideas from lecture, lab and text to understand the role of calories.

- Teacher's analysis of discussion quality and participation

Outcome 2: Students will be able to read, develop a hypothesis and follow directions for a lab procedure, gather and record data and write a lab report.

Outcome 3: Students will analyze data and confirm, modify or reject hypotheses.

- Lab report

| CATEGORY | 4 Excellent | 3 Good | 2 Satisfactory | 1 Poor |
|---|--|--|---|---|
| Introduction/ Purpose | The purpose of the lab is clearly identified and stated. Background information is accurately and thoroughly explained. | The purpose of the lab is identified, but is stated in a somewhat unclear manner. Background information is accurately explained, but lacks depth. | The purpose of the lab is partially identified, and is stated in a somewhat unclear manner. Background information is explained with some inaccuracies. | The purpose of the lab is erroneous or irrelevant. Background information was not included. |
| Hypothesis | Clear and reasonable hypothesis based on background knowledge and what has been studied. | Clear and reasonable hypothesis with some connection to background knowledge and what has been studied. | Reasonable hypothesis based on general knowledge and observations. | Hypothesis has been stated, but appears to be based on flawed logic. |
| Materials and Procedures | Procedures are listed in clear steps. Each step is numbered and is a complete sentence. The lab can be easily replicated by following the steps. All materials are included in a clear and logical way. | Procedures are listed in a logical order, but steps are not numbered and/or are not in complete sentences. The lab could be replicated but is lacking some detail. Most materials are included in a somewhat clear and logical way. | Procedures are listed but are not in a logical order or are difficult to follow. Many materials are included but 2-3 are left out OR all the materials are included but in an unclear manner. | Procedures do not accurately list the steps of the experiment. Materials are included but many left out OR no materials included. |
| Results/ Data | Professional looking and accurate representation of the data in tables and/or graphs. Graphs and tables are labeled and titled. Thorough written summary of data. | Accurate representation of the data in tables and/or graphs. Graphs and tables are labeled and titled. Written summary of data included. | Accurate representation of the data in written form, but no graphs or tables are presented OR graphs or tables are presented, but no written summary of the data. | Data is lacking in both graphs or tables as well as the written summary. |
| Analysis | Thoroughly explains the data in accepting or rejecting the hypothesis. Clearly explains why the data came out the way it did. Clearly explains the graph/table in relationship to accepting or rejecting the hypothesis. | Explains the data in accepting or rejecting the hypothesis. Explains why the data came out the way it did. Explains the graph/table in relationship to accepting or rejecting the hypothesis. | Somewhat explains the data in accepting or rejecting the hypothesis. Somewhat explains why the data came out the way it did. Somewhat explains the graph/table in relationship to accepting or rejecting the hypothesis. | Poor explanation of the data. Little to no connection to the hypothesis. Does not provide explanation of graphs/tables. |
| Conclusion | Conclusion clearly summarizes the experiment and the data in relation to the hypothesis. Clearly reflects on the validity of the experiment, including possible sources of error. Clearly reflects on what was learned from the experiment and possible future implications. | Conclusion summarizes the experiment and the data in relation to the hypothesis. Reflects on the validity of the experiment, including possible sources of error. Reflects on what was learned from the experiment and possible future implications. | Conclusion somewhat summarizes the experiment and the data in relation to the hypothesis. Somewhat reflects on the validity of the experiment, including possible sources of error. Somewhat reflects on what was learned from the experiment and possible future implications. | Conclusion is lacking in summary of experiment as well as reflection. |
| Grammar, Sentence Structure & Vocabulary | Proper scientific conventions are followed throughout the report. | Some scientific conventions are followed throughout the report. | Few scientific conventions are followed throughout the report. | Scientific conventions are lacking. |
| Overall Grade | A (25-28 pts) | B (21-24 pts) | C (14-20 pts) | F (<14pts) |
| Comments: | | | | |

Assessment:

Outcome 1: Students will integrate ideas from lecture, lab and text to understand the role of calories.

| Evaluation Rubric | | | |
|--|----------|----------|-----|
| • Reflection references the resources read. | No | Somewhat | Yes |
| • Reflection uses information from source to support the student’s feelings. | No | Somewhat | Yes |
| • Reflection is written in appropriate prose. | No | Somewhat | Yes |
| Total Points | 9 | | |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Guided students as they read and annotated Belk and Maier Chapter Four, Section One: Calories.
2. Discussed metabolic rate asking text-based questions.
3. Asked students to reading the “Feel the Burn” article and answer text-based questions in academic notebook.
4. Introduced calorie lab.
5. Discussed parts of a lab report using the model in the academic notebook.
6. Used students examples and chart to discuss strong and weak lab reports.
7. Reviewed the lab directions, purposes and procedures.
8. Guided students as they conducted the lab.
9. Discussed ways to write up the lab using the model and the sentence starters in the academic notebook.
10. Asked students to share and discuss lab reports mid-way and responded to any questions.
11. Assessed student discussion of calories during the lesson.
12. Assessed lab report using rubric.
13. Conducted weekly reflection of both disciplinary literacy and science learning.

Lesson 5

Transforming Science Information

Overview and Rationale:

This lesson introduced students to science animations. Science animations pull together science and technology in ways that have great potential for teaching and learning. Animations, accompanied by good instruction, can help students understand difficult processes. In this lesson, students will learn to use animations to illuminate the science processes. They will also learn to transform knowledge by moving from animation to text to visualization. Thus, students will experience multiple representations of science information.

Tasks/Expected Outcomes:

1. Students will be able to transform knowledge from visual to text and vice versa.
2. Students will compare and integrate representations of science processes.
3. Students will begin to understand the role of models, animations and multiple representations of information in science.
4. Students will explain science processes through discussion, writing and drawing.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (8) Reading/Comprehension of Informational Text/Culture and History. Students analyze, make inferences and draw conclusions about the author's purpose in cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to analyze the consistency and clarity of the expression of the controlling idea and the ways in which the organizational and rhetorical patterns of text support or confound the author's meaning or purpose.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and

- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
 - (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
- (14) Writing/Literary Texts. Students write literary texts to express their ideas and feelings about real or imagined people, events, and ideas. Students are responsible for at least two forms of literary writing. Students are expected to:
 - (A) write an engaging story with a well-developed conflict and resolution, a clear theme, complex and non-stereotypical characters, a range of literary strategies (e.g., dialogue, suspense), devices to enhance the plot, and sensory details that define the mood or tone;
- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.

4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

Animations:

- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_enzymes_work.html
- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_diffusion_works.html
- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_facilitated_diffusion_works.html
- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_osmosis_works.html
- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_the_sodium_potassium_pump_works.html

Timeframe:

100 minutes

Targeted Vocabulary:

Discipline Specific Vocabulary

- diffusion
- facilitated diffusion
- osmosis
- sodium-potassium pump

General Vocabulary Used in a Discipline-Specific Way

- transport (active and passive)

Activity One

Building Connections (Approx. 5 minutes)

Discuss the role of animations in science learning. Ask students to think about how seeing concepts in multiple ways can help deepen their understanding. Can they think of an example from their daily life (e.g. watching, reading about and playing a sport)?

Activity Two

Understanding Animations (Approx. 95 minutes)

Start by showing students the animation on enzymes as a review of what they read in Belk and Maier 4.1.

(https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_enzymes_work.html)

Discuss the concepts as a class. Ask, what were the key ideas that a person needs to understand from this animation? Do enzymes always function by turning two substances into one? Why not? Can you give an example from the textbook on it working the other way (one substance to two)? What science vocabulary do you need to know? Remind students that we are learning vocabulary as part of a science process so they need to know more than just the definition. They also need to know how the vocabulary concept works within the science process.

Ask students to briefly summarize the concept presented in the animation in their academic notebook.

Ask students to read Belk and Maier 3.2 on Transport. As they read and annotate, intersperse the animations after each one is presented in the text. Thus, students will read the text, view the static diagram in the text and then view the animated diagrams.

Ask students to read the first two paragraphs of the overview. Before annotating, ask them to pair up to discuss the diagram (Figure 3.5). They will need to use the information in the paragraph to understand the diagram. Ask them to underline the key ideas the paragraph that help explain the process depicted in the diagram. Discuss the concept as a whole-class.

Discuss the following juicy sentence: “Hydrophobic substances can dissolve in the membrane and pass through it more easily than hydrophilic ones.” Look at the prefix/suffix chart to figure out what hydrophobic and hydrophilic mean (hydro-water, phil-loving, fond of). Ask, what does it mean if water loving substances have a harder time dissolving in the membrane?

Discuss the rest of the section. (Larger molecules, charged molecules and ions cannot cross over lipid bilayer on their own. They must move through proteins embedded in membrane. Proteins serve as channels, until their concentration is equal on both sides of the membrane or past the point of chemical equilibrium.)

Ask students to read the section entitled Passive Transport in A Closer Look.

Tell students that this section discusses a lot of important concepts in a very short section. In this lesson, students will learn how to slow down to focus on learning and understand each idea. Remind them to think about the scientific vocabulary as a part of understanding the entire science process.

Show the diffusion animation and ask students to write a brief summary in their academic notebook. Follow with facilitated diffusion and osmosis.

- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_diffusion_works.html.
- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_facilitated_diffusion_works.html.
- https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_osmosis_works.html.

After viewing the animations and writing the summaries, move to the section on active transport in Belk and Maier 3.2. Once again, ask students to read the running text in the textbook, while also reading the diagram. Remind them that one strategy that is

important for all science students to learn is to be able to jump back and forth within text from the diagram back to the extended description in the text. Ask students to underline the sections of text that explain the diagram.

Then, show the animation on the sodium potassium pump and ask students to write a brief summary in their academic notebook.

(https://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation__how_the_sodium_potassium_pump_works.html)

Once students have all of their summaries written they will transform the text back to visual form with a partner. Talk to students about how being able to transform from visual to text or text to visual is an essential tool that scientists need. When scientists read about a science process they try to visualize it in their minds. When they view a diagram they try to explain it fully. This flexibility is a good way to make sure you understand each process.

Transforming science information: One student will read one of their explanation paragraphs and the other student will draw the process being described. Students will discuss the process and debrief on what information helped and what may have been missing from both the written and drawn work by using the diagrams in the text. Students will trade roles until all of the animations have been discussed.

Vocabulary learning: Remind students that they are learning the vocabulary of science as they are learning the science concepts. Therefore, it is important that they use the language of the discipline as they describe their animations to each other. Instead of saying, “the thing moved across the membrane,” it is important to use precise terminology, “the oxygen molecule crossed the membrane to achieve equilibrium.” As they share their summaries and work on transforming information, ask students to remember that in addition to learning the concepts, they also must learn the terms.

Ask students to form small groups to try out the transformation process using a static diagram to extend their learning (Figure 3.8). In a small group, ask students to apply their knowledge by making sense of the diagram by reading the text on exocytosis and endocytosis. They will then write the process in paragraph form.

Assessments:

Outcome 1: Students will be able to transform knowledge from visual to text and vice versa.

Outcome 2: Students will compare and integrate representations of science processes.

Outcome 3: Students will begin to understand the role of models, animations and multiple representations of information in science.

Outcome 4: Students will be able to discuss science processes through discussion, writing and drawing.

- Written explanations of animations

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Accurately explains visual science process in written form. | No | Somewhat | Yes |
| • Completely represents each part of the process. | No | Somewhat | Yes |
| • Uses scientific terminology in explanation. | No | Somewhat | Yes |

- Visual representations of the animations and diagrams

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Accurately explains written science process in visual form. | No | Somewhat | Yes |
| • Completely represents each part of the process. | No | Somewhat | Yes |
| • Uses scientific terminology in explanation. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Discussed the role of animations in science.
2. Showed and discussed the enzyme animation.
3. Asked students to read Belk and Maier Chapter Three, Section 3.2.
4. Interspersed animations in the appropriate places within the reading on the text.
5. Asked students to summarize each concept in their academic notebooks.
6. Discussed the role of vocabulary and precision of terminology as an aspect of learning science concepts.
7. Asked students to transform their summaries back to visual with a partner.
8. Extended learning by asking students to use the process with Belk and Maier Figure 3.8.
9. Reflected on the learning with students.

Lesson 6

Synthesizing Knowledge Gained from Text

Overview and Rationale:

One of the guiding inquiry practices in this unit is that scientific knowledge is socially constructed using peer critique and public dissemination. This lesson provides an additional opportunity for students to hone their skills in sharing science with peers. Students will have the opportunity to take roles of an expert and of a learner while sharing scientific concepts. Students will also add to their knowledge by taking notes over a lecture and discussing BMI. Students will synthesize their knowledge on calories, nutrition and BMI in a class discussion.

Tasks/Expected Outcomes:

1. Students will be able to clearly explain science concepts to peers.
2. Students will learn the Cornell Method of note-taking.
3. Students will synthesize concepts from multiple sources and representations to discuss the complexity of calories.
4. Students will develop arguments based on evidence from multiple sources.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

(15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:

- (D) produce a multimedia presentation (e.g., documentary, class newspaper, docudrama, infomercial, visual or textual parodies, theatrical production) with graphics, images, and sound that appeals to a specific audience and synthesizes information from multiple points of view.

(23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into an extended written or oral presentation that:

- (A) provides an analysis that supports and develops personal opinions, as opposed to simply restating existing information;
- (B) uses a variety of formats and rhetorical strategies to argue for the thesis;
- (C) develops an argument that incorporates the complexities of and discrepancies in information from multiple sources and perspectives while anticipating and refuting counter-arguments;
- (E) is of sufficient length and complexity to address the topic.

(§110.34) English Language Arts Standards: Speaking and Listening

(24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:

- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
- (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

(25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate

(e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 6. Analyze imagery in literary texts.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.

- B. Develop effective speaking styles for both group and one-on-one situations.
 - 1. Participate actively and effectively in one-on-one oral communication situations.
 - 2. Participate actively and effectively in group discussions.
 - 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- C. Produce and design a document.
 - 1. Design and present an effective product.
 - 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy

1. Use search engines, databases, and other digital electronic tools effectively to locate information.
2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Belk and Maier Chapter Three, Section 4.3
- WebMD Article “How Accurate is BMI?”
(<http://www.webmd.com/diet/features/how-accurate-body-mass-index-bmi>)

Timeframe:

150 minutes

Targeted Vocabulary:

Discipline Specific Vocabulary

- antherosclerotic
- body mass index (BMI)
- hypertension
- hydrophobic/hydrophilic
- low/high density lipoproteins

General Academic Vocabulary

- predisposition

Activity One

Gathering Information from Group (Approx. 50 minutes)

Ask students to read and annotate Belk and Maier 4.3 on body fat and health in small groups. In class, divide students into small groups to read the intro paragraph and the section on evaluating body fat up to the end of the discussion on BMI. Then each group will delve deeper into one of the health disorders discussed in the section.

- A. Divide students into five to seven groups. Each group will be assigned one health disorder (obesity, diabetes, hypertension, heart attack & stroke, anorexia & bulimia). *Note: If necessary, heart attack, stroke, anorexia and bulimia can each be done by a separate group to make seven topics.*
- B. Each group will gather the following information on their assigned disorder: definition of their disorder, causes, associated risks and treatments.
- C. Each group will select a “juicy sentence” from their section to share with the class. They will begin with that sentence as a way to begin to explain the information.
- D. Each student in the group will learn the information about their assigned disorder well enough to explain it to their peers.
- E. Give students time become familiar with their disorder and to make a plan for sharing the information with their peers.
- F. Ask each group to present their topic to the class. Encourage students to ask questions for clarification.
- G. At the end of the group sessions, answer any other questions students may have about the disorders.

Ask students to read the BMI article and discuss in their groups why we need to know more than BMI.

- Web MD Article (<http://www.webmd.com/diet/features/how-accurate-body-mass-index-bmi>)

Ask students to take notes in their academic notebook focusing on:

- A definition of BMI.
- The role of BMI.
- The pros and cons of using BMI to measure healthy weight.

Discuss summaries as a class.

Assessment:

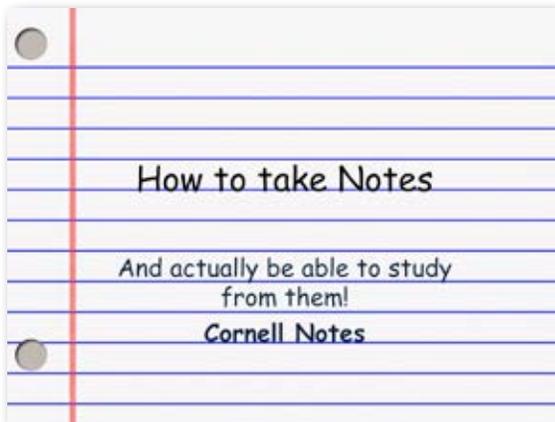
Outcome 1: Students will be able to clearly explain science concepts to peers.

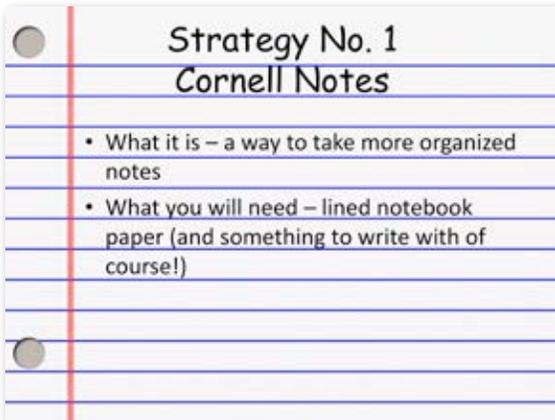
| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Participates fully in the discussion | No | Somewhat | Yes |
| • Adds meaningful information or insights | No | Somewhat | Yes |

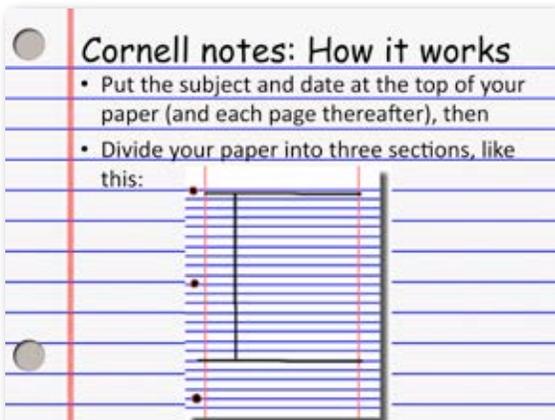
Activity Two

Cornell Note Taking (15 minutes)

Go over the Cornell Notes PowerPoint with the class. Discuss the importance of recording the key points during the lecture, including examples, diagrams, etc. Then, discuss the importance of using the margins to write questions after the lecture for testing themselves on the material.

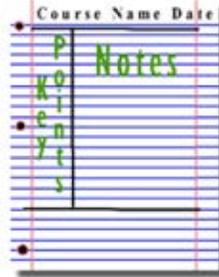






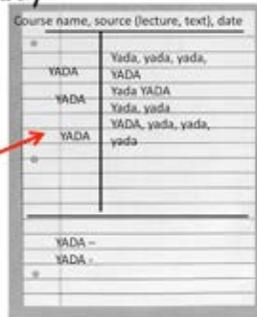
Cornell notes: How it works - Taking notes

- The large box to the right is for writing notes, either from the lecture or as you read.
- Skip a line between main ideas and topics.
- Don't use complete sentences, and don't try to copy down every word from the text or the lecture. Use abbreviations, whenever possible. Develop a shorthand of your own, such as using "&" for the word "and", w/ for with, b/c for because, and so on.



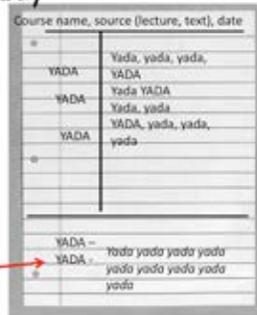
Cornell Notes: Using your notes to study

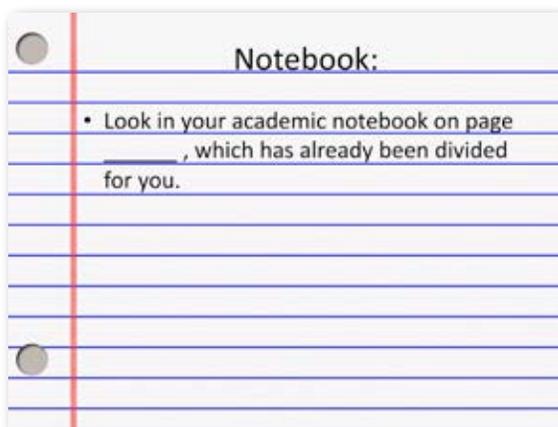
- Review notes as soon as possible after class!
- Pull out main ideas and put them in the left column

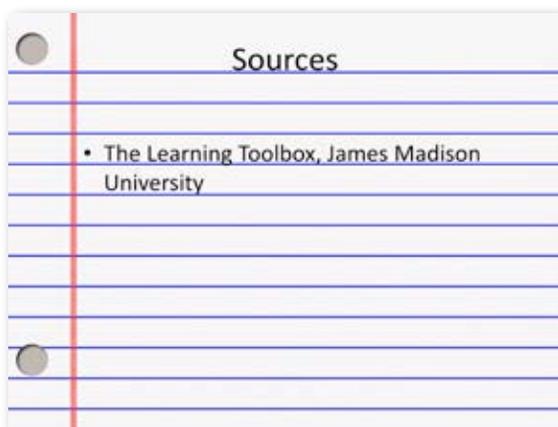


Cornell Notes: Using your notes to study

- Write a summary of the main ideas in the bottom section







Activity Three

Insulin Lecture (35 minutes)

Students will take notes on a lecture about insulin. Remind students to use the Cornell note-taking method. When delivering the lecture, stop periodically to ask students to summarize what they have heard and to ask questions. Ask students to draw a line under the notes they have taken so far, label the next part “Summary,” and add a summary of their notes. After the lecture, students will compare their notes to look for ways to improve them in accuracy and completeness. After checking their notes, they will create a way to test their knowledge of the information by pulling out key concepts or writing questions in the margins to ask themselves. Ask students to “grade” their work using the lecture note checklist.

TEACHER RESOURCE

Lecture on Insulin

Davidson College Biology

How does insulin work in the human body?

Insulin secretion

Insulin is synthesized in the beta cells of the pancreas through a glucose transporter by means of facilitated diffusion. The main function of the pancreas is to produce insulin, digestive enzymes, and other hormones (Norman, 2002). The secretion of

insulin is controlled by the glucose concentrations in the blood stream. As the level of glucose rises in the blood, the insulin levels also increases. As carbohydrates or sugars are absorbed by the intestines after a meal, insulin is secreted by the pancreas in response to this increase in blood sugar. Due to the heightened levels of glucose, membrane depolarization of the beta cells occurs, causing extracellular calcium to rush into the cell. This in turn stimulates the export of secretory granules, which contain insulin, out of the cell (Bowen, 2004). Most cells throughout the human body have insulin receptors to which insulin binds, and these cells activate other receptors designed to absorb the glucose from the blood stream. To elevate the glucose levels in the beta cells, calcium-independent pathways are triggered by these receptors. Insulin also works in the liver, muscle, and fat cells controlling glucose levels in the body (Purves, et. al., 2001). When glucose levels fall below normal range due to a lack of insulin, glycogen synthesis in the liver ceases and the enzymes responsible for the breakdown of glycogen become active (Bowen, 2004). And without insulin, many of our cells in the body would not be able to take up glucose and would have to resort to alternative fuels like fatty acids for energy (Norman, 2002).

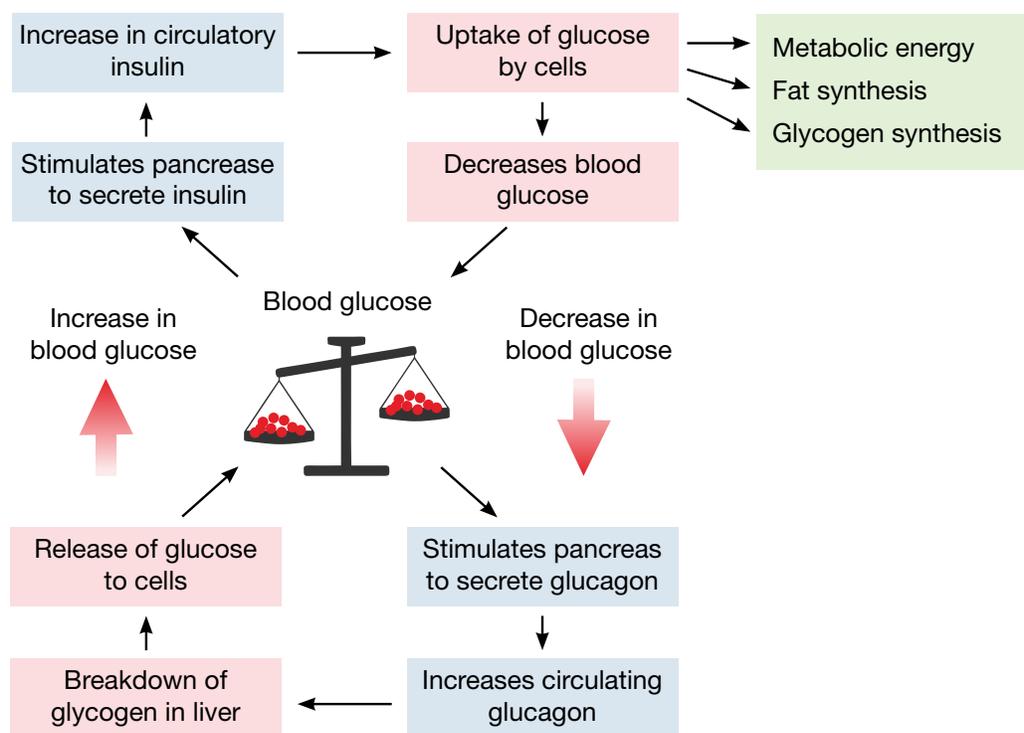


Figure 5. Diagram of the insulin and glucose regulation model.

As blood sugar (glucose) rises, insulin is secreted in the pancreas, it is circulated through out the body and glucose is taken up by cells and blood sugar decreases. With a decrease in blood sugar, the pancreas secretes glucagon to breakdown glycogen in the liver and release glucose into the blood. This process maintains homeostasis in the body in reference to blood glucose levels (Roberts, 2003). Permission pending (<http://bcs.whfreeman.com>).

Insulin receptors

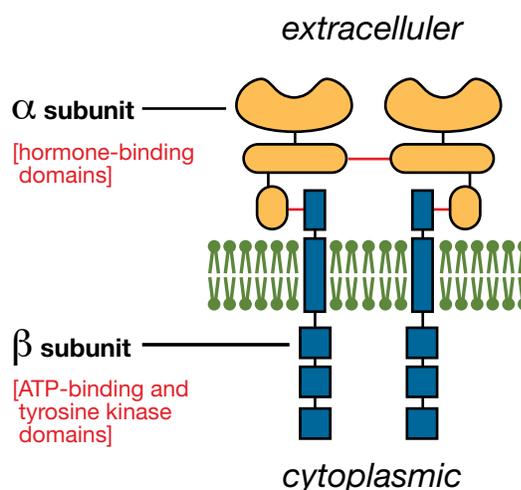
Once insulin is secreted by the pancreas, it goes directly to the liver through the portal vein where it affects carbohydrate and lipid metabolism. This is where the action of the insulin receptors comes into place. The insulin receptors are tyrosine kinase, integral membrane proteins, which contain two alpha subunits and two beta subunits. The alpha subunits are entirely extracellular and hold the binding site for the insulin. The beta subunits are attached to each of the alpha subunits by a sulfur bonds and extend through the plasma membrane to anchor the protein in the cell wall. The two complexes are connected by a disulfide bond (Bowen, 2004).

When insulin binds to the alpha subunit, the beta subunits phosphorylate themselves. One of the substrates of the insulin receptor, IRS-1, is the most studied. This substrate serves as a docking center for activation of other enzymes to mediate insulin's effects by a signal transduction process, creating a complex biological response.

Figure 6. An insulin receptor.

This insulin receptor has two alpha subunits (yellow) and two beta subunits (blue). The red lines are bonds, showing the sulfur bond between the alpha and beta subunits and a disulfide bond between the two complexes (Bowen, 2004).

(http://arbl.cvmbs.colostate.edu/hbooks/pathphys/endocrine/pancreas/insulin_phys.html)



Carbohydrate and Lipid Metabolism effects

Glucose metabolism is regulated by insulin in different types of cells. During digestion in the small intestine, glucose is extracted from carbohydrates by hydrolysis into the blood stream. With the detection of increased levels of glucose in the blood, insulin is secreted by beta cells in the pancreas (Bowen, 2004). Once insulin binds to the appropriate insulin receptors, cytoplasmic vesicles under the plasma membrane fuse with the plasma membrane and glucose transporters (Na⁺-independent and Na⁺-dependent) and break through the plasma membrane. These glucose transporters are required for muscle, adipose and some other tissues in the presence of insulin in order to transport glucose. Glucose also needs to be regulated and the phosphorylase A receptor measures the amounts of glucose present in the liver. With an influx of glucose, it binds to these receptors and alters the shape so it can be dephosphorylated and release the insulin to stimulate the formation of glycogen in the liver (Stryer, 1995). Glucose is changed into glycogen by the aid of insulin to ultimately maintain homeostasis in blood sugar (Roberts, 2003). The liver measures the amount of glucose in the blood stream and takes up or releases glucose as necessary (Stryer, 1995).

Whenever the liver builds up high levels of glycogen for the human body, glucose is absorbed from a food product and redirected into a different metabolic pathway. Fatty acids are made in this pathway and are transported out of the liver as lipoproteins.

The lipoproteins produced are often used in other tissues, like adipose tissue, to make triglycerides. Insulin inhibits the breakdown of fat in adipose tissue by inhibiting the intracellular lipase that hydrolyzes triglycerides to release the fatty acids. Insulin is basically responsible for stimulating further accumulation of triglycerides in fat cells in adipose tissue (Bowen, 2004). Researchers from the Indian Institute of Chemical Biology have recently speculated that a new cell could be secreting insulin as well. Insulin is thought to only be secreted from beta cells in the pancreas, but now it is thought to exist in adipocytes. The structure-function relationship seem to be very similar and the amino acid sequences of AdpInsl and mammalian beta cell insulin can be related. As an insulin target cell, adipocytes can express the insulin gene and secrete the insulin protein to serve as a natural alternative to the beta cell insulin (Roy, 2003).

Other metabolic reactions insulin stimulates

- glucose transport
- amino acid transport
- glycogen synthase activity
- increases rate of general protein synthesis
- decreases lipolysis and protein degradation (Lilly, 1996).

How does insulin affect the human body?

Insulin regulates a variety of other cellular processes, such as protein and fat synthesis, RNA and DNA synthesis, cell growth, and differentiation. However, Insulin's main concern is the regulation of glucose uptake in the "clinical manifestation of diabetes" (Pittman, et.al., 2004). High levels of glucose will cause water to move from cells in the body to the blood by osmosis and the kidneys will increase in urine output to excrete excess fluid volume from the blood. This is why diabetes is concerned with issues of an overproduction of "sweet" urine (Purves, et. al., 2001). Also, with insufficient amounts of insulin or a mutation within the insulin protein, different diseases can develop like diabetes. There are two main types of diabetes mellitus, idiopathic and secondary. Idiopathic diabetes is divided into two subgroups, Type I and II, and secondary diabetes has many causes that can lead to a host of other diseases. We are most accustomed to idiopathic diabetes, Type I and II.

Idiopathic Diabetes, Type I

Insulin dependent diabetes (IDDM) usually manifests in childhood (juvenile-onset diabetes) and is a result of an autoimmune destruction of the beta cells in the pancreas (King, 2004). This type of diabetes affects about 2 million people in the United States. Within these patients, there is an insufficiency of insulin and a supplement of insulin is necessary by injection. It is known to be genetic, but the actual reason to the destruction of the beta cells is unknown.

Idiopathic Diabetes, Type II

Non-insulin dependent diabetes (NIDDM) is characterized by persistent hyperglycemia. It usually manifests in people over the age of 40 (adult-onset diabetes). It can result from a genetic defect and can cause insulin resistance or insulin deficiency, one associated with obesity and one not associated with obesity (King, 2004). Type II diabetes affects about 85% of the total diabetic population. For these patients obesity seems to be a common issue because of the increase in fat from adipose tissue. Therefore, the

main form of treatment is a low carbohydrate diet (little sugar) and an exercise program (Vander, 1998).

Secondary Diabetes

This type of diabetes can result in many causes including:

- Maturity onset diabetes of the young (MODY); has an onset prior to age 25 with shown impairment of beta cell function and late beta cell failure; there are six types:
 - Pancreatic disease
 - Endocrine disease
 - Drug-induced diabetes
 - Mutations in the insulin gene
 - Mutations in insulin receptor gene which can lead to Leprachaunism, Rabson-Mendenhall syndrome, and Type A insulin resistance
- Gestational diabetes, shown during pregnancy and following childbirth

Other disease involving impaired glucose tolerance (King, 2004).

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Assessment:

Outcome 2: Students will learn the Cornell Method of note-taking.

- Lecture notes

Lecture Note Checklist:

Please circle the appropriate number.

| | 5 Always | 4 | 3 Sometimes | 2 | 1 Never |
|--|----------|---|-------------|---|---------|
| The lecture notes are titled and dated. | 5 | 4 | 3 | 2 | 1 |
| The notes are easy to read. | 5 | 4 | 3 | 2 | 1 |
| The notes are organized. | 5 | 4 | 3 | 2 | 1 |
| You underline or star key ideas. | 5 | 4 | 3 | 2 | 1 |
| You utilize abbreviations of longer words. | 5 | 4 | 3 | 2 | 1 |
| You skip spaces between ideas/concepts. | 5 | 4 | 3 | 2 | 1 |
| You indent minor points. | 5 | 4 | 3 | 2 | 1 |
| You note all the important concepts | 5 | 4 | 3 | 2 | 1 |
| You paraphrase what the instructor says. | 5 | 4 | 3 | 2 | 1 |
| Your notes incorporate examples. | 5 | 4 | 3 | 2 | 1 |
| Your notes are accurate. | 5 | 4 | 3 | 2 | 1 |
| Your notes are complete. | 5 | 4 | 3 | 2 | 1 |
| Your notes include self-test questions. | 5 | 4 | 3 | 2 | 1 |
| Your self-test questions: | | | | | |
| a. Are complete. | 5 | 4 | 3 | 2 | 1 |
| b. Will prepare you for the instructor's tests. | 5 | 4 | 3 | 2 | 1 |
| c. Cover all the material from that day's lecture. | 5 | 4 | 3 | 2 | 1 |
| d. Use short-answer format. | 5 | 4 | 3 | 2 | 1 |
| e. Are appropriate for the type of tests in the class. | 5 | 4 | 3 | 2 | 1 |
| f. Combine material from multiple lecture topics into a single question. | 5 | 4 | 3 | 2 | 1 |

Activity Four

Synthesizing Knowledge (Approx. 50 minutes)

Ask students to synthesize the information on calories, nutrition, health, and BMI by discussing a question on the role of counting calories. Ask students to read the question below. Have them state their ideas about what concepts and sources they would need to respond to the prompt.

FROM THE STUDENT ACADEMIC NOTEBOOK

Prompt

Is counting calories enough for a person to maintain health? After reading Belk and Maier Chapters Three and Four, viewing animations and lectures, and reading informational articles, compare the interpretations of the role of calories and argue for the other factors that need to be considered. Be sure to support your position with evidence from the texts and videos.

Ask students to demonstrate their understanding of the concepts of this unit as a whole by discussing the prompt in small groups. They will have about 25 minutes to talk as a group and 25 minutes to discuss their response.

Ask students to write down their ideas to the following questions before they discuss the prompt in small groups.

FROM THE STUDENT ACADEMIC NOTEBOOK

Use the prompt above to show your understanding of the complexity of calories. You may use your notes from the text, articles and videos to support your stance. Think about the following:

- How could a person be overweight, but calculate a lower-than-recommended daily caloric intake? Discuss the role of metabolism, nutrients, fat and calories.
- Explain the science behind the saying, “you are what you eat” in terms of a person’s overall health. What role does transport play?
- What factors do we need to consider when looking at someone’s overall health (nutrients, enzymes, health disorders)?
- Make a recommendation for someone trying to lose weight about what they need to think about in addition to calories. What if that person had an obesity-related disease? What additional recommendations would you have?
- Think about the results from the calorie lab on the ways calories are determined.

Students will use the chart in their academic notebook to record their sources and ideas. They will be able to use their notes as they discuss their response.

List the text, lecture, lab, or animation information that supports your stance.

| Source (text, lecture, etc.) | Quote/Facts | Summary of how this information supports your stance |
|------------------------------|-------------|--|
| | | |
| | | |
| | | |
| | | |

Students will have 25 minutes to discuss their responses as a class. Ask students to cite their sources as they present their ideas for why counting calories is only one part of maintaining health.

Assessments:

Outcome 3: Students will synthesize concepts from multiple sources and representations to discuss the complexity of calories.

Outcome 4: Students will develop arguments based on evidence from multiple sources.

- Teacher analysis of discussions

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Participates fully in the discussion. | No | Somewhat | Yes |
| • Adds meaningful information or insights. | No | Somewhat | Yes |
| • Uses sources in meaningful ways. | No | Somewhat | Yes |
| • Produces a credible argument. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students to read and annotate Belk and Maier Chapter Four, Section Three in small groups.
2. Asked small groups to prepare one health disorder to share with the class.
3. Guided student presentations of health disorders.
4. Asked students to read and take notes on BMI article.
5. Discussed the Cornell Method of note-taking.
6. Presented the insulin lectures.
7. Asked students to use the Cornell Method to take notes over the lecture.
8. Asked students to review notes in small groups and to make marginal annotations/review questions.
9. Presented guiding question prompt for synthesizing knowledge on calories.
10. Asked students to work in groups to prepare for class discussion on the prompt.
11. Led class discussion on the prompt.

Lesson 7

Taking Science Quizzes

Overview and Rationale:

This lesson helps students learn to prepare for, take and learn from a science quiz. Students will generate their own quiz review by thinking about the types of questions teachers ask, the amount of material they need to know and the strategies that will help them master the material. By creating their own quiz review rather than relying on the teacher to supply a review, students must be able to select the information to be learned and create a way to learn it. In this lesson, they will learn two strategies to help them generate effective quiz reviews. Students will take a quiz that asks mainly higher-level questions. They will take the quiz twice, once individually and once collaboratively. The purpose of the collaborative, or group, quiz is not to make the job easier for students. Rather, the group quiz is used to get students talking about and debating science concepts. Research has indicated that collaborative quizzes promote comprehension, improve test-taking skills and provide an opportunity for all students to participate in discussion.

Tasks/Expected Outcomes:

1. Students will utilize strategies to generate their own quiz reviews.
2. Students will learn to ask and answer higher-level questions.
3. Students will learn to use group testing as a way to increase their ability to explain and understand science concepts.
4. Students will evaluate their own quiz performance.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students

are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
 - 1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.

2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
 1. Participate actively and effectively in one-on-one oral communication situations.
 2. Participate actively and effectively in group discussions.
 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 1. Analyze and evaluate the effectiveness of a public presentation.
 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 1. Listen critically and respond appropriately to presentations.
 2. Listen actively and effectively in one-on-one communication situations.
 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- C. Produce and design a document.
 1. Design and present an effective product.
 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
 1. Prepare and present scientific/technical information in appropriate formats for various audiences.

- D. Research skills/information literacy
1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Belk and Maier Chapters Three and Four
- 3x5 Index cards
- Nutrition quiz (Note: you will need one copy for each student and one copy for each group.)

Timeframe:

175 minutes

Targeted Vocabulary:

- Student-selected vocabulary from Belk and Maier Chapters Three and Four.

Activity One

Introducing the Topic (Approx. 5 minutes)

Introduce the concept of group quizzes. Explain to student that in this class they will take a quiz over Belk and Maier 3.1-3.2 and 4.1 and 4.3, the articles read and the animations discussed (15 questions). However, this quiz may work a little differently than they are used to because it will be both an individual and group quiz. First, students will take the quiz individually and turn it in. The individual quiz will count for two-thirds of the total quiz score. Then, students will retake the same quiz with a small group. In the group, students need to discuss each question and come to a consensus regarding the appropriate answer in order to fill out a single answer sheet that will be submitted as a group. The group quiz scores will count as up to one-third of the total quiz score. The purpose of taking the quiz in a group is to allow students the opportunity to talk/debate/sink their teeth into the science.

Ask students to look at the peer Evaluation page in the academic notebook. To encourage everyone to participate and to prevent “freeloading” during the group quiz, students will be asked to evaluate the other members of the group on how well they contributed to group functioning. This evaluation will be used to determine how many group quiz points each student will receive. For example, if a student receives an average score of 80 percent from their peers, that student would receive 80 percent of their group’s quiz points. (Of course, the teacher reserves the right to overrule any peer evaluation score if it appears to be inaccurate or inappropriate, such as when evaluations have been biased because of personality conflicts.)

Activity Two

Preparing for the Quiz (Approx. 70 minutes)

Students will generate their own quiz review. Rather than using a teacher-generated review, ask students to work together to create a review that covers all of the material up to this point: text (Belk and Maier 3.1-3.2 and 4.1 and 4.3), animations and supplemental readings. As described in the academic notebook, students will learn two strategies to help them create the review: talk-throughs and reciprocal questioning.

FROM THE STUDENT ACADEMIC NOTEBOOK

The Talk-Through

A “talk-through” is a method of preparing and reviewing for an exam that involves practicing and rehearsing aloud the key ideas of a text or science process. A talk-through is very similar to a lecture that you would give someone. In fact, when giving a talk-through, a student should imagine being an instructor giving a lecture to students who know very little about the topic you are teaching. Students will record key information on a notecard, then use the card as a prompt to help them say the information out loud to a classmate.

To create the talk throughs, ask students to generate a list of possible topics in small groups—nutrients, osmosis, transport, etc. Students can use the materials to remind themselves of all the topics learned so far. (If they mention strategies, such as annotation, remind them that the strategies are used as a vehicle to learn the science content—the quiz will only include science—not strategies.)

List the topics on the board and ask students to make sure that all of the concepts are listed. Then ask students to group the topics together to discuss processes. For example, concentration gradient, diffusion, facilitated diffusion and osmosis could be combined under the process of passive transport. It is better for one student to do a talk through on these ideas as a whole so that they can see how the processes are alike and how they differ (rather than having one student do diffusion, another student do facilitated diffusion, etc.). However, if a student is having a lot of trouble understanding one of those topics, say facilitated diffusion, it is okay for them to tackle that one on its own.

Each student will choose a topic/ process to work on. It is okay if there are some duplicates, but all of the important topics should have at least one student creating a talk through card. On the 3x5 card, students will write only a few words to help guide them as they explain the concept to others, but it should not be a full listing of all the details—the point is to know the concept without needing more than a little prompt. Once they have the card written, they will review all the materials where their topic was discussed (text, articles, animations, etc.) to make an outline of what they will say when they use their talk through.

Remind students to use precise language as they create and practice their card. They will be practicing the vocabulary they learned, as they seek to understand the science processes. As they present the talk through to their classmates, they need to pay careful attention to using the correct terminology. Knowing definitions for the terms is not sufficient in science; it is much more important to understand how the term is used within the science process.

Students should practice their talk through several times (in class and/or at home) before giving their talk during the quiz review. Once students have their talk through card written and have practiced it at least one time, ask them to get into small groups to learn the next strategy.

Reciprocal Questioning:

Students will use reciprocal questioning as a way to review the science concepts they have learned so far. In small groups, ask students to create 10 questions and answers. They will use these questions to quiz classmates on the material as a way to prepare for the quiz. They should remember to include questions from the textbook, articles, videos, animations, etc.

Have the students use the following guidelines to create questions:

- Avoid “what” questions. Ask higher-level questions using words such as *why*, *how*, *explain* or *compare*. For example, it is much better to ask a question such as, “*Explain the role of enzymes in lactose intolerance,*” than to ask, “*What is an enzyme?*”
- Predict short answer items (even if you are taking multiple-choice tests) because they will help you check your knowledge of an entire concept, rather than one small part.
- Ask questions that require application, analysis or interpretation of ideas. These are the types of questions you will be asked on the quiz.
- Get at the “big picture.”
- Ask questions that make people really think about the concepts.

- General hint: if it takes more words to ask the question than to answer it, ask a tougher question.

In small groups, ask students to create one sample question using the guidelines.

Share the questions as a class to make small fixes where necessary (if students pose a “what” question, ask them to change it to a more complex question. If students pose a question over one small concept, have them work to make it a more encompassing question). Once the class understands how to create big, broad questions, ask each group to create 10 challenging questions that will be used during the quiz review. Students should also sketch out the answers—this can be in a bulleted list format. They just need enough information to know if the person responding to their question is correct.

FROM THE STUDENT ACADEMIC NOTEBOOK

| QUESTION | ANSWER <i>(note: you can write this as a bulleted list)</i> | Source(s) <i>(please specifically note where the material came from—text, article, lecture, etc.)</i> | Page number |
|----------|--|--|-------------|
| 1. | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

(additional space provided through Question 10)

Debrief on the learning so far. Ask students to discuss their experience using these two rehearsal strategies (talk thoughts and creating Q&A). How is it helping them review for the quiz so far? What do they need to to/know to prepare for the quiz review? What questions do they have about either the strategies or the science concepts?

Assessments:

Outcome 1: Students will utilize strategies to generate their own quiz reviews.

- Talk-Through

| Evaluation Rubric | | | |
|--|----|----------|-----|
| <ul style="list-style-type: none"> • Student is able to provide an accurate and complete verbal recall of a science topic using only their talk-through text. | No | Somewhat | Yes |
| <ul style="list-style-type: none"> • Student makes use of information from multiple sources in their talk-through. | No | Somewhat | Yes |

Outcome 2: Students will learn to ask and answer higher-level questions.

- Predicted questions and answers

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Contains at least 10 questions and answers. | No | Somewhat | Yes |
| • Questions come from all of the sources used thus far. | No | Somewhat | Yes |
| • Answers are complete enough to indicate that the student understands the entire concept. | No | Somewhat | Yes |

Activity Three

Quiz Review (Approx. 25 minutes)

After creating the two strategies, students will conduct the review.

- **Ask students to work in pairs to share their talk-throughs.** One student will present the card as the other student listens. The listening student should ask questions about the concept being discussed. Then the pair will swap roles so that the listening student now shares his/her talk through. Students will trade partners several times to hear as many talk-throughs as possible.
- **Place students in small groups (four to six students) that differ from the groups that worked together to create questions in the last class for the reciprocal questioning.** One student will ask a predicted question and the rest of the group will try to answer it without looking at their notes or text. The group can work together to respond. Then another student will ask a question using the same process. This continues until each student has asked at least one question. Then, students will regroup to ask questions with a new set of peers as time allows.

Activity Four

Taking the Quiz (Approx. 50 minutes)

Students will take the quiz in both individual and group format. First, students will have 25 minutes to take the quiz individually. They will then submit that quiz and work with their group on a new copy of the quiz. They will have the remaining 25 minutes to discuss the questions and respond to the quiz as a group.

Activity Five

Evaluating the Quiz (Approx. 25 minutes)

Before discussing the quiz as a class, ask students to fill out the quiz evaluation and the group evaluation in their academic notebook once they have received the feedback on the quiz (both group and individual).

FROM THE STUDENT ACADEMIC NOTEBOOK

Group Quiz Evaluation

The purpose of this evaluation is to help you learn from your experience preparing for and taking the quiz. Think about how you felt about your level of preparation before the quiz, where you focused your effort, and how you felt taking both the individual and group portions of the quiz.

- A. What went right? Analyze the quiz to discuss what you did well and what helped your thinking about these concepts.
- B. What went wrong? Analyze the quiz to discuss areas you might want to work on. In this analysis:
- Think about the errors you made and diagnose the nature of your difficulties as they relate to the nutrition concepts learned, problem solving expected, or your beliefs about science and/or science learning. Note: don't just describe a difficulty; you need to analyze your thinking. (Example: A poor diagnosis would be, "I was confused" or "I picked the wrong answer." A good diagnosis would provide a reason for the errors: "I thought that a person's basal metabolic rate was the same as their overall metabolic rate.")
- C. What will I do differently next time? Conduct an overall assessment of your quiz performance. This is where you will look for patterns to your errors, think about particular aspects of the quiz that may have been difficult for you, types of questions you missed, general concepts that were difficult, etc. In your assessment, write about how understanding these issues will impact your science quiz taking in the future.

Peer Evaluations

Class (include class, time and day):

Name: _____ Group Name _____

This is an opportunity to evaluate the contributions of your teammates to group quizzes. Please write the names of your teammates in the spaces below and give them the scores that you believe they earned. You will have 10 points available to distribute for each member or your group, not counting yourself (e.g. if you are in a group of six people, you each will have 50 points to distribute. A group of five would have 40 points, etc.).

If you believe everyone contributed equally, then you should give everyone 10 points. If everyone in the group feels the same way, you will all have an average of 10 points and receive 100 percent of the group score. An average of nine would receive 90 percent of the group quiz score, etc. Be fair and accurate in your assessments. If someone in your group didn't contribute adequately (i.e., had not studied, didn't communicate with the rest of the group, frequently missed class, etc), give them fewer points. If someone worked harder than the rest, give that person more than 10 points.

There are some rules that you must observe in assigning points:

- This is not a popularity contest. Don't give anyone a grade that they don't deserve (high or low) for personal reasons or otherwise.
- "Contributing to the group" does not simply mean giving the most correct answers. Asking good questions, challenging the group, etc, are also ways to contribute.
- You cannot give anyone in your group more than 15 points.
- You do not have to assign all of your group points, but you cannot assign more than the total number of points allowed for each group (i.e., (# of people in group – 1) x 1 points).

Group Member:

Score:

| | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |

Indicate why you gave someone more than 10 points.

Indicate why you gave someone less than 10 points.

If you were to give yourself a score, what would it be? Why?

Discuss student experiences taking the quiz. How did preparing and conducting quiz review help them learn? How can you use this in their science classes?

Ask students to complete their weekly reflection.

FROM THE STUDENT ACADEMIC NOTEBOOK

Week 4

1. Think about the science. What did you learn about transforming information and taking science tests?

2. Think about your learning. How will your experiences change the way you approach reading in the sciences?

Assessments:

Outcome 1

- Reflection Writing

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Reflection references the resources read. | No | Somewhat | Yes |
| • Reflection uses information from sources to support student's feelings. | No | Somewhat | Yes |
| • Reflection is written in appropriate prose. | No | Somewhat | Yes |

Outcome 3: Students will learn to use group testing as a way to increase their ability to explain and understand science concepts.

Outcome 4: Students will be able to evaluate their own quiz performance.

- Individual quiz
- Group quiz

Teacher Answer Key

1. c
 2. d
 3. a
 4. d
 5. c
 6. b
 7. d
 8. d
 9. c
 10. c
 11. Answers will vary but should include:
 - saturated fat - carbons of a fatty acid are bound to as many hydrogens as possible (butter)**
 - unsaturated fat - carbons of the fatty acid are not bound to as many hydrogens (cooking oil)**
 12. Answers will vary but should include:
 - Many vitamins are water soluble, so cooking the vegetables in water causes the vitamins to leach out into the water.**
 13. Answers will vary but should include:
 - Many vitamins are water soluble, so cooking the vegetables in water causes the vitamins to leach out into the water.**
 14. See Belk and Maier Chapter Three p. 66
 15. As blood sugar (glucose) rises, insulin is secreted in the pancreas, it is circulated through out the body, glucose is taken up by cells and blood sugar decreases. With a decrease in blood sugar, the pancrease secretes glucagon to breakdown glycogen in the liver and release glucose into the blood. This process maintains homeostasis in the body in reference to blood glucose levels
- Teacher assessment of quiz evaluation
 - Teacher assessment of peer group evaluation

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides thoughtful reflection. | No | Somewhat | Yes |
| • Accurately assesses performance. | No | Somewhat | Yes |
| • Provides meaningful feedback to peers in group. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced the concept of individual and group quizzes.
- 2. Discussed the talk-through strategy.
- 3. Brainstormed and listed possible talk-through concepts.
- 4. Asked students to choose concept and create talk through using course materials and sources.
- 5. Discussed the use of vocabulary and precise terminology in the talk through.
- 6. Introduced the reciprocal questioning strategy.
- 7. Discussed guidelines for creating effective questions.
- 8. Asked students to write questions and answers using the chart in the academic notebook.
- 9. Asked students to reflect on using the rehearsal strategies for quiz preparation.
- 10. Guided students through the quiz review by asking them to switch from talk throughs to reciprocal questioning.
- 11. Gave students the individual quiz.
- 12. Gave students the group quiz.
- 13. Graded the quizzes and returned them to students.
- 14. Asked students to evaluate their experiences preparing for and taking the quiz in their academic notebook.

Nutrition Quiz

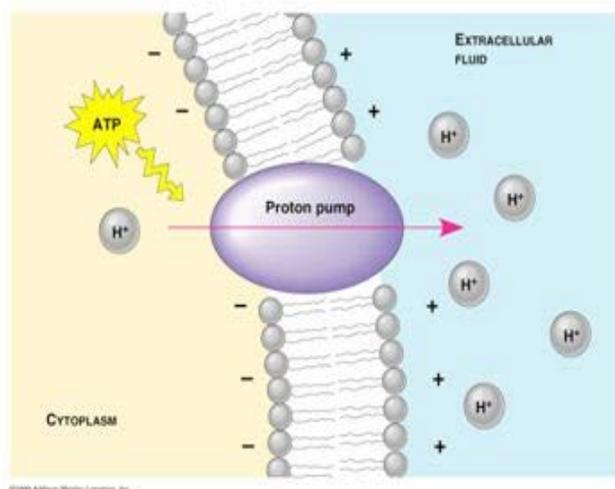
Name:

Class period:

1. Which of the following is an important part of our diet, but is not considered a nutrient because it is not absorbed by our bodies?
 - a. Protein
 - b. Carbohydrates
 - c. Fiber
 - d. Fats
2. Which of the following is true about vitamins?
 - a. vitamins function as a coenzyme
 - b. vitamins help with the absorption of other nutrients
 - c. deficiencies can effect our cells
 - d. all of the above
3. Which of the following describes how an enzyme and substrate fit together?
 - a. The shape of the enzyme changes when the substrate binds to the enzyme.
 - b. The active site is permanently changed after the substrate binds to the enzyme.
 - c. The enzyme is like a key that fits into the substrate which is like a lock.
 - d. After the product is reduced, the enzyme breaks down and can no longer function.
4. What would happen if activation energy barriers didn't exist?
 - a. Substrates would not bind properly to enzymes.
 - b. Chemical reactions in the body would never occur.
 - c. Coenzymes would not work, but enzyme function would not be affected.
 - d. All chemical reactions in the body would proceed whether they were needed or not.
5. Why do some people who are dieting lose less weight than other dieters, even when diet and exercise are almost the same?
 - a. Eating 1 less calorie per day can result in losing 1 pound per week.
 - b. The enzymes in one person are generally not the same as the enzymes in another person.
 - c. People differ in their basal metabolic rates.
 - d. Mental focus and outlook are important, but often overlooked, components of all weight-loss regimes.

6. Activation energy is similar to the “push” needed to start rolling a stalled car down a hill. How do enzymes fit into this analogy?
- Enzymes increase the effort that’s needed to start the car moving.
 - Enzymes decrease the effort that’s needed to start the car moving.
 - Enzymes increase the steepness of the hill that the car will roll down.
 - Enzymes decrease the distance the car needs to move to reach the bottom of the hill.
7. This type of movement moves molecules from areas of high concentration to areas of low concentration and does not require energy.
- Active Transport
 - Diffusion and Active Transport
 - Passive Transport
 - Diffusion and Passive Transport

8. What type of transport is shown in the picture?
- Diffusion
 - Osmosis
 - Passive Transport
 - Active Transport



9. The role of insulin in the human body is to
- increase the level of sugar in the blood.
 - decrease the amount of body fat.
 - trigger body cells to take up glucose.
 - trigger the immune system to destroy the beta cells in the pancreas.
10. Shannon has considered herself an extremely healthy person for most of her life. She is a marathon runner and watches her diet very carefully. She has 8% body fat, weighs 105 pounds, and is 5 foot 10 inches tall. Shannon might not actually be as healthy as she thinks because she
- is overweight for her height.
 - likely has metabolic problems associated with high blood pressure.
 - doesn’t have enough body fat for menstruation or pregnancy.
 - doesn’t consume enough nutrients for normal bodily functions.

Lesson 8

Introduction to Science Research

Overview and Rationale:

In this lesson, students will begin their final project: producing a pamphlet. A pamphlet is considered gray literature because it contains very recent information that may be difficult to find using conventional channels. Gray literature is an important type of scientific literature because it provides recent information, often discovered within the last 12 to 18 months, and includes up-to-date research. Gray literature often includes information from the cutting edge of science, including patents, technical reports from government agencies or scientific research groups, working papers from research groups or committees and white papers. The goal in this project is for students to research a topic related to health and nutrition, then present it in a way that will be easy to understand for a lay audience. Even though students are communicating their information in a simplified way, they must fully understand the concepts in order to communicate them in ways that can inform and educate the public.

Tasks/Expected Outcomes:

1. Students will select a topic related to health and nutrition that is appropriate for a research project.
2. Students will plan out their project.
3. Students will learn to identify appropriate sources.
4. Students will conduct library searches for sources.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

- (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 - 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 - 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.

4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 1. Formulate research questions.
 2. Explore a research topic.
 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 1. Gather relevant sources.
 2. Evaluate the validity and reliability of sources.
 3. Synthesize and organize information effectively.
- C. Produce and design a document.
 1. Design and present an effective product.
 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Oregon Graduate Institute of Science and Technology Efficient Reading Pamphlet
- Pamphlet examples
 - Lyme disease —
(http://www.tickedoffandfedup.com/PDF_Files/Pfizer_Pamphlet.pdf)
 - Alcohol brochure —
(<http://www.centurycouncil.org/sites/default/materials/all-brochure-kids.pdf>.)
 - El Nino pamphlet —
(http://www.nws.noaa.gov/om/brochures/climate/El_NinoPublic.pdf)
 - Living life online —
(<http://publications.usa.gov/USAPubs.php?PubID=383>)

Timeframe:

150 minutes

Targeted Vocabulary:

General Academic Vocabulary

- annotated bibliography
- gray literature

Activity One

Introducing the Project (Approx. 50 minutes)

Before they come to class, the students will identify possible topics suitable for a research project that will result in an informational brochure/pamphlet explaining the issues, causes, problems and possible solutions to the public. To brainstorm possible topics, students should consider the following two ideas:

1. The topics should be debatable. That is, reasonable people may have differing views about the topic.
2. The topic should be narrow and focused enough to investigate for this assignment. For example, nutrition-related diseases is too broad a topic and could be a book. Instead, students might want to focus on one nutrition-related disease in particular.

They will write their ideas in their academic notebooks. Students will discuss the ideas with a small group.

Introduce the students to the final project by going over the project directions. Ask students to pay close attention to the information on gray literature in the project directions.

Final Project Teacher Instructions

A pamphlet is considered to be gray literature, which is literature hard to find using conventional methods. Gray literature is an important type of scientific literature because it provides recent information, information found within the last 12 to 18 months, and includes up-to-date research. Gray literature, like the pamphlet, should be easy to understand for a lay audience. Even though students are communicating their information in a more simplified way, they will need to understand the science concepts to be able to explain them to others. They must be sure to cite their sources and include them in a works cited page so that if the reader wishes to read for more detailed information it will be available to them.

Prompt: How does the scientific community communicate important information to a lay audience? After researching scientific articles, journals and websites on important topics in nutrition, write an informational pamphlet in which you explain the issues, causes, problems and possible solutions to the public. Support your position with evidence from the texts.

In this project, each student will select a topic about nutrition or diet that s/he thinks the public needs to know more about. It should be a timely issue that would resonate with people interested in finding out more about said topic. For example, a student might want to look the impacts of bulimia or the promise of new obesity treatments.

Ask students to read and take notes on the directions by annotating important points in the margins of their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Nutrition Final Project Directions

Purpose: Your purpose is to create an informational pamphlet or brochure about a topic related to nutrition and diet using science research to support your claims.

A pamphlet is considered to be gray literature, which is literature hard to find using conventional methods. Gray literature is an important type of scientific literature because it provides recent information, information found within the last 12 to 18 months, and includes up-to-date research. Gray literature, like the pamphlet, should be easy to understand for a lay audience. Even though you are communicating the information in a more simplified way, you must understand the science concepts fully to be able to explain them to others. You will need to cite your sources and included them in a works cited page, so that if the reader wishes to read for more detailed information it will be available to them.

Prompt: How does the scientific community communicate important information to a lay audience? After researching scientific articles, journals and websites on important topics in nutrition, write an informational pamphlet in which you explain the issues, causes, problems and possible solutions to the public. Support your position with evidence from the texts.

In this project, you will select a topic about nutrition or diet that you think the public needs to know more about. It should be a timely issue that would resonate with people interested in finding out more about said topic.

The topics should be debatable. That is, reasonable people may have differing views about the topic. The topic should be narrow and focused enough to investigate for this assignment. For example, nutrition-related diseases is too broad a topic and could be a book instead of a pamphlet. Instead, you might want to focus on one nutrition-related disease in particular.

You will need to bring 10 copies of your pamphlet for class presentations.

You will need to include at least five sources to use in your work. To help you read and organize the material you will take notes on each source in your academic notebook.

Finding Articles for the Final Project: Articles can be found in many different places including journals, magazines, newspapers, and websites. Popular journals, such as Scientific American, are aimed at the general public. The articles are written by journalists, who have consulted with experts, to be accessible by the public. Peer-reviewed journals contain articles written by experts aimed at experts. The reader is expected to know the basics on the topic covered in the article. For the final project, we are going to focus on popular journals, magazines, newspapers and websites.

Example websites and journals:

- <http://www.scientificamerican.com/>.
- <http://news.sciencemag.org/>.
- <http://www.mayoclinic.com/>.
- <http://www.nih.gov>.

To format your pamphlet, you will use a four-column layout. This will give you a total of eight panels to use to explain your information. How you organize the information in your pamphlet will depend upon your topic. A sample layout is shown below; be sure to include all of the elements in your pamphlet. Fold the paper so that the title page will be on the front and the works cited will be on the back when the pamphlet is folded and ready to be read. The layout will need to be printed on legal sized paper. The four-column layout will give you more room to include the information from your sources. You can use Microsoft Word or Microsoft Publisher to complete the pamphlet.

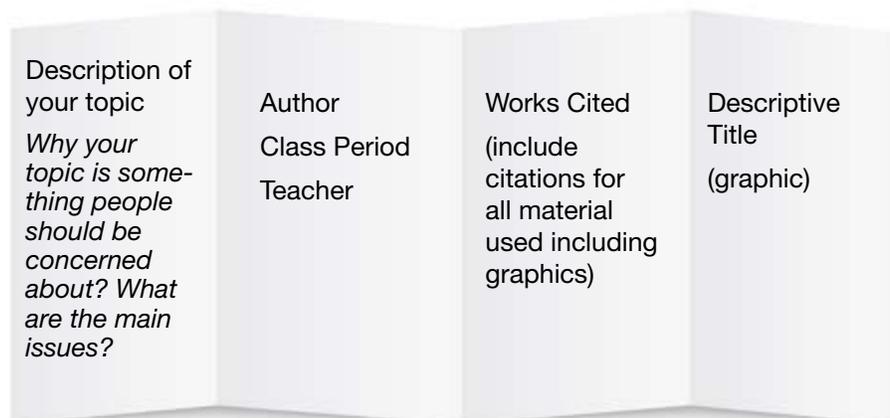
Microsoft Word Directions:

- Open Microsoft Word.
- Go to File, then Page Setup and then choose Landscape (under the Margins Tab).
- While you are there, change the top and bottom margins to one inch. Change the right and left margins to 0.5 inches.
- Click on the Paper Tab while in Page Setup and choose Legal.
- Next choose Format, then click on columns and then choose four.

Microsoft Publisher Directions:

- Open Microsoft Publisher.
- Click on Publications for print.
- Click on Brochures.
- Choose from the Informational Brochures section.
- Once the brochure is chosen, on the left hand side of the screen, click on four-panel.

Side One



Side Two



Grading Rubric

| Category | Excellent | Good | Almost | Not Yet |
|--|--|---|--|--|
| Attractiveness & Organization (Organization) | Exceptionally attractive formatting and well-organized information. | Attractive formatting and well-organized information. | Well-organized information. | Formatting and organization of material are confusing to the reader. |
| Content - Accuracy (Ideas) | The science is exceptionally well explained including all relevant information. | The science is well explained including all relevant information. | The science is explained including most relevant information. | The pamphlet has little of the required information. |
| Writing - Mechanics (Conventions) | No errors. | No major errors, one to two minor errors. | Has some major and minor errors. | Has some major and minor errors. |
| Scientific language and terminology | Used carefully throughout the pamphlet in ways the public can understand. | Used in most of the pamphlet in ways the public can understand. | Is used, but is confusing for readers. | Is not used. |
| Graphics/ Pictures | The graphics go well with the text and there is a good mix of text and graphics. | The graphics go well with the text, but there are so many that they distract from the text. | The graphics go well with the text, but there are too few. | The graphics do not go with the accompanying text or appear to be randomly chosen. |
| Sources | Carefully chosen, excellent sources that provide a full picture of the issues involved in the topic. | Carefully chosen sources that provide a good picture of the issues involved in the topic. | Sources do not provide a full picture of the issues involved in the topic. | Incomplete sources. |
| Citations | No errors in APA style. | Few errors in APA style. | Many errors in APA style. | APA style not used. |

Ask students to discuss their understandings of the project as a whole group. Be sure that students understand what is being asked of them and how they are expected to conduct the research for this project.

Discuss the elements of pamphlets by asking students to analyze an example pamphlet. Show several examples of pamphlets. In small groups, ask students to identify the elements of one of the following pamphlets (each group can take a different pamphlet to analyze):

- Lyme disease (http://www.tickedoffandfedup.com/PDF_Files/Pfizer_Pamphlet.pdf)
- Alcohol pamphlet (see handout)
- El Nino pamphlet (http://www.nws.noaa.gov/om/brochures/climate/El_NinoPublic.pdf)
- Living life online (<http://publications.usa.gov/USAPubs.php?PubID=383>).

Discuss how language and vocabulary are used in the pamphlet examples. Draw attention to how pamphlets should make complex topics understandable to the public, and the language and other devices (like diagrams or illustrations) they use to do this.

For example pamphlets should:

- Explain the issue in ways that are easy to understand.
- Add to the reader’s knowledge about the topic.
- Seek to change the reader’s attitude about the topic or calls the reader to action.
- Use diagrams or illustrations effectively.
- Use headings and subheadings to emphasize key points.

Language usage:

- Defines scientific terms used.
- Uses active voice (this is different than most science text that uses passive voice).
- Avoids negative language (“you should quit smoking” rather than “don’t smoke.”).

Discuss how the language in a pamphlet differs from other scientific language they have encountered in the unit. Students should be aware that they will need to carefully inform their readers by defining the science terms that they will use. Ask them to pay attention to the ways that vocabulary is both used and explained in their sample pamphlet.

Ask small groups to analyze one of the pamphlets using the guiding questions in their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Elements of an effective Pamphlet

1. The pamphlet my group analyzed:

2. What was the purpose of the pamphlet? Who is the writer?

3. Who was the intended audience? How can you tell?

4. How was the information presented? Were there directions? A call to action?

5. What kind of vocabulary was used in the pamphlet? (Technical, scientific, general?)
How did the language choice impact the message?

6. How were science concepts explained?

7. Which of the following text features were contained in the pamphlet? Which ones were particularly effective?

| Print Features | Organizational Aids | Graphic Aids | Illustrations |
|--|--|---|--|
| <ul style="list-style-type: none"> • font • italics • bold print • colored print • bullets • titles • headings • subheadings • labels • sidebars • text boxes • captions | <ul style="list-style-type: none"> • table of contents • index • glossary • preface • pronunciation guide • appendix | <ul style="list-style-type: none"> • diagrams • sketches • graphs • comparisons • figures • maps • charts • tables • cross-sections • timelines • overlays | <ul style="list-style-type: none"> • colored photographs • colored drawings • black & white photographs • black & white drawings • labeled drawings • enlarged photographs |

In their academic notebooks, the students will finalize their topics given their understanding of the task and they will summarize their thoughts about what the project entails to ensure that students understand what they are being asked to do.

FROM THE STUDENT ACADEMIC NOTEBOOK

My Topic Idea:

This is an important topic because:

What I need to find out:

What I want to let the public know about:

Understanding the final project: in your own words, summarize the task.

Ask several students to share out their task summaries to be sure everyone understands what they are being asked to do.

Activity Two

Planning the Project (Approx. 25 minutes)

Students will write a plan for completing the project on time in their academic notebook. Ask students to brainstorm the tasks they will need to complete the task by the due date (searching for at least five sources, reading and taking notes on articles, creating an outline of the pamphlet, drafting the pamphlet using the eight-panel format outlined in the directions, editing and revising draft, etc.).

FROM THE STUDENT ACADEMIC NOTEBOOK

Project Planning Timeline

Make a plan for completing the project by the due date. Be sure to include deadlines for finding and reading your sources, creating a rough draft and a final draft to be discussed in class.

Project Title:

| What will be done? | By when? | What resources will I need? | What goals do I have? | Notes |
|--------------------|----------|-----------------------------|-----------------------|-------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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| | | | | |

Ask students to share out their plans in small groups. Students can revise their plans based upon feedback from the group.

Discuss any lingering questions about the project as a whole class.

Activity Three

Reading Scientific Articles (25 minutes)

Guided student reading of the pamphlet from the Oregon Graduate Institute of Science and Technology on efficient reading of science papers. Ask students to read the section entitled, “Why Read?” In small groups, have them discuss their purposes for reading these articles. Talk about the different reading purposes discussed in this section and how they might use many of them in creating their own pamphlet—the skimming technique discussed in the pamphlet can be useful as they are searching the library for the articles (reading the abstract and skimming the rest) and reading carefully is more appropriate as they use the articles for research.

Now move to the section on deciding what to read and building a framework for reading. Ask students to read independently.

Ask the following questions:

- How can you decide what to read? How can skimming the article help you?
- What does the term superseded mean? Students should use their prefix/suffix chart to help them figure out the meaning if they do not know this term (to supplant; to replace with a newer model).
- Why is this concept especially important in science? (You want to make sure you are getting the most current information that has not been superseded.)
- So what does this mean in terms of searching for articles? (In general, look for newer articles.)

Read the section on reading in depth independently. Then ask the following questions:

- What do you think is meant by scientific skepticism?
- What are the most important ideas to remember about reading a science article in depth? (To challenge assumptions; to be selective in terms of finding good sources, to make sure that the conclusions are supported by the data.)

(Note: side two of the pamphlet will be used in Lesson Nine.)

Taking Notes: React to what you read

Taking notes will help you to understand what you read and will save you effort in the future. When you have just read a paper, you may understand it well. The definitions are clear, the charts show correlations at a glance. But next week, when you are writing a report on this subject, or next year, when you need to refer to the paper again, it may not be so clear.

Highlight major points

On papers you plan to keep, underline main points or mark them with a line in the margin; make notes so that new ideas will stand out. When you find a definition of a new term, abbreviation or acronym, write "def" in the margin. When you find an example that clarifies a point, note that in the margin.

When you see a chart or table, examine it. Figure out what its significance is. What trends does it show? What correlations? Write a note explaining it in your own way.

React to the points in the paper

If you see a correlation to other work, note it in the margin. If you doubt a statement, note your objection. If you find a pleasing quotation, write it down.

Construct your own example

This can tell you if you understand the definitions and terminology, give you insight on why a theorem or result holds, and expose aspects not covered by the examples in the paper.

Summarize what you read

When you have digested an article, write a short summary. In your own words, state what you learned from the paper. What were the main points for you? Keep the summary with the article for future reference.

Reacting to what you are reading gets you emotionally involved in the argument. Emotion emphasizes what is said, making it easier to remember. Writing a summary helps to relate the paper to what you already know, again aiding memory by tying into your framework for the subject. The summary also serves as a reference when you need to return to the paper.

Summary: How to read a paper

Preparation

- Quiet place.
- Pencil, paper, photocopy of article.

Deciding what to read

- Read title, abstract.
- Read it, file it or skip it?

Read for breadth

- What did they do?
- Skim introduction, headings, graphics, definitions, conclusions and bibliography.
- Consider the credibility.
- How useful is it?
- Decide whether to go on.

Read in depth

- How did they do it?
- Challenge their arguments.
- Examine assumptions.
- Examine methods.
- Examine statistics.
- Examine reasoning and conclusions.
- How can I apply their approach to my work?

Take notes

- Make notes as you read.
- Highlight major points.
- Note new terms and definitions.
- Summarize tables and graphs.
- Write a summary.

An online version of this document can be found here:
<http://www.cse.ogi.edu/~dylan/efficientReading.html>
Thanks to Dave Maier for additional suggestions.

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revised by Dylan J. McNamee (dylan@cse.ogi.edu)

Efficient Reading of Papers in Science and Technology

This brochure provides an approach to help you read scientific papers efficiently and effectively.

Prepared by:
Michael J. Hanson
Updated by:
Dylan J. McNamee

version of January 6, 2000

Introduction: Why Read?

Before beginning to read a paper, consider why you are doing it. What do you want to get out of it? Your needs control how you read. If you only need an overview, a brief skim may suffice. If you will present the paper to others, you will need to dig deeply, to challenge the paper's arguments until you understand it fully. If you will use the information later, taking notes will help you remember it. If you don't know what you hope to gain from the paper, you can not tell whether reading it will be beneficial or a waste of time.

In order to get the most from your reading, you should be properly prepared. Find a quiet place to work where you will not be disturbed or distracted, have a pencil and note pad at hand, and bear in mind exactly what you expect to get from this paper.

The following method for reading a scientific paper offers you ideas about the process of reading a paper, how to decide what to read, how to build a broad framework by skimming, and how to challenge the paper to get depth of understanding. Finally, it will show you how to take notes so that the key points won't be lost as soon as you set the paper down. Since reading is the process of getting ideas from the author, you must focus on the author's thoughts, not just read the words on the paper.

Deciding what to read

When you first approach a paper, ask yourself "What did the author do?" Reading the title and the abstract should tell you this. Then decide if the paper is useful to you now. If so, read it. If not, might the paper be useful to you later? If so, file it. If it is not relevant to you, skip it.

Reading for Breadth: Build a framework

If you decide to read the paper, first skim it.

- Read the introduction.
- Read the section headings.
- Look at the tables and graphs to see what they say and read the captions.
- Read the definitions and theorems.
- Read the conclusions.
- Consider the credibility of the article:
 - Who wrote it? Are they well-known?
 - Where do they work? What biases might they have as a result of their employer?
 - Where was the article published? What is the reputation of the journal? Was the journal refereed?
 - When was it written? Might it be outdated or superseded?
- Skim the bibliography:
 - How extensive is it?
 - Are the authors aware of current work?
 - Does it reference classic papers in this field?
 - Have you read any of the papers that are referred to?
 - Do you know relevant research that isn't cited?

By skimming the paper first you can learn what the authors did, and develop a framework to understand the parts of the paper. Developing a framework adds to your general understanding of the field, and gives you a basis to understand the paper. If you know what conclusions they draw, you can follow their arguments more easily. Knowing where they are going can help you to follow their path and give you a chance to find shortcuts or places where they missed a turn.

Once you have skimmed a paper you have a broad idea of what they did. Then you can decide if you want to know more. If you are interested in how they did it, then read the body of the paper for details. If not, file away what you have learned and congratulate yourself

Reading in Depth: Challenge what you read

There is a lot of junk published, so you should be selective in what you read and what you believe. When you read a paper in detail, approach it with scientific skepticism. You can do this by trying to tear the arguments apart.

Examine the assumptions

- Do their results rely on any assumptions about trends or environments?
- Are these assumptions reasonable?

Examine the methods

- Did they measure what they claim?
- Can they explain what they observed?
- Did they have adequate controls?
- Were tests carried out in a standard way?

Examine the statistics

- Were appropriate statistical tests applied properly?
- Did they do proper error analysis?
- Are the results statistically significant?

Examine the conclusions

- Do the conclusions follow logically from the observations?
- What other explanations are there for the observed effects?
- What other conclusions or correlations are there in the data that they did not point out?

By challenging what you read, you will understand better what the author is saying and why they say it. You will also be able to decide whether the evidence supports their conclusions, and to draw your own conclusions from their data. Once you understand the paper, ask yourself how you can apply their approach to your own work.

Activity Four

Searching for Information (Approx. 50 minutes)

The students will spend the class in the library. Students will begin to conduct searches in the library to find sources for their project. Any additional library time needed for searching will be done on their own.

Review the following guidelines with students:

- Articles do not need to be peer-reviewed scholarly articles for this assignment, but they should be from credible sources such as the National Institutes of Health, Scientific American, etc.
- Newer articles will generally have the most up-to-date information.
- Ask students to use the project directions to help them as they select the articles they plan to use.
- Ask students to think about their topic and their plan for their pamphlet as they select the articles they plan to use.

FROM THE STUDENT ACADEMIC NOTEBOOK

Finding Articles for the Final Project

Articles can be found in many different places including journals, magazines, newspapers, and websites. Popular journals, such as Scientific American, are aimed at the general public. The articles are written by journalists, who have consulted with experts, to be accessible by the public. Peer-reviewed journals contain articles written by experts aimed at experts. The reader is expected to know the basics on the topic covered in the article. For the final project, popular journals, magazines, newspapers and websites are acceptable.

Example websites and journals:

- <http://www.scientificamerican.com/>.
- <http://news.sciencemag.org/>.
- <http://www.mayoclinic.com/>.
- <http://www.nih.gov>.

Assessments:

Outcome 1: Students will select a topic related to health and nutrition that is appropriate for a research project.

Outcome 2: Students will learn to identify appropriate sources.

- Teacher evaluation of student topic
- Student summary of topic

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Contains an appropriate topic. | No | Somewhat | Yes |
| • Demonstrates an understanding of the importance of the issue. | No | Somewhat | Yes |
| • Demonstrates an understanding of the research that will need to be done to complete the project. | No | Somewhat | Yes |
| • Used library time wisely and productively. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students to identify possible project topics on diet and nutrition before class.
2. Introduced final project.
3. Discussed “gray” literature.
4. Asked students to read and annotate project directions.
5. Discussed directions as a whole class.
6. Discussed the use of language and vocabulary in pamphlets.
7. Asked students to analyze a sample pamphlet in small groups using the guiding questions in the academic notebook.
8. Asked students to finalize topic and summarize their understanding of the project in the academic notebook.
9. Asked students to create a project timeline in their academic notebook.
10. Asked students to share plan in small groups.
11. Guided student reading of the OGI institute pamphlet on efficient reading of science papers.
12. Discussed conducting library searches.
13. Provided library time for finding sources.

Lesson 9

Research and Writing in Science

Overview and Rationale:

In this lesson, students will use the research they have done to write an explanation of their topic in a way that can be understood by the public. In order to be able to write about science in a way that is understandable and accessible to the public, students must deeply understand the concepts. Students will bring in the articles they have selected and will begin to outline their final project. They will use a framework to organize their thoughts. They will examine several pamphlets to understand the basic elements of an effective informational pamphlet. Finally, students will draft a pamphlet and will learn to edit and revise using peer feedback.

Tasks/Expected Outcomes:

1. Students will use science research to explain science to the public.
2. Students will identify important concepts from science articles and use the information to support their ideas.
3. Students will explain the science topic they are researching by citing specific evidence from their sources.
4. Students will engage in scientific inquiry by forming hypotheses, researching evidence and providing support across multiple sources to support their claims.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

- (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 - 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 - 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.

1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
1. Formulate research questions.
 2. Explore a research topic.
 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
1. Gather relevant sources.
 2. Evaluate the validity and reliability of sources.
 3. Synthesize and organize information effectively.
- C. Produce and design a document.
1. Design and present an effective product.
 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.

4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Final project directions
- Student articles for final project
- Efficient reading pamphlet (from Lesson Eight)
- Pamphlet examples
- APA guidelines — <http://owl.english.purdue.edu/owl/resource/560.071>.

Timeframe:

250 minutes

Activity One

Taking Notes on Science Research (Approx. 75 minutes)

(Students will need to have all of their sources with them for this class.)

Ask students to turn to the Efficient Reading pamphlet in their academic notebook (Lesson Eight). Ask students to review the introduction section.

Ask, why are we reading these articles? (To gather information for our pamphlets. To learn more about our topic, to understand the detail of our topic, etc.)

How does our purpose shape how you will approach the reading and what types of information are you looking for as you read? (We are not trying to learn every detail for a test; we are trying to find what the research questions were, how the research was done, what the authors found, and what that means for the public. Basically, we are trying to find the information we will report on in our pamphlet.)

Ask students to read the section in the pamphlet on Taking Notes. Discuss the importance of making notes as you read so that you can recall what the author was discussing. Talk about the two types of notes suggested—first, in the margins as students read, and second, writing a summary after the information has been digested. Students will take both types of notes as they read. There is a graphic organizer in their academic notebook to help them record their ideas.

Ask students to take out one of the articles they found. Ask students to note the type of source it is in the graphic organizer in their academic notebook and to write down the bibliographic information. Show the following website for APA style guidelines — <http://owl.english.purdue.edu/owl/resource/560/07/>.

FROM THE STUDENT ACADEMIC NOTEBOOK

APA Basic Form

Articles

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical*, volume number (issue number), pages. doi:<http://dx.doi.org/xx.xxx/yyyy>

Books

Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle*. Location: Publisher. (this type also uses a hanging indention)

Online periodical

Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Online Periodical*, volume number(issue number if available). Retrieved from <http://www.someaddress.com/full/url/>.

Ask students to identify the purpose of the article. Often this will be in the abstract. If there is no abstract, ask students to skim the article to find the intent of the research.

Ask students to continue to read the article taking notes as they go. Circulate as they are reading to respond to questions.

After about 10 minutes of independent reading and note taking, ask students to discuss the process so far. What questions do they have? How is taking notes helping them process what they have read?

| | |
|--|--|
| Source (type – book, journal article, research report, etc.) | |
| Bibliographic information (full reference using APA style) | |
| Purpose of the paper | |
| Description | |
| Data (include page number) | |
| Examples (include page number) | |
| Important figures or tables (include page number) | |
| Summary | |
| What the public needs to know | |

Students will have the rest of the time to take notes on their sources. They will need to have all of their sources read before moving to the next task (outlining).

Assessments:

Outcome 1: Students will use science research to explain science to the public.

Outcome 2: Students will identify important concepts from science articles and use the information to support their ideas.

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Contains at least five appropriate sources. | No | Somewhat | Yes |
| • Uses APA style. | No | Somewhat | Yes |
| • Provides a summary of the article. | No | Somewhat | Yes |
| • Provides assessment of the content. | No | Somewhat | Yes |

Activity Two

Outlining (Approx. 50 minutes)

Ask students to review their notes on their sources. From their findings, have them generate a list of five to seven key ideas that they think are the most important to include in their pamphlet. Write these ideas in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

List five to seven key ideas from your findings:

Ask students to examine the editing and revision checklist and the project grading rubric. They should use these as resources as they create their outline, draft and final pamphlets.

Then, ask students to write an outline for each of the panels of their pamphlet. This can be a bulleted list of ideas at this point. They will be crafting a draft over the next few class periods.

FROM THE STUDENT ACADEMIC NOTEBOOK

Title:

Description of your topic (Why is your topic something people should be concerned about? What are the main issues?):

Background information (causes, symptoms, examples, descriptions, effects on the body, etc.):

Latest research on the topic (These are your five to seven key points. Be sure to include relevant statistics/data/charts, etc.)

Solutions/ resolutions/actions people can take:

Ask students to share out their plans with a partner. The pair should be looking for logical flow of ideas, completeness and precision of ideas, precise terminology, and support for ideas.

Provide time for students to ask questions as a whole class.

Assessment:

Outcome 3: Students will explain the science topic they are researching by citing specific evidence from their sources.

- Outline of pamphlet

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Applies an outline strategy to support the controlling idea. | No | Somewhat | Yes |
| • Provides citations and references with elements for correct form. | No | Somewhat | Yes |
| • Draws a credible implication from information about an issue or topic. | No | Somewhat | Yes |
| • Writes in readable prose. | No | Somewhat | Yes |

Weekly reflection: Ask students to complete the reflection in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Week 5

1. Think about the science. What did you learn about science research and health disorders?

2. Think about your learning. How will your experiences change the way you approach reading in the sciences?

Activity Three

Drafting a Pamphlet (Approx. 100 minutes)

The students will draft a pamphlet. First, ask students to examine the eight-column structure of the pamphlet (described in the project directions in Lesson 8). The draft should follow this format.

Remind students to think about how language is used to in the pamphlet examples. (Have the pamphlet examples from Lesson Eight available for students to look at.) Draw attention to how pamphlets should make complex topics understandable to the public and to the language and other devices (like diagrams or illustrations) they use to do this.

For example, pamphlets should:

- Explain the issue in ways that are easy to understand.
- Add to the reader’s knowledge about the topic.
- Seek to change the reader’s attitude about the topic or call the reader to action.
- Use diagrams or illustrations effectively.
- Use headings and subheadings to emphasize key points.

Language usage:

- Use scientific terms.
- Define scientific terms used.
- Use precise language (avoid general noun such as these, those, they).
- Use active voice (this is different than most science text that uses passive voice).
- Avoid negative language (“you should quit smoking” rather than “don’t smoke”).

Discuss how the language in a pamphlet differs from other scientific language they have encountered in the unit. Talk about the need to define any science terms that they use in language that is understandable to the reader.

Ask students to review their outline as they begin a draft of their pamphlet. Their goal is to create a fully drafted pamphlet using their sources and the notes from the sources. As students work, circulate through to help guide students and answer questions. After about 20 minutes of work, pull the class together to discuss their progress and answer any questions.

Once students have a draft, they should read their work to revise.

FROM THE STUDENT ACADEMIC NOTEBOOK

Revising your Work

Read your draft and think about the following questions:

1. Evaluate your main point. What are you trying to say in this pamphlet? Would it be clear to someone reading your pamphlet for the first time?
2. How is the writing appropriate for your intended audience?
3. What is your purpose for informing readers about your topic? Is your purpose clear in your draft?
4. Evaluate your evidence. Do you offer enough scientific evidence to support your points?
5. How are specific statistics/figures/data used to support your points?
6. Is there any information that doesn't seem to fit your purpose or your topic? You either need to add more support for that information, or cut the idea.
7. Do the ideas flow from one point to another? Will the reader be able to follow a logical progression of ideas?
8. Can you read through the pamphlet in the way it is currently designed or do ideas need to be reordered?
9. Are you using and defining scientific terms? Are you using precise language to get your ideas across?
10. Are the references cited properly?
11. What specific suggestions/solutions do you provide for readers?
12. How does the information in the pamphlet follow the format outlined in the project directions?
13. Read for grammar and spelling errors.

Revise your paper based upon your responses to the questions to create a stronger pamphlet.

Ask students to discuss their responses to these questions in pairs, demonstrating evidence from their draft. The pairs should consult the grading rubric for the project to make sure their draft is on track.

Assessment:

Outcome 3: Students will explain the science topic they are researching by citing specific evidence from their sources.

- Draft of pamphlet

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Writes a concise summary statement or draft opening that establishes a controlling idea and identifies key points that support development of information and/or explanation. | No | Somewhat | Yes |
| • Writes in readable prose. | No | Somewhat | Yes |
| • Revises work appropriately. | No | Somewhat | Yes |
| • Utilizes peer feedback and grading rubric appropriately in revision. | No | Somewhat | Yes |

Activity Four

Peer Editing (Approx. 25 minutes)

Ask students to read a partner’s draft using the Editing and Revision checklist to provide feedback. Students will use the editing and revision checklist to evaluate their partner’s pamphlet. After they complete their initial assessment, the pairs should discuss their evaluations—talking about what was good about the draft and what needs to be revised before presenting the pamphlet.

FROM THE STUDENT ACADEMIC NOTEBOOK

Editing & Revision Checklist

Paper’s Author

Paper’s Editor

Directions for the editor: Answer all questions to the best of your ability. The writer’s grade somewhat depends on you. If you have questions or you are not sure about something, ask me. You need to read the paper several times. Do not skip sentences. Do not skim. Read very closely. Even read aloud quietly, so you can hear problems.

Directions for the writer (after the peer editing process): Make any changes necessary to gain a yes answer to all questions.

Headings and Subheadings:

- Yes No 1. Is there effective use of main heading?
- Yes No 2. Are there subheadings used?
- Yes No 3. Does the heading grab the reader’s attention?
- Yes No 4. Do the subheadings contain all the proper information?

Introduction to the topic:

- Yes No 1. Is there an attention-getter?
- Yes No 2. Is there background information about the topic?
- Yes No 3. Are the main terms and issues defined?

Background information:

- Yes No 1. Is there a description of the causes of the problem and/or a description of the issue?
- Yes No 2. Is there an effective description of the symptoms, effects on the body, etc.?
- Yes No 3. Does the writer provide citations for the information?

Description of Research

- Yes No 1. Is there an informative presentation of the latest research on the topic?
- Yes No 2. Is there information about how the research impacts the public?
- Yes No 3. Is the science clearly explained?
- Yes No 4. Are diagrams/illustrations used effectively?

Conclusions:

- Yes No 1. Does the writer present solutions or resolutions to the issue?
- Yes No 2. Does the writer present several reasonable actions people can take?
- Yes No 3. Is the author's concluding sentence meaningful and memorable?

Works Cited Page

- Yes No 1. Is the Works Cited information complete?
- Yes No 2. Has the author used at least five different sources?
- Yes No 3. Are all of the author's sources appropriate for this assignment?
- Yes No 4. Are the sources in alphabetical order?
- Yes No 5. As much as you can tell, is each source listed in the correct format (APA style)?

Grammar/mechanics Checklist:

1. Read through the entire pamphlet and look at all of the words that end with –s. Check and make sure that the writer didn't forget to make a possessive –s. On the paper, put 's (apostrophe s) anywhere where it is needed.
2. Read through the entire paper and look for any sentence that begins with the following words: **when, because, since, if, although, after, even though, while, in order that**. First, make sure these sentences are not fragments. Second, **make sure there is a comma after the subordinate clause**.
3. Check for sentences beginning with the word "So." Get rid of the word. It probably isn't needed. Do the same for sentences beginning with "**And**" or "**But**."
4. Circle any use of the words "**you,**" "**your,**" "**me,**" "**I,**" "**we,**" and so on. Suggest how the writer can avoid these words.
5. Mark all uses of the words "**they**" and "**their**," and make sure that the antecedents are plural. Also check to make sure there is a clear antecedent for these words.
6. Mark all uses of the words "**this,**" "**that,**" "**these,**" or "**those.**" Remind the writer to follow these words with specific nouns.
7. Read the entire paper and make sure that all sentences make sense. Mark sentences that don't make sense and suggest how the writer can change them.
8. Read the entire paper again and make sure that all words are **spelled correctly**. Circle words that are questionable. Check for common misspelled words: *then, than, effect, affect, its, it's, their, there, to, too, two*.
9. Make sure that titles are properly designated by *italics*, underlining, or **quotation marks**.
10. Read through the entire paper and check every time the writer uses the word **that**. Make sure it shouldn't be **who**.
11. Check every comma in the paper, and make sure that it is not bringing together two complete sentences.
12. Check all of the following words: **and, but, so, for, or**. Make sure that there isn't a comma needed. Ask me if you are not sure. If these words are bringing together two complete sentences, then use a comma before the conjunction.
13. Anytime you see a **colon** (:) or a **semi-colon** (;), make sure that it is used correctly.
14. Read the paper one last time and make sure that there are no other mistakes that you can identify. Check for transitions, double negatives, verb forms, subject-verb agreement, and so on. Help the writer get an A.
15. Check to make sure that the entire paper is in **consistent tense** (no shifting from past to present, etc.).
16. Check all verbs ending with –ing, and make sure you can't change it. You are looking for passive verbs: some form of the verb *be* + the past participle of the verb.

Example: "Many options were *tried* by the soldiers" can be changed to "The soldiers *tried* many options." Check to make sure that passive sentences couldn't be better if they were active.

Assessment:

Outcome 4: Students will engage in scientific inquiry by forming hypotheses, researching evidence and providing support across multiple sources to support their claims.

- Development of pamphlet

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides an opening to include a controlling idea and an opening strategy relevant to the prompt. | No | Somewhat | Yes |
| • Provides an initial draft with all elements of the prompt addressed. | No | Somewhat | Yes |
| • Writes in readable prose. | No | Somewhat | Yes |

- Peer editing

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Demonstrates use of revision strategies that clarify logic and development of ideas; embeds relevant details; improves word-usage and phrasing and creates smooth transitions between sentences and paragraphs. | No | Somewhat | Yes |
| • Applies a text structure to organize reading material content and to explain key points related to the prompt. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students to review the efficient reading pamphlet.
2. Discussed purpose for reading sources.
3. Asked students to read note taking sections of the efficient reading pamphlet.
4. Discussed the basics of APA style.
5. Guided students as they took notes over their sources using the graphic organizer in their academic notebooks.
6. Asked students to begin to outline their ideas by listing five to seven key ideas for their pamphlet in their academic notebook.
7. Guided students as they wrote an outline of their pamphlet using the questions in their academic notebook.
8. Asked students to complete the weekly reflection at the end of week five.
9. Began the process of drafting the pamphlet by asking students to review the project directions.
10. Discussed the use of language and vocabulary in pamphlets.
11. Guided students as they drafted pamphlets.
12. Asked students to use the guiding questions to revise their work.
13. Asked students to work in pairs to provide feedback using the peer editing checklist in their academic notebooks.
14. Asked students to complete their final pamphlets.

Lesson 10

Final Project Presentations

Overview and Rationale:

In the last lesson of the unit, students will turn in their finalized pamphlets. To make the information public, students will share their pamphlets with the class. Students will also evaluate their peers. Peer evaluation benefits both the presenter, who gains additional feedback, and students, who listen more carefully and gain deeper insight into the process.

Tasks/Expected Outcomes:

1. Students will present their final project to their peers.
2. Students will engage in science discourse explaining and defending their work.
3. Students will use evidence to support their claims.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (D) produce a multimedia presentation (e.g., documentary, class newspaper, docudrama, infomercial, visual or textual parodies, theatrical production) with graphics, images, and sound that appeals to a specific audience and synthesizes information from multiple points of view.
- (23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into an extended written or oral presentation that:
- (A) provides an analysis that supports and develops personal opinions, as opposed to simply restating existing information;
 - (B) uses a variety of formats and rhetorical strategies to argue for the thesis;
 - (C) develops an argument that incorporates the complexities of and discrepancies in information from multiple sources and perspectives while anticipating and refuting counter-arguments;
 - (D) uses a style manual (e.g., *Modern Language Association*, *Chicago Manual of Style*) to document sources and format written materials; and
 - (E) is of sufficient length and complexity to address the topic.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:

- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
 - 1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 - 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
 - 1. Participate actively and effectively in one-on-one oral communication situations.
 - 2. Participate actively and effectively in group discussions.
 - 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).

- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- C. Produce and design a document.
 - 1. Design and present an effective product.
 - 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- State/local assessments

Timeframe:

100 minutes

Targeted Vocabulary:

- From pamphlet presentations

Activity One

Sharing Information (Approx. 75 minutes)

Common Core State Standards: Speaking and listening– 1, 1a, 1c, 2, 3, 4, 5, 6

Ask students to share their pamphlets in small groups. Each student will need to bring ten copies of their pamphlet for class presentations. Students will be placed in groups of three. Students will decide the order in which they will read the pamphlets. Ask students to assume the following roles as they read:

1. One student will take the role of a consumer for whom the pamphlet was written (for example, a pamphlet on lowering cholesterol would be of great interest to someone who suffers from high cholesterol) and will take notes in their academic notebook as they read about how the pamphlet impacted their understanding of the topic. They will also note what action they will take based upon the knowledge they gained from the pamphlet. This student will note any questions they have for the author.
2. One student will take the role of a skeptic and will question the reliability of the information being presented in the pamphlet based on what they know about science. They will take notes on the same two questions in their academic notebook, and will also note questions they have for the author.

Ask students to discuss their pamphlets in small groups. After students read and take notes over one pamphlet, the group will discuss the information presented. Talk with students about their role in small group discussions. They are expected to be active participants who engage the pamphlet author in a dialogue about his/her pamphlet information. Be sure that they understand that they are expect to:

- Look at and make eye contact with each member of the small group.
- Ask questions about the information presented in the pamphlet.
- Discuss how the pamphlet impacted their understanding of the topic and whether or not it changed their stance.
- Be able to summarize the topic presented and make connections to their own topic and/or to what we have learned about diet and nutrition.

Students will switch roles and continue reading each other’s pamphlets until all three pamphlets are discussed. Students can continue to re-group in groups of three to discuss pamphlets with other classmates as time allows.

FROM THE STUDENT ACADEMIC NOTEBOOK

Presenter:

Reviewer:

Topic:

Date:

Understanding of the topic –

Actions I will take –

Questions I have for the author –

| | 5 Excellent | 4 | 3 Good | 2 | 1 Poor |
|---|----------------|---|-----------|---|-----------|
| How effectively did the pamphlet introduce the topic? | 5 | 4 | 3 | 2 | 1 |
| How clearly and fully was the science evidence presented? | 5 | 4 | 3 | 2 | 1 |
| Were the recommendations effective, logical and complete? | 5 | 4 | 3 | 2 | 1 |

What was the strongest part of the pamphlet?

What would you suggest for improvement?

Activity Two

Reflection (Approx. 25 minutes)

Common Core State Standards: Writing– 9, 10

Ask students to complete the weekly reflection.

FROM THE STUDENT ACADEMIC NOTEBOOK

Week 6

1. Think about the science. What did you learn science research?

2. Think about your learning. How will your experiences change the way you approach reading in the sciences?

Assessments:

Outcome 1: Students will present their final project to their peers.

Outcome 2: Students will engage in science discourse explaining and defending their work.

Outcome 3: Students will use evidence to support their claims.

- Peer Evaluation on presentations

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides effective, specific feedback to peers. | No | Somewhat | Yes |
| • Includes comments on areas for improvement. | No | Somewhat | Yes |
| • Includes comments on pamphlet strengths. | No | Somewhat | Yes |

- Pamphlet discussion

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Research is appropriate and effective. | No | Somewhat | Yes |
| • Pamphlet is effective and informative. | No | Somewhat | Yes |
| • Information/resources are presented effectively. | No | Somewhat | Yes |
| • Student is able to discuss/answer questions about their work. | No | Somewhat | Yes |

Grading Rubric

| Category | Excellent | Good | Almost | Not Yet |
|---|--|---|--|--|
| Attractiveness & Organization (Organization) | Exceptionally attractive formatting and well-organized information. | Attractive formatting and well-organized information. | Well-organized information. | Formatting and organization of material are confusing to the reader. |
| Content - Accuracy (Ideas) | The science is exceptionally well explained including all relevant information. | The science is well explained including all relevant information. | The science is explained including most relevant information. | The pamphlet has little of the required information. |
| Writing - Mechanics (Conventions) | No errors. | No major errors, one to two minor errors. | Has some major and minor errors. | Has some major and minor errors. |
| Scientific language and terminology | Used carefully throughout the pamphlet in ways the public can understand. | Used in most of the pamphlet in ways the public can understand. | Is used, but is confusing for readers. | Is not used. |
| Graphics/ Pictures | The graphics go well with the text and there is a good mix of text and graphics. | The graphics go well with the text, but there are so many that they distract from the text. | The graphics go well with the text, but there are too few. | The graphics do not go with the accompanying text or appear to be randomly chosen. |
| Sources | Carefully chosen, excellent sources that provide a full picture of the issues involved in the topic. | Carefully chosen sources that provide a good picture of the issues involved in the topic. | Sources do not provide a full picture of the issues involved in the topic. | Incomplete sources. |
| Citations | No errors in APA style. | Few errors in APA style. | Many errors in APA style. | APA style not used. |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Asked students to share their pamphlets in small groups.
- 2. Assigned students to the following roles (ensuring that each student had an opportunity to portray each role):
 - a. Presenter.
 - b. Consumer.
 - c. Skeptic.
- 3. Asked students to briefly summarize each presentation and make connections to science learning in small groups.
- 4. Asked students to complete the weekly reflection.

Unit 1

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SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

Science Unit 1. Nutrition
The Academic Notebook



Name



Unit 1

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Course Overview

Welcome to the first disciplinary literacy science unit of the SREB Readiness Course-Literacy Ready. What does disciplinary literacy in science mean? According to Shanahan & Shanahan (2012), disciplinary literacy refers to the specialized skills and strategies needed to learn at higher levels in each discipline. That means that how people approach reading and writing in the sciences would differ from how they approach it in history, English, mathematics, or other fields. It also means that students need to learn more than the content in any particular discipline—they also need to learn how reading and writing are used within that field. So, disciplinary literacy in science in this unit will introduce you to the knowledge, skills, and tools used by scientists.

You will learn to “make explicit connections among the language of science, how science concepts are rendered in various text forms, and resulting science knowledge” by learning ways to “develop the proficiencies needed to engage in science inquiry, including how to read, write, and reason with the language, texts, and dispositions of science” (Pearson, Moje, Greenleaf, 2010). These ideas are the principal focus of this unit. While certainly the content covered in this course is important, a primary purpose of this unit is to equip you with the tools necessary to be more successful in your college coursework. You will take part in many reading and writing activities aimed at improving your disciplinary literacy in science. To that end, the creators of the course have developed this academic notebook.

Purposes of the Academic Notebook

The Academic Notebook has three roles in this course. First, the notebook provides you with a starter kit of tools aimed to prepare you for college science courses. These tools will assist you in learning and comprehending the information from the scientific text, animations, and lectures you receive in the class.

A second role of the notebook is to provide you with a personal space to record your work. The academic notebook is where you will take your notes for the class on any materials you are covering. For example, if you are reading an article in class, take notes in this notebook. If you are doing a lab, make your observations and notes here. Likewise, if you are listening to a lecture, take notes here. Use the tools in the resource portion of the notebook to assist you in organizing your notes.

The third and final role of the notebook is that of an assessment tool. Your instructor may periodically collect the notebooks and review your work to ensure that you are remaining on task and to assist you with any material that is causing you difficulty. Your instructor may also assign tasks to be completed in the notebook, such as in-class writing assignments. At the end of this six-week unit, your instructor will review the contents of this notebook as part of your overall grade. Thus, it is important that you work seriously, as this notebook becomes the record of your activity in this course.

Helpful Hints for Science Literacy Success

About Scientists: How do Scientists think?

As you will spend much of your time in class learning this on your own, it is best to be brief. In short, scientists learn by careful observation of the world around them to discover general principles. They do this through careful experimentation that results in data. Scientists use this data to draw conclusions. You likely have heard of the scientific method. Scientists use this method as a structured way to investigate the questions they have. An important use of the scientific method is to be able to replicate previous work. Scientists strive to organize, analyze, and explain things clearly. Scientists believe that science is an attempt to build understandings of the world and that science findings are tentative and subject to revision based on new understandings.

About Scientists: What do scientists ask?

Scientists ask lots of questions about nature and the world around them. These are questions that you will hopefully come to ask upon completing this coursework, and the tools in the resource materials section of the academic notebook are intended to aid you in asking these questions.

Scientists are systematic when they ask questions. Scientific inquiry helps scientists answer questions through investigation. They begin with observations. They may start with big, broad questions: “Why? What’s going on? How is this explained?” They then may break a larger question into smaller parts to examine. They examine work that has already been done. They use the scientific method to hypothesize, test, analyze and draw conclusions. This inquiry is often cyclical, with experience and observation leading to new hypotheses.

Lesson 1

Evaluating Science Claims

In this lesson, you will . . .

- Be introduced to the two levels of thinking required in this unit: thinking like a scientist and thinking about learning in the sciences.
- Learn about the components of science literacy.
- Develop the skills to critically examine claims made by manufacturers of sports/energy drinks.
- Evaluate claims by using multiple sources of information.
- Apply your knowledge by evaluating claims made by other popular energy drinks and present your findings to your peers.
- Explain the processes involved in evaluating science claims.

Please work with a partner to circle all of the noun phrases you find in this section.

Carbohydrates as Nutrients. Foods such as bread, cereal, rice and pasta, as well as fruits and vegetables, are rich in sugars called carbohydrates. Carbohydrates are the major source of energy for cells. Energy is stored in the chemical bonds between the carbons, hydrogens and oxygens that comprise carbohydrate molecules. Carbohydrates can exist as single-unit monomers or can be bonded to each other to produce longer-chain polysaccharide polymers.

The single-unit simple sugars are digested and enter the bloodstream quickly after ingestion. Sugars found in milk, juice, honey and most refined foods are simple sugars. Fructose, the sugar found in corn syrup, is shown in figure 3.1 a.

When multisubunit sugars are composed of many different branching chains of sugar monomers, they are called complex carbohydrates. Complex carbohydrates are found in vegetables, breads, legumes and pasta (*Belk and Maier pages 56-57*).

Read this short article on how scientists think from *Science Daily*

Sep. 22, 2009 — <http://www.sciencedaily.com/releases/2009/09/090921162150.htm>.

Sep. 22, 2009 — Profound discoveries and insights on the frontiers of science do not burst out of thin air but often arise from incremental processes of weaving together analogies, images, and simulations in a constrained fashion. In cutting-edge science, problems are often ill-defined and experimental data are limited.

To develop an understanding of the system under investigation, scientists build real-world models and make predictions with them. The models are tentative at first, but over time they are revised and refined, and can lead the community to novel problem solutions. Models, thus, play a big role in the creative thinking processes of scientists.

Dr. Nancy J. Nersessian has studied the cognitive processes that underlie scientific creativity by observing scientists at work in their laboratories. She says, “Solving problems at the frontiers of science involves complex cognitive processes. In reasoning with models, part of the process occurs in the mind and part in the real-world manipulation of the model. The problem is not solved by the scientist alone, but by the scientist – model combination. This is a highly creative cognitive process.” Her research is published in an upcoming issue of *Topics in Cognitive Science*.

Her study of the working methods of scientists helps in understanding how class and instructional laboratory settings can be improved to foster creativity, and how new teaching methods can be developed based on this understanding. These methods will allow science students to master model-based reasoning approaches to problem solving and open the field to many more who do not think of themselves as traditional “scientists.” (<http://www.sciencedaily.com/releases/2009/09/090921162150.htm>)

REFLECT: Write down the two related words that are the most important in this piece.

Word 1:

Word 2:

Briefly explain your thinking in selecting these two words:

Oygizer

First read the first Savvy Reader section from Belk and Maier.

Savvy Reader **Detox Drinks**



A CLEAR WINNER IN THE FEEL-GOOD STAKES | BY CAROLINE STACEY |
THE INDEPENDENT (LONDON) | JANUARY 3, 2004

So you thought water was just a drink? Think again. It's a lifestyle choice. We can all safely drink our litre or more a day straight from the tap. But where's the cachet or the profit in that? It's almost as free as air. And wonderful and hydrating though tap water is, the latest bottled waters offer so much more—to make you sportier, healthier, and less hungover.

With Oygizer you pay for air and water together. It's oxy-

genated, but not fizzy. Bottled in the Tyrolean mountains by a company based in Innsbruck, Austria, it describes itself as “a sip of fresh air.” Already big in the Middle East—where water's a more precious commodity than it is here—it has been launched in Europe and now in the UK.

Oygizer doesn't just slake a thirst, it provides the body with extra oxygen too. A litre contains

150 mg of oxygen, around 25 times more than what's in a litre of tap water. This apparently helps remove toxins and ensures a stronger immune system, as well as assisting the respiratory system so you recover better from exercise. Some claim detox benefits, it helps hangovers, and even enhances flavours to make food taste better.

- 1 List the claims made by this article. Is there enough information presented in this article to back up the claims made?
- 2 Use the appropriate questions in the checklist provided in Chapter 1, Table 1.2, to evaluate this newspaper article. What types of information are missing from this article?
- 3 Is any data presented to substantiate the claim that oxygenated water improves health?

Oxygizer

Now read a second Oxygizer article from Belk and Maier. We will examine both the claims and the research abstract from the article that the developers of the drink used to substantiate their claims.

Savvy Reader Oxygizer Improves Performance?



The Savvy Reader feature in Chapter 2 introduced you to the oxygenated water beverage Oxygizer. In addition to making many other claims, the author of the newspaper article wrote that drinking Oxygizer would “assist the respiratory system so you recover better from exercise.” The following is an excerpt from the website of the company that produces Oxygizer: “Oxygizer improves performance during periods of high physical stress and the resulting regenerative phase. Univ. Prof. Dr. Wolfgang Marktl (Head of Science at the Institute of Medical Physiology at Vienna University) and his research team have completed their scientific tests. Using a randomised double-blind study, these tests have proven the effective influence and effect of Oxygizer on the body’s performance capability.”

This is pretty compelling writing and may convince some to purchase this oxygenated water. However, let’s also look at an excerpt from the actual scientific study performed by Dr. Marktl and published in the *International Journal of Sports Medicine* in March 2006. “Results showed no significant influence on aerobic parameters or lactate metabolism, neither at submaximal nor at maximal levels. We conclude that the consumption of oxygenated water does not enhance aerobic performance.”

- 1 Does it appear that the author of the newspaper article read the actual study or the promotional material only?
- 2 How are claims made in the newspaper and on websites different from claims made by authors of articles published in scientific journals?
- 3 The Oxygizer website also includes some data (<http://www.oxygizer.com/default.aspx?lngId=2>) that seem to support their claims. Private companies can hire their own scientists to perform studies that often have results that differ from those of government and university-sponsored scientists. Would you be more skeptical of results produced by scientists hired by the company whose product they are testing or scientists who work for the government or a University?
- 4 Carefully consider the following two sentences from the Oxygizer website: “Univ. Prof. Dr. Wolfgang Marktl (Head of Science at the Institute of Medical Physiology at Vienna University) and his research team have completed their scientific tests. Using a randomised double-blind study, these tests have proven the effective influence and effect of Oxygizer on the body’s performance capability.” Each of these sentences, read separately, is true. Dr. Marktl and his team did complete their tests, and the Oxygizer scientists did produce data showing increased performance capability. However, placed adjacent to each other, these sentences seem to be indicating that Dr. Marktl’s university-sponsored research came up with results that were actually produced by the Oxygizer scientists. Do you think this is a willful attempt to deceive potential customers? Most people don’t have time to do such a thorough analysis of every newspaper article they read. This is why it is helpful to develop a general level of skepticism about most product claims.

Abstract

It has been asserted that the consumption of oxygenated water can support physical working capacity. As this has not been accurately investigated yet we analyzed effects of a two-week period of daily O₂-water ingestion on spiroergometric parameters and lactate metabolism in healthy adults. Twenty men (24 ± 2.5 years of age) with comparable aerobic abilities performed four exhaustive bicycle spiroergometric tests. Applying a double-blind crossover study design 10 subjects drank 1.5 liters of highly oxygenated water every day during the two weeks between the initial two tests whereas the other group consumed 1.5 liters untreated water from the same spring. After a two-week wash-out period subjects underwent a second period consuming the opposite type of water. Spiroergometric parameters and lactate kinetics between both groups at submaximal and maximal levels were analyzed using a MANOVA. Results showed no significant influence on aerobic parameters or lactate metabolism, neither at submaximal nor at maximal levels (all p-values ≥ 0.050). Merely increments of V·EO₂ at submaximal levels were demonstrable (p = 0.048). We conclude that the consumption of oxygenated water does not enhance aerobic performance or lactate kinetics in standardized laboratory testing.

Does Oxygenated Water Support Aerobic Performance and Lactate Kinetics?

V. Leibetseder, G. Strauss-Blasche, W. Marktl, C. Ekmekcioglu. Int J Sports Med 2006; 27(3): 232-235

DOI: 10.1055/s-2005-865633

Please reread the two Savvy Reader articles from Belk and Maier and use the checklist on the next page to evaluate the news report.

Savvy Reader (continued)

TABLE 1.2 A guide for evaluating science in the news. For each question, check the appropriate box.

| Question | Possible answers | |
|--|---|--|
| | Preferred answer | Raises a red flag |
| 1. What is the basis for the story? | Hypothesis test | <input type="radio"/> Untested assertion <i>No data to support claims in the article.</i> <input type="radio"/> |
| 2. What is the affiliation of the scientist? | Independent (university or government agency) | <input type="radio"/> Employed by an industry or advocacy group <i>Data and conclusions could be biased.</i> <input type="radio"/> |
| 3. What is the funding source for the study? | Government or nonpartisan foundation (without bias) | <input type="radio"/> Industry group or other partisan source (with bias) <i>Data and conclusions could be biased.</i> <input type="radio"/> |
| 4. If the hypothesis test is a correlation: Did the researchers attempt to eliminate reasonable alternative hypotheses? | Yes | <input type="radio"/> No <i>Correlation does not equal causation. One hypothesis test provides poor support if alternatives are not examined.</i> <input type="radio"/> |
| If the hypothesis test is an experiment: Is the experimental treatment the only difference between the control group and the experimental group? | Yes | <input type="radio"/> No <i>An experiment provides poor support if alternatives are not examined.</i> <input type="radio"/> |
| 5. Was the sample of individuals in the experiment a good cross section of the population? | Yes | <input type="radio"/> No <i>Results may not be applicable to the entire population.</i> <input type="radio"/> |
| 6. Was the data collected from a relatively large number of people? | Yes | <input type="radio"/> No <i>Study is prone to sampling error.</i> <input type="radio"/> |
| 7. Were participants blind to the group they belonged to and/or to the "expected outcome" of the study? | Yes | <input type="radio"/> No <i>Subject expectation can influence results.</i> <input type="radio"/> |
| 8. Were data collectors and/or analysts blinded to the group membership of participants in the study? | Yes | <input type="radio"/> No <i>Observer bias can influence results.</i> <input type="radio"/> |
| 9. Did the news reporter put the study in the context of other research on the same subject? | Yes | <input type="radio"/> No <i>Cannot determine if these results are unusual or fit into a broader pattern of results.</i> <input type="radio"/> |
| 10. Did the news story contain commentary from other independent scientists? | Yes | <input type="radio"/> No <i>Cannot determine if these results are unusual or if the study is considered questionable by others in the field.</i> <input type="radio"/> |
| 11. Did the reporter list the limitations of the study or studies on which he or she is reporting ? | Yes | <input type="radio"/> No <i>Reporter may not be reading study critically and could be overstating the applicability of the results.</i> <input type="radio"/> |

Lesson 2

Close Reading in the Sciences: Nutrition

In this lesson, you will . . .

- Explain the processes involved while reading in the sciences.
- Learn about how to approach both general and discipline-specific vocabulary.
- Learn about and practice close reading with a college-level science chapter on nutrition.

Reading Science Text

(Adapted from Nist-Olejnik & Holschuh, 2013).

In science textbooks, you will find many new terms and definitions. Often, the terms introduced in early chapters will be used later in the text to define other terms. So you need to be sure you understand the new terms as they appear to avoid trouble understanding future reading. Science textbooks also discuss proven principles and theories in terms of their relationship to each other. Therefore, it is important to be aware of and understand how the theories connect and how they explain the science concepts you are learning.

Concepts in science textbooks are usually presented sequentially, which means the concepts build on each other. Your best plan is to test yourself as you read to make sure you fully understand each concept. It is also helpful to create reading goals to monitor what you are learning. This means that rather than focusing on getting through a chapter, focus on learning concepts every time you read. Adopt a scientific approach and ask yourself questions such as:

- What data supports this concept or theory?
- What other theories is this concept related to?
- How does this phenomenon work? What is the scientific process involved?
- Why does this phenomenon occur?
- What does it show us?

It is also important to pay attention to the diagrams in each chapter. They are there to help you picture the science process so that you can see what is happening. Understanding diagrams is crucial to doing well in most science courses.

Gearing Up for Reading

To gear up for reading, start by reading the chapter title and thinking about what you already know about that concept. Focus on primary and secondary headings to understand how the chapter is organized and how the ideas are related together. If your text has an outline of topics at the beginning of each chapter, use it to help you think

about the key points. If not, skim through the chapter for key terms and think about how they are related to the appropriate heading or subheading. Pay special attention to diagrams and figures, and think about how they relate to the overall focus of the chapter. Finally, read the chapter objectives and guiding questions if your textbook has these features.

What and How to Annotate During Reading

Because of the large amount of new terminology involved in learning science, it is important for you to read your science textbooks before class. In this way, you will be familiar with the terms and concepts discussed in the text and you will be able to build your understanding of the concepts as you listen in class. It is also a good idea to connect the concepts discussed in class with the concepts described in your text by comparing your lecture notes to your text annotations each time you read. This will help you follow the flow of the concepts and will help you understand how the ideas are connected.

When you annotate your science text, you need to match your annotations to the course expectations. For example, if you are expected to think at higher levels, be sure your annotations include more than just the bold-faced terms. If you are expected to be able to explain science processes, be sure your annotations help you learn to do just that.

In general, it is a good idea to limit the amount of material you annotate. Annotate big concepts and save the details for your rehearsal strategies. A big mistake that students make when annotating science is that they tend to annotate too much. It is also essential to focus on putting the ideas into your own words. This will help you monitor your understanding of what you have read and will keep you from copying exactly from the text. In addition, look for experiments and results or conclusions drawn from scientific theories, and seek to make connections between the experiments and the concepts they generate.

Science texts often contain diagrams or charts to explain concepts. Because science exams usually contain questions about the concepts described in diagrams or charts, you must be able to read and understand each one. As you read your text, annotate the diagrams and take the time to reflect on what they are depicting. A good self-testing strategy to make sure you fully understand the concept is to cover up the words in the diagram and try to talk through the information. If you can explain how the concept works, you've shown that you understand it. If you find that you cannot explain it, reread your annotations or the diagram text to be sure you understand the key points.

In the annotation example on the next page, notice how the annotations focus on explaining the concepts rather than just memorizing the terms.

Example of Annotations in a Science Textbook

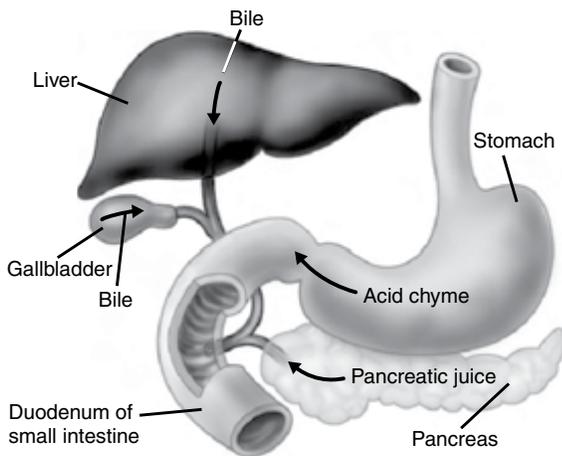


Figure 22.12
The duodenum.

Acid chyme squirted from the stomach into the duodenum (the beginning of the small intestine) is mixed with pancreatic juice, bile from the liver and gallbladder, and intestinal juice produced by the duodenal lining itself. As peristalsis propels the mix along the small intestine, hydrolases break food molecules down to their monomers.

pizza we're following, are a special problem for the digestive system because they do not dissolve in water. The fats in chyme start out as relatively large globules. Only those molecules on the surface of the globules are in contact with the lipase dissolved in the surrounding solution. Agitation from the rhythmic contraction of muscles in the intestinal wall breaks the fat globules into small droplets, but without the help of bile salts, those droplets would quickly fuse again into larger globules that would be difficult to digest. Through a process called emulsification, bile salts essentially coat the tiny fat droplets and prevent them from fusing. Similarly, emulsification by a chemical additive helps keep oil permanently mixed with vinegar in some commercial salad dressings.

The intestinal lining itself also aids in enzymatic digestion by producing a variety of hydrolases. The cumulative activities of all these hydrolytic enzymes break the different classes of food molecules completely down into monomers, which are now ready for absorption into the body.

Absorption of Nutrients Wait a minute! The previous sentence said that nutrients "are now ready for absorption by the body." Aren't these nutrients already in the body? Not really. The alimentary canal is a tunnel running through the body, and its cavity is continuous with the great outdoors. The doughnut analogy in **Figure 22.13** should convince you that this is so. Until nutrients actually cross the tissue lining of the alimentary canal to enter the bloodstream, they are still outside the body. If it were not for nutrient absorption, we could eat and digest huge meals but still starve to death, in a sense.

Most digestion is complete by the time our pizza meal reaches the end of the duodenum. The next several meters of small intestine (called the jejunum and the ileum) are specialized for nutrient absorption. The structure of the intestinal lining, or epithelium, fits this function (**Figure 22.14**). The surface area of this epithelium is huge—roughly 300m², equal to the floor space of a one bedroom apartment. The intestinal lining not only has large folds, like the stomach, but also fingerlike outgrowths called villi, which makes the epithelium something like the absorptive surface of a fluffy bath towel. Each cell of the epithelium adds even more surface by having microscopic projections called microvilli. Across this expansive surface of intestinal epithelium, nutrients are transported into the network of small blood vessels and lymphatic vessels in the core of each villus.

The duodenum receives digestive juices from the pancreas, liver, and gallbladder (**Figure 22.12**). The **pancreas** is a large gland that secretes pancreatic juice into the duodenum via a duct. Pancreatic juice neutralizes the stomach acids that enter the duodenum and contains hydrolases that participate in the chemical digestion of carbohydrates, fats, proteins, and nucleic acids.

Bile is a juice produced by the **liver**, stored in the **gallbladder**, and secreted through a duct into the duodenum. Bile contains no digestive enzymes but does have substances called bile salts that make fats more accessible to lipase. Fats, including those from the cheese of the

Digestion Sm Intestine

- when food reaches sm int. it has been thru mech. and chem. digestion
- hydrolysis is initiated

Duodendum

1st ft. of sm int.

- where food is broken into monomers
- gets digest. juice from pancreas (pancreatic juice via duct—neutralizes stomach acid & contains hydrolases for chem digest), liver (bile), gallbladder (where bile is stored and via duct)
- Bile salts—make fats accessible to lipase thru emulsification—bile salts coat fat droplets to keep them separated (like oil and water in dressing) Int. lining produces hydrolases to get food ready for absorption

Absorption

Nutrients don't really 'enter' body until entering bloodstream. Nut abs occurs in jejunum and ileum (next parts of sm int.)
Epithelium—int. lining (huge—300m², folded, and has villi). Very abosorptive. Each cell has microvilli—all help transport nutrients

The Annotation System of Text Marking

What is Annotation?

- Writing brief summaries in the textbook's margin.
- Enumerating multiple ideas (i.e., causes, effects, reasons characteristics).
- Sketching pictures or charts to explain difficult processes/concepts.
- Writing possible test questions.
- Noting puzzling or confusing ideas that need clarification.
- Underlining key ideas.

Why Should I Annotate?

- It will improve your concentration so you will not become distracted and have to re-read.
- It can provide an immediate self-check for your understanding of the textbook's key ideas.
- It will help you remember more.
- It can assist you in test preparation.
- It will negate the need of time spent in re-reading the chapters.
- It will help you state ideas in your words.

What should I annotate?

- Definitions.
- Lists, features, causes, effects, reasons, characteristics.
- Diagrams and Processes.
- Examples of main idea.
- Good summaries.
- Possible test questions.
- Something you do not understand.

Four Types of Vocabulary Encountered in Science Texts

1. **Discipline specific vocabulary:**

These are content area words like *polymer* or *macromolecule* that help students understand the content they are reading—these are often the boldface words in science texts.

2. **Words that help you discuss the discipline:**

These are words that discipline experts use when they practice the discipline such as *hypothesis*, *theory*, *model*, *process* and *evidence*.

3. **General academic vocabulary:**

These are difficult words that can be used in any discipline, like *expediency*, *plethora* and *enumerate*.

4. **General vocabulary used in a discipline-specific way:**

These are words that have general meanings and specific meanings in a discipline. “Class” in history means something different than “class” in science.

SCIENTIFIC ROOT WORDS, PREFIXES AND SUFFIXES

(<http://www.succeedinscience.com/apbio/assignments/generalinfo/rootwords.pdf>)

| | | | | | |
|---|--|--|--|--|--|
| a-; an- ab- -able | not; without; lacking; deficient away from; out from capable of | cente- centi- centr- | pierce hundredth center | -err- erythro- -escent | wander; go astray red becoming |
| ac- -aceous | to; toward of or pertaining to | cephal- cerat- | head horn | eso- eu- | inward; within; inner well; good; true; normal |
| acou-; acous - | hear | cerebr- | brain | eury- | widen |
| ad- aden- adip- | to; toward gland fat | cervic- chel- chem- | neck claw dealing with chemicals | ex- extra- -fer- | out of; away from beyond; outside bear; carry; produce |
| aero- agri- -al alb- | air field; soil having the character of white | chir- chlor- chondr- chrom-; -chrome | hand green cartilage color | ferro- fibr- -fid; fiss- -flect; -flex | iron fiber; thread split; divided into bend |
| alg-; -algia alto- ambi- ameb- amni- amphi-; am- pho- amyl- ana- andro- anemo- ang- angi- ante- anter- antho- anti- anthropo- -ap-; -aph- apo-; ap- aqu- archaeo- -ary; -arium arteri- arth- -ase aster-; astr- -ate ather- -ation atmo- audi- aur- auto- bacter-; bactr- barb- baro- bath- bene- bi- (Latin) bi-; bio- (Greek) -blast- | pain high both change; alternation fetal membrane both starch up; back; again man; masculine wind choke; feel pain blood vessel; duct before; ahead of time front flower against; opposite man; human touch away from water primitive; ancient place for something artery joint; articulation forms names of enzymes star verb form - the act of... fatty deposit noun form - the act of... vapor hear ear self bacterium; stick; club beard weight depth; height well; good two; twice life; living sprout; germ; bud | chron- -chym- -cid-; -cis - circa-; circum- cirru- co- cocc- coel- coll- coni- contra- corp- cort-; cortic- cosmo- cotyl- counter- crani- cresc-; cret- crypt- -cul-; -cule cumul- cuti- cyan- -cycle; cycl- -cyst- cyt-; -cyte dactyl- de- deca- deci- deliquesc- demi- dendr- dent- derm- di-; dipl- (Latin) di-; dia- (Greek) dia- (Latin) digit- din- dis- | time juice cut; kill; fall around; about hairlike curls with; together seed; berry hollow glue cone against body outer layer world; order; form cup against skull begin to grow hidden; covered small; diminutive heaped skin blue ring; circle sac; pouch; bladder cell; hollow container finger away from; down ten tenth become fluid half tree tooth skin two; double through; across; apart day finger; toe terrible apart; out | flor- flu-; fluct-; flux foli- fract- -gam- gastr- geo- -gen; -gine -gene- -gest- -glen- -glob- gloss- gluc-; glyc- glut- gnath- -gon -grad- -gram; graph grav- -gross- gymno- gyn- gyr- -hal-; -hale halo- hapl- hecto- -helminth- hem- hemi- hepar-; hepat- herb- hetero- hex- hibern- hidr- hipp- hist- holo- homo- (Latin) | flower flow leaf break marriage stomach land; earth producer; former origin; birth carry; produce; bear eyeball ball; round tongue sweet; sugar buttock jaw angle; corner step record; writing heavy thick naked; bare female ring; circle; spiral breathe; breath salt simple hundred worm blood half liver grass; plants different; other six winter sweat horse tissue entire; whole man; human |

LESSON 2

Literacy Ready . Science Unit 1

| | | | | | |
|---------------------|------------------------------|------------------|-------------------------------|--------------------|-------------------------------|
| brachi- | arm | dorm- | sleep | homo- (Greek) | same; alike |
| brachy - | short | dors- | back | hort- | garden |
| brady- | slow | du-; duo- | two | hydr- | water |
| branchi- | fin | -duct | lead | hygr- | moist; wet |
| brev- | short | dynam- | power | hyper- | above; beyond; over |
| bronch- | windpipe | dys- | bad; abnormal; difficult | hyph- | weaving; web |
| cac- | bad | ec- | out of; away from | hypno- | sleep |
| calor- | heat | echin- | spiny; prickly | hypo- | below; under; less |
| capill- | hair | eco- | house | hyster- | womb; uterus |
| capit- | head | ecto- | outside of | -iac | person afflicted with disease |
| carcin- | cancer | -elle | small | -iasis | disease; abnormal condition |
| cardi- | heart | -emia | blood | -ic | (adjective former) |
| carn- | meat; flesh | en-; endo-; ent- | in; into; within | ichthy- | fish |
| carp- | fruit | -en | made of | ign- | fire |
| carpal- | wrist | encephal- | brain | in-; il-; im-; ir- | not |
| cata- | breakdown; downward | enter- | intestine; gut | in-; il-; im-; ir- | to; toward; into |
| caud- | tail | entom- | insects | in- | very; thoroughly |
| -cell- | chamber; small room | -eous | nature of; like | -ine | of or pertaining to |
| cen-; -cene | now; recent | epi- | upon; above; over | infra- | below; beneath |
| inter- intra- | between within; inside | -oma omni- | abnormal condition; tumor all | sacchar- sapr- | sugar rotten |
| -ism | a state or condition | onc- | mass; tumor | sarc- | flesh |
| iso- | equal; same | oo- | egg | saur- | lizard |
| -ist | person who deals with... | ophthalm- | eye | schis -; schiz- | split; divide |
| -itis | inflammation; disease | opt- | eye | sci- | know |
| -ium | refers to a part of the body | orb- | circle; round; ring | scler- | hard |
| -kary- | cell nucleus | -orium; -ory | place for something | -scop- | look; device for seeing |
| kel- | tumor; swelling | ornith- | bird | -scribe; -script | write |
| kerat- | horn | orth- | straight; correct; right | semi- | half; partly |
| kilo- | thousand | oscu- | mouth | sept- | partition; seven |
| kine- | move | -osis | abnormal condition | -septic | infection; putrefaction |
| lachry- | tear | oste- | bone | sess- | sit |
| lact- | milk | oto- | ear | sex- | six |
| lat- | side | -ous | full of | -sis | condition; state |
| leio- | smooth | ov- | egg | sol- | sun |
| -less | without | oxy- | sharp; acid; oxygen | solv- | loosen; free |
| leuc-; leuk- | white; bright; light | pachy - | thick | som-; somat-; - | body |
| lign- | wood | paleo- | old; ancient | somn- | sleep |
| lin- | line | palm- | broad; flat | son- | sound |
| lingu- | tongue | pan- | all | spec-; spic- | look at |
| lip- | fat | par-; para- | beside; near; equal | -sperm- | seed |
| lith-; -lite | stone; petrifying | path-; -pathy | disease; suffering | -spher- | ball; round |
| loc- | place | -ped- | foot | spir-; -spire | breathe |
| -log- | word; speech | -ped- | child | -spor- | seed |
| -logist | one who studies... | pent- | five | stat-; -stasis | standing; placed; staying |
| -logy | study of... | per- | through | stell- | stars |
| lumin- | light | peri- | around | sten- | narrow |
| -lys-; -lyt-; -lyst | decompose; split; dissolve | permea- | pass; go | stern- | chest; breast |

| | | | | | |
|----------------|----------------------------|-----------------|---------------------------|---------------|----------------------------|
| macr- | large | phag- | eat | stom-; -stome | mouth |
| malac- | soft | pheno- | show | strat- | layer |
| malle- | hammer | -phil- | loving; fond of | stereo- | solid; 3-dimensional |
| mamm- | breast | phon-; -phone | sound | strict- | drawn tight |
| marg- | border; edge | -phore; pher- | bear; carry | styl- | pillar |
| mast- | breast | photo- | light | sub- | under; below |
| med- | middle | phren- | mind; diaphragm | super-; sur- | over; above; on top |
| meg- | million; great | phyc- | seaweed; algae | sym-; syn- | together |
| mela-; melan- | black; dark | phyl- | related group | tachy- | quick; swift |
| -mer | part | -phyll | leaf | tarso- | ankle |
| mes- | middle; half; intermediate | physi- | nature; natural qualities | tax- | arrange; put in order |
| met-; meta- | between; along; after | phyt-; -phyte | plant | tele- | far off; distant |
| -meter; -metry | measurement | pino- | drink | telo- | end |
| micro- | small; millionth | pinni- | feather | terr- | earth; land |
| milli- | thousandth | plan- | roaming; wandering | tetr- | four |
| mis- | wrong; incorrect | plasm-; -plast- | form; formed into | thall- | young shoot |
| mito- | thread | platy- | flat | -the-; -thes- | put |
| mole- | mass | pleur- | lung; rib; side | -thel- | cover a surface |
| mono- | one; single | pneumo- | lungs; air | -therm- | heat |
| mort- | death | -pod | foot | -tom- | cut; slice |
| -mot- | move | poly- | many; several | toxico- | poison |
| morph- | shape; form | por- | opening | top- | place |
| multi- | many | port- | carry | trache- | windpipe |
| mut- | change | post- | after; behind | trans- | across |
| my- | muscle | pom- | fruit | tri- | three |
| myc- | fungus | pre- | before; ahead of time | trich- | hair |
| mycel- | threadlike | prim- | first | -trop- | turn; change |
| myria- | many | pro- | forward; favoring; before | -troph- | nourishment; one who feeds |
| moll- | soft | proto- | first; primary | turb- | whirl |
| nas- | nose | pseudo- | false; deceptive | -ul-; -ule | diminutive; small |
| necr- | corpse; dead | psych- | mind | ultra- | beyond |
| nemat- | thread | pter- | having wings or fins | uni- | one |
| neo- | new; recent | pulmo- | lung | ur- | urine |
| nephro- | kidney | puls- | drive; push | -ura | tail |
| -ner- | moist; liquid | pyr- | heat; fire | vas- | vessel |
| neur- | nerve | quadr- | four | vect- | carry |
| noct-; nox- | night | quin- | five | ven-; vent- | come |
| -node | knot | radi- | ray | ventr- | belly; underside |
| -nom-; -nomy | ordered knowledge; law | re- | again; back | -verge | turn; slant |
| non- | not | rect- | right; correct | vig- | strong |
| not- | back | ren- | kidney | vit-; viv- | life |
| nuc- | center | ret- | net; made like a net | volv- | roll; wander |
| ob- | against | rhag-; -rrhage | burst forth | -vor- | devour; eat |
| ocul- | eye | rhe-; -rrhea | flow | xanth- | yellow |
| oct- | eight | rhin- | nose | xero- | dry |
| odont- | tooth | rhiz- | root | xyl- | wood |
| -oid | form; appearance | rhodo- | rose | zo-; -zoa | animal |
| olf- | smell | roto- | wheel | zyg- | joined together |
| oligo- | few; little | rubr- | red | zym- | yeast |

Week 1

Weekly Reflection

Reflect on your experience:

1. Think about the science. What would scientists pay attention to if they were looking at a new energy drink on the market?

2. Think about your learning. How will this experience change the way you approach reading in the sciences?

3. Think about how using annotation impacted the way you read in science? What do you like about the strategy? What do you dislike about it?

Lesson 3

Analogies in Science

In this lesson, you will . . .

- Read, understand and apply science concepts to a health-related case.
- Read across texts in multiple representations and make connections between text, diagram and animation information.
- Present case study results in a short presentation to peers indicating an understanding of how to make science knowledge public.

Chemical Reaction Simulation

Round 1:

Total Time to complete all chemical reactions:

In this simulation, each person represented a reactant. How did they find the other reactant that they were meant to undergo a chemical reaction with?

How does this serve as an analogy for chemical reactions?

How would you describe the rate of this reaction?

Chemical Reaction Simulation

Round 2:

Total Time to complete all chemical reactions:

How were the parameters of the “chemical reaction” changed in this round?

Based on this information, how do you think enzymes speed up chemical reactions?

Chemical Reaction Simulation

Round 3:

Total time to complete all chemical reactions:

How were the parameters of the “chemical reaction” changed in this round?

Based on this information, how do you think enzymes speed up chemical reactions?

Form a hypothesis to predict what might happen if the enzyme were absent in one of the enzyme/substrate systems.

Chemical Reaction Simulation: Model Analysis and Synthesis

Having discussed this simulation as a class and read about enzymes in your textbook, use the following questions to help you analyze the chemical reaction simulation modeling activity and to guide you to synthesis regarding the function of enzymes.

1. How did the simulation activity help you to visualize chemical reactions?

Do you think the simulation of reactants finding each other is a fair analogy of chemical reactions happening in the cell?

Why or why not?

2. Consider the total time necessary to complete all of the chemical reactions in round one versus round two. Why are enzymes necessary in order for cells to survive?

3. You read in your text that enzymes speed up chemical reactions by decreasing activation energy. What served as the analogy for activation energy in the chemical reaction simulation activity?

Do you think this is a fair analogy of activation energy?

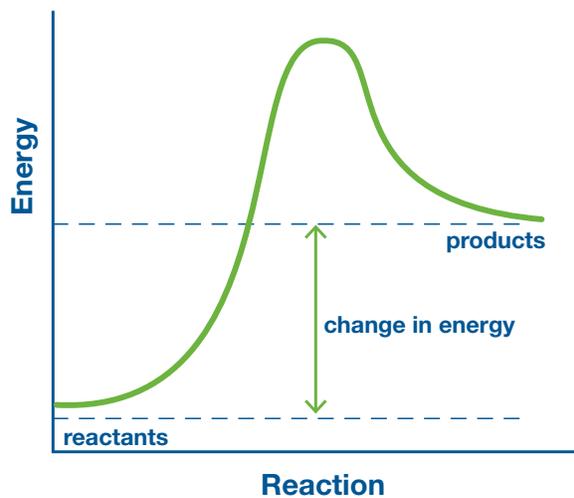
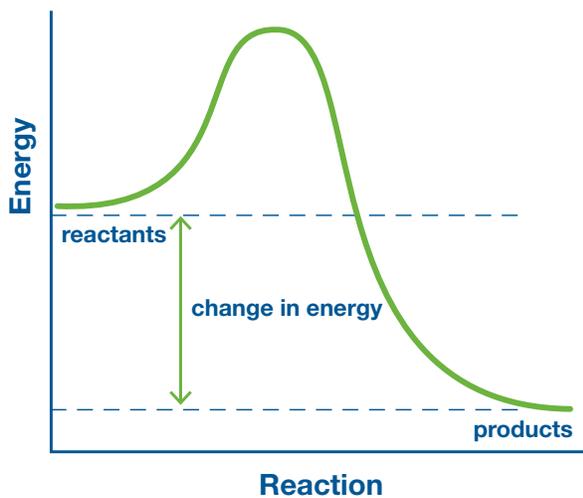
Why or why not?

4. You read about the specificity of enzymes. What served as the analogy for specificity in the chemical reaction simulation activity?

Do you think this is a fair analogy of activation energy?

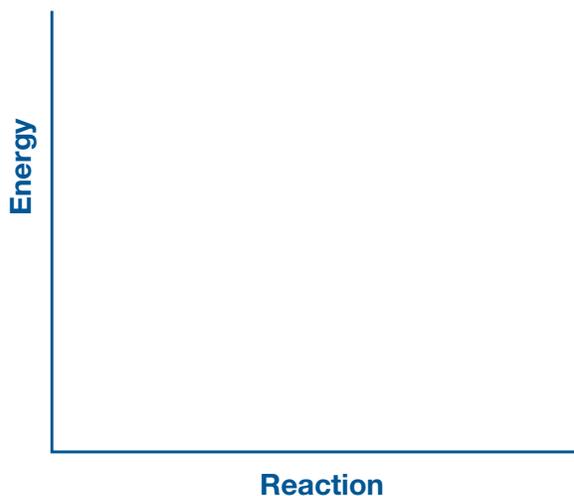
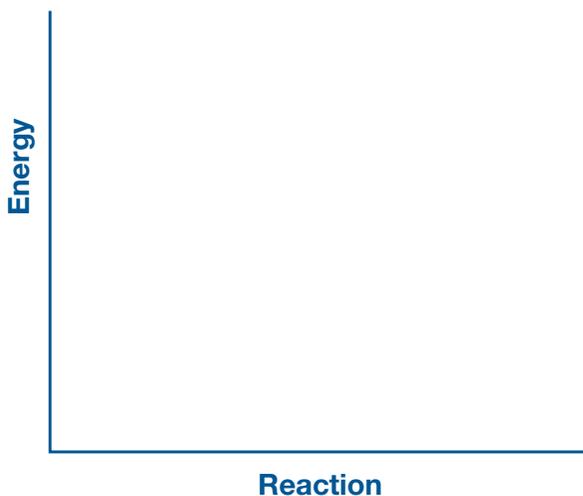
Why or why not?

7. The graphs below represent the energy pathway of two different chemical reactions in a cell—one that is anabolic (reactants combine to form one product) and one that is catabolic (reactant splits to form more than one product).



a. Can you infer which reaction is anabolic and which is catabolic? Explain your reasoning.

b. Both of these reactions are shown without an enzyme present. Infer what the energy pathway would look like in these reactions if an enzyme were active. Draw that energy pathway on top of the graphs below.



CASE STUDY

Hannah, a 21 year-old female, used to enjoy eating out with friends. Over the past year, she has noticed that within an hour after she eats, she experiences bloating, abdominal cramping, gas, and diarrhea. These symptoms do not occur after every meal, for example, eating in her favorite sushi restaurant is fine as are the meals at the BBQ restaurant. Other foods always seem to bother her such as pizza or burgers. Because Hannah does not know when she will experience the symptoms, she always makes sure she eats somewhere close to home.

Why might one suspect lactose deficiency in this case?

What information helped you solve this?

Draw and label two diagrams: (1) showing the digestion of lactose when lactase is present and (2) showing the process for someone with lactose deficiency.

Lesson 4

The Complexity of Calories

In this lesson, you will . . .

- Integrate ideas from lecture, lab and text to understand the role of calories.
- Read and follow directions for a lab procedure, gather and record data, and write a lab report.

Notes on *Feel the burn*. Scientific American.

1. How did the scientists measure calories from restaurants?

a. Explain the procedure used to prepare the food.

b. Explain the procedure used to measure the food.

Effects of proximity on plant growth

Jane Doe

1/12/09

Mrs. Salyer

Introduction

Plants need sunlight, water, nutrients from soil and Carbon Dioxide in order to complete photosynthesis and grow. Factors can affect growth rate, such as fertilizers added to soil or water, intensity of light, and amount of space between growing seedlings to name a few. In this experiment, the amount of space between growing seedlings will be used to determine the affect on plant growth.

Hypothesis

If plants have more space to grow, then they will grow taller than those that are crowded by other seedlings. This hypothesis was based on prior knowledge about plant growth including the need for plants to take up nutrients from the soil and spread roots to establish growth. If a plant is crowded by other seedlings, the plants can't spread roots as far, they compete for nutrients and inhibit growth by coming into contact with one another.

Materials and Procedure

- 3 pots labeled A, B, C
- potting soil
- water
- bean seeds
- sunny window with temperature maintained at ~70 degrees Celsius
- metric ruler (to measure height in mm)

1. Each pot is filled $\frac{3}{4}$ full with potting soil by gently packing soil into pot.
2. Place 1 bean seed in pot A $\frac{1}{2}$ way into soil.
3. Place 3 bean seeds in pot B $\frac{1}{2}$ way into soil.
4. Place 6 bean seeds in pot C $\frac{1}{2}$ way into soil.
5. Each pot is watered with 50 mL of tap water every other day.
6. Height (mm) measurements are taken every Friday for 10 weeks.

Results

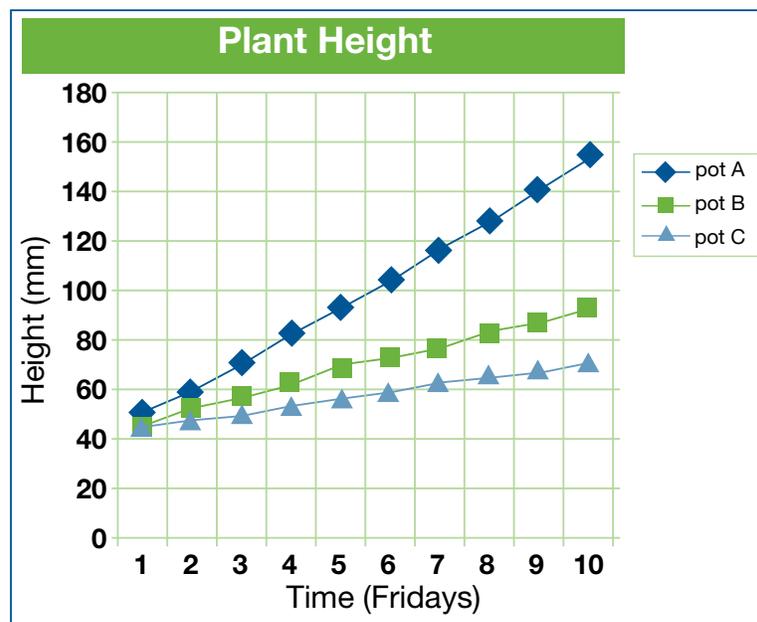
After one week of growth Pot A, which had 1 plant, was at 59 mm while B and C had plants that reached only 56 and 54 mm respectively. Through the 10-week trial the plants in Pot A grew to a maximum height of 155 mm on week 10. Plants in pot B reached 99 mm and plants in C reached 78 mm. The plants grew at a rate of about 9 mm per week for pot A, about 5 mm per week for pot B, and 3 mm per week for pot C. Refer to data table for complete data set.

Plant Height Data

| Time (Friday) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Pot A (mm) | 59 | 68 | 78 | 89 | 100 | 110 | 121 | 132 | 143 | 155 |
| Pot B (mm) | 56 | 62 | 67 | 72 | 77 | 81 | 85 | 90 | 94 | 99 |
| Pot C (mm) | 54 | 57 | 60 | 63 | 65 | 68 | 71 | 74 | 76 | 78 |

Analysis

According to the data, proximity of seedlings had a direct effect on plant growth. Pot A, which had only 1 bean plant, grew taller each week and reached a higher maximum height at 155mm. The graph supports this by showing a larger increase and a higher slope for the data for pot A. Pot B had plants that reached a greater height than pot C. Again this is represented by the graph showing the line for pot B with a slightly steeper slope than the line for pot C. This data supports the hypothesis made that plants would grow better (taller) if more space was available.



Conclusion

The experiment performed was testing bean plant proximity and the relationship to growth. Varying numbers of beans were used in similar pots and under similar conditions to test the growth in bean height over a ten-week period. The data supported the hypothesis that fewer beans per pot would yield better growth. The beans in pot A, which had only 1 bean, grew at a faster rate and reached a greater height (155mm) than beans in pot B or pot C. Data collection could have been better at indicating plant growth if other factors would have been taken into account. For instance, if number of leaves and stems, coloration, width of leaves or number of blooms had been measured the experiment would have been more comprehensive.

Lab Report Strong and Weak Points

Include the strong components, stay away from the weak ones!

| Meets | Strong | Weak |
|------------------------|---|--|
| Introduction | <ul style="list-style-type: none"> • The purpose was....(purpose statement). • Background knowledge (ethylene gas). • All sections of lab report are labeled. | <ul style="list-style-type: none"> • Not enough detail. • Don't use personal pronouns. • Not including purpose or background info. |
| Hypothesis | <ul style="list-style-type: none"> • Use If...Then.... statement. • A true prediction of what is going to happen in the experiment. | <ul style="list-style-type: none"> • Not including because statement. |
| Methods/ Procedures | <ul style="list-style-type: none"> • Experimental and control group are identified. • Procedures are numbered. • IV, DV, and constants are identified. • Complete sentences. • Very clear to the reader. | <ul style="list-style-type: none"> • Don't use personal pronouns. • Could someone replicate your experiment step-by-step? • Skipping steps, assuming the reader knows what you are doing. • Not organized. |
| Data | <ul style="list-style-type: none"> • Labels!! • Data table is used to organize data. • Specific observations – using senses. • Graphs used if possible (not for qualitative data). • Units! | <ul style="list-style-type: none"> • Not specific about type of data collected. • Data table is not organized. |
| Analysis | <ul style="list-style-type: none"> • The hypothesis was accepted/rejected because... • Explains <u>why</u> you got the data you did. • What made you decide whether the hypothesis was accepted/rejected? | <ul style="list-style-type: none"> • Not labeling sections. • Not referring to the data. • Not referring back to the hypothesis. |
| Conclusion | <ul style="list-style-type: none"> • Lists possible errors in the experiment (Human errors? Experimental error?) • How valid or trustworthy was the experiment? • A concise summary of the experiment. • Any possible next steps? | <ul style="list-style-type: none"> • Not considering all the errors or how to improve the experiment. • Only restating everything that has been said before. |

Lab: Determining Calorie Content in Foods (Burning Calories)

Related Reading: Calories and Metabolic Rate – Belk and Maier 4.1.

Literacy Skills:

- Develop a hypothesis based on readings and lab procedure.
- Read and follow directions for a lab procedure.
- Gather and record data.
- Write a lab report.

Connections: During the remaining days/weeks of the unit, debate/discuss nutrients and whether counting calories is sufficient for good nutrition.

Objective: The **scientific goal** of this experiment is to determine the amount of chemical energy stored in food by burning it and capturing the heat given off in a homemade calorimeter. The **literacy goal** is to understand the importance of being able to read and follow directions for a lab procedure and write appropriate reports/follow up.

Introduction: You know that the energy that keeps your brain and body going comes from the food you eat. Your digestive system and the cells in your body break down the food and gradually oxidize the resulting molecules to release energy that your cells can use and store.

In this experiment you will learn a method for measuring how much chemical energy is stored in different types of food. You will oxidize the food much more rapidly, by burning it in air. You will use a homemade calorimeter to capture and measure the heat energy released by burning. The basic idea of a calorimeter is to capture the released heat energy with a reservoir of water, which has a high capacity for absorbing heat. The temperature of the water reservoir is measured at the beginning and at the end of the experiment. The increase in the temperature (in °C) times the mass of the water (in g) will give you the amount of energy captured by the calorimeter, in calories. We can write this in the form of an equation:

$$Q_{\text{water}} = mc\Delta T$$

Where:

- **Q_{water}** is the heat captured, in calories (cal);
- **m** is the mass of the water, in grams (g);
- **c** is the specific heat capacity of water, which is 1 cal/g°C (1 calorie per gram per degree Celsius); and
- **ΔT** is the change in temperature (the final temperature of the water minus the initial temperature of the water), in degrees Celsius (°C).

My hypothesis for the lab:

(Example problem in notes below.)

A Note on Units:

A calorie (lowercase “c”) is actually defined by the heat capacity of water. One calorie is the amount of energy that will raise the temperature of a gram of water by 1°C. When we talk about food energy, we also use the word “Calorie,” (note uppercase “C”) but it is a different unit. It is the amount of energy needed to raise the temperature of a kilogram (= 1000 grams) of water by 1°C. So a Calorie is the same as 1000 calories. Or, to put it another way, 1 Calorie = 1 kcal. So in this experiment, for food Calories we will be careful to always use an uppercase “C”.

Materials and Equipment:

- homemade calorimeter (for diagram and instructions on assembling, see Experimental Procedure below) requires:
 - two tin cans, one larger than the other
 - wood dowel, pencil or other rod-shaped support
 - cork
 - needle or wire paper clip
 - hammer and nail
- graduated cylinder
- water (preferably distilled)
- thermometer (calibrated in °C, range 20–100 or greater)
- safety glasses
- lighter or matches
- scale (calibrated in grams, for determining energy content per gram of food)
- food items to test (dry items will obviously work better), for example:
 - roasted cashew nuts, peanuts or other whole nuts
 - pieces of popcorn
 - marshmallows
 - small pieces of bread
 - dry pet food.

Experimental Procedure:

Safety notes: Make sure you work on a non-flammable surface. Keep long hair tied back. Be careful handling the items used in this experiment as they may be hot! Wear safety glasses.

1. Constructing the calorimeter (http://www.sciencebuddies.org/science-fair-projects/project_ideas/Chem_p017.shtml?from=Home).
 - a. Select two cans to build your calorimeter. They should nest inside one another. The smaller can needs to sit high enough so that you can place the cork, needle and food item beneath it.
 - b. Remove the top and bottom from a coffee (or similar-sized) can so that you have a cylinder open on both ends.
 - c. Use a hammer and nail to make holes around the bottom of the can (to allow air in to sustain the flame).
 - d. Punch holes at opposite sides of the smaller can near the top for the support to pass through. The diagram labels the support as a glass rod, but you can use a wood dowel, a pencil or a metal rod for the support. Your support needs to be longer than the width of your large can.
 - e. Grasp the needle (or wire) and push its blunt end into the cork. You will impale the food to be tested on the sharp end of the needle. (If you use wire, you can bend it into a support or wrap it around the food item to be tested. Don't use insulated wire!)
 - f. The smaller can will hold the water to be heated by burning the food samples. Use the graduated cylinder to measure how much water you use; the can should be about half-full. Put the supporting rod in place through the two holes.

Figure 1. Diagram of Homemade Calorimeter

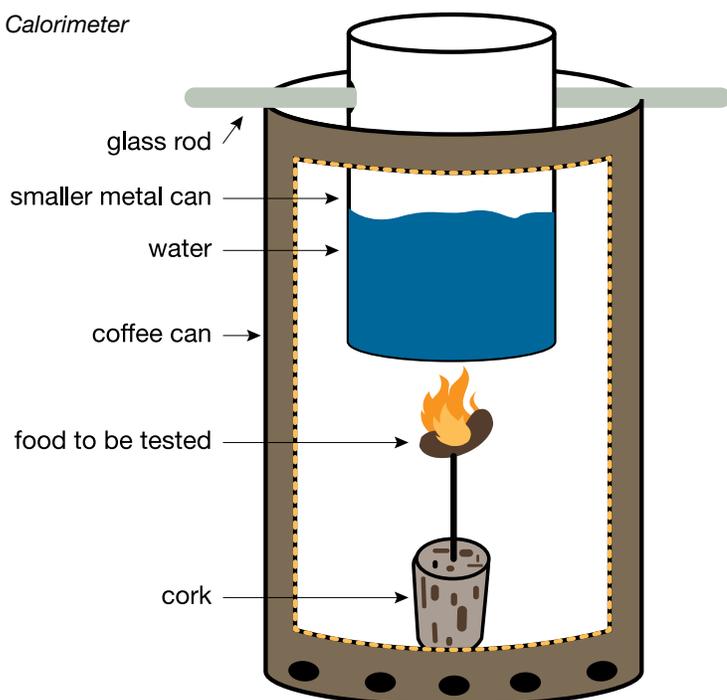


Figure 2. A top down view of the homemade calorimeter is shown here.



2. Weigh each of the food items to be tested and record the weight in your data chart. (An alternate method is to weigh the cork, needle and food assembly before and after burning; see step 12.)
3. Fill the small can about half-way with a measured amount of distilled water (100 mL or so).
4. Measure the initial temperature (T_i) of the water (record it in your data chart).
5. Impale the food item on the needle (or wrap the wire around it).
6. Have your calorimeter pieces close at hand and ready for use.
7. Place the cork on a non-flammable surface. Light the food item (the nuts may take awhile to catch fire).
8. When the food catches fire, immediately place the large can around the cork, then carefully place the smaller can in place above the flame. Carefully observe the food as it burns and record the qualitative data in your data chart.
9. Allow the food item to burn itself out.
10. Carefully remove the small can by holding the ends of the supporting rod, and place it on a flat, heat-proof surface. The can will be hot, so be careful.
11. Carefully stir the water and measure the final temperature (T_f). Make sure the thermometer has reached a steady level before recording the value. (Record it in your data chart.)
12. When the burnt food item has cooled, carefully remove it from the needle (or wire) and weigh the remains. (An alternate method is to weigh the cork, needle and food assembly before burning and again after burning; see step 2.) (Record it in your data chart.)
13. Repeat steps two through 13 for all of the food items. It's a good idea to repeat the measurement with multiple samples of each food item, to insure consistent results.
14. Analyze your data. Calculate the energy released per individual food item (in calories and Calories), and the energy per unit weight of each food item (in calories/gram and Calories/gram). From your individual results, calculate average values for each food type. (Record it in your data chart.)

DATA: Create a neatly organized data table in the space below. Include a labeled spot for qualitative observations underneath the table.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a space for students to take notes or complete assignments.

ALTERNATE PROCEDURE – This is a simpler apparatus yielding less accurate results but much easier to set up.

Suspend an empty soda can from a ring clamp on a ring stand using a support rod inserted through the flip top of the soda can. Place the food sample on a needle and cork assembly beneath the soda can as described above, or hot-glue a large paper clip to the inside of a jar lid and stretch it up to make a platform for the food. Measure water and pour into soda can just as in the small can used above. Proceed as above.

Other versions of homemade calorimeters can be found at this website:

<http://www.bing.com/images/search?q=Making+A+Calorimeter&FORM=IQFRDR>.



Notes:

A calorie (lowercase “c”) is actually defined by the heat capacity of water. One calorie is the amount of energy that will raise the temperature of a gram of water by 1°C. When we talk about food energy, we also use the word “Calorie,” (note uppercase “C”) but it is a different unit. It is the amount of energy needed to raise the temperature of a kilogram (= 1000 grams) of water by 1°C. So a Calorie is the same as 1000 calories. Or to put it another way, one Calorie = one kcal. So in this experiment, for food Calories we will be careful to always use an uppercase “C.”

Eating a balanced diet is fundamental to good health. This experiment will give you a chance to learn about how much energy your cells can extract from different types of food. It is important to remember though, that energy is only one measure of nutritional value. As you are doing your background research on this project, try to find out about other measures of a balanced diet in addition to food energy.

Sample problem: Let’s work through an example to make sure that the equation is clear. (We’ll use made-up numbers for the example. You’ll have to try the experiment for yourself to get actual measurements.) So let’s say that we start out with 100 g of water in the calorimeter ($m = 100 \text{ g}$). The initial temperature of the water is 20°C. After burning up some small piece of food, we measure the water temperature again, and find that the final temperature is 24°C. Now we have all of the information we need to calculate the amount of heat captured by the calorimeter:

$$\begin{aligned}Q_{\text{water}} &= mc\Delta T \\&= 100 \text{ g} \times \frac{1 \text{ cal}}{\text{g}^\circ\text{C}} \times (24^\circ\text{C} - 20^\circ\text{C}) \\&= 100 \cancel{\text{g}} \times \frac{1 \text{ cal}}{\cancel{\text{g}^\circ\text{C}}} \times (4^\circ\cancel{\text{C}}) \\&= 100 \times 1 \text{ cal} \times 4 \\&= 400 \text{ cal}\end{aligned}$$

Now you can see why the specific heat capacity of water has such strange units (cal/g°C). Notice that the grams (g) from the mass of the water and the degrees Celsius (°C) from the change in temperature cancel out with the grams (g) and degrees Celsius (°C) in the denominator of the units for specific heat. That way you are left with units of calories (cal), which is what you want.

Terms to know:

- calorie (cal)
- kilocalorie (kcal)
- Calorie
- calorimeter
- oxidation
- Recommended Dietary Allowance

Related Questions:

- The reference level for a normal diet is 2000 **Calories**. How many **calories** is this?
- What are the basic chemical structures of fats, sugars and proteins?
- Do these types of molecules differ in the amount of energy they contain?
- Which of your food items do you think will release the most energy? Why?
- What is meant by a “balanced” diet? Why is it important?

The U.S. Department of Agriculture is a good online source of information about nutrition. The links below are for general information, key nutritional recommendations and special pages with information for kids:

- <http://www.choosemyplate.gov/weight-management-calories/calories.html>.
- <http://www.health.gov/dietaryguidelines/2010.asp>.

Variations

Do background research to find out the approximate proportions of the different basic food chemicals (fats, carbohydrates, proteins) in each of the food items you tested.

Can you draw any conclusions about the relative amounts of energy available in these different types of chemicals?

Do background research to find out the chemical composition of candle wax (paraffin). Design an experiment to determine the amount of energy released per gram of candlewax.

Credits

USC Biology Department, 2004. “ ‘Burning Calories’: The Energy in Food,” Biology Department, University of Southern California. Online at:

http://bioweb.usc.edu/courses/2004-fall/documents/bisc150-lab_burningcal.pdf.

Gardner, R., 1999. *Science Projects About Kitchen Chemistry*. Berkeley Heights, NJ: Enslow Publishers, 40–42.

Andrew Olson, Ph.D., Science Buddies. Online at:

http://www.sciencebuddies.org/science-fair-projects/project_ideas/Chem_p017.shtml?from=Home.

The U.S. Department of Agriculture is a good online source of information about nutrition. The links below are for general information, key nutritional recommendations and special pages with information for kids:

- <http://www.mypyramid.gov/guidelines/index.html>.
- <http://www.health.gov/dietaryguidelines/dga2005/recommendations.htm>.
- <http://www.mypyramid.gov/kids/index.html>.

Lab Report Sentence Starters

Introduction

- In the investigation...
- The purpose is to determine...
- The experiment is designed to test...
- Information about _____ includes...

Hypothesis

- If _____ (IV) _____ then _____ (DV) _____ because _____
(background information) _____.

Procedures/Methods

1. Measure _____ mL of _____ using a graduated cylinder.
2. Then measure _____ mL of _____ and mix in _____.

Data

- Usually in a table format.
- May also include a graph (line, bar, circle, etc) when appropriate.
- Includes both measured data (quantitative) and descriptive data (qualitative).

Analysis

- The data indicated that ...
- That data supported the hypothesis that _____ because _____.
- The data rejected the hypothesis that _____ because _____.
- The hypothesis that _____ was supported by data as seen in the table by _____.
- The purpose was to _____. The data indicates this was accomplished by _____.
- This occurred because _____.
- The reason this happened was probably because _____.

Conclusion

- In this experiment _____.
- The data _____ supported/rejected the hypothesis that _____.
- Errors in the experiment included _____.
- The experiment could be improved by _____.

| CATEGORY | 4 Excellent | 3 Good | 2 Satisfactory | 1 Poor |
|---|--|--|---|---|
| Introduction/ Purpose | The purpose of the lab is clearly identified and stated. Background information is accurately and thoroughly explained. | The purpose of the lab is identified, but is stated in a somewhat unclear manner. Background information is accurately explained, but lacks depth. | The purpose of the lab is partially identified, and is stated in a somewhat unclear manner. Background information is explained with some inaccuracies. | The purpose of the lab is erroneous or irrelevant. Background information was not included. |
| Hypothesis | Clear and reasonable hypothesis based on background knowledge and what has been studied. | Clear and reasonable hypothesis with some connection to background knowledge and what has been studied. | Reasonable hypothesis based on general knowledge and observations. | Hypothesis has been stated, but appears to be based on flawed logic. |
| Materials and Procedures | Procedures are listed in clear steps. Each step is numbered and is a complete sentence. The lab can be easily replicated by following the steps. All materials are included in a clear and logical way. | Procedures are listed in a logical order, but steps are not numbered and/or are not in complete sentences. The lab could be replicated but is lacking some detail. Most materials are included in a somewhat clear and logical way. | Procedures are listed but are not in a logical order or are difficult to follow. Many materials are included but 2-3 are left out OR all the materials are included but in an unclear manner. | Procedures do not accurately list the steps of the experiment. Materials are included but many left out OR no materials included. |
| Results/ Data | Professional looking and accurate representation of the data in tables and/or graphs. Graphs and tables are labeled and titled. Thorough written summary of data. | Accurate representation of the data in tables and/or graphs. Graphs and tables are labeled and titled. Written summary of data included. | Accurate representation of the data in written form, but no graphs or tables are presented OR graphs or tables are presented, but no written summary of the data. | Data is lacking in both graphs or tables as well as the written summary. |
| Analysis | Thoroughly explains the data in accepting or rejecting the hypothesis. Clearly explains why the data came out the way it did. Clearly explains the graph/table in relationship to accepting or rejecting the hypothesis. | Explains the data in accepting or rejecting the hypothesis. Explains why the data came out the way it did. Explains the graph/table in relationship to accepting or rejecting the hypothesis. | Somewhat explains the data in accepting or rejecting the hypothesis. Somewhat explains why the data came out the way it did. Somewhat explains the graph/table in relationship to accepting or rejecting the hypothesis. | Poor explanation of the data. Little to no connection to the hypothesis. Does not provide explanation of graphs/tables. |
| Conclusion | Conclusion clearly summarizes the experiment and the data in relation to the hypothesis. Clearly reflects on the validity of the experiment, including possible sources of error. Clearly reflects on what was learned from the experiment and possible future implications. | Conclusion summarizes the experiment and the data in relation to the hypothesis. Reflects on the validity of the experiment, including possible sources of error. Reflects on what was learned from the experiment and possible future implications. | Conclusion somewhat summarizes the experiment and the data in relation to the hypothesis. Somewhat reflects on the validity of the experiment, including possible sources of error. Somewhat reflects on what was learned from the experiment and possible future implications. | Conclusion is lacking in summary of experiment as well as reflection. |
| Grammar, Sentence Structure & Vocabulary | Proper scientific conventions are followed throughout the report. | Some scientific conventions are followed throughout the report. | Few scientific conventions are followed throughout the report. | Scientific conventions are lacking. |
| Overall Grade | A (25-28 pts) | B (21-24 pts) | C (14-20 pts) | F (<14pts) |
| Comments: | | | | |

Lesson 5

Transforming Science Information

In this lesson, you will . . .

- Transform knowledge from visual to text and vice versa.
- Compare and integrate representations of science processes.
- Understand the role of models, animations and multiple representations of information in science.
- Explain science processes through discussion, writing and diagramming.

Lesson 6

Synthesizing Knowledge Gained From Text

In this lesson, you will . . .

- Clearly explain science concepts to peers.
- Learn the Cornell method of note-taking.
- Pull concepts together from multiple sources and representations to discuss the complexity of calories.
- Develop arguments based on evidence from multiple sources.

Lecture Note Checklist:

Please circle the appropriate number.

| | 5 Always | 4 | 3 Sometimes | 2 | 1 Never |
|--|-----------------|----------|--------------------|----------|----------------|
| The lecture notes are titled and dated. | 5 | 4 | 3 | 2 | 1 |
| The notes are easy to read. | 5 | 4 | 3 | 2 | 1 |
| The notes are organized. | 5 | 4 | 3 | 2 | 1 |
| You underline or star key ideas. | 5 | 4 | 3 | 2 | 1 |
| You utilize abbreviations of longer words. | 5 | 4 | 3 | 2 | 1 |
| You skip spaces between ideas/concepts. | 5 | 4 | 3 | 2 | 1 |
| You indent minor points. | 5 | 4 | 3 | 2 | 1 |
| You note all the important concepts | 5 | 4 | 3 | 2 | 1 |
| You paraphrase what the instructor says. | 5 | 4 | 3 | 2 | 1 |
| Your notes incorporate examples. | 5 | 4 | 3 | 2 | 1 |
| Your notes are accurate. | 5 | 4 | 3 | 2 | 1 |
| Your notes are complete. | 5 | 4 | 3 | 2 | 1 |
| Your notes include self-test questions. | 5 | 4 | 3 | 2 | 1 |
| Your self-test questions: | | | | | |
| a. Are complete. | 5 | 4 | 3 | 2 | 1 |
| b. Will prepare you for the instructor's tests. | 5 | 4 | 3 | 2 | 1 |
| c. Cover all the material from that day's lecture. | 5 | 4 | 3 | 2 | 1 |
| d. Use short-answer format. | 5 | 4 | 3 | 2 | 1 |
| e. Are appropriate for the type of tests in the class. | 5 | 4 | 3 | 2 | 1 |
| f. Combine material from multiple lecture topics into a single question. | 5 | 4 | 3 | 2 | 1 |

Prompt:

Is counting calories enough for a person to maintain health? After reading Belk and Maier Chapters Three and Four, viewing animations and lectures and reading informational articles, compare the interpretations of the role of calories and argue for the other factors that need to be considered. Be sure to support your position with evidence from the texts and videos.

Use the prompt above to show your understanding of the complexity of calories. You may use your notes from the text, articles and videos to support your stance. Think about the following:

- How could a person be overweight, but calculate a lower-than-recommended daily caloric intake? Discuss the role of metabolism, nutrients, fat and calories.

- Explain the science behind the saying, “you are what you eat,” in terms of a person’s overall health. What role does transport play?

- What factors do we need to consider when looking at someone's overall health (nutrients, enzymes, health disorders)?

- Make a recommendation for someone trying to lose weight about what they need to think about in addition to calories. What if that person had an obesity-related disease? What additional recommendations would you have?

- Think about the results from the calorie lab on the ways calories are determined.

List the text, lecture, lab or animation information that supports your stance.

| Source (text, lecture, etc.) | Quote/Facts | Summary of how this information supports your stance |
|------------------------------|-------------|--|
| | | |
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| | | |

Lesson 7

Taking Science Quizzes

In this lesson, you will . . .

- Utilize strategies to generate your own quiz reviews.
- Learn to ask and answer higher-level questions.
- Use group-testing as a way to increase your ability to explain and understand science concepts.
- Evaluate your own quiz performance.

In this class, you will take a short quiz (15 questions). However, this quiz may work a little differently than you are used to. First, you will take the quiz individually and turn it in. Your individual quiz will count for two-thirds of your total quiz score.

Then, you will retake the same quiz with your group.

In your group, you need to discuss each question and come to a consensus regarding the appropriate answer in order to fill out a single answer sheet that you will submit as a group. The group quiz scores will count as up to one-third of your total quiz score.

To encourage everyone to participate and to prevent “free-loading” during the group quiz, you will be asked to evaluate the other members of your group on how well they contributed to group functioning. This evaluation will be used to determine how many group quiz points each student will receive. For example if a student receives an average score of 80 percent from their peers, that student would receive 80 percent of their group’s test points. (Of course, the instructor reserves the right to overrule any peer evaluation score if it appears to be inaccurate or inappropriate such as when evaluations have been biased because of personality conflicts.)

Preparing for science tests

The talk-through:

A “talk-through” is a method of preparing and reviewing for an exam that involves you in practicing and rehearsing aloud the key ideas of a text or science process. A talk through is very similar to a lecture that you would give someone. In fact, when giving a talk through, you should imagine yourself as an instructor giving a lecture to students who know very little about the topic you are teaching. For example, if you know a lot about the ozone layer or how to use the IBM computer and taught your roommate or friend to understand the concept of the ozone layer or how to use the IBM computer, you have probably given a talk through.

To create an effective talk through:

1. Select a difficult concept from Belk and Maier Chapter Three or Four, the animations you viewed, the lectures or the articles you read thus far. Think about the important ideas involved in the concept you selected.
2. Organize the key ideas and details on an index card, but be brief—don’t write everything as the card is meant only to prompt your memory.
3. Find a quiet place, close the material you are using and use your talk through card to deliver aloud your talk through.
4. After practicing your first talk through, refer back to the material to be sure you included all of the key ideas and that your talk through was accurate and complete.

Question and Answer Strategy

In this strategy, you will use the science concepts you learned so far to create 10 questions. You will use these questions to quiz your classmates over the material as a way to prepare for the quiz. Remember to include questions from the textbook, articles, videos, animations, etc.

Use the following guidelines as you create your questions:

- Avoid “what” questions. Ask higher-level questions using words such as *why*, *how*, *explain* or *compare*. For example, it is much better to ask a question such as, “*Explain the role of the enzymes in lactose intolerance.*” than it is to ask, “*What is an enzyme?*”
- Predict short answer items (even if you are taking multiple-choice tests) because it will help you check your knowledge of an entire concept, rather than one small part.
- Ask questions that require application, analysis or interpretation of ideas. These are the types of questions you will be asked on the quiz.
- Get at the “big picture.”
- Ask questions that make people really think about the concepts.
- (General hint: if it takes more words to ask the question than to answer it, ask a tougher question.)

GROUP QUIZ Evaluation:

The purpose of this evaluation is to help you learn from your experience preparing for and the quiz. Think about how you felt about your level of preparation before the quiz, where you focused your effort, and how you felt taking both the individual and group portions of the quiz. What were the results of your experiments? What was surprising in these results?

1. What went right? Analyze the quiz to discuss what you did well and what helped your thinking about these concepts.

2. What went wrong? Analyze the quiz to discuss areas you might want to work on. In this analysis:

Think about the errors you made and diagnose the nature of your difficulties as they relate to the nutrition concepts learned, problem solving expected, or your beliefs about science and/or science learning. Note: don't just describe a difficulty; you need to analyze your thinking. (Example: A poor diagnosis would be, "I was confused" or "I picked the wrong answer." A good diagnosis would provide a reason for the errors "I thought that a person's basal metabolic rate was the same as their overall metabolic rate.")

PEER EVALUATIONS

Name: _____ Group Name: _____

This is an opportunity to evaluate the contributions of your teammates to group quizzes. Please write the names of your teammates in the spaces below and give them the scores that you believe they earned. You will have 10 points available to distribute for each member or your group, not counting yourself (e.g. if you are in a group of six people, you each will have 50 points to distribute. A group of five would have 40 points, etc.). If you believe everyone contributed equally, then you should give everyone 10 points. If everyone in the group feels the same way, you will all have an average of 10 points and receive 100 percent of the group score. An average of nine would receive 90 percent of the group quiz score, etc. Be fair and accurate in your assessments. If someone in your group didn't contribute adequately (i.e., had not studied, didn't communicate with the rest of the group, frequently missed class, etc.), give them fewer points. If someone worked harder than the rest, give that person more than 10 points.

There are some rules that you must observe in assigning points:

- This is not a popularity contest. Don't give anyone a grade that they don't deserve (high or low) for personal reasons or otherwise.
- Contributing to the group does not simply mean who gave the most correct answers. Asking good questions, challenging the group, etc., showing up reliably are also ways to contribute.
- You cannot give anyone in your group more than 15 points.
- You do not have to assign all of your group points, but you cannot assign more than the total number of points allowed for each group (i.e., (number of people in group – 1) x 10 points).

Group Member:

Score:

| | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |

Indicate why you gave someone more than 10 points.

Indicate why you gave someone less than 10 points.

If you were to give yourself a score, what would it be? Why?

Lesson 8

Introduction to Science Research

In this lesson, you will . . .

- Select a topic related to health and nutrition that is appropriate for a research project.
- Understand the elements of an effective pamphlet.
- Plan your project.
- Learn to identify appropriate sources.

Nutrition Final Project Directions:

Purpose: Your purpose is to create an informational pamphlet or brochure about a topic related to nutrition and diet using science research to support your claims.

A pamphlet is considered to be gray literature, which is literature hard to find using conventional methods. Gray literature is an important type of scientific literature because it provides recent information, information found within the last 12 to 18 months, and includes up-to-date research. Gray literature, like the pamphlet, should be easy to understand for a lay audience. Even though you are communicating the information in a more simplified way, you must understand the science concepts fully to be able to explain them to others. You will need to cite your sources and include them in a works cited page, so that if the reader wishes to read for more detailed information it will be available to them.

Prompt: How does the scientific community communicate important information to a lay audience? After researching scientific articles, journals and websites on important topics in nutrition, write an informational pamphlet in which you explain the issues, causes, problems and possible solutions to the public. Support your position with evidence from the texts.

In this project, you will select a topic about nutrition or diet that you think the public needs to know more about. It should be a timely issue that would resonate with people interested in finding out more about said topic.

The topics should be debatable. That is, reasonable people may have differing views about the topic. The topic should be narrow and focused enough to investigate for this assignment. For example, nutrition-related diseases is too broad a topic and could be a book instead of a pamphlet. Instead, you might want to focus on one nutrition-related disease in particular.

You will need to bring 10 copies of your pamphlet for class presentations.

You will need to include at least five sources to use in your work. To help you read and organize the material you will take notes on each source in your academic notebook.

Finding Articles for the Final Project: Articles can be found in many different places including journals, magazines, newspapers, and websites. Popular journals, such as *Scientific American*, are aimed at the general public. The articles are written by journalists,

who have consulted with experts, to be accessible by the public. Peer-reviewed journals contain articles written by experts aimed at experts. The reader is expected to know the basics on the topic covered in the article. For the final project, we are going to focus on popular journals, magazines, newspapers and websites.

Example websites and journals:

- <http://www.scientificamerican.com/>.
- <http://www.mayoclinic.com/>.
- <http://news.sciencemag.org/>.
- <http://www.nih.gov>.

To format your pamphlet, you will use a four-column layout. This will give you a total of eight panels to use to explain your information. How you organize the information in your pamphlet will depend upon your topic. A sample layout is shown below—be sure to include all of the elements in your pamphlet. Fold the paper so that the title page will be on the front and the works cited will be on the back when the pamphlet is folded and ready to be read. The layout will need to be printed on legal sized paper. The four-column layout will give you more room to include the information from your sources. You can use Microsoft Word or Microsoft Publisher to complete the pamphlet.

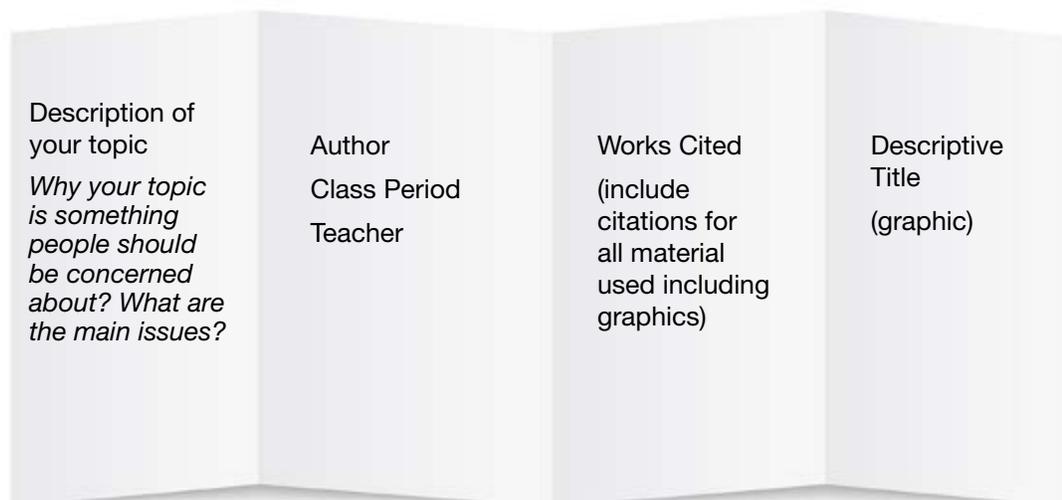
Microsoft Word Directions:

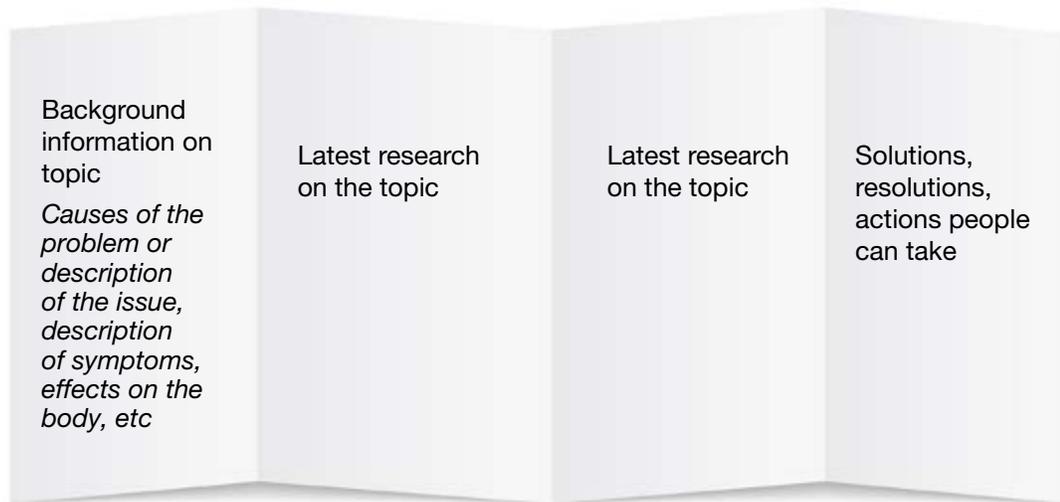
- Open Microsoft Word.
- Go to File, then Page Setup and then choose Landscape (under the Margins Tab).
- While you are there, change the top and bottom margins to one inch. Change the right and left margins to 0.5 inches.
- Click on the Paper Tab while in Page Setup and choose Legal.
- Next choose Format, then click on columns and then choose Four.

Microsoft Publisher Directions

- Open Microsoft Publisher.
- Click on Publications for print.
- Click on Brochures.
- Choose from the Informational Brochures section.
- Once the brochure is chosen, on the left hand side of the screen, click on four-panel.

Side One



Side Two**Grading Rubric**

| Category | Excellent | Good | Almost | Not Yet |
|--|--|---|--|--|
| Attractiveness & Organization (Organization) | Exceptionally attractive formatting and well-organized information. | Attractive formatting and well-organized information. | Well-organized information. | Formatting and organization of material are confusing to the reader. |
| Content - Accuracy (Ideas) | The science is exceptionally well explained including all relevant information. | The science is well explained including all relevant information. | The science is explained including most relevant information. | The pamphlet has little of the required information. |
| Writing - Mechanics (Conventions) | No errors. | No major errors, one to two minor errors. | Has some major and minor errors. | Has some major and minor errors. |
| Scientific language and terminology | Used carefully throughout the pamphlet in ways the public can understand. | Used in most of the pamphlet in ways the public can understand. | Is used, but is confusing for readers. | Is not used. |
| Graphics/ Pictures | The graphics go well with the text and there is a good mix of text and graphics. | The graphics go well with the text, but there are so many that they distract from the text. | The graphics go well with the text, but there are too few. | The graphics do not go with the accompanying text or appear to be randomly chosen. |
| Sources | Carefully chosen, excellent sources that provide a full picture of the issues involved in the topic. | Carefully chosen sources that provide a good picture of the issues involved in the topic. | Sources do not provide a full picture of the issues involved in the topic. | Incomplete sources. |
| Citations | No errors in APA style. | Few errors in APA style. | Many errors in APA style. | APA style not used. |

ELEMENTS OF AN EFFECTIVE PAMPHLET

1. The pamphlet my group analyzed:

2. What was the purpose of the pamphlet? Who is the writer?

3. Who was the intended audience? How can you tell?

4. How was the information presented? Were there directions? A call to action?

5. What kind of vocabulary was used in the pamphlet? (Technical, scientific, general?) How did the language choice impact the message?

6. How were science concepts explained?

My Topic Idea:

This is an important topic because:

What I need to find out:

What I want to let the public know about:

Understanding the final project: In your own words, summarize the task.

Project Planning Timeline

Make a plan for completing the project by the due date. Be sure to include deadlines for finding and reading your sources, and creating a final draft to be discussed in class.

Project Title:

| What will be done? | By when? | What resources will I need? | What goals do I have? | Notes |
|--------------------|----------|-----------------------------|-----------------------|-------|
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Taking Notes: React to what you read

Taking notes will help you to understand what you read and will save you effort in the future. When you have just read a paper, you may understand it well. The definitions are clear, the charts show correlations at a glance. But next week, when you are writing a report on this subject, or next year, when you need to refer to the paper again, it may not be so clear.

Highlight major points

On papers you plan to keep, underline main points or mark them with a line in the margin; make notes so that new ideas will stand out. When you find a definition of a new term, abbreviation or acronym, write "def" in the margin. When you find an example that clarifies a point, note that in the margin.

When you see a chart or table, examine it. Figure out what its significance is. What trends does it show? What correlations? Write a note explaining it in your own way.

React to the points in the paper

If you see a correlation to other work, note it in the margin. If you doubt a statement, note your objection. If you find a pleasing quotation, write it down.

Construct your own example

This can tell you if you understand the definitions and terminology, give you insight on why a theorem or result holds, and expose aspects not covered by the examples in the paper.

Summarize what you read

When you have digested an article, write a short summary. In your own words, state what you learned from the paper. What were the main points for you? Keep the summary with the article for future reference.

Reacting to what you are reading gets you emotionally involved in the argument. Emotion emphasizes what is said, making it easier to remember. Writing a summary helps to relate the paper to what you already know, again aiding memory by tying into your framework for the subject. The summary also serves as a reference when you need to return to the paper.

Summary: How to read a paper

Preparation

- Quiet place.
- Pencil, paper, photocopy of article.

Deciding what to read

- Read title, abstract.
- Read it, file it or skip it?

Read for breadth

- What did they do?
- Skim introduction, headings, graphics, definitions, conclusions and bibliography.
- Consider the credibility.
- How useful is it?
- Decide whether to go on.

Read in depth

- How did they do it?
- Challenge their arguments.
- Examine assumptions.
- Examine methods.
- Examine statistics.
- Examine reasoning and conclusions.
- How can I apply their approach to my work?

Take notes

- Make notes as you read.
- Highlight major points.
- Note new terms and definitions.
- Summarize tables and graphs.
- Write a summary.

An online version of this document can be found here:
<http://www.cse.ogi.edu/~dylan/efficientReading.html>
Thanks to Dave Maier for additional suggestions.

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revised by Dylan J. McNamee (dylan@cse.ogi.edu)

Efficient Reading of Papers in Science and Technology

This brochure provides an approach to help you read scientific papers efficiently and effectively.

Prepared by:
Michael J. Hanson
Updated by:
Dylan J. McNamee

version of January 6, 2000

Introduction: Why Read?

Before beginning to read a paper, consider why you are doing it. What do you want to get out of it? Your needs control how you read. If you only need an overview, a brief skim may suffice. If you will present the paper to others, you will need to dig deeply, to challenge the paper's arguments until you understand it fully. If you will use the information later, taking notes will help you remember it. If you don't know what you hope to gain from the paper, you can not tell whether reading it will be beneficial or a waste of time.

In order to get the most from your reading, you should be properly prepared. Find a quiet place to work where you will not be disturbed or distracted, have a pencil and note pad at hand, and bear in mind exactly what you expect to get from this paper.

The following method for reading a scientific paper offers you ideas about the process of reading a paper, how to decide what to read, how to build a broad framework by skimming, and how to challenge the paper to get depth of understanding. Finally, it will show you how to take notes so that the key points won't be lost as soon as you set the paper down. Since reading is the process of getting ideas from the author, you must focus on the author's thoughts, not just read the words on the paper.

Deciding what to read

When you first approach a paper, ask yourself "What did the author do?" Reading the title and the abstract should tell you this. Then decide if the paper is useful to you now. If so, read it. If not, might the paper be useful to you later? If so, file it. If it is not relevant to you, skip it.

Reading for Breadth: Build a framework

If you decide to read the paper, first skim it.

- Read the introduction.
- Read the section headings.
- Look at the tables and graphs to see what they say and read the captions.
- Read the definitions and theorems.
- Read the conclusions.
- Consider the credibility of the article:
 - Who wrote it? Are they well-known?
 - Where do they work? What biases might they have as a result of their employer?
 - Where was the article published? What is the reputation of the journal? Was the journal refereed?
 - When was it written? Might it be outdated or superseded?
- Skim the bibliography:
 - How extensive is it?
 - Are the authors aware of current work?
 - Does it reference classic papers in this field?
 - Have you read any of the papers that are referred to?
 - Do you know relevant research that isn't cited?

By skimming the paper first you can learn what the authors did, and develop a framework to understand the parts of the paper. Developing a framework adds to your general understanding of the field, and gives you a basis to understand the paper. If you know what conclusions they draw, you can follow their arguments more easily. Knowing where they are going can help you to follow their path and give you a chance to find shortcuts or places where they missed a turn.

Once you have skimmed a paper you have a broad idea of what they did. Then you can decide if you want to know more. If you are interested in how they did it, then read the body of the paper for details. If not, file away what you have learned and congratulate yourself

Reading in Depth: Challenge what you read

There is a lot of junk published, so you should be selective in what you read and what you believe. When you read a paper in detail, approach it with scientific skepticism. You can do this by trying to tear the arguments apart.

Examine the assumptions

- Do their results rely on any assumptions about trends or environments?
- Are these assumptions reasonable?

Examine the methods

- Did they measure what they claim?
- Can they explain what they observed?
- Did they have adequate controls?
- Were tests carried out in a standard way?

Examine the statistics

- Were appropriate statistical tests applied properly?
- Did they do proper error analysis?
- Are the results statistically significant?

Examine the conclusions

- Do the conclusions follow logically from the observations?
- What other explanations are there for the observed effects?
- What other conclusions or correlations are there in the data that they did not point out?

By challenging what you read, you will understand better what the author is saying and why they say it. You will also be able to decide whether the evidence supports their conclusions, and to draw your own conclusions from their data. Once you understand the paper, ask yourself how you can apply their approach to your own work.

FINDING ARTICLES FOR THE FINAL PROJECT:

Articles can be found in many different places including journals, magazines, newspapers, and websites. Popular journals, such as Scientific American, are aimed at the general public. The articles are written by journalists, who have consulted with experts, to be accessible by the public. Peer-reviewed journals contain articles written by experts aimed at experts. The reader is expected to know the basics on the topic covered in the article. For the final project, popular journals, magazines, newspapers and websites are acceptable.

Example websites and journals:

- <http://www.scientificamerican.com/>.
- <http://news.sciencemag.org/>.
- <http://www.mayoclinic.com/>.
- <http://www.nih.gov>.

Lesson 9

Research and Writing in Science

In this lesson, you will . . .

- Use science research to explain science to the public.
- Identify important concepts from science articles and use the information to support your ideas.
- Explain the science topic you are researching by citing specific evidence from your sources.
- Engage in scientific inquiry by forming hypotheses, researching evidence and providing support across multiple sources to support your claims.

Taking Notes on Reading

We will be using APA style to cite sources. Please see the following website for examples of APA style: <http://owl.english.purdue.edu/owl/resource/560/07/>.

APA Basic Form

Articles

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical*, volume number (issue number), pages. doi:<http://dx.doi.org/xx.xxx/yyyy>.

Books

Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle*. Location: Publisher. (this type also uses a hanging indention)

Online periodical

Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Online Periodical*, volume number (issue number if available). Retrieved from: <http://www.someaddress.com/full/url/>.

Use these charts to help you take notes on your sources:

| | |
|--|--|
| Source (type – book, journal article, research report, etc.) | |
| Bibliographic information (full reference using APA style) | |
| Purpose of the paper | |
| Description | |
| Data (include page number) | |
| Examples (include page number) | |
| Important figures or tables (include page number#) | |
| Summary | |
| What the public needs to know | |

| | |
|--|--|
| Source (type – book, journal article, research report, etc.) | |
| Bibliographic information (full reference using APA style) | |
| Purpose of the paper | |
| Description | |
| Data (include page number) | |
| Examples (include page number) | |
| Important figures or tables (include page number#) | |
| Summary | |
| What the public needs to know | |

| | |
|--|--|
| Source (type – book, journal article, research report, etc.) | |
| Bibliographic information (full reference using APA style) | |
| Purpose of the paper | |
| Description | |
| Data (include page number) | |
| Examples (include page number) | |
| Important figures or tables (include page number) | |
| Summary | |
| What the public needs to know | |

| | |
|--|--|
| Source (type – book, journal article, research report, etc.) | |
| Bibliographic information (full reference using APA style) | |
| Purpose of the paper | |
| Description | |
| Data (include page number) | |
| Examples (include page number) | |
| Important figures or tables (include page number#) | |
| Summary | |
| What the public needs to know | |

| | |
|--|--|
| Source (type – book, journal article, research report, etc.) | |
| Bibliographic information (full reference using APA style) | |
| Purpose of the paper | |
| Description | |
| Data (include p. page number) | |
| Examples (include page number) | |
| Important figures or tables (include page number) | |
| Summary | |
| What the public needs to know | |

Begin to outline your ideas for the eight panels of the pamphlet.

Title:

Description of your topic (Why is your topic something people should be concerned about? What are the main issues?):

Background information (causes, symptoms, examples, descriptions, effects on the body, etc.):

Revising your Work

Read your draft and think about the following questions:

1. Evaluate your main point. What are you trying to say in this pamphlet? Would it be clear to someone reading your pamphlet for the first time?
2. How is the writing appropriate for your intended audience?
3. What is your purpose for informing readers about your topic? Is your purpose clear in your draft?
4. Evaluate your evidence. Do you offer enough scientific evidence to support your points?
5. How are specific statistics/figures/data used to support your points?
6. Is there any information that doesn't seem to fit your purpose or your topic? You either need to add more support for that information or cut the idea.
7. Do the ideas flow from one point to another? Will the reader be able to follow a logical progression of ideas?
8. Can you read through the pamphlet in the way it is currently designed or do ideas need to be reordered?
9. Are you using and defining scientific terms? Are you using precise language to get your ideas across?
10. Are the references cited properly?
11. What specific suggestions/solutions do you provide for readers?
12. How does the information in the pamphlet follow the format outlined in the project directions?
13. Read for grammar and spelling errors.

Editing & Revision Checklist

Paper's Author

Paper's Editor

Directions for the editor: Answer all questions to the best of your ability. The writer's grade somewhat depends on you. If you have questions or you are not sure about something, ask me. You need to read the paper several times. Do not skip sentences. Do not skim. Read very closely. Even read aloud quietly, so you can hear problems.

Directions for the writer (after the peer editing process): Make any changes necessary to gain a yes answer to all questions.

Headings and Subheadings:

- Yes No 1. Is there effective use of main heading?
- Yes No 2. Are there subheadings used?
- Yes No 3. Does the heading grab the reader's attention?
- Yes No 4. Do the subheadings contain all the proper information?

Introduction to the topic:

- Yes No 1. Is there an attention-getter?
- Yes No 2. Is there background information about the topic?
- Yes No 3. Are the main terms and issues defined?

Background information:

- Yes No 1. Is there a description of the causes of the problem and/or a description of the issue?
- Yes No 2. Is there an effective description of the symptoms, effects on the body, etc.?
- Yes No 3. Does the writer provide citations for the information?

Description of Research

- Yes No 1. Is there an informative presentation of the latest research on the topic?
- Yes No 2. Is there information about how the research impacts the public?
- Yes No 3. Is the science clearly explained?
- Yes No 4. Are diagrams/illustrations used effectively?

Conclusions:

- Yes No 1. Does the writer present solutions or resolutions to the issue?
- Yes No 2. Does the writer present several reasonable actions people can take?
- Yes No 3. Is the author's concluding sentence meaningful and memorable?

Works Cited Page

- Yes No 1. Is the Works Cited information complete?
- Yes No 2. Has the author used at least five different sources?
- Yes No 3. Are all of the author's sources appropriate for this assignment?
- Yes No 4. Are the sources in alphabetical order?
- Yes No 5. As much as you can tell, is each source listed in the correct format (APA style)?

Grammar/mechanics Checklist:

1. Read through the entire pamphlet and look at all of the words that end with –s. Check and make sure that the writer didn't forget to make a possessive –s. On the paper, put 's (apostrophe s) anywhere where it is needed.
2. Read through the entire paper and look for any sentence that begins with the following words: **when, because, since, if, although, after, even though, while, in order that.** First, make sure these sentences are not fragments. Second, **make sure there is a comma after the subordinate clause.**
3. Check for sentences beginning with the word "So." Get rid of the word. It probably isn't needed. Do the same for sentences beginning with "**And**" or "**But.**"
4. Circle any use of the words "**you,**" "**your,**" "**me,**" "**I,**" "**we,**" and so on. Suggest how the writer can avoid these words.
5. Mark all uses of the words "**they**" and "**their,**" and make sure that the antecedents are plural. Also check to make sure there is a clear antecedent for these words.
6. Mark all uses of the words "**this,**" "**that,**" "**these,**" or "**those.**" Remind the writer to follow these words with specific nouns.
7. Read the entire paper and make sure that all sentences make sense. Mark sentences that don't make sense and suggest how the writer can change them.
8. Read the entire paper again and make sure that all words are **spelled correctly.** Circle words that are questionable. Check for common misspelled words: *then, than, effect, affect, its, it's, their, there, to, too, two.*
9. Make sure that titles are properly designated by *italics*, underlining, or **quotation marks.**

10. Read through the entire paper and check every time the writer uses the word **that**. Make sure it shouldn't be **who**.
11. Check every comma in the paper, and make sure that it is not bringing together two complete sentences.
12. Check all of the following words: **and, but, so, for, or**. Make sure that there isn't a comma needed. Ask me if you are not sure. If these words are bringing together two complete sentences, then use a comma before the conjunction.
13. Anytime you see a **colon** (:) or a **semi-colon** (;), make sure that it is used correctly.
14. Read the paper one last time and make sure that there are no other mistakes that you can identify. Check for transitions, double negatives, verb forms, subject-verb agreement, and so on. Help the writer get an A.
15. Check to make sure that the entire paper is in **consistent tense** (no shifting from past to present, etc.).
16. Check all verbs ending with -ing, and make sure you can't change it. You are looking for passive verbs: some form of the verb *be* + the past participle of the verb.

Example: "Many options were *tried* by the soldiers," can be changed to, "The soldiers *tried* many options." Check to make sure that passive sentences couldn't be better if they were active.

Lesson 10

Final Project Presentations

In this lesson, you will . . .

- Present your final project to your peers.
- Engage in science discourse, explaining and defending your work.
- Use evidence to support your claims.

Presenter:

Reviewer:

Topic:

Date:

Understanding of the topic –

Actions I will take –

Questions I have for the author –

| | 5 Excellent | 4 | 3 Good | 2 | 1 Poor |
|--|----------------|---|-----------|---|-----------|
| How effectively did the pamphlet introduce the topic? | 5 | 4 | 3 | 2 | 1 |
| How clearly and fully was the science evidence presented? | 5 | 4 | 3 | 2 | 1 |
| Were the recommendations effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 |

What was the strongest part of the pamphlet?

What would you suggest for improvement?

Presenter:

Reviewer:

Topic:

Date:

Understanding of the topic –

Actions I will take –

Questions I have for the author –

| | 5 Excellent | 4 | 3 Good | 2 | 1 Poor |
|--|----------------|---|-----------|---|-----------|
| How effectively did the pamphlet introduce the topic? | 5 | 4 | 3 | 2 | 1 |
| How clearly and fully was the science evidence presented? | 5 | 4 | 3 | 2 | 1 |
| Were the recommendations effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 |

What was the strongest part of the pamphlet?

What would you suggest for improvement?

Presenter:

Reviewer:

Topic:

Date:

Understanding of the topic –

Actions I will take –

Questions I have for the author –

| | 5 Excellent | 4 | 3 Good | 2 | 1 Poor |
|--|----------------|---|-----------|---|-----------|
| How effectively did the pamphlet introduce the topic? | 5 | 4 | 3 | 2 | 1 |
| How clearly and fully was the science evidence presented? | 5 | 4 | 3 | 2 | 1 |
| Were the recommendations effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 |

What was the strongest part of the pamphlet?

What would you suggest for improvement?

Presenter:

Reviewer:

Topic:

Date:

Understanding of the topic –

Actions I will take –

Questions I have for the author –

| | 5 Excellent | 4 | 3 Good | 2 | 1 Poor |
|--|----------------|---|-----------|---|-----------|
| How effectively did the pamphlet introduce the topic? | 5 | 4 | 3 | 2 | 1 |
| How clearly and fully was the science evidence presented? | 5 | 4 | 3 | 2 | 1 |
| Were the recommendations effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 |

What was the strongest part of the pamphlet?

What would you suggest for improvement?

Presenter:

Reviewer:

Topic:

Date:

Understanding of the topic –

Actions I will take –

Questions I have for the author –

| | 5 Excellent | 4 | 3 Good | 2 | 1 Poor |
|--|----------------|---|-----------|---|-----------|
| How effectively did the pamphlet introduce the topic? | 5 | 4 | 3 | 2 | 1 |
| How clearly and fully was the science evidence presented? | 5 | 4 | 3 | 2 | 1 |
| Were the recommendations effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 |

What was the strongest part of the pamphlet?

What would you suggest for improvement?



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**Science Unit 2 . DNA and
Biotechnology**

Unit 2

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Unit 2

Course Overview

Overview:

In this unit, students will extend their understanding of reading and writing in the sciences. They will read research articles, textbook material, take notes from lecture videos and make predictions using scientific models. The text material in this second science unit, DNA and Biotechnology, is more complex in both content and composition than the material from unit one. Students will learn to use models as a way to predict scientific processes in protein synthesis. Additionally, students will be asked to write in more depth as they prepare to write and present an evidence-based scientific poster in a research symposium.

How to Use This Unit:

We have designed this unit to be somewhat flexible. The pacing guide is based on 250 minutes of instruction per week. Lessons are not based on specific instructional minutes; they are designed conceptually. Thus, one lesson may run for 50 minutes and another 250 minutes. For each lesson, you will find a list of objectives and goals as well as a listing of activities and resources needed.

Students will use the academic notebook during each lesson. This notebook will provide a means to record notes, vocabulary and complete lesson activities. Thus, it will serve as a way to assess student learning. Students should be encouraged to add to their vocabulary collection each week. Additionally, students should complete the weekly reflections in the academic notebook to think about both the science and the literacy skills they are learning.

Students will complete multiple assessments; some graded, some ungraded. The three major assessments are: 1) a DNA model, 2) an exam, and 3) a science poster.

Unit Objectives:

1. Students will learn strategies for approaching both general and discipline specific vocabulary.
2. Students will be able to explain the processes involved in reading in the sciences.
3. Students will develop skills to critically examine current science topics.
4. Students will evaluate perspectives from multiple stakeholders using multiple sources of information.
5. Students will understand the functions and importance of modeling in the sciences.
6. Students will be able to explain the processes involved in critical reasoning in science.
7. Students will develop skills to analyze information from a variety of sources.
8. Students will integrate ideas to develop a larger understanding of scientific contributions made by researchers.

9. Students will be able to read, analyze and critique scientific peer-reviewed research studies.
10. Student will apply their knowledge by analyzing science-based arguments.
11. Students will be able to write and present evidence-based arguments citing specific examples, using data-driven and peer-reviewed materials and drawing conclusions from the research.

Week 1

Lesson 1: Gateway Activity (150 minutes)

1. Students will be provided with an overview of the course and introduction to the academic notebook.
2. Students will think about how scientists do research by comparing and contrasting two views of the scientific method using a charting strategy.
3. Students will participate in a gateway activity on biotechnology and health: Would you want to be screened for disease?
 - Discussion of ethics in science
 - Discussion of reading scientific articles
 - Applying principles

Lesson 2: Close Reading in Science: DNA and Biotechnology (105 minutes)

1. Students will be introduced to *Phelan Chapter Five DNA and Biotechnology*.
2. Students will learn to annotate this text using a close reading approach.
3. Students will read, annotate and respond to text dependent questions.
4. Students will complete a weekly reflection on learning.

Week 2

Lesson 3: Discovery of DNA Structure (100 minutes)

1. Students will understand the characteristics of DNA.
2. Students will read historical scientific, popular press and textbook articles regarding the discovery of the structure of DNA.
3. Students will create a diagram of DNA based on multiple sources, adding to and editing their model with each new source.

Lesson 4: DNA: Structure to Function (100 minutes)

1. Students will read and annotate the text describing the function of DNA, and the flow of information from gene to expression.
2. Students will build their understanding of the concepts through vocabulary learning.
3. Students will create a concept map connecting key scientific terminology in this complex process of genetic expression.

LESSON 5: DNA: Modeling in the Sciences Part 1 (50 minutes)

1. Students will read, annotate and respond to text dependent questions.
2. Students will complete a weekly reflection on learning.

Week 3

Lesson 5: DNA: Modeling in the Sciences Part 2 continued (150 minutes)

1. Students will learn about the function and importance of models in sciences.
2. Students will create scientific models.
3. Students will learn to use the model for prediction.

Lesson 6: Taking Notes from Lecture Part 1 (100 minutes)

1. Students will read and annotate text.
2. Students will learn strategies for effective note taking.
3. Students will use the Cornell method of note taking over the biotechnology video.
4. Students will compare notes with peers and reflect on the note taking process.
5. Students will complete a weekly reflection on learning.

Week 4

Lesson 6: Taking Notes from Lecture Part 2 (50 minutes)

1. Students will use the Cornell method of note taking over the biotechnology video.
2. Students will compare notes with peers and reflect on the note taking process.

Lesson 7: Taking Science Exams (150 minutes)

1. Students will organize information for the exam by creating concept maps in small groups.
2. Students will predict exam questions using higher-level questioning strategies.
3. Students will conduct their exam review by explaining their maps and quizzing each other using the predicted questions.
4. Students will take the exam.
5. Students will reflect on the exam.

Lesson 8: Analyzing Science Arguments Part 1 (50 minutes)

1. Students will learn about creating research posters for the final project.
2. Students will brainstorm topics to research for a poster session on biotechnology.
3. Students will learn about analyzing arguments from research articles.
4. Students will complete a weekly reflection on learning.

Week 5

Lesson 8: Analyzing Science Arguments Part 2 (50 minutes)

1. Students will apply the principles of analyzing arguments to a research article on biotechnology and crops.
2. Students will use a pro/con chart to delineate their arguments.

Lesson 9: Critiquing Science Research (200 minutes)

1. Student will select a research topic.
2. Students will create a project plan timeline.

3. Students will review strategies for reading scientific articles.
4. Students will find sources for their project in the library.
5. Students will take notes on their articles.
6. Students will complete a weekly reflection on learning.

Week 6

Lesson 10: Research Poster Symposium (250 minutes)

1. Students will examine research poster examples to help them understand the task.
2. Students will work on drafting the poster presentations.
3. Students will work in pairs to edit and revise their posters.
4. Students will present their poster presentations.

Lesson 1

Gateway Activity

Overview and Rationale:

This is the second science unit in Literacy Ready, which will build on the skills and strategies from the nutrition unit and will introduce new strategies as well. Students will continue to learn about science literacy, the ways scientists think when reading and writing and the literacy conventions that are specific to the sciences. Students will also learn a more complex view of the scientific method that is used by scientists. These ideas will be reinforced throughout the unit as instructors model literacy processes and as students have an opportunity to try new ways to read, write and learn in science.

Students will be introduced to the content of the unit as they engage in thinking about the role of ethics in science. Students will watch videos on the BRCA1 gene, read a fact sheet from a government website, read scientific articles about screening for specific diseases and engage in a classroom discussion about being screened for disease from both scientific and ethical stances. These activities are designed to pique students' interest as well as introduce the topics of DNA and biotechnology. Students will use a decision-making framework for critical reasoning that examines what is currently known, who the stakeholders are, what questions still remain and what possible conclusions/solutions/outcomes may be. This way of viewing science allows students to use a solid understanding of science to grapple with ethical concerns about new biotechnology.

Tasks/Expected Outcomes:

1. Students will add to their understanding of the two levels of thinking required in this course: thinking like a scientist and thinking about learning in the sciences.
2. Students will add to their understanding of the components of science literacy.
3. Students will develop skills to critically examine current science topics.
4. Students will evaluate perspectives from multiple stakeholders using multiple sources of information.
5. Students will apply their knowledge by analyzing science-based arguments.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- B. Select information from a variety of sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.

4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

Websites

- How to read a scientific paper —
<http://www.lib.purdue.edu/help/tutorials/scientific-paper>

Videos

- Scientific Explanation of BRCA-1 —
<http://www.youtube.com/watch?v=-GwdZlqJf8g> (one minute).
- Patient with BRCA1 —
<http://youtu.be/z3SDBk2Yedk> (five minutes).
- Commercial website —
www.23andme.com
- Video explanation of gene mutation —
http://www.youtube.com/watch?v=C503LJrUGKc&feature=results_video&playnext=1&list=PLD85B1680C865C024 (two minutes).

Readings

Whole class articles:

- “BRCA1 and BRCA2: Cancer Risk and Genetic Testing.” National Cancer Institute —
<http://www.cancer.gov/cancertopics/factsheet/Risk/BRCA>
- “Genetic Testing for a BRCA 1 mutation.” American Journal of Medical Genetics —
<http://onlinelibrary.wiley.com/doi/10.1002/ajmg.a.10102/abstract>
- New York Times Angelina Jolie editorial —
<http://www.nytimes.com/2013/05/14/opinion/my-medical-choice.html>

Small group articles:

- “Diagnosing Down Syndrome, Cystic Fibrosis, Tay-Sachs Disease and Other Genetic Disorders.” Nature Education —
<http://www.nature.com/scitable/topicpage/diagnosing-down-syndrome-cystic-fibrosis-tay-sachs-646>
- “Ethics of Genetic Testing: Medical Insurance and Genetic Discrimination.” Nature Education —
<http://www.nature.com/scitable/topicpage/ethics-of-genetic-testing-medical-insurance-and-651>
- “Normal Breast-Cancer Gene Keeps Cancer at Bay by Blocking DNA Replication.” Scientific American —
<http://www.scientificamerican.com/article.cfm?id=normal-breast-cancer-gene>
- “Breast Cancer: Knocking Out a Killer.” Scientific American —
<http://www.scientificamerican.com/article.cfm?id=breast-cancer-knocking-ou>
- “Facing Your Genetic Destiny.” Scientific American —
<http://www.scientificamerican.com/article.cfm?id=facing-your-genetic-desti-2002-02-18>
- “Facing Life With a Lethal Gene.” New York Times —
<http://www.nytimes.com/2007/03/18/health/18huntington.html?pagewanted=all>.

Timeframe:

150 minutes

Targeted Vocabulary:

General Academic Vocabulary

- authoritativeness
- bias
- critical reasoning
- timeliness
- risk assessment

Discipline Specific Vocabulary

- genetic mutation
- genetic testing
- prophylactic surgery

Activity One

Discussing Science Thinking (Approx. 10 minutes)

NOTE: If students are starting Unit Two without doing the lessons from Science Unit One: Nutrition, it would be beneficial to teach them Lesson One: Activity One from that unit.

Explain in this unit, students will learn science content but also reading and writing strategies to help them learn the content. Students will also learn about disciplinary literacy, which are the specialized skills and strategies that scientists use. This means that there are certain reading, writing and listening strategies for learning in science that are different than those used in other contents. There are also some strategies that are used across contents, but need to be used in a way that makes sense in the sciences. Students will learn both the discipline-specific and general strategies adapted for science in this unit. The goal of this unit is to help students prepare for college and career-readiness in science.

Ask students to discuss the ways scientists think as a think-pair-share activity. They will discuss their parts in pairs and then in small groups:

- What are scientists looking for when reading?
- What are scientists' goals when conducting an experiment?
- What are their goals when writing up results?
- What does this mean for the ways students should approach reading, writing, and thinking in the sciences?

Discuss the responses as a class. Ask students to discuss how their knowledge about these issues has increased since completing the nutrition unit.

Activity Two

Understanding How Science Works (Approx. 40 minutes)

NOTE: If students did not complete Unit One, go over the features of the academic notebook with students.

Ask students to take a look at the academic notebook to help familiarize them with how they will use it in this unit.

Ask students to turn to the table of contents. There are 10 overall lessons in this unit, but know that some are longer than others. The entire unit will span six weeks.

Students will have an exam during Lesson 6. It is important to note that this will be a science exam, not a strategies exam. That means that even though students are learning reading and writing strategies for learning sciences, the exam will assess how well they learned the science—there will not be any questions about the strategies themselves.

Students will also have a final project at the end of the unit. This will be discussed more about this as it gets closer, but basically students will research a topic related to DNA and biotechnology and create research poster about it.

Ask students to turn to the section about the purpose of the notebook: Ask, “What is the purpose?”

1. Tools and information for learning.
2. Place to record work.
3. Assessment tool—it will be collected periodically for grading.

Ask students to examine the “Overview of the Scientific Method” and the “How Science Works” diagrams in their academic notebooks.

Discuss how scientists use diagrams as a visual way to depict information. Discuss the following steps in reading a science diagram:

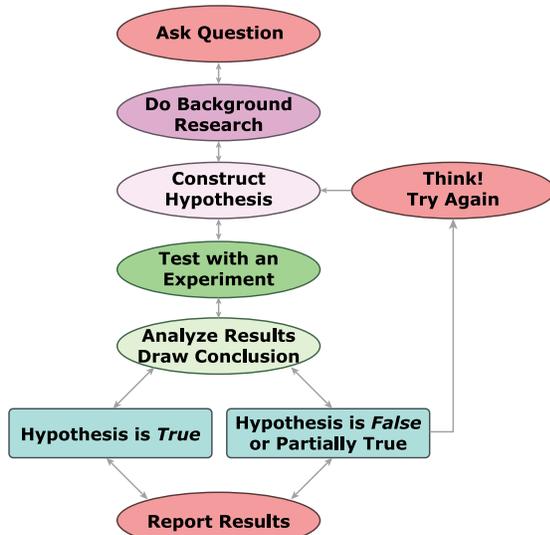
1. Read the title and the information on where the diagram comes from (what is the source).
2. Read the labels (often these will be vocabulary terms that you need to know when the diagram is depicting a science process).
3. Examine the directionality of the arrows or lines. This will help you understand the ways that the ideas are connected.

Ask students to work in small groups comparing and contrasting the two diagrams using the chart in the academic notebook. Remind students about the strategies learned in Unit 1: Nutrition on annotating diagrams.

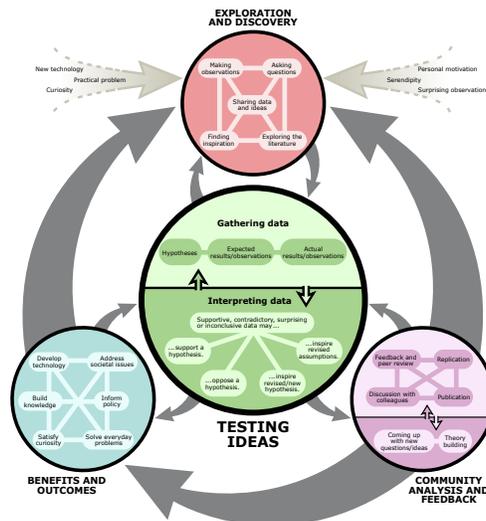
Discuss how the traditional view of the scientific method as a step-by-step process may not get at the iterative, complex way that scientific inquiry is conducted in reality.

FROM THE STUDENT ACADEMIC NOTEBOOK

Overview of the Scientific Method



How science works



sciencebuddies.org

http://undsci.berkeley.edu/lessons/pdfs/complex_flow_handout.pdf

| | Overview of the scientific method | How science works |
|--|-----------------------------------|-------------------|
| Main premises of the diagram. | | |
| How are science outcomes described? | | |
| How is science conducted? | | |
| Who are the key players involved in science inquiry? | | |

Ask students to summarize their conclusions about the two diagrams in their notebooks.

As a whole class, ask students to use their knowledge from the diagrams they read to discuss the ways they differ in terms of how science is viewed. Why are students taught the simple version of the scientific method? What does the more complex version mean for them as students taking a science class?

Remind students about of the disciplinary literacy in conventions that they learned from the last unit on nutrition. Ask them to recall some of the ideas they learned (long

noun phrases, transforming information, evaluating information from the media, using prefixes, roots, and suffixes to determine word meaning, etc.). Talk about how this unit will add their knowledge about science learning.

Ask students to think about how knowledge builds in science. First, ask students to think about the scientific method they just examined and the concept of knowledge building. For example, in the nutrition unit students learned about enzymes. They discussed how they work like puzzle pieces for molecules in the active site. In this unit students will need to use that knowledge to understand how molecules work with DNA replication. Students may notice that in science information builds and an idea that was introduced in an earlier chapter is now being used differently in a later chapter.

Often students will find that a bold faced term in an earlier chapter, say ATP (Adenosine triphosphate-the “energy currency of life”), may have been introduced in a chapter on nutrition and energy production and is now being used in a chapter on DNA without definition to describe the processes involved in RNA synthesis. If students don’t remember what ATP is from that earlier chapter, they will have trouble understanding the ideas in the later chapter. This is why it is very important to understand each science process as it is taught—if students try to memorize without really understanding what is going on, they will find that they forget key concepts down the line.

In this unit students will be discussing DNA and biotechnology. It will pull together a lot of what you have previously learned in science classes. The class will address ways to recall previously learned information throughout this unit.

Assessments:

Outcome 1: Students will add to their understanding of the two levels of thinking required in this course: thinking like a scientist and thinking about learning in the sciences.

Outcome 2: Students add to their understanding of the components of science literacy.

- Compare/contrast chart

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Provides clear differences between the two models. | No | Somewhat | Yes |
| • Can explain the key players involved. | No | Somewhat | Yes |
| • Provides insight into the ways science is investigated. | No | Somewhat | Yes |
| • Provides a complete summary, which clearly identifies the difference between the two diagrams. | No | Somewhat | Yes |

Activity Three

Introducing the Topic (Approx. 5 minutes)

Ask students if they have ever heard of BRCA 1. Have they ever heard of gene mutations or genetic screening? Tell them that they will be watching videos and reading several sources to learn about these issues. Their goal is to be able to compare and contrast the ideas they hear as they think about their own stances on genetic screening.

Activity Four

Note-taking from Videos (Approx. 10 minutes)

Students will view three videos about BRCA1 mutation: one about a patient with a positive BRCA 1 diagnosis and the others presenting a scientific explanation of BRCA 1 mutation. Show the videos in the order below. Ask students to take notes in their academic notebook.

- Patient with BRCA1 — <http://youtu.be/z3SDBk2Yedk> (five minutes).
- Scientific Explanation of BRCA1 — <http://www.youtube.com/watch?v=-GwdZlqJf8g> (one minute).
- Video explanation of gene mutation — http://www.youtube.com/watch?v=C503LJrUGKc&feature=results_video&playnext=1&list=PLD85B1680C865C024 (two minutes).

After viewing these videos, ask students to add to or revise their notes on the BRCA1 mutation. Show them the website from a company selling home genetic screening tests. Discuss their thoughts on this type of testing.

- Commercial website — www.23andme.com.

Ask students to write a personal reflection on genetic screening in their academic notebooks.

Assessments:

Outcome 1: Students will add to their understanding of the two levels of thinking required in this course: thinking like a scientist and thinking about learning in the sciences.

Outcome 2: Students add to their understanding of the components of science literacy.

- Reflection

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Reflection references the resources read. | No | Somewhat | Yes |
| • Reflection uses information from sources to support student’s feelings. | No | Somewhat | Yes |
| • Reflection is written in appropriate prose. | No | Somewhat | Yes |

Activity Five

Reading Science Articles (Approx. 85 minutes)

Common Core State Standards: Anchor Reading– 1, 2, 6, 7, 8, 9; Science/technical– 1, 2, 6, 7, 8, 9

Students will read several articles about gene mutation. Ask students to pay careful attention to information about the risks of cancer with a BRCA 1 or 2 gene mutation, the risk factors and genetic discrimination. This information will provide multiple perspectives on screening and treatment of BRCA 1.

Guide students through the reading:

Talk about the elements of a scientific article using the article from the American Journal of Medical Genetics (AJMG).

- First show students the following web explanation:
<http://www.lib.purdue.edu/help/tutorials/scientific-paper>.
- Examine the different sections (abstract, introduction, methods, results and discussion) of the AJMG paper. The abstract gives students an overview of the entire study, the introduction discusses previous research in the field, the methods tell the reader about the participants in the study, how the experiment is conducted (the order of events), how data will be collected and how data will be analyzed. This should give the reader enough information that they could replicate the study. The results section tells the reader what happened as a result of the experiment. The discussion section talks about what the results mean—how they should be interpreted.
- Discuss that the purpose for reading this article is to get a glimpse into some of the research being done on BRCA screening. Although students will read entire articles during this unit, right now they should focus on the abstract for this article on BRCA 1 testing. Ask students to read the first column of text.

Ask the following text-dependent guided reading questions:

- What is the purpose for doing the study? What research questions are the researchers trying to answer? Where in the text can you find this information?
- How did the researchers go about answering their questions?
- What did they find out about BRCA1 screening for mutation? Did it change people's behaviors?

Discuss student responses as a class.

Now ask students to turn to the article from the National Cancer Institute and the New York Times (NYT) editorial by Angelina Jolie. In pairs, ask students to work through the claims made by Jolie using the data supplied by the National Cancer Institute (NCI). First read the NYT editorial. Circle any science claims made about BRCA 1, genetic testing, cancer, medical choices. Then use the information from the NCI to see if those claims are supported by cancer research. After students have time with both articles ask them to summarize their findings in the academic notebook.

Talk about how students should go about reading multiple sources. Students should think about comparing and contrasting ideas across text, thinking about the science methods/processes/ideas presented in each text, the bias and credibility of each source. They should also consider the cause/effect relationships and decision-making processes used by the woman in the BRCA 1 video. How is she using the science?

Ask students to think about issues related to science and ethics—how do ethical considerations affect our reading?

Ask students to write a short reflection on their thoughts about genetic screening so far. Remind them to use evidence or examples from the articles to support their claim.

As a whole class, discuss the ethical decision-making involved for a patient after genetic testing. They will also discuss the science behind genetic screening.

Ask students to apply their knowledge of genetic screening to other genetic diseases. Tell students that they will be examining, evaluating and presenting science

based arguments about genetic screening. Later in this unit, students will go into much more detail about evaluating arguments. For now, students should think about:

FROM THE STUDENT ACADEMIC NOTEBOOK

- **Data:** these are the facts involved in your argument that support your claims. What data does your article contain?
- **Claim:** this is the conclusion that is drawn from the data. What conclusion do the authors have?
- **Warrants:** these are the reasons that justify the connection between the data and the claim. In science, these are often the scientific principles and/or methods. What warrants are present in your article?
- **Backing:** these are the basic assumptions that are commonly agreed upon that provide justification for the warrants. What are the basic assumptions that the authors used as a justification for their stance?

Ask students to work in small groups to read one of the articles on other genetic mutation diseases. They will prepare for a class discussion using the chart in their academic notebook.

Small group articles:

- “Diagnosing Down Syndrome, Cystic Fibrosis, Tay-Sachs Disease and Other Genetic Disorders.” Nature Education —
<http://www.nature.com/scitable/topicpage/diagnosing-down-syndrome-cystic-fibrosis-tay-sachs-646>.
- “Ethics of Genetic Testing: Medical Insurance and Genetic Discrimination.” Nature Education —
<http://www.nature.com/scitable/topicpage/ethics-of-genetic-testing-medical-insurance-and-651>.
- “Normal Breast-Cancer Gene Keeps Cancer at Bay by Blocking DNA Replication.” Scientific American —
<http://www.scientificamerican.com/article.cfm?id=normal-breast-cancer-gene>.
- “Breast Cancer: Knocking Out a Killer.” Scientific American —
<http://www.scientificamerican.com/article.cfm?id=breast-cancer-knocking-ou>.
- “Facing Your Genetic Destiny.” Scientific American —
<http://www.scientificamerican.com/article.cfm?id=facing-your-genetic-desti-2002-02-18>.
- “Facing Life With a Lethal Gene.” New York Times —
<http://www.nytimes.com/2007/03/18/health/18huntington.html?pagewanted=all>

FROM THE STUDENT ACADEMIC NOTEBOOK

Notes on National Cancer Institute article on genetic testing and Angelina Jolie's NYT editorial:

Reflection: Should people be screened?

Discussion Preparation

| Article | Genetic disease description | Science argument | Ethical argument |
|---------|-----------------------------|------------------|------------------|
| | | | |

Question: Use the information you have learned so far to come to a group conclusion. Should people be screened for genetic disease? Students should support their argument with text, refute counterarguments with text and discuss both ethical and scientific concerns.

Ask students to briefly share their summaries with the class. Ask the following questions during the whole-class discussion:

- Would I want to be screened? What are the benefits/drawbacks?
- Who should have access to my screening info? (Insurance, job, doctors, etc.?)
- What is the impact of this knowledge?
- What are the science-based arguments and the ethical arguments? How do they differ?
- Are there some diseases that should always/never be screened? Ask students to think about and discuss the genetic disease they read about.
- Should parents get children tested?

Assessments:

Outcome 3: Students will develop skills to critically examine current science topics.

Outcome 4: Students will evaluate perspectives from multiple stakeholders using multiple sources of information.

Summary of articles on screening for genetic disease (in academic notebook).

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Summaries include relevant information, summarizes and/or paraphrases effectively. | No | Somewhat | Yes |
| • Uses and understands multiple representations and science processes. | No | Somewhat | Yes |
| • Reflection is written in appropriate prose. | No | Somewhat | Yes |

Outcome 5: Students will apply their knowledge by analyzing science-based arguments.

- Teacher’s analysis of discussion quality and participation.
- Quality of group presentations of arguments.

Criteria

| | Excellent | Good | Approaching | Not Yet |
|---------------------------|--|---|--|---|
| Content and organization | All content is relevant to presentation topic and organized in a clear and logical sequence. | Most of the content is relevant to the presentation topic; sequence of main ideas is good but could be improved. | Much of the content is not relevant to the presentation topic; some main ideas seem to be out of logical sequence. | Content is confusing or not relevant to the presentation topic; there is no clear plan for the organization of information. |
| Effectiveness of argument | Argument is identifiable, reasonable, and sound; each point is supported by persuasive evidence and rhetorical analysis. | Either argument is not identifiable OR not all points are sufficiently supported by evidence and rhetorical analysis. | Argument is barely reasonable and identifiable; few points are supported by evidence and rhetorical analysis. | Argument is not identifiable and insufficiently supported. |
| Collaboration | Each student in the group was highly productive and played a contributive role. | Each student in the group was sufficiently productive and played a fairly contributive role. | Not all students in the group were productive or played a contributive role. | Few students in the group were productive or played a contributive role. |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Discussed science learning.
- 2. Introduced disciplinary literacy (how scientists approach literacy).
- 3. Provided an overview of the course.
- 4. Introduced academic notebook.
- 5. Asked students to compare/contrast and summarize two views of the scientific method.
- 6. Discussed their findings as a whole class.
- 7. Discussed how knowledge builds in science.
- 8. Introduced BRCA.
- 9. Showed videos and websites about BRCA and asked students to take notes in their academic notebooks.
- 10. Discussed elements of scientific article.
- 11. Used the abstract from the AJMG article to examine the specific elements.
- 12. Asked students to read claims from two articles on BRCA screening.
- 13. Asked students to work in small groups to apply their knowledge to articles on other genetic diseases.
- 14. Discussed elements of academic argument.
- 15. Asked students to summarize the arguments for the class.

Lesson 2

Close Reading in Science: DNA

Overview and Rationale:

Students will continue to learn text annotation as a way to mark the text while they read. Annotations can be used in any field, because what is annotated can be tailored to the specific requirements of the discipline. In science, they should focus on the elements of the text that are important to scientists: processes, systems, models and explanations, diagrams, interactions, descriptions, classifications, evidence and so on. In our main text, Phelan Chapter Five, it is very important to pay attention to diagrams and processes as well as the specific characteristics of DNA and RNA. Paying attention to these elements will help students to understand not only this chapter, but also science text in general.

Tasks/Expected Outcomes:

1. Students will learn about and practice close reading with a college-level science chapter on DNA.
2. Students will learn about how to approach both general and discipline specific vocabulary.
3. Students will be able to explain the processes involved while reading in the sciences.
4. Students will add to their understanding of the two levels of thinking required in this course: thinking like a scientist and thinking about learning in the sciences.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 6. Analyze imagery in literary texts.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.

1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
2. Apply knowledge of roots and affixes to infer the meanings of new words.
3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- B. Select information from a variety of sources.
 2. Evaluate the validity and reliability of sources.
 3. Synthesize and organize information effectively.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Phelan Chapter Five
- Annotation example
- “That Wild Streak? Maybe it Runs in the Family” New York Times article
<http://www.nytimes.com/2006/06/15/health/15gene.html?ref=dnaage&pagewanted=all>

Timeframe:

100 minutes

Targeted Vocabulary:

Discipline Specific Words

- base pairs
- nucleic Acid
- swab
- trait
- DNA

General Academic Vocabulary

- exoneration
- manipulation
- predisposition
- relieve
- mitigate

Activity One

Setting a Purpose for Reading (Approx. 10 minutes)

Ask students to examine Phelan Chapter Five. Begin by guiding students through the chapter examining the way the chapter is structured. They will discuss their expectations based on the format of the text. Ask students to identify which text features are important to pay attention to and which are not:

- Important: science diagrams and figures, bold-faced words, explanations, characteristics, and details on science processes, take-home messages (provides section summaries).
- Less important: photos (*Time Magazine*, cookies, etc.).

Guide the reading by first asking students what they know about DNA. Where have they seen/read/heard about it? They will focus on the standard of citing specifics from text sources. They will also learn how to read in multiple passes with different goals (vocabulary, making notes, etc.). Students will learn strategies for annotating their text to pull out the most relevant information. Students will share their annotations with a partner and in a full class discussion.

Activity Two

Text Annotation (Approx. 80 minutes)

Ask students to read about text annotations in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

What and How to Annotate During Reading

Because of the large amount of new terminology involved in learning science, it is important for you to read your science textbooks before class. In this way, you will be familiar with the terms and concepts discussed in the text and you will be able to build your understanding of the concepts as you listen in class. It is also a good idea to connect the concepts discussed in class with the concepts described in your text by comparing your lecture notes to your text annotations each time you read. This will help you follow the flow of the concepts and will help you understand how the ideas are connected.

When you annotate your science text, you need to match your annotations to the course expectations. For example, if you are expected to think at higher levels, be sure your annotations include more than just the bold-faced terms. If you are expected to be able to explain science processes, be sure your annotations help you learn to do just that. In general, it is a good idea to limit the amount of material you annotate. Annotate big concepts and save the details for your rehearsal strategies. A big mistake that students make when annotating science is that they tend to annotate too much. It is also essential to focus on putting the ideas into your own words. This will help you monitor your understanding of what you have read and will keep you from copying exactly from the text. In addition, look for experiments and results or conclusions drawn from scientific theories, and seek to make connections between conclusions drawn from scientific theories, and seek to make connections between the experiments and the concepts they generate.

Science texts often contain diagrams or charts to explain concepts. Because science exams usually contain questions about the concepts described in diagrams or charts, you must be able to read and understand each one. As you read your text, annotate the diagrams and take the time to reflect on what they are depicting. A good self-testing strategy to make sure you fully understand the concept is to cover up the words in the diagram and try to talk through the information. If you can explain how the concept works, you've shown that you understand it. If you find that you cannot explain it, reread your annotations or the diagram text to be sure you understand the key points.

Work through the introduction of Phelan 5.1 together. Ask a student to take turns reading the information aloud. Ask students to consider the following questions as you read: Why does the chapter start with a story? What do you make of the tone? Why do you think the author uses so many negative words—tragic, unjust, inaccurate—to introduce the chapter?

Ask, what do the *avail*, *swab*, and *exoneration* mean in this introduction? These are not science-specific words. If you did not know the words, how could that impact your understanding of this section? What other words might be worth looking up? How can the context surrounding the word help?

Ask students to think about this sentence: “In this chapter, we take a close look at DNA, the molecule responsible for Julius Ruffin’s exoneration and the deferred justice served to the DNA 200.”

Ask, what words can help you make sense of the word exoneration? (Deferred, justice.) Often you can define a word using the context of the rest of the sentence or paragraph. In this case, knowing the word deferred can help you figure out exonerate.

Ask students to think about the word DNA. Use the root word chart in your academic notebook to think about the meaning of **Deoxyribonucleic Acid**. (Note: ribo and acid are not contained in the chart. Ask student to think about their previous science knowledge to come up with the meanings of these roots.)

De = To take away from

Oxy = Oxygen

Ribo = A type of sugar

Nuc = Center

Acid = Acid-like molecule—it contains many hydrogen molecules.

Discuss what this means. What is it composed of? How can these roots tell us that? We will learn about the components of DNA in detail as we continue in this Unit.

Ask students to take a second pass at the material in section 5.1 to think about the vocabulary. Ask them to identify any words they do not know in section 5.1 by circling them in the text. They may mention deferred, identifier, manipulation, etc. Discuss the meanings of the words by using context. Talk about how sometimes context cannot help. For example, “...analysis on a swab of evidence...” may not provide enough information to know exactly what a swab is. Ask students to refer to a dictionary for words that cannot be defined through context.

Ask students to annotate the first section of Phelan 5.1 (up to the quotes on page 161). Discuss their annotations in pairs. What did they find important to annotate? How did they phrase their annotations? Were they complete enough or was more detail needed?

Ask students to discuss this juicy sentence “Like a social security number, DNA is unique in virtually every person.” Ask, what does this mean in terms of the reading so far? (Something about how it is useful in criminal investigation. It is an individual identifier.) What does it mean in terms of science? (Something about the complexity of DNA that it can be composed of the same materials and yet be unique for each person.)

Ask students to annotate the rest of the section and share their annotation with a partner. What will the rest of the chapter be about? (The structure of DNA and how DNA is being manipulated currently.) How do they know this? (The last paragraph of this section.)

Now move to the New York Times article —

<http://www.nytimes.com/2006/06/15/health/15gene.html?ref=dnaage&pagewanted=all>.

Ask a student to read the first paragraph aloud. What is this article going to be about? How do they know?

There may be a good deal of unfamiliar vocabulary in this article. Assign students into groups to examine the vocabulary on one of the pages of text. Have them circle the words in the text. Share out words as a whole class and use the context to figure out word meanings. Many of these words are not science-specific. Ask students to separate science from non-science words as they discuss.

Ask students to read the article with a partner. They will annotate the article as they read. Have the partners discuss their annotations at the end of each page of text.

Discuss the article as a whole class by asking the following text dependent questions:

- What does the text say about the role of DNA in terms of human behavior and habits?
- What controversies or ethical issues does the article present?
- How does the author think that increased knowledge about the role of DNA on personality and individual traits will impact society?

Discuss the use of annotations as a class: What did they find important to note in this article? What is similar about annotating a textbook versus annotating a popular press science article? What is different? What did they learn from the article about how DNA technology has impacted our lives?

Ask students what they liked and did not like about using annotation, both of a textbook and of a media article. Some may say that it takes a long time to annotate or that it is hard to figure out what is important to note. Be sure to let students know that annotation is a strategy that takes a while to master and that they will likely find it worth the effort when they study for the final and realize they remember what they have learned. In fact, close reading of any type is going to take longer but is crucial for understanding and comprehending complex text.

Assessments:

Outcome 1: Students will learn about and practice close reading with a college-level science chapter on DNA.

Outcome 2: Students will learn about how to approach both general and discipline specific vocabulary.

Outcome 3: Students will be able to explain the processes involved while reading in the sciences.

- Text annotation (see Annotation Checklist).

Annotation Checklist

- Your annotations are perfect! Keep up the good work.
- You have missed many key ideas. Go back and annotate them.
- You need to put your annotations in your own words—do not copy from the book!
- Be briefer in your annotations. You do not need to write in full sentences
- You have ignored the graphic aids. Annotate them.
- You need to note the specific examples—they could reappear on the exam.
- You need to enumerate the specific facts, characteristics, causes, events, etc., in the margin or in the text. Get the details, too!
- Your annotations need to focus on the key ideas more and less on details.
- You are underlining too much—work more on writing your summaries in the margin.
- You are annotating too much! It will take you forever to do a chapter.
- You are annotating too little! You do not have enough information annotated to use as a study aid.
- You need to develop some symbols of your own and use them.
- You need to develop a method for organizing your annotations.
- Please annotate these sections or pages again.

p. _____ p. _____

p. _____ p. _____

Activity Three

Weekly Reflection (Approx. 10 minutes)

Students will write a reflection on learning at two levels in their academic notebook: what they learned about science and what they learned about literacy.

FROM THE STUDENT ACADEMIC NOTEBOOK

Weekly Reflection: Week 1

1. Think about the science. What would scientists pay attention to in terms of genetic testing? How does this differ from what patients would pay attention to? Why?

2. Think about your learning. How will this experience change the way you approach reading in the sciences? What strategies did you use that helped you understand what you were reading?

Assessment:

Outcome 4: Students will add to their understanding of the two levels of thinking required in this course: thinking like a scientist and thinking about learning in the sciences.

- Weekly Reflection

Evaluation Rubric

| | | | |
|---|----|----------|-----|
| • Reflection references the resources read. | No | Somewhat | Yes |
| • Reflects on the learning of science | No | Somewhat | Yes |
| • Shows a deep understanding of both the science and the learning | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Discussed the text features of Phelan Chapter Five.
2. Presented the text annotation strategy.
3. Began the discussion of Phelan 5.1 by reading as a class.
4. Discussed learning vocabulary through context.
5. Asked students to read and annotate Phelan 5.1.
6. Asked students to read and annotate New York Times article on DNA.
7. Asked students to identify science and non-science vocabulary terms in the article.
8. Discussed the article as a class.
9. Debriefed on student experiences using text annotation.
10. Provided annotation feedback to students using the annotation checklist.
11. Asked students to complete the weekly reflection in their academic notebook.

Lesson 3

Discovery of DNA Structure

Overview and Rationale:

Students will build their understanding of the structure of DNA through reading multiple sources. Students will also build on their close reading strategies by reading different types of text. The class will begin with the famous Watson and Crick article, debuting their discovery of DNA structure. Based on this article, students will create a rough model of the structure of DNA, drawing and labeling as much as they can based on the article. They will also write a paragraph that explains why the structure of DNA is so important. Students will then read the article from *Popular Science* that reports on this important discovery. Using information from this article, students will revise their diagram of the structure of DNA and their explanation as to why the structure of DNA is so important. Finally, students will read Phelan 5.2 to add to or edit their diagram of DNA and explanation of the importance of the structure of DNA. In this lesson, students will build understanding of the structure of DNA by first consulting historical scientific texts to create a diagram of DNA, and then corroborating this information across multiple sources.

Tasks/Expected Outcomes:

1. Students will understand the characteristics of DNA.
2. Students will read historical scientific articles regarding the discovery of the structure of DNA.
3. Students will create a diagram of DNA based on multiple sources, adding to and editing their model with each new source.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
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 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- B. Select information from a variety of sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Watson and Crick article
- Popular Science article
<http://www.popsci.com/archive-viewer?id=uSADAAAAMB&pg=66>.
- Phelan 5.2
- Academic notebook

Video clips

- Watson and Crick DNA Story
<http://www.youtube.com/watch?v=OiiFVSvLfGE>.
- James Watson explains base pairing
<http://www.youtube.com/watch?v=PDeaLxoL75M>.

Timeframe:

100 minutes

Targeted Vocabulary:

Discipline Specific Vocabulary

- phosphate
- nucleotides

General Academic Vocabulary

- helix
- dyad

General Vocabulary Used in a Disciplinary Way

- base

Activity One

Reading Scientific Articles (Approx. 30 minutes)

Remind students about the components of scientific articles discussed during Lesson One. The first article the students will be reading is from the scientific journal *Nature*, which is written by scientists for scientists. Explain to students that scientists have field-specific scientific journals that they use to publish their work for other scientists. These journals are peer-reviewed, highly formulaic and are full of scientific jargon. As teachers, we understand that students will not understand every word of these types of articles, but it is important that students are exposed to this type of writing, as they will be expected to use these articles in their research. There are a few words, however, that will impact student understanding of the article if they do not know what they mean:

- Phosphate—a salt of phosphoric acid.
- Helix (helical)—something spiral in form.
- Dyad—pair of two.

Discuss the meaning of these words by asking students what they know about them. Ask if they have ever heard the terms. Ask where they may have seen them in the past (Chemistry, math, etc). Ask them to be on the lookout for these words and other unfamiliar terms as they read. Remind them to use the annotation and close reading strategies as they begin to read.

Ask students to read the first paragraph of the Watson and Crick article. What is the purpose of the article (to suggest a structure for DNA)?

Ask students to read paragraphs two and three in pairs. Then, discuss the paragraphs as a class. What is the main point of this paragraph (to discuss why previous theories on DNA structure are incorrect)? What was wrong with those previous attempts at explaining DNA structure?

Ask students to finish reading the Watson and Crick article in pairs, discussing the ideas after each paragraph with their partner.

No. 4356 April 25, 1953 NATURE

MOLECULAR STRUCTURE OF NUCLEIC ACIDS

A Structure for Deoxyribose Nucleic Acid

WE wish to suggest a structure for the salt of deoxyribose nucleic acid (D.N.A.). This structure has novel features which are of considerable biological interest.

A structure for nucleic acid has already been proposed by Pauling and Corey¹. They kindly made their manuscript available to us in advance of publication. Their model consists of three intertwined chains, with the phosphates near the fibre axis, and the bases on the outside. In our opinion, this structure is unsatisfactory for two reasons: (1) We believe that the material which gives the X-ray diagrams is the salt, not the free acid. Without the acidic hydrogen atoms it is not clear what forces would hold the structure together, especially as the negatively charged phosphates near the axis will repel each other. (2) Some of the van der Waals distances appear to be too small.

Another three-chain structure has also been suggested by Fraser (in the press). In his model the phosphates are on the outside and the bases on the inside, linked together by hydrogen bonds. This structure as described is rather ill-defined, and for this reason we shall not comment on it.



This figure is purely diagrammatic. The two ribbons symbolize the two phosphate-sugar chains, and the horizontal rods the pairs of bases holding the chains together. The vertical line marks the fibre axis.

We wish to put forward a radically different structure for the salt of deoxyribose nucleic acid. This structure has two helical chains each coiled round the same axis (see diagram). We have made the usual chemical assumptions, namely, that each chain consists of phosphate di-ester groups joining β -D-deoxy-ribofuranose residues with 3',5' linkages. The two chains (but not their bases) are related by a dyad perpendicular to the fibre axis. Both chains follow right-handed helices, but owing to the dyad the sequences of the atoms in the two chains run in opposite directions. Each chain loosely resembles Furberg's² model No. 1; that is, the bases are on the inside of the helix and the phosphates on the outside. The configuration of the sugar and the atoms near it is close to Furberg's 'standard configuration', the sugar being roughly perpendicular to the attached base. There

is a residue on each chain every 3.4 Å. in the z-direction. We have assumed an angle of 36° between adjacent residues in the same chain, so that the structure repeats after 10 residues on each chain, that is, after 34 Å. The distance of a phosphorus atom from the fibre axis is 10 Å. As the phosphates are on the outside, cations have easy access to them.

The structure is an open one, and its water content is rather high. At lower water contents we would expect the bases to tilt so that the structure could become more compact.

The novel feature of the structure is the manner in which the two chains are held together by the purine and pyrimidine bases. The planes of the bases are perpendicular to the fibre axis. They are joined together in pairs, a single base from one chain being hydrogen-bonded to a single base from the other chain, so that the two lie side by side with identical z-co-ordinates. One of the pair must be a purine and the other a pyrimidine for bonding to occur. The hydrogen bonds are made as follows: purine position 1 to pyrimidine position 1; purine position 6 to pyrimidine position 6.

If it is assumed that the bases only occur in the structure in the most plausible tautomeric forms (that is, with the keto rather than the enol configurations) it is found that only specific pairs of bases can bond together. These pairs are: adenine (purine) with thymine (pyrimidine), and guanine (purine) with cytosine (pyrimidine).

In other words, if an adenine forms one member of a pair, on either chain, then on these assumptions the other member must be thymine; similarly for guanine and cytosine. The sequence of bases on a single chain does not appear to be restricted in any way. However, if only specific pairs of bases can be formed, it follows that if the sequence of bases on one chain is given, then the sequence on the other chain is automatically determined.

It has been found experimentally^{3,4} that the ratio of the amounts of adenine to thymine, and the ratio of guanine to cytosine, are always very close to unity for deoxyribose nucleic acid.

It is probably impossible to build this structure with a ribose sugar in place of the deoxyribose, as the extra oxygen atom would make too close a van der Waals contact.

The previously published X-ray data^{3,4} on deoxyribose nucleic acid are insufficient for a rigorous test of our structure. So far as we can tell, it is roughly compatible with the experimental data, but it must be regarded as unproved until it has been checked against more exact results. Some of these are given in the following communications. We were not aware of the details of the results presented there when we devised our structure, which rests mainly though not entirely on published experimental data and stereochemical arguments.

It has not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material.

Full details of the structure, including the conditions assumed in building it, together with a set of co-ordinates for the atoms, will be published elsewhere.

We are much indebted to Dr. Jorry Donohue for constant advice and criticism, especially on interatomic distances. We have also been stimulated by a knowledge of the general nature of the unpublished experimental results and ideas of Dr. M. H. F. Wilkins, Dr. R. E. Franklin and their co-workers at King's College, London. One of us (J. D. W.) has been aided by a fellowship from the National Foundation for Infantile Paralysis.

J. D. WATSON
F. H. C. CRICK

Medical Research Council Unit for the
Study of the Molecular Structure of
Biological Systems,
Cavendish Laboratory, Cambridge.
April 2.

¹ Pauling, L., and Corey, R. B., *Nature*, 171, 346 (1953); *Proc. U.S. Nat. Acad. Sci.*, 39, 84 (1953).

² Furberg, S., *Acta Chem. Scand.*, 6, 634 (1952).

³ Chargaff, E., for references see Zamenhof, S., Braverman, G., and Chargaff, E., *Biochim. et Biophys. Acta*, 9, 402 (1952).

⁴ Wyatt, G. E., *J. Gen. Physiol.*, 26, 301 (1952).

⁵ Astbury, W. T., *Symp. Soc. Exp. Biol.*, 1, *Nucleic Acid*, 66 (Camb. Univ. Press, 1947).

⁶ Wilkins, M. H. F., and Randall, J. T., *Biochim. et Biophys. Acta*, 10, 192 (1953).

After reading, ask students to complete the questions in part I of the “Building Your Understanding of the Structure of DNA” prompt in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Building your Understanding of DNA Structure

Part 1:

After reading the Watson and Crick’s article in Nature on their discovery of the structure of DNA, draw a diagram of DNA below, labeling all components of your diagram.

Explain the importance of the structure of DNA in understanding how our genetic material functions to make us who we are.

As part of a whole-class discussion, ask students the following text-dependent questions:

1. How did Linus Pauling’s model differ from Watson and Crick’s model for DNA?
2. What type of bond holds the bases together?
3. A very important observation is made about base pairing in this article. What is the significance of how bases pair up?

Ask students to locate and share where in the article they find evidence to support their answers to these questions.

Activity Two

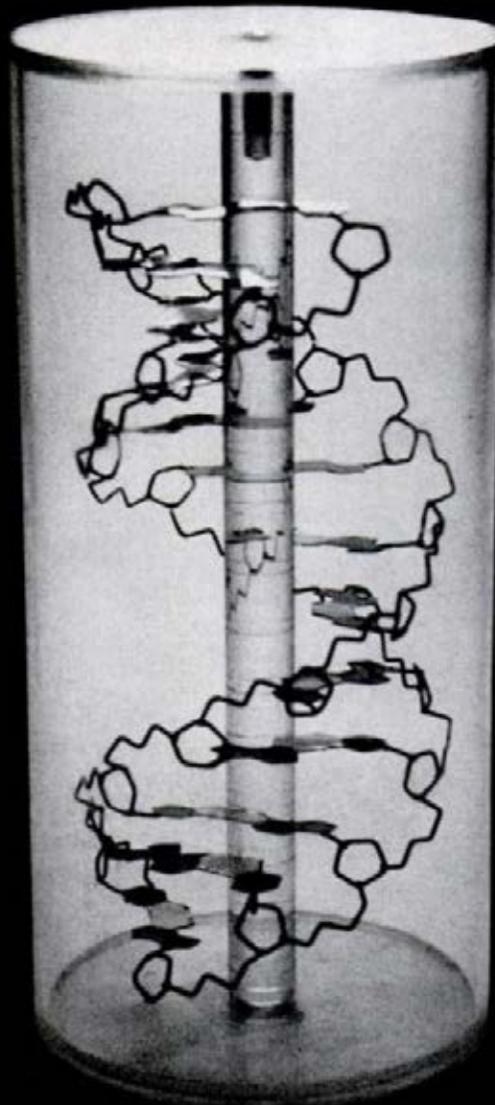
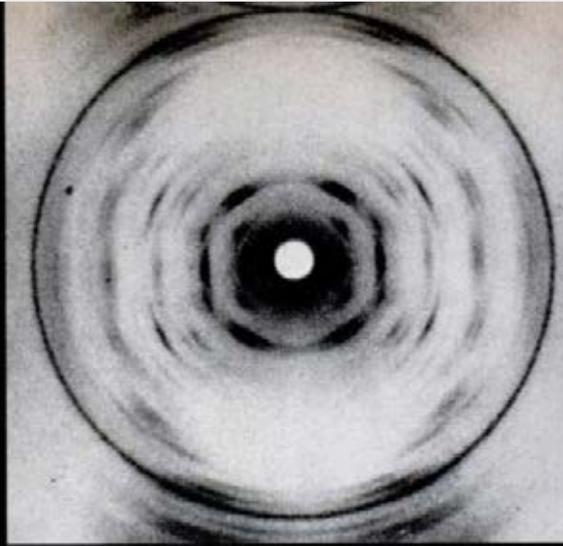
Reading Popular Articles (Approx. 30 minutes)

Ask students to read paragraphs one through three of the article from *Popular Science Magazine*. Discuss how these articles are often written in more layman’s terms and are easier to understand. These articles allow people can gain a general understanding of the scientific principles, but may lack in some detail or depth. The article students will be reading was written for Popular Science Magazine in 1963 after the Nobel prize was awarded to Watson and Crick for the discovery of the structure of DNA. This article reviews their findings and discusses the importance of this discovery (<http://www.popsci.com/archive-viewer?id=uSADAAAAMBAJ&pg=66>).

D N A

It Calls
the Signals
for Life

Like a spiral staircase, shape of DNA molecule is shown by model at right, worked out mathematically from X-ray diffraction photos, like one at top by L. D. Hamilton of Sloan-Kettering Institute.



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How three men got the Nobel Prize for solving a jigsaw puzzle: assembling the pieces of a molecule that made you what you are—and keeps you ticking

By Wallace Cloud

LAST December an American biologist and two English physicists received formal recognition, in the shape of a Nobel Prize, for a discovery made 10 years ago—a discovery that started a chain reaction in biology.

They determined the structure of a molecule that provides answers to questions scientists have been asking for over a century:

- How does a heart muscle “know” how to beat?
- How does a brain cell “know” how to play its role in thinking and feeling?
- How do the cells of the body “know” how to grow, to reproduce, to heal wounds, to fight off disease?
- How do infectious bacteria “know” what diseases to cause?
- How do single fertilized egg cells, from which most of nature’s creatures begin, “know” how to become plants, animals, people?
- If one such cell is to multiply and form a human being, how does it “know” how to produce a potential Einstein or a Marilyn Monroe?

The stuff that genes are made of. Sounds like a lot to expect of a molecule—even one with a jaw-breaking name like deoxyribonucleic acid (known more familiarly as DNA). But it’s scientific fact that DNA is what genes are made of. DNA molecules supply the basic instructions that direct the life processes of all living things (except a few viruses). The DNA molecule contains information in a chemical code—the code of life.

The effects of discovery of the structure of DNA have been called “a revolution far greater in its potential significance than the atomic or hydrogen bomb.” Professor Arne Tiselius, President of the Nobel Foundation, has said that it “will lead to methods of tampering with life, of creating new diseases, of controlling minds, of influencing heredity—even, perhaps, in certain desired directions.”

I asked the American member of the Nobel Prize trio, Dr. James D. Watson, about these speculations in his laboratory at Harvard. It was a few weeks before he flew to Stockholm to receive the award

Three Nobelmen



Dr. James D. Watson, now at Harvard, worked on DNA in 1953 while in England.



Dr. Francis H. C. Crick of Cambridge was Watson’s partner in the research.



Dr. Maurice H. F. Wilkins, King’s College, London, made essential X-ray photos.

CONTINUED

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along with Dr. Francis H. C. Crick of Cambridge University and Dr. Maurice H. F. Wilkins of King's College, London.

The boyish 34-year-old Nobelman, who did the prize-winning research in England when he was only 25 (he entered college at 15, had been a Quiz Kid before that, in the days of radio), refused to endorse the wilder predictions about the future of DNA research. He said, "The average scientist busy with research looks ahead anywhere from an hour to two years, not more."

Conceding that discovery of the structure of DNA was as important as the working out of atomic structure that led to the atom bomb, he added, "It will have a very profound effect, slowly, on medicine. Doctors will stop doing silly things. Our knowledge of DNA won't cure disease, but it gives you a new approach—tells you how to look at a disease."

Dr. Watson went on to explain just what he and his co-workers discovered during those days of inspired brainwork in England, back in 1953, and how they did it.

The discovery was not the work of an institute-full of technicians, he said, but the product of four minds: He and Crick did the theoretical work, interpreting cryptic X-ray diffraction photos made by Wilkins, who had as collaborator an English woman scientist, Dr. Rosalind Franklin. She died in 1958. She "should have shared" the Nobel Prize, said Dr. Watson.

Picking up the thread. DNA was not a newly discovered substance. It had been isolated in 1869, and by 1944 geneticists were sure it was the substance of the genes—the sites of hereditary information in the chromosomes. Then they started asking, "How does it work?" That's the question Watson and his co-Nobelists answered.

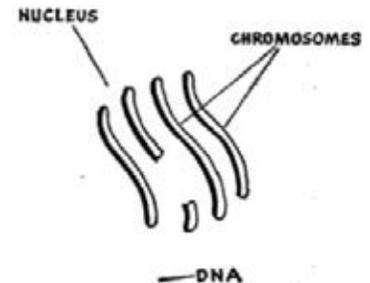
They knew DNA as one of the most complex of the "giant molecules" known to man. It was believed to have a long, chainlike structure consisting of repeating groups of atoms, with side groups sticking out at regular intervals.

The shape of the DNA molecule was important. In the cell, many of the larger molecules work together like machine parts, and their mechanical properties are as important as their chemical activity. However, even the electron microscope, through which it is possible to see some of the biggest giant molecules, shows DNA only as a thread, without detail.

One way of "looking" at molecules is to take them apart by chemical treatments that make

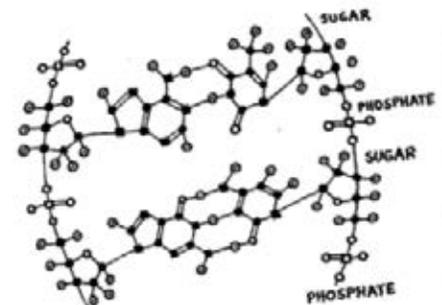
[Continued on page 186]

How DNA molecules



A miniature chemical factory, the living cell (diagramed above) is controlled by "executive molecules" of DNA—deoxyribonucleic acid. In all plant and animal cells, DNA is located in chromosomes, threadlike bodies in the nucleus. Bacteria have simpler structures, but are also directed by DNA.

Control depends on the ability of DNA molecules to store and transmit information. Long, twisted strands of DNA are archives of instructions for



- CARBON
- NITROGEN
- OXYGEN
- PHOSPHORUS
- ⊙ HYDROGEN

all processes of the cell.

Information is recorded in a molecular code made possible by the structure of the DNA molecule, detailed above.

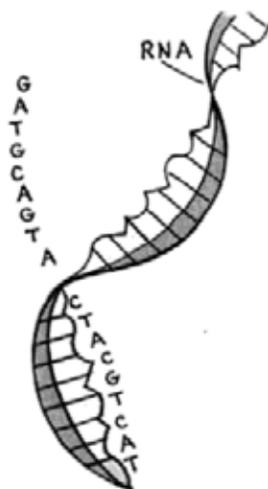
Twin backbones are repeating chains of submolecular units, called deoxyribose sug-

supply instructions to direct life processes of living things

ars, linked together by phosphate bonds. Bridging across are pairs of subunits named adenine, thymine, cytosine, and guanine—usually called A, T, C, and G.

These units serve as a four-letter alphabet. As shown below, their sequence spells "words" that are meaningful to the cell.

Instructions are read by means of another kind of molecule, RNA (ribonucleic acid), a single twisted chain with side groups that correspond to the subunits of DNA. RNA mole-



cles are built by the chemical machinery of the cell, using one strand of a DNA molecule as a template. Then the RNA molecule peels off, acts as a messenger to deliver instructions elsewhere in the cell.

Two-stranded structure of DNA makes possible use of the same information-transfer mechanism for copying DNA molecules, so that hereditary instructions can be passed from generation to generation.

Pairing of subunits follows a rule: A can pair only with T, C pairs only with G. (Note that



this rule is followed throughout illustration.) Thus, the strands are not identical, but are complementary, and each can serve as a template for the reconstruction of the other.

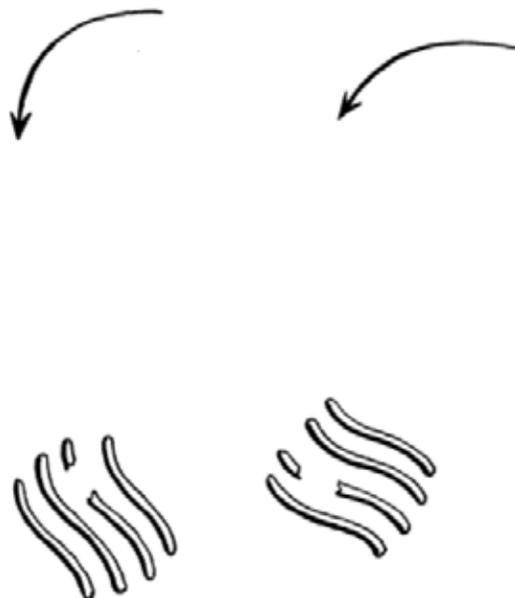
When a DNA molecule is to be copied, the molecule "unzips," as shown symbolically above. Then the machinery of the cell uses the same zipper-like action to reconstruct each missing half, as shown below, from subunits freely available in the nucleus of the cell. Now there are two DNA molecules identical with the original one.

Every DNA molecule in the chromosomes of a cell is cop-

ied prior to cell division, the basis of all reproduction. When the cell divides, the chromosomes split in half and a full complement of half-chromosomes goes into each new cell.

Since all the information-bearing DNA molecules have doubled, each cell now contains exactly the same stored instructions as the original parent cell, and can carry out the same life processes.

That's how you got those big brown eyes. (The family secret for manufacturing the pigment in your eyes was handed down by means of your ancestral DNA.)



DNA: It Calls the Signals for Life

[Continued from page 68]

small molecules out of big ones. In the case of DNA, the pieces—six kinds of sub-molecular units—had been identified. Now it was necessary to figure out how the jigsaw puzzle fitted together.

Another way is to use X rays, but in a special manner. A technique called X-ray diffraction lets physicists take a peculiar kind of look inside certain kinds of molecules—those that form crystals.

DNA extracted from cells and purified is a jelly-like material. Not much resemblance to a crystal, you might think. But when it's pulled like taffy and dried under the right tension, it forms fibers that do have a complicated crystalline structure.

One of the Nobel Prize winners, Dr. Wilkins, is a physicist who worked in this country on the Manhattan Project. After World War II, back in England, he got interested in biological problems and became a biophysicist. During the early 1950s he perfected a method of making X-ray diffraction photos of DNA fibers.

Such photos are taken by shooting a very narrow beam of X rays through the sample. Some of the X rays are bent by interaction with atoms. The emerging X-ray waves interfere with each other to form a pattern that registers on the film.

X-ray diffraction photos do not show the outlines of the molecules they represent. They are in "reciprocal space"—small distances on a photograph stand for large spaces in the molecule, and vice versa. The pictures must be interpreted by mathematical analysis; and the more complex the molecule, the more difficult that is.

Drs. Crick and Watson began to work on methods of interpreting the X-ray diffraction photos of DNA. They met at Cambridge, where Watson had gone to do research a couple of years after getting a Ph. D. from Indiana University.

Working backwards. Crick had worked out a theory for predicting what X-ray pictures of various molecular models would look like. That is, the pictures were so hard to interpret they had to work backwards: devise a model, then determine mathematically what its X-ray diffraction equivalent should be. Then the prediction was compared with actual distances and angles on the X-ray photos.

The two experimenters shared with Wilkins the idea that a twisted, helical molec-

ular structure might fit the X-ray data (it had been discovered that such twists exist in other molecules produced by the cell). They built a model of rods, clamps, and sheet-metal cutouts (representing the various known pieces of the jigsaw puzzle), and evaluated it mathematically.

This first model didn't prove out, and they temporarily dropped the problem, going on to other research. Some months later, in February, 1953, they learned of a structure proposed for DNA by Linus Pauling, Caltech's Nobel-Prize-winning chemist. From their previous work, they knew that Pauling had to be wrong. This stimulated them to try another model, incorporating new information about the exact shapes of some of the subunits of DNA.

A month later they had a model that fitted the X-ray data closely. From it, they worked out the profound "Watson-Crick hypothesis," which explains how the DNA molecule does its work in the cell. That hypothesis has been tested through ingenious experiments in numerous laboratories, and is accepted as gospel in the new world of molecular biology.

The key to life. The DNA molecule stands revealed as a double helix shaped roughly like a twisted ladder.

The two legs of the ladder are identical, but the rungs are not, and this is the key to the molecule's ability to store information. The order of the four different subunits that make up the rungs is the code of life.

The way the subunits link across the rungs is the key to DNA's ability to transmit information. Each rung actually consists of two units, but the pairing of the units follows definite rules; the molecule can "unzip," and each half serves as a template for rebuilding the missing half, producing two new molecules identical to the original one.

The Watson-Crick hypothesis has made possible a new view of the "molecular basis of life": In the cell—really a miniature chemical factory—DNA molecules contain the instructions that tell the molecular machinery of the factory what new molecules to build. The product molecules in turn determine the function of the cell—whether it's a blood cell, a nerve cell, a sperm cell, or (if not part of a many-celled organism) perhaps a harmful bacterium.

DNA: It Calls the Signals for Life

In this way, the information stored in DNA molecules specifies an entire community of cells, such as those that add up to a human being—the color of his hair and eyes, his basic aptitudes, his built-in sensitivity or resistance to disease.

Programing a man. An individual DNA molecule is about 10,000 subunits long (that is, there are that many rungs on the ladder), and the list of instructions necessary to specify a human being is about 10 billion DNA units long. If the DNA molecules containing that message were placed end to end, they would make a strand 10 feet long, but only one twelve-millionth of an inch thick. Actually the strands are bundled in the microscopic bodies called chromosomes, in the nucleus of each cell, which hold the machinery of heredity.

The specifications must be passed on from generation to generation. This takes place during the cell division, when the chromosomes divide. Preparatory to cell division, the DNA molecules in the chromosomes have unzipped and have been copied by the machinery of the cell.

Work in the cell, controlled by DNA, is important not only to healthy life, but also to disease. Viruses, for example, take over cells and turn them into virus factories by interfering with the normal flow of instructions and substituting new instructions. Hereditary diseases are the result of "errors" that have crept into the coded instructions during copying of DNA molecules. Such changes also transform normal cells into cancer cells, which have "forgotten" their usual roles and "learned" new functions.

Those facts explain why DNA has created such excitement among biologists. If a way can be found to send man-made chemical messages into cells and alter the instructions stored there by DNA molecules, almost anything is possible.

But that isn't likely to come about this year or next. First the code must be deciphered. That's where most of the research on DNA is concentrated today.

Another unsolved problem, perhaps even more mysterious, is how cells "decide" to use particular instructions stored in their DNA archives. Discoveries on this frontier will explain how cells respond to outside stimuli—and how a single fertilized cell can multiply selectively to produce the many different kinds of specialized cells that make up a human being. ■ ■



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THE TESTOR CORPORATION Rockford, Illinois

Ask students to look at the following “juicy sentences” from the second paragraph of the article:

The discovery of DNA structure is **“a revolution far greater in its potential significance than the atomic or hydrogen bomb.”**

Professor Arne Tiselius, President of the Nobel Foundation, has said that it **“will lead to methods of tampering with life, of creating new diseases, of controlling minds, of influencing heredity—even, perhaps, in certain desired directions.”**

What do these sentences tell you about the impact of the discovery of DNA structure on the world in 1963? What were the hopes and fears?

Ask students to read the rest of the article with a partner. As they read, they should focus on expanding their understandings of the structure of DNA and the implications of understanding that structure on the sciences.

After reading, ask students to complete part II of the “Building Your Understanding of the Structure of DNA” prompt in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Part II:

After reading the Popular Science article describing the Nobel Prize-winning scientists’ discovery of DNA, go back to your original diagram of DNA. Make changes or add to your diagram based on additional understanding gained from this article. You can also re-draw your diagram.

Add to your explanation of the importance of the structure of DNA in understanding how our genetic material functions to make us who we are.

Activity Three

Reading Textbook Explanations (Approx. 30 minutes)

Ask students to read and annotate Phelan 5.2. After reading two scientific articles on the structure of DNA and developing a conceptual diagram of the structure of DNA based on their understanding, students will then read and annotate Phelan 5.2 that describes the structure of DNA in detail. Students should pay special attention to the diagrams in this section as they illustrate the details about the structure of DNA. Students should read and annotate Phelan 5.2 individually.

Ask students to complete part III of the “Building Your Understanding of the Structure of DNA” prompt in their academic notebooks after reading the section.

FROM THE STUDENT ACADEMIC NOTEBOOK

Part III:

After reading and annotating Phelan 5.2, paying special attention to the diagrams and figures, go back to your original diagram of DNA. Make changes or add to your diagram based on additional understanding gained from this article. You can also re-draw your diagram.

Add to your explanation of the importance of the structure of DNA in understanding how our genetic material functions to make us who we are.

Activity Four

Reflection (Approx. 10 minutes)

Show the following videos on the discovery of DNA. Show a two-minute video clip of Watson and Crick discussing their roles in the discovery and a two-minute clip of Watson explaining base pairing:

- <http://www.youtube.com/watch?v=OiiFVSvLfGE>
- <http://www.youtube.com/watch?v=PDeaLxoL75M>

The discovery of the structure of DNA was a profound finding based on the use of models. **Ask students to reflect on the importance of models, such as their diagram of DNA, in helping scientists gain understanding of complex concepts by asking the following questions:**

- How did drawing the structure of DNA aid in your understanding of the concept? (Ask several students to share their diagrams.)
- How did using multiple sources add to your model?
- How do models help to explain science concepts?

Discuss how scientists use models in a variety of ways that can help them illustrate an abstract concept and make predictions of how something may function. Students will learn more about using models for prediction later in this unit.

Assessments:

Outcome 1: Students will understand the characteristics of DNA.

Outcome 2: Students will read historical scientific articles regarding the discovery of the structure of DNA.

Outcome 3: Students will create a diagram of DNA based on multiple sources, adding to and editing their model with each new source.

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Student responses to questions reflect an understanding of the concepts presented in each source. | No | Somewhat | Yes |
| • Student model of DNA reflects an understanding of the structure of DNA. | No | Somewhat | Yes |
| • Student explanation in the academic notebook is based on information presented in the text. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Reviewed the components of scientific articles.
2. Discussed the vocabulary in the Watson and Crick article.
3. Guided student reading of the academic article.
4. Asked students to respond to the part I questions in their academic notebook.
5. Discussed the Watson and Crick article as a class.
6. Guided student reading of Popular Science article.
7. Asked students complete the part II questions in their academic notebook.
8. Guided student reading of Phelan 5.2.
9. Asked students complete the part III questions in their academic notebook.
10. Reflected on diagramming DNA using multiple sources.
11. Introduced the role of models in science.

Lesson 4

DNA: Structure to Function

Overview and Rationale:

Students will read an overview of the complex process by which a person's DNA can determine their traits. This process can be confusing to many students and includes terminology of many related words. Students will learn the strategy of concept mapping to show relationships between key terms. This process will help them comprehend the overall process of gene expression, which will serve as a foundation before diving into the detailed and complex process of protein synthesis in the following lesson.

Tasks/Expected Outcomes:

1. Students will read and annotate the text describing the function of DNA and the flow of information from gene to expression.
2. Students will build their understanding of the concepts through vocabulary learning.
3. Students will create a concept map connecting key scientific terminology in this complex process of genetic expression.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Constructing your first concept map directions
- 3x5 cards for each group

Timeframe:

100 minutes

Targeted Vocabulary:

- DNA bases
- genome
- chromosomes
- gene
- allele
- trait
- coding DNA
- non-coding DNA
- genotype
- phenotype
- transcription
- translation

Activity One

Close Reading of Science Processes (Approx. 40 minutes)

Students will read and annotate Phelan 5.3- 5.5 (pages 164-168). Students should read with the purpose of trying to determine HOW the structure of DNA allows for its function. There is a good deal of terminology involved in these sections, which can make them a challenge. Ask students to circle the terms they need to remember as they read. They will be using these terms in the next two activities.

Read and annotate the first two paragraphs of Phelan 5.3 together. Ask students what the author means by using the analogy of a cookbook to explain DNA. If DNA is the cookbook, what are used in the recipes? Ask students to read and annotate the rest of 5.3 with a partner. Once they have finished, ask the class to explain Figure 5.6, “from genome to gene.” How do they all connect?

Ask students to explain the relationship between Figures 5.6 and 5.7. How are these ideas related? Why do different alleles produce different versions of a gene?

Ask students to continue to annotate Phelan 5.4 in pairs. Ask them to read the heading of this section, “Not all DNA contains instructions for making proteins.” From this heading, ask them to discuss what information they should be looking for as they read. (Why this occurs, how this occurs, what does it mean for DNA coding?) After students have read and annotated, discuss the differences between coding and non-coding DNA as a class.

Ask students to read and annotate 5.5 in pairs. This section provides an overview of how genes work. Students should pay attention to the cookbook analogy used in Figure 5.11 and think about what that means for understanding the processes of transcription and translation.

Assessment:

Outcome 1: Students will read and annotate the text describing the function of DNA, and the flow of information from gene to expression.

Annotation Checklist

- Your annotations are perfect! Keep up the good work.
- You have missed many key ideas. Go back and annotate them.
- You need to put your annotations in your own words—do not copy from the book!
- Be briefer in your annotations. You do not need to write in full sentences
- You have ignored the graphic aids. Annotate them.
- You need to note the specific examples—they could reappear on the exam.
- You need to enumerate the specific facts, characteristics, causes, events, etc., in the margin or in the text. Get the details, too!
- Your annotations need to focus on the key ideas more and less on details.
- You are underlining too much—work more on writing your summaries in the margin.
- You are annotating too much! It will take you forever to do a chapter.
- You are annotating too little! You do not have enough information annotated to use as a study aid.
- You need to develop some symbols of your own and use them.
- You need to develop a method for organizing your annotations.
- Please annotate these sections or pages again.

p. _____ p. _____

p. _____ p. _____

Activity Two

Creating a Concept Map (Approx. 30 minutes)

Discuss the components of a concept map using the information in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

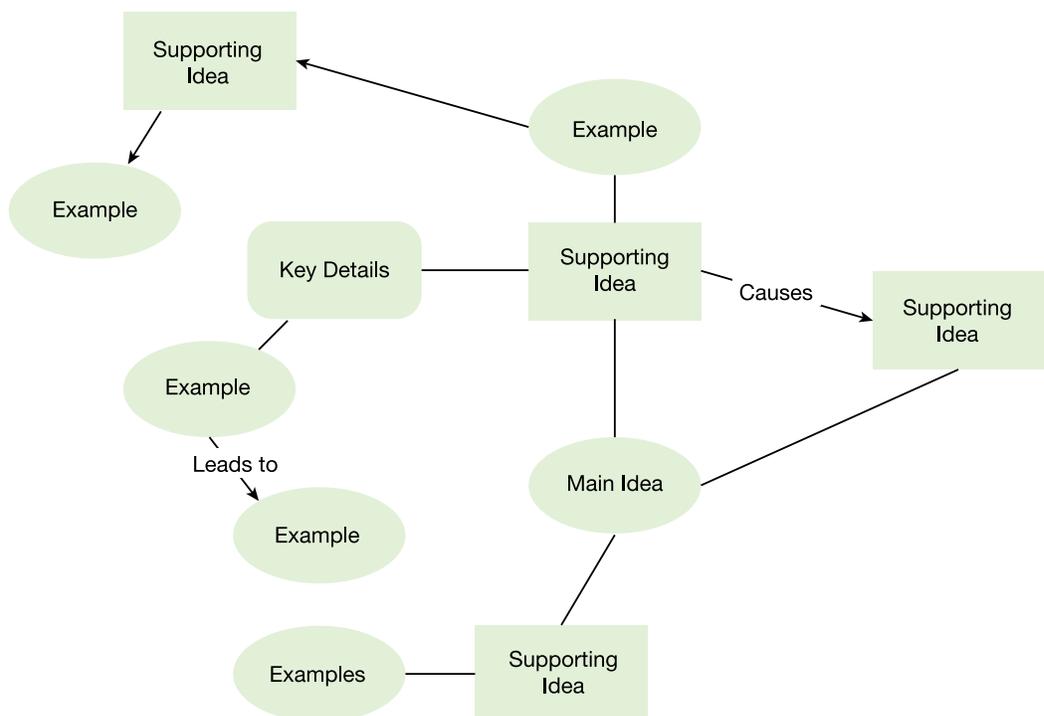
Concept Maps

Concept maps are visual representations of information, so using this strategy is very useful for students who tend to learn visually. A concept map is organized in such a way that it is easy to see the major concept that is being mapped, related concepts, and how everything is related.

Concept mapping works well when it is important to see the relationship between complex concepts, and it works particularly well in courses where many ideas are related or interconnected. For example, mapping might work well to see the relationship between hormones of the endocrine system or the stages of meiosis. Mapping is especially useful for students who like to personalize strategies because there is no right or wrong way to map. The important thing is to clearly show the way ideas are linked together in your concept map.

How Do You Use Maps to Study? When you study your map, you can begin by rehearsing one concept at a time. Then cover up everything except the main concept, and begin to talk the information through. Say the related material and then check your accuracy. Focus on how the concepts are related to each other because that is the major strength of mapping. Rather than viewing ideas one at a time, as you would with CARDS, mapping enables you to understand how these ideas fit together. (Adapted from Nist-Olejnik, S. L. & Holschuh, J. P. (2013). *College Success Strategies 4th ed.*)

General Structure of a Concept Map

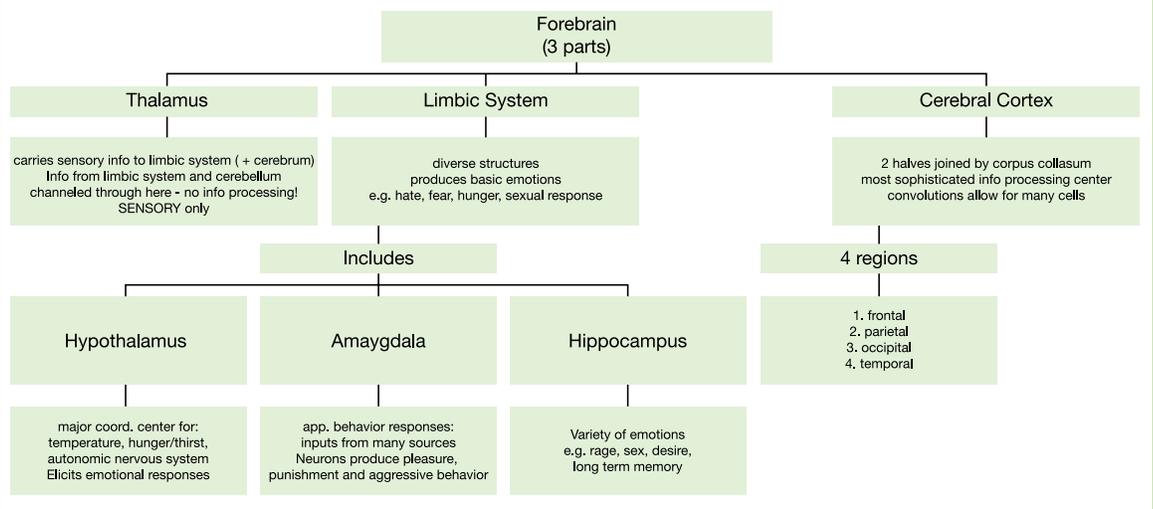


You can see in this example that the map includes both main and supporting ideas as well as details and examples.

Components of a concept map:

1. Enclosed space (circle, box, etc.) to represent the concepts.
2. Lines to represent the relationship between the concepts.
3. Labels on the line to describe the relationship, such as:
 - causes,
 - composed of,
 - depends on,
 - affects (increases, decreases, inhibits, generates, etc.),
 - includes,
 - leads to.
4. Arrows indicate the direction(s) of the relationship.

It also can show how one concept leads to another or how concepts are interrelated. In the example below, a student has depicted the parts of the forebrain.



Ask students to work through sections 5.2-5.5 in small groups to create a concept map.

Ask them to make a jot list of the ideas that should be incorporated into the map by writing each term on a 3x5 index card. Then have them start to think about how those ideas are related by laying the 3x5 cards out on the table and moving them around until the concepts are placed in such a way that makes the most sense to the group. They are trying to map both the structure and function of DNA. They need to think about how that is best depicted (there is no one right answer—students need to think about how the concepts interrelate and how one idea is expanded by another). **Once students feel that they have captured the ideas into a well-represented and organized way, they can draw their concept map.** Tell students that they will be adding to their map as they work through the next few sections (so they may want to look ahead and leave themselves some space in the appropriate areas). They will also be using the cards again as a way to help them remember the terminology.

Circulate among the groups as students work to respond to questions and to help student work through the relationships between the concepts and processes they are depicting.

Activity Three

Extending Concept Map for Vocabulary and Concept Learning (Approx. 20 minutes)

Ask students to go back to the 3x5 cards where they listed the concepts before they created their concept map (they can add to them to make them a complete representation of the ideas they charted). Students should shuffle the cards and, as a group, sort the cards into smaller piles according to the ideas/process related to each term. For example, eukaryotic cell, nucleus and chromosome would all be grouped together.

Students should start to see that some terms, like gene, would be placed in several groupings. Discuss how these overlaps are a good way to see the relationships between the concepts they are learning. Ask students to manipulate the cards to show all possible combinations of terms for the concepts they have learned thus far.

Then ask students to shuffle the cards again. This time they will pair up with a partner and quiz each other on the terms. The student must define the term and identify at least one science process (or larger concept) the term belongs with. Discuss how in science, it is important to understand both a definition of a concept and be able to place that concept within the larger ideas.

Assessments:

Outcome 2: Students will build their understanding of the concepts through vocabulary learning.

Outcome 3: Students will create a concept map connecting key scientific terminology in this complex process of genetic expression.

- Concept Map
- Adapted from NCSEC Concept Map Rubric⁶

| | Excellent | Good | Below Average | Poor |
|--------------|--|--|--|---|
| Organization | Well organized. Logical format. Contains main concepts. Contains an appropriate number of concepts. | Thoughtfully organized. Easy to follow most of the time. Contains most of the main concepts. Contains an adequate number of concepts. | Somewhat organized. Somewhat incoherent. Contains only a few of the main concepts. | Choppy and confusing. Contains a limited number of concepts. |
| Content | Linking words demonstrate superior conceptual understanding. Links are precisely labeled. | Linking words easy to follow but at times ideas unclear. Links are not precisely labeled. | Linking words are clear but present a flawed rationale. Links are not labeled. | Difficult to follow. No links. |
| Cooperation | Worked extremely well with each. Respected and complemented each others ideas. | Worked very well with each other. Worked to get everyone involved. | Attempted to work well with others. At times “off task” and not everyone was actively involved. | Little or no teamwork. |

⁶National Computation Science Education Consortium Louisiana Team11. (2000). Rubric4: ConceptMap. Retrieved on December 20, 2007, from <http://www.ncsec.org/team11/RubricConceptMap.doc>.

Activity Four

Weekly Reflection (Approx. 10 minutes)

Students will write a reflection on learning at two levels in their academic notebook: what they learned about science and what they learned about literacy.

FROM THE STUDENT ACADEMIC NOTEBOOK

Week 2

1. Think about the science. What did you learn about the discovery, structure, and function of DNA?

2. Think about your learning. How will your experiences change the way you approach reading in the sciences?

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students to read and annotate Phelan 5.3-5.5.
2. Discussed each section of the text using text dependent questions.
3. Discussed how to create concept maps in science.
4. Asked students to list concepts from Phelan 5.2-5.5 on 3x5 cards.
5. Modeled how to use the concepts on the cards to show how they function in each science process.
6. Asked students to create a concept map.
7. Asked students to sort the cards to extend their vocabulary and concept learning.
8. Asked students to complete the weekly reflection in their academic notebook.

Lesson 5

DNA: Modeling in the Sciences

Overview and Rationale:

Students will first learn about the use and importance of modeling in science. They will then create their own models of the complex processes of transcription and translation after reading about protein synthesis and watching animations of these processes. Students will use these models to make predictions for how particular DNA mutations would impact protein synthesis and therefore cellular function. Understanding the role and function of models in science is an important unifying construct.

Tasks/Expected Outcomes:

1. Students will learn to create scientific models.
2. Students will learn to use scientific models for prediction.
3. Students will extend their knowledge about the role and functions of modeling in science.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
 - (D) produce a multimedia presentation (e.g., documentary, class newspaper, docudrama, infomercial, visual or textual parodies, theatrical production) with graphics, images, and sound that appeals to a specific audience and synthesizes information from multiple points of view.
- (23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into an extended written or oral presentation that:
 - (A) provides an analysis that supports and develops personal opinions, as opposed to simply restating existing information;
 - (B) uses a variety of formats and rhetorical strategies to argue for the thesis;
 - (C) develops an argument that incorporates the complexities of and discrepancies in information from multiple sources and perspectives while anticipating and refuting counter-arguments;
 - (E) is of sufficient length and complexity to address the topic.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices,

eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
1. Participate actively and effectively in one-on-one oral communication situations.
 2. Participate actively and effectively in group discussions.
 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- C. Produce and design a document.
 - 1. Design and present an effective product.
 - 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Transcription and Translation model (4 minutes) PBS The secret of life — http://www.youtube.com/watch?v=41_Ne5mS2ls&feature=watch-vrec
- Transcription animation — http://highered.mcgraw-hill.com/sites/0072943696/student_view0/chapter3/animation__mrna_synthesis__transcription__quiz_1_.html
- Translation animation — http://highered.mcgraw-hill.com/sites/0072943696/student_view0/chapter3/animation__how_translation_works.html
- Protein Synthesis Modeling Activity (teacher directions and student activity sheet)
- Accompanying modeling activity materials:
 - DNA transcription and translation strand (printed on card stock)
 - mRNA bases (printed using different colored paper)
 - tRNA (printed using a light color paper because students will need to write on them)
 - Codon chart (as a reference)
- Protein Synthesis Modeling Analysis Question Sheet

Timeframe:

200 minutes

Targeted Vocabulary:

Discipline-Specific Vocabulary

- | | |
|------------------|---------------|
| • model | • mRNA |
| • gene | • tRNA |
| • transcription | • amino Acid |
| • translation | • ribosome |
| • RNA polymerase | • mutation |
| • DNA | • deleterious |

Activity One

Annotation/Introduction to Transcription and Translation (Approx. 50 minutes)

Ask students to read and annotate Phelan 5.6 and 5.7. Students should pay particular attention to the diagrams in this section, as these sections are very dense, and the diagrams can help to visualize these complex processes.

After students have completed reading these sections, ask the following text-dependent questions:

1. Describe the process of transcription—what happens first? What is the role of RNA? What signals to process to begin? What signals the end?
2. Think about the court reporter analogy used in section 5.6—how does this help/hinder our understanding of DNA?
3. Describe the process of translation—what are the steps involved? What signals translation to begin? What signals it to end?

Show students the animation on transcription.

Transcription animation —

http://highered.mcgraw-hill.com/sites/0072943696/student_view0/chapter3/animation__mrna_synthesis__transcription__quiz_1_.html.

Ask students to summarize the process in their academic notebook.

Show students the animation on translation.

Transcription animation —

http://highered.mcgraw-hill.com/sites/0072943696/student_view0/chapter3/animation__how_translation_works.html.

Ask students to summarize the process in their academic notebook.

Ask students to work in pairs to add the material about transcription and translation to their concept map from lesson four.

Activity Two

Introduction to Modeling (Approx. 100 minutes)

Students will watch the short video on transcription and translation. Following this video, discuss the ways viewing this process (or science animations) can help our understanding of science one cannot see.

- Transcription and Translation model (4 minutes) PBS The secret of life — http://www.youtube.com/watch?v=41_Ne5mS2ls&feature=watch-vrec.

Introduce the idea of modeling in science as a way to go beyond “seeing” science to predicting what will happen next. Earlier in the unit students created a diagram of the structure of DNA, now they will create their own models of the process of protein synthesis based on analyzing the online animations and text explanations they have already read and/or viewed. Scientists use models to deepen their understanding of complex processes such as protein synthesis, but also to make predictions of outcomes when the process is altered in some way. In this activity, students are given minimal directions on how to create their model in an effort to allow them the

productive struggle that is required to truly understand the processes of transcription and translation. A step-by-step procedure for this activity is included for **teacher** use only. The teacher can use this procedure to guide students as needed, but only after allowing students time to grapple with the process themselves. **DO NOT** copy these procedures for students. The intent of this activity is for students to *create* a model of protein synthesis, not simply follow directions on how to make one. Remind students to use their notes from the animations, text, and articles they have read to help them create the model.

TEACHER RESOURCE

PROTEIN SYNTHESIS – TRANSCRIPTION AND TRANSLATION: A Modeling Activity

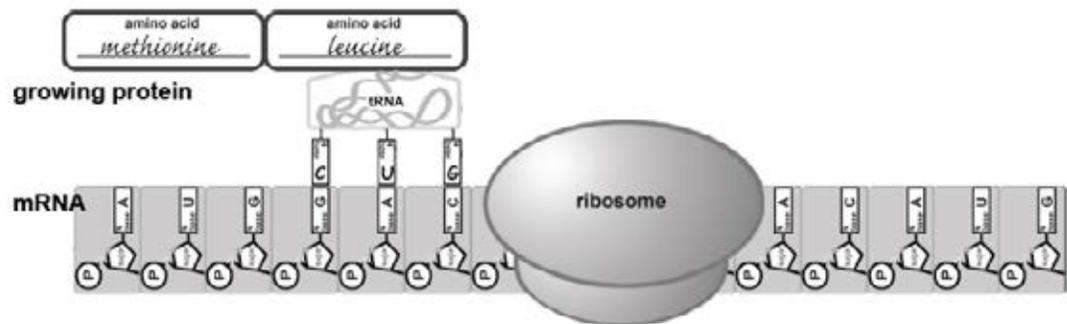
(Note: Students have this overview in their academic notebook. They do not have the step-by-step procedure)

DNA is the molecule that stores the genetic information in your cells. That information is coded in the four **nitrogenous bases** of DNA: C (cytosine), G (guanine), A (adenine), and T (thymine). The DNA directs the functions of the cell on a daily basis and will also be used to pass on the genetic information to the next generation. Because of its critical role in all the functions of the cell, DNA is kept protected in the nucleus of your cells.

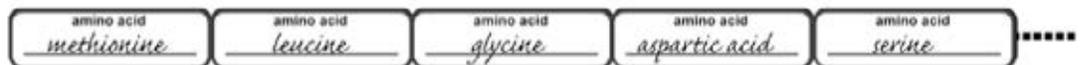
DNA is organized in sections called **genes**. Genes code for **proteins**, and it is proteins that do all the work in the cell. They function as structural proteins—serving as the building blocks of cells and bodies. And they function as enzymes—directing all the chemical reactions in living organisms. Proteins are made in the cytoplasm on ribosomes.

Since DNA cannot leave the nucleus, the *information* from DNA must be transmitted from the nucleus to the cytoplasm. During **transcription**, each gene on the DNA is read and codes directly for a **messenger RNA (mRNA)** molecule. The mRNA is made by matching its complementary bases—C, G, A, and **U (uracil)**—to the DNA bases. This process is called transcription, because the message is going from one version of nucleic acid language (DNA code) to another version of nucleic acid language (RNA code), so it is like transcribing from the key of G to the key of C in music. Before leaving the nucleus, this primary mRNA transcript is modified in several ways. **Introns** (intervening non-coding units) are edited out and **exons** (expressed coding sequences) are spliced together. In addition, a **5' GTP cap** and a **3' poly-A tail** are added to the mRNA to protect it from RNase enzymes in the cytoplasm. This mature mRNA transcript then leaves the nucleus and carries the code for making the protein from the DNA gene in the nucleus to the ribosome in the cytoplasm. During **translation**, the ribosome reads the sequence of bases on the mRNA in sets of three—the triplet **codons**. Another type of RNA—**transfer RNA (tRNA)**—brings the protein building blocks—**amino acids**—to the ribosome as they are needed. The ribosome bonds the amino acids together to build the protein coded for by the gene back in the nucleus. This process is called *translation*, because the message is going from nucleic acid language (DNA/RNA code) to the completely different amino acid language (protein code), so it is like translating from English to Chinese.

- To be ready for the mRNA in the cytoplasm, design a ribosome to use in your simulation. Be sure to distinguish the small and large ribosomal subunits and mark the A, P, and E sites of the ribosome.
- To help the ribosome do its job, use a pencil to draw lines, which divide your mRNA into triplet codons. Now obtain tRNA molecules and write in the complementary anticodons to match your mRNA codons so that the tRNAs bring the correct amino acid to the ribosome.
- Label the name of the amino acid that each tRNA is carrying. To help you with this, use the mRNA codon chart and the amino acid code chart supplied by your teacher. Start reading the mRNA at the START codon and end at the STOP codon. Follow the diagram below.



- As the tRNA molecules match the mRNA codons, cut off the amino acid and bond them together in a chain to simulate the action of the ribosome—covalently bonding the amino acids in a polypeptide chain.



- Use your DNA, your mRNA, and your polypeptide to answer the Summary Questions.

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Ask students to use their models to predict the outcomes of particular DNA mutations by completing the modeling analysis questions handout. In small groups, ask student to work on the handout and make sure that they have complete captions of the model and that their representations are accurate.

- c. Did this change in the DNA sequence cause any significant change to the protein produced? Explain.
- e. Why are insertions and deletions called “frameshift” mutations, and what is meant by the “reading frame” of a gene?

11. FRAMESHIFT MUTATION 2: Here is your original DNA sequence from this lab and the amino acid sequence that was translated from it:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|---|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3' | | | | | | | | | | 5' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| C | T | G | A | G | C | T | A | C | T | G | A | G | C | T | G | A | G | C | T | G | C | A | G | A | G | C | C | G | A | G | C | T | C | C | T | G | T | G | T | A | A | A | C | T | T | G | | | | |
| X | | X | | MET | | THR | | ARG | | LEU | | ASP | | VAL | | SER | | ALA | | ARG | | GLY | | HIS | | ILE | | STOP | | | | | | | | | | | | | | | | | | | | | | |

Now let’s simulate a frameshift mutation by deleting the 10th base. Now transcribe this new DNA strand into mRNA, and then also translate it into its amino acid sequence.

- a. Did this change in the DNA sequence cause any significant change to the protein produced? Explain.
 - b. Which do you think would cause a more profound biological impact: (1) a deletion/insertion near the beginning of a gene, or (2) a deletion/insertion towards the end of a gene? Explain.
13. Are mutations always deleterious? What do you think is the evolutionary value of mutations? Explain.

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Assessments:

Outcome 1: Students will learn to create scientific models.

- Student model creation

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Accurately models the process. | No | Somewhat | Yes |
| • Completely represents each part of the process. | No | Somewhat | Yes |

Outcome 2: Students will learn to use scientific models for prediction.

- Protein synthesis modeling analysis questions

| Meets | | | |
|---|----|----------|-----|
| • Accurately responds to questions. | No | Somewhat | Yes |
| • Uses model information in responses. | No | Somewhat | Yes |
| • Uses Scientific terminology in explanation. | No | Somewhat | Yes |
| • Demonstrates ability to use the model for prediction. | No | Somewhat | Yes |
| • Responses demonstrate conceptual understanding. | No | Somewhat | Yes |

Activity Three

Annotation/ Introduction to Mutations (Approx. 50 minutes)

Ask students to read and annotate Phelan 5.8 and 5.9. Ask students to be sure to show comparison/contrast or cause/effect relationships when annotating the two types of mutations and the three causes of mutations in section 5.8. In other words, what defining features separate the different types of gene mutation? Ask them to work on incorporating the text with the figures on these topics.

The goal is to be able to recall what they have read well enough that they can use only the diagram to explain the processes involved. Ask students to think about what they predicted about each type of mutation when using the models as they read about gene mutations.

After annotating this section ask students to share how they showed the relationships in their annotations and made the differences explicit in their notes. Discuss how this can help them recall the information.

Ask students to work in pairs to explain the types of mutations using figure 5.16. Students will take turns explaining one of the mutations depicted. The listening student will check the information based on their own text annotations of the material.

Ask students to annotate 5.9. Ask them to think about their knowledge of translation and transcription as they think about how mutations can lead to disease. It is important for them to annotate examples in this section as they are used to explain the general concept.

Ask students to refer back to their model and the predictions they made about the types of mutations. Were they correct? Do they need to revise any answers after having read about mutations in more detail.

Activity Four

Reflection (Homework)

Ask students to reflect on the usefulness of modeling in science and how modeling can improve understanding of complex biological processes such as protein synthesis in the academic notebook.

Assessments:

Outcome 3: Students will extend their knowledge about the role and functions of modeling in science.

- Demonstration and explanation of models in small groups/captions on models.

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Accurately explains the model. | No | Somewhat | Yes |
| • Completely represents each part of the process in captions. | No | Somewhat | Yes |
| • Uses Scientific terminology in explanation. | No | Somewhat | Yes |

- Reflection on scientific process of protein synthesis and the scientific practice of modeling.

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Reflection references the resources read. | No | Somewhat | Yes |
| • Reflection uses information from sources to support student's feelings. | No | Somewhat | Yes |
| • Reflection is written in appropriate prose. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Asked students to read and annotate Phelan 5.6-5.7.
- 2. Showed and discussed the transcription and translation animations.
- 3. Asked students to summarize the processes in their academic notebooks.
- 4. Asked students to add transcription and translation to their concept maps.
- 5. Showed the 4 min. video about transcription and translation
- 6. Introduced the modeling activity.
- 7. Provided the handouts for the modeling activity:
 - a. DNA transcription and translation strand (printed on card stock)
 - b. mRNA bases (printed using different colored paper)
 - c. tRNA (printed using a light color paper because students will need to write on them)
 - d. Codon chart (as a reference)
- 8. Asked students to create their model and respond to the questions in their academic notebook.
- 9. Asked students to use the model for prediction using the questions in their academic notebooks.
- 10. Asked students to read Phelan 5.8-5.9 thinking about comparison and contrast relationships.
- 11. Asked students to reflect on the experience in their academic notebook.

Lesson 6

Taking Notes from Lecture

Overview and Rationale:

Students will take notes over a full-length documentary. This will advance the note-taking skills introduced in previous units. Students will also continue to read Phelan Chapter Five to learn more about the role of DNA in biotechnology.

Tasks/Expected Outcomes:

1. Students will understand the steps involved in biotechnology.
2. Students will learn note-taking strategies for science documentaries.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.

3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Cornell notes PPT
- The biotech revolution (59 minutes)
<http://www.youtube.com/watch?v=bukTqyWgaM8>

Timeframe:

150 minutes

Targeted Vocabulary:

Discipline Specific Vocabulary

- biomolecular
- restriction enzymes
- polymerase chain reaction
- transgenic
- plasmids

General Vocabulary

- unparalleled
- amplify

Activity One

Annotating Multi-step processes (Approx. 40 minutes)

Ask students to read and annotate Phelan 5.10. This is the last section students will read in this text (other than using one of the remaining sections in their final project) and, at this point, we want them to recognize their ability to pull out the information that is important to learn. We want students to use the knowledge and skills they have learned this far to determine the key ideas in this section.

Ask students to preview this section and discuss what will be important to note (the five steps of biotech). What guided them to this knowledge of what to mark? What will they need to note about each step (why it occurs, when it occurs, what happens, what are the outcomes)?

This is a very important section for understanding biotechnology. **Ask students to annotate up to the second column of page 180.** Have them share out their annotations with a partner.

Place students into Five working groups. Assign each group one of the steps in biotechnology (p 180-183). These groups will be responsible for creating an explanation of one of the five steps (including the important terminology and corresponding diagrams) to their peers. Remind them to use a dictionary and the

prefix-suffix chart to help them determine word meanings. Once the five groups have read, annotated, and created an explanation to share, place them into learning groups that has one member from each of the five working groups. The students will carefully explain their section to the group. After students have heard explanations of the five steps, they will write a summary in their academic notebooks.

Assessments:

Outcome 1: Students will understand the steps involved in biotechnology.

- Summary

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Summaries include relevant information, summarizes and/or paraphrases effectively. | No | Somewhat | Yes |
| • Indicates understanding of the five steps process. | No | Somewhat | Yes |
| • Includes correct terminology. | No | Somewhat | Yes |

- Annotations

Annotation Checklist

- Your annotations are perfect! Keep up the good work.
- You have missed many key ideas. Go back and annotate them.
- You need to put your annotations in your own words—do not copy from the book!
- Be briefer in your annotations. You do not need to write in full sentences
- You have ignored the graphic aids. Annotate them.
- You need to note the specific examples—they could reappear on the exam.
- You need to enumerate the specific facts, characteristics, causes, events, etc., in the margin or in the text. Get the details, too!
- Your annotations need to focus on the key ideas more and less on details.
- You are underlining too much—work more on writing your summaries in the margin.
- You are annotating too much! It will take you forever to do a chapter.
- You are annotating too little! You do not have enough information annotated to use as a study aid.
- You need to develop some symbols of your own and use them.
- You need to develop a method for organizing your annotations.
- Please annotate these sections or pages again.

p. _____ p. _____

p. _____ p. _____

Activity Two

Review of Note-Taking (Approx. 10 minutes)

Review the Cornell Notes PPT from Unit 1: Nutrition. Discuss the importance of noting the key points during the lecture—including examples, diagrams, etc. Then, after the lecture, students will use the margins to write question for self-testing over the material.

Activity Three

Taking Notes from Video (Approx. 100 minutes)

Students will watch the biotech revolution video and will take notes using the Cornell method of note taking. Ask students to take notes in their academic notebook. Review the following note-taking tips from Unit 1: Nutrition.

FROM THE STUDENT ACADEMIC NOTEBOOK

- *Read ahead of time:* Most college instructors provide outlines in their syllabi of what materials will be read and when. Read these closely before attending class. A close reading of the assigned materials beforehand will alleviate the need to take tons of notes because lectures often repeat material covered in the textbooks.
- *Take reading notes:* Again, in preparation for the lecture, find a system that works for you and take reading notes. You may read a small section of the text, then review it, and then take notes.
- *Listen closely:* This may seem simple but during a long lecture it is easy to drift away and not listen. Stay focused during class and try to identify aspects of the lecture that are not covered in the assigned readings. These new components are perfect note taking opportunities. Keep your mind actively engaged.
- *Be organized in your note taking:* Date each lecture. Leave a space at the top of the page so that you can come back later and outline the major topics covered in the lecture. This mini-outline creates a kind of running table of contents for you that you can review on a day-to-day basis. Use a note-taking tool, like a graphic organizer, that helps you identify the key science processes, terms and ideas.
- *Deal with Diagrams:* An important component in most science lectures is diagrams, tables, and illustrations. When this information is discussed, it is sometimes difficult to take notes on both the diagrams and what the instructor is saying. One way to deal with this problem is to write down the title of the diagram (e.g. the Fluid Mosaic Model) but focus your note taking on the instructor's explanation. Then, refer to your textbook after class to connect the visual with your notes.

Show the biotech revolution video — <http://www.youtube.com/watch?v=bukTqyWgaM8>.

Stop the video periodically (every 15-20 minutes) and ask students to share their notes with a partner, ask questions and fill-in gaps. The video runs about 60 minutes. With the breaks, viewing the entire video should take approximately 90 minutes.

After viewing the video, ask students to review their notes and add self-testing questions in the margins. Ask students to circle the vocabulary and concepts they

have questions about. Discuss the questions as a whole class. Be sure to review the following vocabulary terms and ideas

- Biomolecular (ask students to use their prefix-suffix chart to help them make meaning of this term)
- Gene mapping
- Three stages of medicine
- Transhumans

Sample notes from the biotech revolution video:

| TEACHER RESOURCE | |
|--|--|
| The Biotech Revolution | |
| <p>Explain the biomolecular revolution.</p> | <p>“We are currently witnessing a revolution: From an age of scientific discovery to an age of scientific mastery, an age in which we will be able to discover the destiny of life itself.”</p> <p>Biomolecular revolution promises a strong ability to manipulate life at the most fundamental levels:</p> <ul style="list-style-type: none"> • Enable us to grow human organs in labs. • Change genetic heritage. • Enhance our abilities. • Even shape the evolution of mankind. <p>We are changing from passive observers to active choreographers of nature. We have unparalleled possibilities, enabling us to rethink who we are and how we will live. We currently hold the future of humanity in our hands.</p> <p>Narrator is on his way to the doctors to diagnose his medical future. In the past, scientific advances gave us a great way of checking our future and health, but the biotech revolution will give us greater control of our health.</p> <p>First stage of mastery of life:</p> <ul style="list-style-type: none"> • Allow us to eliminate many diseases. • Perhaps prolong lives by decades. |
| <p>Explain the reasons and impacts of running genetic tests for an individual.</p> | <p>The future will bring us owners’ manuals for ourselves.</p> <ul style="list-style-type: none"> • Mapping genes—using personal history and use of medications to determine health future, in case, future of the narrator’s: <ul style="list-style-type: none"> - Blood test for heart disease, Alzheimer’s, diabetes, and such, including all major diseases. - This practice of genome mapping will soon be very common—like checking blood pressure. - It is very interesting to be able to read genomes and predict health future, but it is also a “Pandora’s box” if discovering something “screwed up” or “lethal”—and, most people have some genes like this. |
| <p>Describe the ethical and social results of knowing genetic risks.</p> | |

Describe the three stages of medicine. How is the third stage currently impacting our society?

Explain the HGP. What is the goal of the CGP?

- Doctors run a genome-wide genetic analysis, but will also be respectful of individual's privacy based on the results.
- This testing procedure would have been impossible without the Human Genome project (HGP).
- Took ten years, billions of "pounds," thousands of researchers over six nations.
- (First draft of human genetic code, 90% of it completed in 18 months, containing nearly 3 billion letters of genetic code). A milestone in human history, because it could potentially eliminate many diseases.
- 1990s scientists did not think that human genome project could be done in only 15 years without advanced technology. This breakthrough of human endeavor—changed everything.

History of medicine:

- BG – Before genome.
- AG – After genome.
- Move from age of discovery to age of mastery (biomolecular revolution).

Now in the age of mastery, we can manipulate our biological codes.

- Medicine (three stages):
 - Stage 1: Germ theory, better sanitation, modern sewer system.
 - Stage 2: Antibiotics, vaccination, modern surgery.
 - Stage 3: Genetic medicine (most profound).
- Story of boy with no immune system; his story offers a glimpse of the future; "Bubby boy" condition (SCID = Severe Combined Immunodeficiency); immune system comes from bone marrow, so try to replace marrow with transplanted marrow from a health match; came up with gene therapy by combining healthy bone marrow with stem cells with working copy of chain.
- Gene therapy may eventually eradicate other diseases that threaten our lives.
- SCID easy to treat through therapy because it only has a single rouge cell.
- Cancer, Alzheimer's, and heart disease harder to treat because they have multiple rouge genes and a lot more difficult to sequence.

Cancer:

- 200,500 die of cancer everyday.
- Cancer death every 30 seconds.
- HGP succeeded by an attempt to map a cancer-free future.
- Caused by mutations in DNA; To study cancer: need to figure out how is functioning within the tumors; want to look at the 50 most common cancers and sample hundreds of tumors to try to sequence all that DNA (roughly 12,500 HGPs).

Explain the secret weapon to preventing cancer in the future.

Cancer Genome project (CGP):

- Goal: to compile an encyclopedia of all known cancers, marking down every single genetic mutation in all cancers.
- Francis Collins believes its doable and that cancer is preventable.
 - Secret weapon to figuring this out: the merger between the computer and the biotech revolutions.
 - Biology, with use of digital tools, can now become quantitative, and get more at the heart of illnesses.

Biotech Revolution

- Promises to reprogram our biology—
 - Turning genes on and off.
 - Turn on or off enzymes, proteins, and other gene expressions.
 - Possible reprogram biology away from cancer, heart disease, major diseases.
 - Ability to do this is increasing exponentially (and doubling) every year.

What exactly is the biotech revolution?

What if our medical history will be irrelevant compared to the medical future ridden in our genes?

Genetic test (Narrator's results):

How might genetic tests and knowledge of an individual's DNA work against an individual?

- At risk for heart disease (however; it's low in Japanese people in general).
- He had to ask himself: If at risk for Alzheimer's, what about financial stability for his future to cover illness expenses, how will he be taken care of, what measures should they (his family) take when/if he gets sick?
- Results, he says, forces one to think about social and ethical questions.
- Knowing genome health future may revolutionize health care.
- Health future might cause us to want us to know everything that's possible to know.
- DNA could work against us (insurance example).

Provide and elaborate on examples of current biotech revolutionary projects.

Biotech revolution ("Human body shop"):

- Might enable us to repair and regrow the tissues and organs that our bodies are made out of.
- Regenerate human organs.
- Skin, cartilage, blood vessels, windpipes, small kidneys, etc.
- Lab grown bladders actually used in 7 patients in 2006 research study.
- This gives us power to make us better, lengthen life, make us healthier, or perhaps even immortal.

If we can suddenly regenerate our body parts, what will that mean for our future? Would life be less interesting if we no longer had pain or physical issues, and so on?

Describe the difference between humans today and humans continuously being given regenerated body parts, longer lifespans, and ability to feel no pain?

Explain the second stage in the mastery of life.

How is the power of cloning currently being used?

Explain and interpret potential ethical and social implications of cloning.

Due to modern medicine, we can now double the lifespan of humans. We are now uncovering the molecular secret of the aging process.

A lab in Massachusetts discovered section of sequence that causes aging. If they can determine that sequence, then it would hold the answer to all aging issues. Molecular secret to the aging process: calorie restriction, which is a diet that was discovered nearly 75 years ago and slow down the aging process in rats and other animals that it was tested on. It has a genetic basis and can impact on the aging process. Researcher feels that if the aging process can be affected, then the result will also be favorable on diseases that come with age: could be healthier longer and live longer.

The nature of life is not mortality, but immortality. DNA is an immortal molecule. This molecule was on earth, probably more than 3.5 billion years ago. It's a self-made molecule, which even after duplication and duplication and in variations, is still around today. This is as close to immortality on earth that we can get.

Our life is dictated by sense of self, sense of when we will continue to life, and then when we will die. We have to consider the implications of manipulating our genes. Also, we need to consider why we might want to live longer and what we would do with technology and it's advances in that time.

Second stage of mastery of life—

- Control own biology.
- Control biology of future generations.
- Tamper with human evolution itself.
- 1996 – first cloned mammal (Dolly the sheep); made illegal in several countries.
- Tampering with new strains of crops, new varieties of farm animals.

How will we use this power of cloning?

Marquis Ranch in Texas—

- Ranch has all cloned cattle.
- Four cloned families.
- Cloning allows for the breeding of almost perfect animals.
- Enable him to breed animals of assured strength and extreme pedigree (cloning prize bulls).
- Cloning allows him to know exactly what kind of animal he'll get.

We need to think about what cloning should be used for or not used for.

- Can we put embryos in near infertile people?
- Can cloning happen on a case-by-case basis?
- Should cloning be allowed for rich people to maintain wealth in family?
- We might have to accept that human cloning will eventually happen.
- Human cloning can change human nature itself, which is power to genetically enhance ourselves to give us abilities beyond our biology heritage.

Argue on the role humans should have with cloning.

- Look at the mouse example with enhanced brain protein; “regular” mouse can’t find platform under cloudy water, even after shown it, but genetically designed mouse can find it almost immediately.
- Memory enhancement happens in mice, which are very similar to humans, and thus very possible for memory enhancement to be performed on humans (a possibility at least).
- Might be able to enhance mental as well as physical abilities.

Will we do the same as we do on animals and use this power to enhance ourselves?

Discuss the world with all genetically enhance individuals.

- Society built on being better than others.
- Maximized performance in sports.
- What about allowing people a “better go at a better life,” if they’ve been given a “short straw”?
- Raises question as to who decides what’s an improvement and enhancement...
- Key question: What happens to society if everyone is clamoring to have their status and their capabilities boosted? A race of super-beings? Haves and haves-not?
- What if our individual modified genes affects our children’s genetic makeup?
- Will we have a generation of designer children?

Describe the debate that genetically modified genes will have and how they will impact our future.

Genetically modified genes can cause us to tremendously enhance or improve humans—but we need to consider the impacts on our future.

- Should humans be allowed to take control of their own genetic evolutionary futures?
- We seek to extend ourselves through our knowledge.
- It’s up to us to figure out how our future will be.
- Potential genetic divide.
- It’s our first chance in life to have the potential to be many different things and to be many different things.
- Pace of science is increases. Future may bring even more possibilities.
- One day we can length life span, human abilities, and cure diseases.
- Transhumans?
- Key is to engage in reason, democratic debate.

Activity Four

Reflection (Homework)

Ask students to complete the following homework activity:

Students will respond to the questions in their academic notebook. Explain to students that they will be selecting a topic to research in the field of biotechnology within the next week. These questions will be used to help them decide on a topic for research.

FROM THE STUDENT ACADEMIC NOTEBOOK

Based on the video you watched and the text you read, respond to the following questions:

- Why might a scientist want to modify organisms?
- What are the current concerns and advancements in biotechnology?
- What interests you about biotechnology?

Assessments:

Outcome 3: Students will learn note-taking strategies for science documentaries.

Cornell notes from video—Use lecture note checklist for assessing the notes.

- Assessment using the lecture note checklist

| Lecture Note Checklist | | | | | |
|--|---------------|------------------|----------|--------------|----------|
| <i>Please circle the appropriate number</i> | 5 | 4 | 3 | 2 | 1 |
| | Always | Sometimes | | Never | |
| 1. The lecture notes are titled and dated. | 5 | 4 | 3 | 2 | 1 |
| 2. The notes are easy to read. | 5 | 4 | 3 | 2 | 1 |
| 3. The notes are organized. | 5 | 4 | 3 | 2 | 1 |
| 4. You underline or star key ideas. | 5 | 4 | 3 | 2 | 1 |
| 5. You utilize abbreviations of longer words. | 5 | 4 | 3 | 2 | 1 |
| 6. You skip spaces between ideas/ concepts. | 5 | 4 | 3 | 2 | 1 |
| 7. You indent minor points. | 5 | 4 | 3 | 2 | 1 |
| 8. You note all the important concepts | 5 | 4 | 3 | 2 | 1 |
| 9. You paraphrase what the instructor says. | 5 | 4 | 3 | 2 | 1 |
| 10. Your notes incorporate examples. | 5 | 4 | 3 | 2 | 1 |
| 11. Your notes are accurate. | 5 | 4 | 3 | 2 | 1 |
| 12. Your notes are complete. | 5 | 4 | 3 | 2 | 1 |
| 13. Your notes include self-test questions. | 5 | 4 | 3 | 2 | 1 |

| Lecture Note Checklist (continued) | | | | | |
|--|----------|----------|----------|----------|----------|
| 14. Your notes include self-test questions. | 5 | 4 | 3 | 2 | 1 |
| 15. Your self-test questions: | 5 | 4 | 3 | 2 | 1 |
| a. Are complete. | 5 | 4 | 3 | 2 | 1 |
| b. Will prepare you for the instructor's tests. | 5 | 4 | 3 | 2 | 1 |
| c. Cover awll the material from that day's lecture. | 5 | 4 | 3 | 2 | 1 |
| d. Use short-answer format. | 5 | 4 | 3 | 2 | 1 |
| e. Are appropriate for the type of tests in the class. | 5 | 4 | 3 | 2 | 1 |
| f. Combine material from multiple lecture topics into a single question. | 5 | 4 | 3 | 2 | 1 |

- Biotechnology homework questions

| Evaluation Rubric | | | |
|---|----|----------|-----|
| | No | Somewhat | Yes |
| • Student responses include relevant information, and indicate an ability to summarize and/or paraphrase effectively, and use understand the current concerns in biotechnology. | | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Asked students to annotate Phelan 5.10.
- 2. Asked working groups to create an explanation of one of the five steps in biotechnology.
- 3. Asked working groups to share their sections with their learning group.
- 4. Asked students to summarize the five steps of biotechnology.
- 5. Reviewed the Cornell method of note taking.
- 6. Asked students to take notes over the biotechnology video
- 7. Paused the video periodically to allow time for reflections/questions/discussion.
- 8. Discussed student questions about vocabulary and concepts about the video.
- 9. Assigned biotechnology homework questions.

Lesson 7

Preparing for Science Exams

Overview and Rationale:

Students will learn to prepare for and take a science exam. Students will generate their own exam review by organizing the concepts they learned, thinking about the types of questions teachers ask, rehearsing material they need to know, and reflecting on the strategies that will help them master the material. By creating their own review, rather than relying on the teacher to supply a review, students must be able to select the information to be learned and create a way to learn it. In this lesson they will use three strategies to help them generate effective reviews: jot lists, concept maps, and question prediction.

Tasks/Expected Outcomes:

1. Students will utilize strategies to generate their own exam reviews.
2. Students will learn to organize concepts as a way to comprehend science processes.
3. Students will learn to ask and answer higher-level questions.
4. Students will demonstrate their knowledge on a multiple-choice and short essay exam.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
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 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
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 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

(15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:

- (A) write an analytical essay of sufficient length that includes:
 - (i) effective introductory and concluding paragraphs and a variety of sentence structures;
 - (ii) rhetorical devices, and transitions between paragraphs;
 - (iii) a clear thesis statement or controlling idea;
 - (iv) a clear organizational schema for conveying ideas;
 - (v) relevant and substantial evidence and well-chosen details;
 - (vi) information on all relevant perspectives and consideration of the validity, reliability, and relevance of primary and secondary sources; and
 - (vii) an analysis of views and information that contradict the thesis statement and the evidence presented for it;

(§110.34) English Language Arts Standards: Speaking and Listening

(24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:

- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
- (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

(25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

(26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity.

Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).

1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
1. Participate actively and effectively in one-on-one oral communication situations.
 2. Participate actively and effectively in group discussions.
 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
1. Analyze and evaluate the effectiveness of a public presentation.
 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
1. Listen critically and respond appropriately to presentations.
 2. Listen actively and effectively in one-on-one communication situations.
 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- C. Produce and design a document.
1. Design and present an effective product.
 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.

- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Phelan Chapter Five

Timeframe:

150 minutes

Targeted Vocabulary:

The terms and concepts on the concept map,

Activity One

Discussing the Exam Format. (Approx. 5 minutes)

Discuss the format of the exam with the class. The exam will contain multiple-choice (25 items) and short essay (three items) questions. The questions will ask students to apply what they have learned so they need to fully understand the concepts—it is more than a memorization task. Spend a few minutes discussing what this means by presenting the following questions:

For example, the question “What is the shape of DNA called?” is a memory level question. This exam will ask very few memorization items. Instead, students should prepare for items that ask them to synthesize ideas such as “Which of the following is the most essential to process a protein molecule after it has been translated.”

To prepare for the exam, students will generate their own review using jot lists, concept maps and reciprocal questioning.

Activity Two

Organizing Concepts (Approx. 10 minutes)

Remind students that when they are preparing for an exam, they need to organize all of the concepts they need to know. To organize for this exam, students will make a jot list of the concepts that they will need to add to their concept map. Ask students to think about all of the material that will be covered on the exam. Remember to ask them to think beyond the textbook alone (Phelan 5.1-5.10; DNA models and animations, biotechnology video). What other materials? (Students will make a list in their academic notebooks) ite question for self-testing over the material.

Remind students that their goal is to go beyond memorizing individual vocabulary words. If they only know the definition of the term, but do not understand how the term fits into the larger science concept, they are missing the most important part of vocabulary learning in science (and they will not do well on the exam).

Activity Three

Expanding Concept Map (Approx. 25 minutes)

Ask students to examine the concept map they began in Lesson Four to see which concepts need to be added. Then students will work in groups to expand their concept map to include important items generated in their jot list. As students are working, they should ask each other questions and review their annotations if they find a concept that they do not understand. Have students expand their mpas in a way that indicates what additions/changs they made (different color, sticky notes, etc.)

Once students have expanded their maps, discuss how students can use them to study for an exam. To study the map, students will try to explain the broad concept (for example, protein synthesis) by explaining all of the ideas connected to it in detail.

FROM THE STUDENT ACADEMIC NOTEBOOK

Concept Maps

(Adapted from Nist & Holschuh, 2012 College Success Strategies, 4th edition).

How Do You Use Maps to Study?

When you study your map, you can begin by rehearsing one concept at a time. Then cover up everything except the main concept, and begin to talk the information through. Say the related material and then check your accuracy. Focus on how the concepts are related to each other because that is the major strength of mapping.

Assessments:

Outcome 1: Students will utilize strategies to generate their own exam reviews.

Outcome 2: Students will learn to organize concepts as a way to comprehend science processes.

- Concept Map

Evaluation Rubric

| | | | |
|---|----|----------|-----|
| • Show relationships between concepts. | No | Somewhat | Yes |
| • Accurately depicts the science processes. | No | Somewhat | Yes |
| • Is complete. | No | Somewhat | Yes |

Activity Four

Predicting Test Questions (Approx. 25 minutes)

In small groups, ask students to predict one question over the content they have learned so far using the concepts from their jot lists and their concept maps.

They can use any material—chapter, notes, etc. to formulate one question. (Note: Many students will predict “what” questions. Use this as an opportunity to help them hone their question prediction skills—“Instead of asking what is DNA, how can you word that question so that it gets at a deeper understanding of the concept?”) Have students rework their questions so that they are written in ways that encourage higher-level thinking and deeper understandings of the concepts.

Discuss the following guidelines for creating questions:

- Avoid “what” questions. Ask higher-level questions using words such as *why*, *how*, *explain*, or *compare*. For example, it is much better to ask a question such as *Explain the role of tRNA in protein building* than to ask *What is tRNA?*
- Predict short answer items (even when you are taking multiple-choice tests) because they will help you check your knowledge of an entire concept, rather than one small part.
- Ask questions that require application, analysis, or interpretation of ideas. These are the types of questions you will be asked.
- Get at the “big picture.”
- Ask questions that make people really think about the concepts.
- General hint: if it takes more words to ask the question than to answer it, ask a tougher question.

Present the following two questions to students:

1. List the steps in translation.
2. Describe the process of translation.

Ask students to explain why the second question is a better one to predict. Ask students use their concept maps to predict 10 higher-level questions. They should sketch out an answer as well—they don’t need full sentences—just enough information to know if their classmate is on the right track when responding to the question during the exam review.

FROM THE STUDENT ACADEMIC NOTEBOOK

| | Question | Answer |
|----|----------|--------|
| 1 | | |
| 2 | | |
| 3 | | |
| 3 | | |
| 4 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Assessments:

Outcome 1: Students will utilize strategies to generate their own exam reviews.

Outcome 3: Students will learn to ask and answer higher-level questions

- Predicted Test Questions

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Contains appropriate question and answers. | No | Somewhat | Yes |
| • Questions come from all of the sources used thus far. | No | Somewhat | Yes |
| • Answers are complete enough to tell that the student understands the entire concept. | No | Somewhat | Yes |

Activity Five

Test Review (Approx. 35 minutes)

Divide students into small groups for the review. First students will take turns to explain a part of their concept map to the group. They should be sure to include all of the important information about the science process they are describing. Each student in the group should present a different concept so that all major ideas are discussed. For example, one student might discuss the process of transcription, another might discuss the process of translation, a third might discuss the steps in biotechnology, and so on.

Then, students will work in pairs to ask each other the questions they had predicted. Students will take turns asking and answering questions. Tell students to respond to the questions without looking at the text or the concept map to be sure they really understand the science concepts and processes.

Activity Six

Exam (Approx. 50 minutes)

Hand out the science exam to students. Let them know that they have the entire class period to work on the exam. Remind them to write in full sentences when responding to the short essay items.

Activity Seven

Science Exam Reflection (Homework)

After the exams are returned, ask students to complete the exam reflection in their academic notebooks. Ask them to think about what went well and what they would need to change for the next time they take a science exam.

Note: Proceed to Lesson Eight as the next activity while exams are being scored. When exams are returned, this reflection will be a homework assignment that happens concurrently with the work on the final project.

FROM THE STUDENT ACADEMIC NOTEBOOK

Exam Reflection

The purpose of this evaluation is to help you learn from your experience preparing for and the exam. Think about how you felt about your level of preparation before the exam, where you focused your effort, and how you felt taking the exam.

1. What went right? Analyze the exam to discuss what you did well and what helped your thinking about these concepts.
2. What went wrong? Analyze the exam to discuss areas you might want to work on. In this analysis:

Think about the errors you made and diagnose the nature of your difficulties as they relate to the DNA and biotechnology concepts learned, problem solving expected, or your beliefs about science and/or science learning. Note: don't just describe a difficulty; you need to analyze your thinking. (For example, a poor diagnosis would be "I was confused" or "I picked the wrong answer." A good diagnosis would provide a reason for the errors " I thought that a person's tRNA was the same as mRNA.")

3. What will I do differently next time? Conduct an overall assessment of your performance. This is where you will look for patterns to your errors, think about particular aspects of the exam that may have been difficult for you, types of questions you missed, general concepts that were difficult, etc. In your assessment write about how understanding these issues will impact your science test taking in the future.

Assessments:

Outcome 4: Students will demonstrate their knowledge on a multiple-choice and short essay exam.

- Exam

| Answer Key | | | | | |
|------------|-------|-------|-------|-------|--|
| 1. A | 6. E | 11. A | 16. B | 21. E | |
| 2. D | 7. E | 12. C | 17. A | 22. E | |
| 3. B | 8. C | 13. D | 18. B | 23. E | |
| 4. A | 9. E | 14. E | 19. A | 24. D | |
| 5. E | 10. B | 15. C | 20. C | 25. D | |

- Exam Reflection

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Provides thoughtful reflection. | No | Somewhat | Yes |
| • Accurately assesses performance. | No | Somewhat | Yes |
| • Provides a strategy that they will use to prepare for the next exam. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Discussed the exam format with the students.
2. Asked students to create a jot list of important concepts.
3. Reminded students that they are doing more than memorizing unit vocabulary—they are using vocabulary as a way to understand larger concepts.
4. Asked students to work in small groups to expand their concept maps.
5. Discussed how to use concept maps to study.
6. Reviewed the guidelines for predicting exam questions.
7. Asked students to predict 10 higher-level questions and answers about the concepts.
8. Asked students to work in small groups to use explain a part of the concept map during the test review.
9. Asked students to work in pairs to ask each other the questions they predicted.
10. Asked students to complete the exam.
11. Asked students to complete the exam reflection once the exams have been returned.

DNA Exam

Name:

Class period:

Teacher:

1. Double-stranded DNA that contains a high G–C content requires a higher temperature in order to separate the two DNA strands. This is because:
 - a. G–C base pairing involves three hydrogen bonds while A–T pairing involves only two.
 - b. DNA with a high G–C content has more phosphodiester bonds to break.
 - c. DNA with a high G–C content forms a tighter, narrower double helix.
 - d. All of the above are correct.
 - e. Only a) and b) are correct.
2. Which of the following are always the same in every unit of the DNA molecule?
 - a. The sugar
 - b. The base
 - c. The phosphate group
 - d. Only a) and c) are always the same.
 - e. Only a) and b) are always the same.
3. The double helix model of DNA suggested by Watson and Crick was exciting to the scientific community because:
 - a. It proved once and for all that DNA was the messenger of heritable traits.
 - b. It explained how genetic material could be duplicated by means of the complementary strands.
 - c. It broke the code, providing the correct amino acid for each triplet of bases.
 - d. It opened the door to new PCR-based technologies.
 - e. All of the above are correct.
4. The central dogma of molecular biology states that:
 - a. DNA is transcribed into RNA which is translated into protein.
 - b. DNA is translated into protein.
 - c. DNA is translated into RNA which is transcribed into protein.
 - d. RNA is transcribed into protein.
 - e. DNA is transcribed into RNA.

5. Which of the following correctly describes the locations of transcription and translation within a eukaryotic cell?
- DNA is transcribed in the nucleus, then the mRNA transcript is transported to the nucleosomes to be translated into protein.
 - Both transcription and translation occur in the cytosol.
 - DNA is transcribed in the cytosol, then the mRNA transcript is transported into the nucleus to be translated into protein.
 - Both transcription and translation occur in the nucleus.
 - DNA is transcribed in the nucleus, then the mRNA transcript is transported to the cytosol to be translated into protein.
6. Genotype is to phenotype as:
- cookie is to recipe.
 - fish is to bicycle.
 - cookie is to oven.
 - oven is to cookie.
 - recipe is to cookie.
7. An important difference between mRNA and DNA is:
- DNA can move outside of the cell, while mRNA stays inside the cell.
 - mRNA can move outside of the cell, while DNA stays inside the cell.
 - mRNA can move throughout the cell, while DNA stays in the cytosol.
 - DNA can move throughout the cell, while mRNA stays in the nucleus.
 - mRNA contains uracil instead of thymine, which is found in DNA.
8. During transcription, at the point where the DNA strand being copied has an adenine, _____ is added to the mRNA.
- a cytosine
 - an adenine
 - a uracil
 - a thymine
 - a tRNA
9. During eukaryotic translation, mRNA carries genetic information from the _____ to the _____, where amino acids are assembled into proteins.
- nucleolus; smooth endoplasmic reticulum
 - nucleus; Golgi apparatus
 - cytosol; nucleus
 - nucleolus; cytosol
 - nucleus; ribosome

10. A frameshift mutation:
- leaves the amino acid sequence unchanged.
 - results from an insertion or deletion in a DNA sequence.
 - substitutes a purine for a pyrimidine only.
 - is the result of an unequal crossing-over.
 - substitutes a pyrimidine for a purine, or vice versa.
11. Most genetic diseases result from mutations that cause a gene to produce a non-functioning _____, which in turn blocks the functioning of a metabolic pathway.
- enzyme
 - codon
 - polysaccharide
 - tRNA
 - histone
12. The combination of DNA from two or more sources is called:
- 2-DNA.
 - human growth hormone.
 - recombinant DNA.
 - biotechnology.
 - RNA.
13. Gene therapy involves:
- the replacement of organs from patients with genetic disorders by transplant.
 - no controversial or ethical questions.
 - drug treatment of patients with genetic disorders at specific times that correspond with cell division.
 - introducing non-defective genes into the cells of an individual with a genetic disorder.
 - All of the above are correct.
14. Which statement best describes “golden rice”?
- Golden rice is rice that has genes taken from it for use in other organisms. These genes produce vitamin A.
 - Golden rice is rice that has had genes from other organisms added to it. These genes produce gold.
 - Golden rice is rice that has had genes from other organisms added to it. These genes produce beta-carotene.
 - Golden rice is rice that has genes taken from it for use in other organisms. These genes produce beta-carotene.
 - Golden rice is rice that has had genes from other organisms added to it. These genes produce vitamin A.

15. One of the possible concerns about genetically modified foods is that they might kill organisms that we don't want to kill. Which of the following is an example of this phenomenon?
- Bears eating genetically modified corn may be poisoned by the Bt gene introduced to the corn to act as a pesticide.
 - Featherless chickens look so ridiculous that other barnyard animals have died laughing at them.
 - The pollen from plants containing insect-killing Bt genes can be blown onto other plants. Insects that we don't want to kill, such as monarch butterflies, may be killed by such pollen.
 - Genetically modified super-sized salmon have been known to kill the bald eagles that generally feed on them.
 - In the Irish Potato Famine, more than one million people died as a result of the lack of genetic diversity in the potato crop.

| mRNA codons | amino acid |
|--------------------|---------------|
| UAU, UAC | tyrosine |
| CCU, CCC, CCA, CCG | proline |
| GAU, GAC | aspartic acid |
| AUU, AUC, AUA | isoleucine |
| UGU, UGC | cysteine |

16. Refer to the illustration above. Suppose that you are given a protein containing the following sequence of amino acids: tyrosine, proline, aspartic acid, isoleucine, and cysteine. Use the portion of the genetic code given to determine which of the following contains a DNA sequence that codes for this amino acid sequence.
- AUGGGUCUAUAUACG
 - ATGGGTCTATATACG
 - GCAAACCTCGCGCGTA
 - ATAGGGCTTTAAACA
17. A famous X-ray crystallography picture of DNA by Rosalind Franklin showed that the DNA double helix has a uniform diameter. Infer why this would be true.
- Purines pair with pyrimidines.
 - C nucleotides pair with A nucleotides.
 - Deoxyribose sugars bind with ribose sugars.
 - Nucleotides bind with phosphates.
 - Nucleotides bind with deoxyribose sugars.
18. An anticodon would be found in/on a _____ molecule.
- mRNA
 - tRNA
 - the lagging strand
 - rRNA

19. In humans, genes make up _____ of DNA.
- less than 5%
 - about 75%
 - about 50%
 - 100%
 - about 10%
20. The Russian-American biochemist Phoebus Levene was the first to determine that nucleotides may contain one of four different nitrogen-containing bases. Levene believed that the nitrogen-containing bases occurred in equal amounts in DNA. What is the actual proportion of these bases?
- All four do actually occur in equal amounts. Levene was right.
 - DNA contains twice as much of adenine and thymine as guanine and cytosine.
 - DNA contains equal amounts of adenine and thymine, and equal amounts of guanine and cytosine.
 - DNA contains equal amounts of guanine and thymine, and equal amounts of adenine and cytosine
 - DNA contains equal amounts of adenine and guanine, and equal amounts of thymine and cytosine.
21. Alternate versions of a gene are called _____. They can code for different _____ of the same character.
- bases; alleles
 - alleles; bases
 - bases; chromosomes
 - chromosomes; traits
 - alleles; traits
22. Genetic markers are often used to predict the likelihood that a person will develop an inherited illness. Using this information, what is a reasonable definition of a genetic marker?
- A detectable genetic sequence shared by all family members that have a certain disease but not by members that do not have that disease.
 - A detectable genetic sequence that occurs on the same position of the chromosome in every member of a family.
 - A detectable genetic sequence that is linked to the allele that causes a particular disease.
 - All of the above are reasonable definitions of “genetic marker.”
 - Only a) and c) are reasonable definitions of “genetic marker.”
23. You amplify the same gene from two different people using PCR (polymerase chain reaction). When you electrophorese the two samples on a gel, you see that two bands are present in the sample from Individual one, while only one band is present in the sample from Individual two. What is a likely explanation for this outcome?
- Individual 1 is homozygous, while Individual 2 is heterozygous.
 - Individual 1 is a man, while Individual 2 is a woman.
 - Individual 1 is a woman, while Individual 2 is a man.
 - Individual 1 is diploid, while Individual 2 is haploid.
 - Individual 1 is heterozygous, while Individual 2 is homozygous.

Lesson 8

Analyzing Science Arguments

Overview and Rationale:

Understanding argument provides students with a more authentic understanding of what is really involved in scientific inquiry. Students will discuss the idea that science goes beyond observation and experiment to an understanding that science is contested, that scientists often disagree on many ideas, and that there is generally more than one correct answer to a science problem. Additionally, engaging in scientific discourse will help students develop a deeper conceptual understanding of the issue of biotechnology.

Tasks/Expected Outcomes:

1. Students will learn to analyze scientific arguments.
2. Students will learn strategies to construct and represent arguments.
3. Students will evaluate the arguments and counterarguments based on evidence and warrants.
4. Students will learn that science argumentation is based on evidence to support claims and science principles used as warrants.
5. Students will select a topic and create a purpose statement for the final project.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
 - (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:
 - (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
 - (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
 - (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.

4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
1. Participate actively and effectively in one-on-one oral communication situations.
 2. Participate actively and effectively in group discussions.
 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
1. Analyze and evaluate the effectiveness of a public presentation.
 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
1. Listen critically and respond appropriately to presentations.
 2. Listen actively and effectively in one-on-one communication situations.
 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.
- C. Produce and design a document.
 - 1. Design and present an effective product.
 - 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Phillips, T. (2008). Genetically modified organisms (GMOs): Transgenic crops and recombinant DNA technology. *Nature Education* 1(1)
<http://www.nature.com/scitable/topicpage/genetically-modified-organisms-gmos-transgenic-crops-nbsp-732>
- Final Project Directions
- Poster examples
- Phelan Chapter 5

Timeframe:

100 minutes

Targeted Vocabulary:

Discipline-Specific Words

- enrichment
- enterotoxigenic
- fortified
- garner
- monoculture
- transgenic
- propagated

General Academic Vocabulary

- subsequent
- susceptible
- tolerance

Activity One

Introduction to the Final Project (Approx. 25 minutes)

Ask students to read the project directions in their academic notebook. Students should underline and annotate the important parts of the project so that they are clear on what the project will entail.

FROM THE STUDENT ACADEMIC NOTEBOOK

DNA Final project: Biotechnology Research Symposium

General Instructions

The purpose of the project is to research an issue on how DNA and biotechnology impacts our daily lives by reviewing the current research literature. You can choose a topic relating to biotechnology and health or biotechnology and agriculture. This is not a term paper or book report. It is not merely a report on your sources. Instead, your poster report will synthesize the sources to present a coherent explanation of the topic. A key aspect is that it provides evidence for a particular point of view. Thus, you will need to read multiple research articles on the same topic to be able to draw conclusions on the findings. Use the following prompt to help guide your thinking:

Critical Focus Question: This will help you focus your research and the development of your project: “What are the current trends and future applications of biotechnology?”

After researching peer-reviewed journal articles on a topic related to biotechnology and health or biotechnology and agriculture, write a research report in the form of a scientific poster in which you discuss the science behind the technology and evaluate current and future applications. Be sure to support your position with evidence from your research. Cite at least six to eight sources, pointing out key elements from each source. One of your sources will be a section from Phelan 5.11-5.19.

Use the following websites as a way to start your search for materials:

www.sciencemag.org.

www.scientificamerican.com.

www.nature.com.

www.newscientist.com.

<http://learn.genetics.utah.edu/>.

You will create a poster presentation on your topic. To complete this assignment you will read research articles, synthesize the information and write an evaluative argument on your topic.

You will present the poster of your project to the class in a research symposium and create a handout for your classmates.

Research symposium.

For this symposium you will create a poster of your work. Your poster must include the following information:

1. **Title** of a presentation; name; school name; teacher’s name
2. **Background** and introduction to the topic—this section introduces the topic, describes the questions you are asking, and provides a thesis. In this section you

will also explain the science behind the particular method and connect it to what you have learned in class. (Describe the biotechnology—what is it? How is the process accomplished? The detailed description of your biotechnology application will lead to your hypothesis/position.)

3. **Current advances** and results—this is the major focus of your poster. This section presents the current issues, themes, research goals. Where is this technology being used? You will describe the important results and explain how those results shape our current understanding of the topic. Be sure to mention the types of experiments done and discuss their findings but do not report the experimental procedure step-by-step. Include a figure to help discuss the data. What are the outcomes of this technology?

Think about the following:

- Which studies support your hypothesis/thesis/question?
 - Do some studies support alternative hypotheses?
 - Is there controversy in the scientific community over this topic, or is there general agreement?
 - What are the real and potential benefits and dangers of this scientific development?
 - What graphs, figures or tables might be relevant to include?
4. **Discussion**—this section discusses the current advances and results by putting them in context. Highlight any agreements or disagreements in the field and comment on possible reasons for those disagreements. How will the scientific development impact or potentially impact our lives?
 5. **Conclusions/future directions**—this section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.
 6. **References** in APA style

Here are a few websites to help you with APA style —

<http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>.

<http://owl.english.purdue.edu/owl/resource/560/01/>.

<http://www.library.cornell.edu/resrch/citmanage/apa>.

Symposium

You will present your poster by discussing your work with the class. Be prepared to talk about your work without reading directly from your poster. Remember, you should have a good understand of your topic and you should be prepared to answer questions about your work.

Handout

Create a handout for your classmates outlining your work. Be sure to include:

- **Title** of a presentation; name; class
- **Background** and introduction
- **Current advances** and results
- **Discussion**
- **Conclusions/future directions**
- **References** in APA style

FROM THE STUDENT ACADEMIC NOTEBOOK

Possible Topics

| Biotechnology Topic | Rate your interest | Possible research question |
|--|--------------------|----------------------------|
| Human Cloning | | |
| Animal Cloning | | |
| Transgenic (GM) Plants | | |
| Transgenic (GM) Animals | | |
| Gene Therapy | | |
| Forensic DNA Data Banks | | |
| Human Genome Project | | |
| Pharmacogenetics | | |
| Xenotransplantation | | |
| Herbicide tolerance | | |
| Engineered crops | | |
| Insect tolerance | | |
| Golden Rice | | |
| Disease detection | | |
| Repair of damaged organs and tissues | | |
| Engineered proteins for treating disease | | |
| Preserving endangered species | | |

Discuss how this task is similar to writing a paper, but instead of writing the information in a report format, they will need to display and discuss the information to the class.

Go over the template in the academic notebook (shown on the next page) to discuss the general formatting that will be expected. Have students lead the discussion of the template. Students will use the following headings (as this is not a poster using original research) in their poster.

- **Title** of a presentation; name; class
- **Background** and introduction
- **Current advances** and results
- **Discussion**
- **Conclusions/future directions**
- **References** in APA style

Ask students to examine the scoring rubric in Lesson 10 so that they know how their project will be evaluated. Explain how they can use this rubric to guide their work and their revisions.

Ask students to do a quick write of their initial reaction to the project prompt in their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Your poster title goes here. (You can make the text bigger or smaller if needed).

Name

Teacher's Name

Class

Background and Introduction

This section introduces the topic, describes the questions you are asking, and provides a claim. In this section you will explain the science behind the particular method and connect it to what you have learned in class.

Describe the biotechnology—what is it?

How is the process accomplished?
(The detailed description of your biotechnology application will lead to your claim.)

Current Advances and Results

This section presents the current issues, themes, and research goals. Where is this technology being used? Describe the important results and explain how those results shape our current understanding of the topic. Mention the types of experiments done and discuss their findings but do not report the experimental procedure step-by-step.

Think about the following:

- Which studies support your hypothesis/claim/question?
- Do some studies support alternative hypotheses?
- Is there controversy in the scientific community over this topic, or is there general agreement?
- What graphs, figures or tables might be relevant to include?

Include a figure to help discuss the data. What are the outcomes of this technology?)

Conclusion/future directions

This section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.

References

List full references in APA style.

After reviewing the directions with students, discuss the project by asking the following questions:

- What is the purpose of the project?
- What will you need to do to complete the project?
- What will you need turn in?
- What are the elements of a scientific poster? What are the goals?

Ask students reread their thoughts after taking notes on the biotechnology video (at the end of lesson six) **on what they find interesting about biotechnology and what topics they might like to know more about.** Have students review the list of possible topics to find some that interest them. Remind students that thinking about scientific questions and interests are one of the starting points in the expanded scientific model we have been discussing.

Activity Two

Understanding Science Arguments (Approx. 60 minutes)

Explain to students that in order to prepare for the poster symposium, they must first add to their understanding of reading science research. Students will examine science arguments in research.

Discuss the following ideas with students:

In textbooks, science is often presented as a series of experiments and observations. Reading these books can make it seem like all scientists agree on every idea. Actually, the majority of scientific concepts are continually contested and modified in the scientific community. Scientists can agree on one thing: arguing science creates better understandings. Once students learn to spot scientific arguments, they will find them in most science writing.

Students will examine an article on GMOs from the journal *Nature Education* to examine the ways arguments are structured.

Phillips, T. (2008). Genetically modified organisms (GMOs): Transgenic crops and recombinant DNA technology. *Nature Education* 1(1) —

<http://www.nature.com/scitable/topicpage/genetically-modified-organisms-gmos-transgenic-crops-732>.

Remind students about the elements of an argument:

- **Data:** these are the facts involved in your argument that support your claims.
- **Claim:** this is the conclusion that is drawn from the data.
- **Warrants:** these are the reasons that justify the connection between the data and the claim. In science, these are often the scientific principles and/or methods.
- **Backing:** these are the basic assumptions that are commonly agreed upon that provide justification for the warrants.

Ask students to read the title of the GMO article and the guiding questions below the title.

If you could save lives by producing vaccines in transgenic bananas, would you? In the debate over large-scale commercialization and use of GMOs, where should we draw the line?

Ask students to discuss what these questions tell us about the author’s argument.

Ask students to read the first paragraph of the article. Ask, “What is the author discussing?” (Students should mention something about how plants have been bred for certain traits for years, but that now scientists can control these genetic changes more precisely and can even introduce new genes from one species to another.)

Ask, “Which part of the argument is being delineated here?” Note: it is OK for students not to know at this point. Basically, they should understand that author is presenting the grounding for the claim (which has not yet been discussed). These are parts of the warrant for the argument.

Ask students to read the section on current use of GMOs (including Table one). In pairs, ask them to mark up the section to show which part(s) of the argument is being described in this paragraph. Ask, which part of the argument is the author presenting in this section? (Students should mention data, backing, warrant). Ask students to point to the specific sections of the paragraph that indicate the different parts of the argument.

Ask students to work in pairs to read up to, but not including, the section on the History of International Regulations. Students should be looking for the parts of the argument already discussed as well as these two additional aspects of complex arguments.

- **Qualifiers:** These are the special conditions under which the claim can be true. They are the limitations on the claim
- **Rebuttals:** These are the conditions when the claim will not be true.

Ask students to discuss the concerns about GMOs. What are the risks? What are the controversies surrounding GMOs?

Ask students to work in pairs to figure out the author’s complete argument.

The overall goal is to present the argument in a sentence: “The author argues... because (*data*) . . . since (*warrant*) . . . on account of (*backing*) . . . although some believe/are concerned about (*qualifiers*)...however, the data suggests (*rebuttal*)... therefore (conclusion).”

(Adapted from Driver, R., Newton, P., Osborne, J. (1998). Establishing the norms of scientific argumentation in classrooms.)

To help them figure out the argument, ask students to work with a partner to fill out the pro/con chart in their academic notebook before they write out the complete argument.

FROM THE STUDENT ACADEMIC NOTEBOOK

Pro/Con Chart Biotechnology and Crops

| Pros | Cons |
|------|------|
| | |

Assessments:

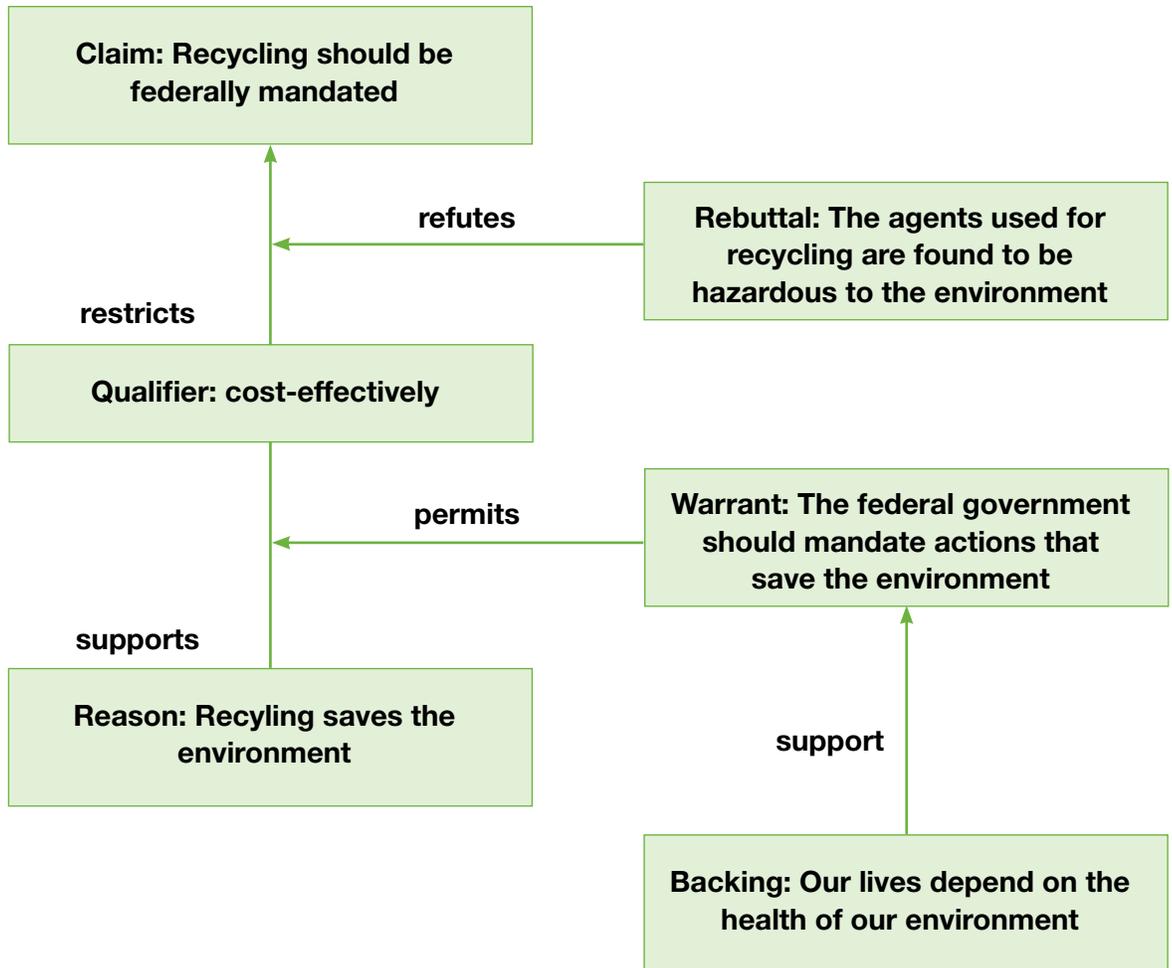
Outcome 1: Students will learn to analyze scientific arguments.

Outcome 3: Students will strategies to construct and represent arguments.

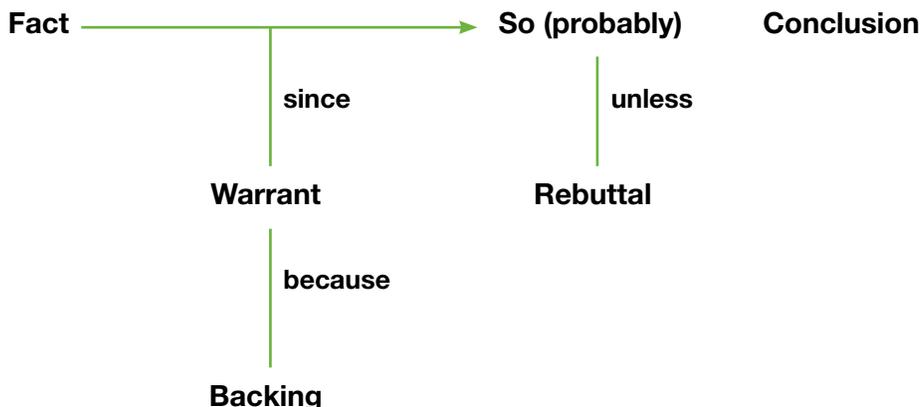
- Pro/con chart

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Includes pros and cons of the argument. | No | Somewhat | Yes |
| • Provides specific references to the article. | No | Somewhat | Yes |
| • Fully delineates the argument. | No | Somewhat | Yes |

Once students have completed their pro/con chart, discuss the examples below to show ways to diagram an argument. Then ask students to work in small groups to create their own diagram to show the argument.



From Britt, M. A., & Larson, A. A. (2003) Constructing representations of arguments. *Journal of Memory and Language*, 48, 794-810.



Once students complete their diagram, ask them to work in small groups to present the argument as a sentence as shown in the following example:

“The author argues...because (*data*) . . . since (*warrant*) . . . on account of (*backing*) . . . although some believe/are concerned about (*qualifiers*)...however, the data suggests (*rebuttal*)...therefore (*conclusion*).”

(Adapted from Driver, R., Newton, P., Osborne, J. (1998). Establishing the norms of scientific argumentation in classrooms.)

Assessments:

Outcome 3: Students will evaluate the arguments and counterarguments based on evidence and warrants.

Outcome 4: Students will learn that science argumentation is based on evidence to support claims and science principles used as warrants.

- Argument Diagrams and Sentences

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Includes all of the components of the argument. | No | Somewhat | Yes |
| • Is able to form into a sentence as well as a diagram. | No | Somewhat | Yes |
| • Contains the elements of an effective argument. | No | Somewhat | Yes |
| • Shows a clear understanding of the science while explaining the argument to peers. | No | Somewhat | Yes |

Activity Three

Classroom Discussion of Arguments (Approx. 15 minutes)

Students will present their argument sentences to the class. As each group presents, the rest of the class will be looking for and asking questions about the elements of good argument.

Activity Four

Creating a Purpose Statement (Homework)

DNA Final Project Topic Idea and Purpose Statement

Discuss the differences between creating thesis and purpose statements from the academic notebook.

Ask students to write up their topic ideas using the guiding questions in their academic notebook before the next class.

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing a Purpose Statement

From https://writing.wisc.edu/Handbook/Thesis_or_Purpose.html

Thesis and Purpose Statements

Use the guidelines below to learn the differences between thesis and purpose statements.

- In the first stages of writing, thesis or purpose statements are usually rough or ill-formed and are useful primarily as planning tools.
- A thesis statement or purpose statement will emerge as you think and write about a topic. The statement can be restricted or clarified and eventually worked into an introduction.
- As you revise your paper, try to phrase your thesis or purpose statement in a precise way so that it matches the content and organization of your paper.

Thesis statements

- A thesis statement is a sentence that makes an assertion about a topic and predicts how the topic will be developed. It does not simply announce a topic: it says something about the topic.
Good: X has made a significant impact on the teenage population due to its . . .
Bad: In this paper, I will discuss X.
- A thesis statement makes a promise to the reader about the scope, purpose, and direction of the paper. It summarizes the conclusions that the writer has reached about the topic.
- A thesis statement is generally located near the end of the introduction. Sometimes in a long paper, the thesis will be expressed in several sentences or an entire paragraph.
- A thesis statement is focused and specific enough to be proven within the boundaries of the paper. Key words (nouns and verbs) should be specific, accurate, and indicative of the range of research, thrust of the argument or analysis, and the organization of supporting information.

Purpose statements

- A purpose statement announces the purpose, scope, and direction of the paper. It tells the reader what to expect in a paper and what the specific focus will be.
Common beginnings include:
“This paper examines . . .,” “The aim of this paper is to . . .,” and “The purpose of this essay is to . . .”
- A purpose statement makes a promise to the reader about the development of the argument but does not preview the particular conclusions that the writer has drawn.
- A purpose statement usually appears toward the end of the introduction. The purpose statement may be expressed in several sentences or even an entire paragraph.

- A purpose statement is specific enough to satisfy the requirements of the assignment. Purpose statements are common in research papers in some academic disciplines, while in other disciplines they are considered too blunt or direct. If you are unsure about using a purpose statement, ask your instructor.

This paper will examine the ecological destruction of the Sahel preceding the drought and the causes of this disintegration of the land. The focus will be on the economic, political, and social relationships which brought about the environmental problems in the Sahel.

FROM THE STUDENT ACADEMIC NOTEBOOK

Critical Focus Question: This will help you focus your research and the development of your project: “What are the current trends and future applications of biotechnology?”

*After researching peer-reviewed journal articles on a topic related to biotechnology and health or biotechnology and agriculture, write a research report in the form of a scientific poster in which you discuss the science behind the technology and evaluates current and future applications. Be sure to support your position with evidence from your research. Cite at least **six to eight** sources, pointing out key elements from each source.*

You will create a poster presentation on your topic. To complete this assignment you will read research articles, synthesize the information and write an evaluative argument on your topic.

You will present the poster of your project to the class in a research symposium and create a handout for your classmates.

Select your research topic. Write up a purpose statement outlining the following:

- **What is your topic?** You can choose one of the suggested topics or come up with one of your own.

Example:

Topic: Engineered crops

- **What is your question?** This is where you take your topic idea and transform it into a question to ask the literature.

Example:

Question: How does genetic engineering of crops impact efforts to fight disease in third world countries?

This question is tentative at this point, but it will help you enter the research with some kind of focus. Next you need to figure out how to answer this question

- **What will you need in order to answer this question?**

Example: First I will need to find out exactly what is being done in the area of engineered crops and disease. I know that there are some studies on “edible vaccinations.” I need to find research on how that is being done and what else the field is working on.

- **List the issues that will be addressed** (Note: this is just a starting off point. Your list will expand as you do your research)

Example:

- Types of diseases being treated.
- Types of vaccines available now and types in production.
- The technology behind creating the edible vaccines.
- Types of foods being used for vaccines.
- Benefits.
- Drawbacks.
- Future benefits and drawbacks.

Assessments:

Outcome 5: Students will select a topic and create a purpose statement for the final project.

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Selects an appropriate topic for the final project. | No | Somewhat | Yes |
| • Writes a well-thought-out purpose statement. | No | Somewhat | Yes |
| • Responds thoughtfully to all questions. | No | Somewhat | Yes |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Introduced the final project.
2. Asked students to read and annotate the project directions in their academic notebook.
3. Reviewed the poster template in the academic notebook.
4. Asked students to discuss the purpose of the project.
5. Asked students to review the list of possible project topics.
6. Discussed analyzing arguments from science research.
7. Discussed the elements of arguments using the GMO article.
8. Asked students to complete the pro/con chart in their academic notebook.
9. Discussed diagramming arguments.
10. Asked students to diagram the argument from the GMO article.
11. Asked students to write the argument as a sentence.
12. Asked students to present their argument to the class.
13. Asked students to create a purpose statement for their project.

Lesson 9

Critiquing Science Research

Overview and Rationale:

In this lesson, students will hone their research topics, gather sources, and create a plan for completing the project. Students will be engaged in evaluating scientific arguments; therefore, students must be able to comprehend and analyze the sources they select. Students will bring in the articles they have selected and will begin to take notes using a template to help guide their reading. By the end of this lesson, students should be ready to draft their poster.

Tasks/Expected Outcomes:

1. Students will be able to explain the science topic they are researching by citing specific evidence from their sources
2. Students will engage in scientific inquiry by forming hypotheses, researching evidence and providing support across text by synthesizing research from multiple sources to support their claims.
3. Students will gather and critically evaluate information.
4. Students will be able to identify important concepts from science articles and use the information to support their ideas.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.

- C. Presentation of scientific/technical information
 - 1. Prepare and present scientific/technical information in appropriate formats for various audiences.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Purugganan & Hewitt (2004) How to read a scientific article (in academic notebook)
- Bocquet-Appel, J.P. (2001). When the world's population took off: the springboard of the neolithic demographic transition. *Science*, 333, 560-561.
- Anest, et al (2003) A nucleosomal function for I[κ]B kinase-[α] in NF-[κ]B-dependent gene expression. *Nature*, 423, 559-663.
- How to write a thesis statement —
http://www.indiana.edu/~wts/pamphlets/thesis_statement.shtml.

Timeframe:

200 minutes

Targeted Vocabulary:

Student-identified words from articles

Activity One

Preparing for the Final Project (Approx. 35 minutes)

Ask students to work in small groups to discuss the purpose statements completed for homework. Ask students to discuss the following:

- Is the topic too broad or too narrow?
- Is it manageable and will you be able to find research about the topic within the time frame of the project?
- Is the topic something you are interested in pursuing?
- Will the findings be interesting? Is there a real and debatable issue to research?

Discuss the topics as a class.

Ask students to respond to the prompt in their academic notebook about the tasks of the final project.

FROM THE STUDENT ACADEMIC NOTEBOOK

- *Prompt:* In your own words, write a brief explanation of what the task is asking you to do. How will you go about selecting research articles? What are all of the components of this task?

Discuss any questions they have about the project, key components, etc.

Ask students to complete the project timeline. Students will have some time in class to work on the project but they should be sure they leave time for working outside of class in their plan. The first goal students should set is for the library time they will have next class period.

FROM THE STUDENT ACADEMIC NOTEBOOK

Project Planning Timeline

Make a plan for completing the project by the due date. Be sure to include deadlines for finding and reading your sources, creating a rough draft, and practicing your presentation for the class.

Project Title

| What will be done? | By when? | What resources will I need? | What goals do I have? |
|-------------------------------------|----------|-----------------------------|-----------------------|
| Notes | | | |
| Library sources (space provided) | | | |

Assessments:

Outcome 1: Students will be able to explain the science topic they are researching by citing specific evidence from their sources.

- Research topic statement

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Writes a concise statement that establishes a controlling idea and identifies key points that support development of information and/or explanation. | No | Somewhat | Yes |
| • Writes in readable prose. | No | Somewhat | Yes |

Outcome 2: Students will engage in scientific inquiry by forming hypotheses, researching evidence, and providing support across text by synthesizing research from multiple sources to support their claims.

- Project timeline

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Creates a “doable” timeline that paces reading and writing processes. | No | Somewhat | Yes |
| • Project planning timeline is complete. | No | Somewhat | Yes |
| • Sets realistic goals. | No | Somewhat | Yes |

Activity Two

Finding Appropriate Sources (Approx. 15 minutes)

When finding library sources students need to consider:

1. Appropriate level of writing.
2. Credibility of sources.
3. Timeliness.

Appropriate level: show students the two articles for this lesson. The purpose for using these articles is to help students figure out how to select articles that will be helpful for them in their research. We want them to read research articles from scientific journals, but they need to take care that those sources are readable for someone who is not an expert in the field.

- Bocquet-Appel, J.P. (2001). When the world’s population took off: the springboard of the neolithic demographic transition. *Science*, 333, 560-561.
- Anest, et al (2003) A nucleosomal function for I[κ]B kinase-[α] in NF-[κ]B-dependent gene expression. *Nature*, 423, 559-663.

Ask them to determine which article would and would not be appropriate for use in this project.

The article from *Nature* on nucleosomal function as an example of an article that they might come across, but should probably not use, as they would not understand the science. Try to have students come to this conclusion on their own by asking them to

explain the abstract or the figures. Because they will not be able to explain the ideas presented in this article, it is probably not a good choice for them at this point.

The article from *Science* is one that would be helpful. It is written about a current topic in a way that is understandable. Students can understand the abstract and figures, so this would be a good article to choose.

Credibility of Sources: Discuss with students that both journals used in the preceding activity are excellent resources. They may just as easily find a difficult read in *Science* and a more appropriate article in *Nature*. To determine the credibility, students need to think about the type of source (peer-reviewed journal is more appropriate than a commercial website. NSA and other government websites are credible) and the author of the article. They should ask themselves, is the author a reporter? A scientist? A professor? Someone working for a business? Knowing who is doing the research and where the work is being published helps us interpret their findings and conclusions.

Timeliness: Discuss the issue of timeliness of sources. Because students are examining new ideas in science, the more current the sources, the better. Therefore, students will rely on research article, not books which take longer to get into print than a journal, to complete the project.

Activity Three

Library Time (Approx. 50 minutes)

Students will begin to conduct searches in the library to find sources for their project. Ask students examine the goals they set for the library time on their timeline. What do they want to accomplish?

Remind students to use the starting places listed in the project directions in their academic notebooks as a good way to start their research:

FROM THE STUDENT ACADEMIC NOTEBOOK

www.sciencemag.org

www.newscientist.com

www.scientificamerican.com

<http://learn.genetics.utah.edu/>

www.nature.com

If your library does not have access to online articles, there are a few good free online depositories:

<http://www.ncsu.edu/sciencejunction/terminal/imse/lowres/3/magazines.htm>.

<http://libguides.fhcr.org/content.php?pid=155296&sid=1319205>.

<http://www.sciencedaily.com>.

<http://www.sciencedirect.com>.

Remind students to use the abstract of the article as a way to determine the appropriateness of the sources for this project.

Circulate to answer questions and to help students find appropriate sources.

After about 20 minutes of searching, ask students to share at least one of their sources with a partner. One partner should read an abstract to the other. They will then discuss what the article will be about and how it can contribute to the student's topic. Partners will then reverse the rolls to share another abstract. As a whole class, discuss how the searching is going and ask students for questions about finding sources, timeliness, or determining appropriateness.

Students will need to have the majority of their six to eight sources before the next class. Any additional article searches they still need to do should be completed as homework. Remind students that one of their sources will be the section in Phelan 5.11-5.19 that relates to their project topic.

Activity Four

Review of Reading Scientific Articles (Approx. 100 minutes)

Review Purugganan & Hewitt (2004) “How to Read a Scientific Article” (in the academic notebook). As the class reviews each section, ask students to work in pairs to find the information in one of their articles.

FROM THE STUDENT ACADEMIC NOTEBOOK

How to Read a Scientific Article

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Cain Project in Engineering and Professional Communication

Reading a scientific article is a complex task. The *worst* way to approach this task is to treat it like the reading of a textbook—reading from title to literature cited, digesting every word along the way without any reflection or criticism. Rather, you should begin by skimming the article to identify its structure and features. As you read, look for the author's main points. Generate questions before, during, and after reading. Draw inferences based on your own experiences and knowledge. And to really improve understanding and recall, take notes as you read. This handout discusses each of these strategies in more detail.

1. Skim the article and identify its structure.

Most journals use a conventional IMRD structure: An abstract followed by **I**ntroduction, **M**ethods, **R**esults, and **D**iscussion. Each of these sections normally contains easily recognized conventional features, and if you read with an anticipation of these features, you will read an article more quickly and comprehend more.

Features of Abstracts

Abstracts usually contain four kinds of information:

- purpose or rationale of study (why they did it).
- methodology (how they did it).
- results (what they found).
- conclusion (what it means).

Most scientists read the abstract first. Others—especially experts in the field—skip right from the title to the visuals because the visuals, in many cases, tell the reader what kinds of experiments were done and what results were obtained. You should probably begin reading a paper by reading the abstract carefully and noting the four kinds of information outlined above. Then move first to the visuals and then to the rest of the paper.

Features of Introductions

Introductions serve two purposes: creating readers' interest in the subject and providing them with enough information to understand the article. Generally, introductions accomplish this by leading readers from broad information (what is *known* about the topic) to more specific information (what is *not known*) to a focal point (what *question* the authors asked and answered). Thus, authors describe previous work that led to current understanding of the topic (the broad) and then situate their work (the specific) within the field.

Features of Methods

The Methods section tells the reader what experiments were done to answer the question stated in the Introduction. Methods are often difficult to read, especially for graduate students, because of technical language and a level of detail sufficient for another trained scientist to repeat the experiments. However, you can more fully understand the design of the experiments and evaluate their validity by reading the Methods section carefully.

Features of Results and Discussion

The Results section contains results—statements of what was found, and reference to the data shown in visuals (figures and tables). Normally, authors do not include information that would need to be referenced, such as comparison to others' results. Instead, that material is placed in the Discussion—placing the work in context of the broader field. The Discussion also functions to provide a clear answer to the question posed in the Introduction and to explain how the results support that conclusion.

Atypical Structure

Some articles you read will deviate from the conventional content of IMRD sections. For instance, Letters to *Nature* appear to begin with an abstract, followed by the body of the article. Upon reading, however, you will see that the “abstract” is a summary of the work filled with extensive introduction (for the purpose of catching the attention of a wide audience), and the next paragraph begins a description of the experiments.

Therefore, when you begin to read an article for the first time, skim the article to analyze the document as a whole. Are the sections labeled with headings that identify the structure? If not, note what the structure is. Decide which sections contain the material most essential to your understanding of the article. Then decide the order in which you will read the sections.

STOP: ASK students to use one of the articles they found to think about the structure. Does it follow a typical or atypical structure? Ask them to use the abstract to find the four types of information discussed.

FROM THE STUDENT ACADEMIC NOTEBOOK

2. Distinguish main points.

Because articles contain so much information, it may be difficult to distinguish the main points of an article from the *subordinate points*. Fortunately, there are many indicators of the author's main points:

Document level

| | |
|----------|--|
| Title | visuals (especially figure and table titles) |
| Abstract | first sentence or the last 1-2 sentences of the Introduction |
| Keywords | |

Paragraph level: words or phrases to look for

| | |
|----------------------------|---------------------------------------|
| <i>surprising</i> | <i>in contrast with previous work</i> |
| <i>unexpected</i> | <i>has seldom been addressed</i> |
| <i>we hypothesize that</i> | <i>we develop</i> |
| <i>we propose</i> | <i>the data suggest</i> |
| <i>we introduce</i> | |

3. Generate questions and be aware of your understanding

Reading is an active task. Before and during your reading, ask yourself these questions:

- Who are these authors? What journal is this? Might I question the credibility of the work?
- Have I taken the time to understand all the terminology?
- Have I gone back to read an article or review that would help me understand this work better?
- Am I spending too much time reading the less important parts of this article?
- Is there someone I can talk to about confusing parts of this article?

After reading, ask yourself these questions:

- What specific problem does this research address? Why is it important?
- Is the method used a good one? The best one?
- What are the specific findings? Am I able to summarize them in one or two sentences?
- Are the findings supported by persuasive evidence?
- Is there an alternative interpretation of the data that the author did not address?
- How are the findings unique/new/unusual or supportive of other work in the field?
- How do these results relate to the work I'm interested in? To other work I've read about?
- What are some of the specific applications of the ideas presented here? What are some further experiments that would answer remaining questions?

STOP: ASK students to skim their article. Ask students to circle any of the words/phrases science readers should look for in academic articles. Then, ask them to read the first section of the article and write down the responses to the questions above that are answered in that section.

FROM THE STUDENT ACADEMIC NOTEBOOK

4. Draw inferences.

Not everything that you learn from an article is stated explicitly. As you read, rely on your prior knowledge and world experience, as well as the background provided in the article, to draw inferences from the material. Research has shown that readers who actively draw inferences are better able to understand and recall information.

As an example, in the box below is an excerpt from the Introduction of an article in the journal *Biochemistry* (Ballestar et al., 2000). The comments in italics are questions and inferences that might be drawn by a student reader.

Rett Syndrome is a childhood neurodevelopmental disorder and one of the most common causes of mental retardation in females *Comment: Hmmm... must be related to a gene on the X-chromosome*, with an incidence of 1 in 10000-15000. *Comment: How common is that? Not too likely to happen to me, but there must be several such children born in Houston every year.* Rett syndrome patients are characterized by a period of normal growth and development (6-18 months) followed by regression with loss of speech and purposeful hand use. *Comment: What happens? Something must be triggered or activated at late infancy.* Patients also develop seizures, autism, and ataxia. After initial regression, the condition stabilizes and patients survive into adulthood. Studies of familial cases provided evidence that Rett is caused by X-linked dominant mutations in a gene subject to X-chromosome inactivation. Recently, a number of mutations in the gene encoding the methyl-CpG binding transcriptional repressor MeCP2 have been associated with Rett Syndrome. *Comment: MeCP2 mutations probably cause Rett Syndrome. This must be an important master-regulator to affect so many processes in the brain. I wonder what they know about it...*

STOP: Read the inference paragraph out loud as a way to model thinking when reading research in science.

5. Take notes as you read.

Effective readers take notes—it improves recall and comprehension. You may think you'll remember everything you read in researching class assignments, professional papers, proposals, or your thesis, but details will slip away. Develop a template for recording notes on articles you read, or adapt the template below for use. As you accumulate a large collection of articles, this template will help you distinguish articles and quickly locate the correct reference for your own writing. The time spent filling out the form will save you hours of rereading when you write a Background, Related Work, or a Literature Review section.

STOP: Ask students to take notes on the article they are reading. Tell them to skip the citation part for now. We will work on APA style after they take notes.

FROM THE STUDENT ACADEMIC NOTEBOOK

Template for Taking Notes on Research Articles: Easy access for later use

Whenever you read an article, pertinent book chapter, or research on the web, use the following format (or something similar) to make an electronic record of your notes for later easy access. Put quotation marks around any exact wording you write down so that you can avoid accidental plagiarism when you later cite the article.

Complete citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

General subject:

Specific subject:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

References

Ballestar, E., Yusufzai, T.M., and Wolffe, A.P. (2000) Effects of Rett Syndrome Mutations of the Methyl-CpG Binding Domain of the Transcriptional Repressor MeCP2 on Selectivity for Association with Methylated DNA. *Biochemistry* 31, 7100-7106.

Burnett, R. (2001) *Technical Communication*. 5th ed. San Antonio: Harcourt College Publishers.

Zeiger, M. (2000) *Essentials of Writing Biomedical Research Papers*. 2nd Ed. St. Louis: McGraw-Hill.

Supported by the Cain Project for Engineering and Professional Communication
Rice University, 2004.

Stop: Discuss this note taking method with students. This is how they will be taking notes on their reading for the final project. Discuss with students that they will use these notes to pull their argument together for the final poster presentation. Therefore, they need to be sure to have enough information in their notes to understand the points that the author was making. Ask students to discuss the benefits and drawbacks that they see in using this method.

Discuss how to use APA citation. Guide students to the following websites for tutorials and examples on how to cite sources both within text and in a reference list:

<http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>.

<http://owl.english.purdue.edu/owl/resource/560/01/>.

<http://www.library.cornell.edu/resrch/citmanage/apa>.

FROM THE STUDENT ACADEMIC NOTEBOOK

Citing Sources: Using APA Style

Within the text cite the author and the year of publication.

According to Jones (2013) biotechnology can benefit poor nations by increasing access to nutritious food.

Jones (2013) stated that biotechnology can benefit poor nations by increasing access to nutritious food.

Jones (2013) suggested that “biotechnology is our greatest tool for addressing the needs of the undernourished poor” (p 207).

<http://owl.english.purdue.edu/owl/resource/560/07/>

APA Basic Form:

Articles

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical, volume number* (issue number), pages. doi:<http://dx.doi.org/xx.xxx/yyyy>.

Books

Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle*. Location: Publisher. (this type also uses a hanging indentation).

Online periodical

Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Online Periodical, volume number* (issue number if available). Retrieved from <http://www.someaddress.com/full/url/>.

Ask students to fill in the citation using APA style for the article they were using in the preceding note taking activity.

Remind students that they will need to think about the project task as they read. Specifically, they should consider how they will construct their evaluation/argument for the poster.

Ask students to discuss any questions they have about where to find information, ways to note the information and what to do when there does not seem to be all

of the information the template asks for. Then, students can continue taking notes on the articles.

For homework, ask students to take notes on the rest of their sources to prepare to write a draft in class.

Assessments:

Outcome 3: Students will gather and critically evaluate information.

Outcome 4: Students will be able to explain the science topic they are researching by citing specific evidence from their sources.

- Article Notes Using Template

| Evaluation Rubric | | | |
|--|----|----------|-----|
| • Accomplishes task by selecting relevant source material to support controlling idea. | No | Somewhat | Yes |
| • Answers question about plagiarism correctly and provides appropriate strategies for avoiding it. | No | Somewhat | Yes |
| • Writes in readable prose. | No | Somewhat | Yes |
| • Notetaking in accurate. | No | Somewhat | Yes |
| • Citation style is accurate. | No | Somewhat | Yes |

Activity Five

Weekly Reflection (Homework)

Ask students to reflect on the following questions in their academic notebook.

1. Think about the science. What did you learn about critiquing science research?
2. Think about your learning. How will your experiences change the way you approach reading in the sciences?

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Asked students to discuss project statements with a peer.
- 2. Asked students to respond to the project prompt in their academic notebook.
- 3. Asked students to create a project planning timeline
- 4. Discussed ways to find appropriate library sources:
 - a. Appropriate level (using the two article examples).
 - b. Credibility.
 - c. Timeliness.
- 5. Provided library time for article searches.
- 6. Discussed reading scientific articles.
- 7. Guided students through note taking from research articles using one of their sources.
- 8. Discussed APA style guidelines.
- 9. Provided class time for note taking from library sources.
- 10. Asked students to complete their note taking before the next class period.
- 11. Asked students to complete their weekly reflection.

Lesson 10

Research Poster Symposium

Overview and Rationale:

Students will prepare for and engage in a research symposium presenting a poster of their research. Students will use their research to present the information in a way that would be meaningful to other scientists. In order to be able to write about science in this way, students must deeply understand the concepts. Students will bring in the articles they have selected and will begin to outline their final project.

Students will learn ways to create effective posters that communicate the significance of the research they read including an overview of how the research was conducted, the results, and the implications of those results.

Tasks/Expected Outcomes:

1. Students will be able to identify important concepts from science articles and use the information to support their ideas.
2. Students will be able to explain the science topic they are researching by citing specific evidence from their sources.
3. Students will engage in scientific inquiry creating an evaluative argument about their topic.
4. Students will be able to synthesize research articles to explain science in a research symposium.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
 - (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (13) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
 - (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, inter views), and developing a thesis or controlling idea;
 - (B) structure ideas in a sustained and persuasive way (e.g., using outlines, note taking, graphic organizers, lists) and develop drafts in timed and open-ended situations that include transitions and the rhetorical devices to convey meaning;
 - (C) revise drafts to clarify meaning and achieve specific rhetorical purposes, consistency of tone, and logical organization by rearranging the words, sentences, and paragraphs to employ tropes (e.g., metaphors, similes, analogies, hyperbole, understatement, rhetorical questions, irony), schemes (e.g., parallelism, antithesis, inverted word order, repetition, reversed structures), and by adding transitional words and phrases;
 - (D) edit drafts for grammar, mechanics, and spelling; and
 - (E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:
 - (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
 - (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and

- (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
 - (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.
- (23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into an extended written or oral presentation that:
 - (A) provides an analysis that supports and develops personal opinions, as opposed to simply restating existing information;
 - (B) uses a variety of formats and rhetorical strategies to argue for the thesis;
 - (C) develops an argument that incorporates the complexities of and discrepancies in information from multiple sources and perspectives while anticipating and refuting counter-arguments.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.
 - 4. Recognize the importance of revision as the key to effective writing. Each draft should refine key ideas and organize them more logically and fluidly, use language more precisely and effectively, and draw the reader to the author's purpose.
 - 5. Edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 6. Analyze imagery in literary texts.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).

1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
1. Participate actively and effectively in one-on-one oral communication situations.
 2. Participate actively and effectively in group discussions.
 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
1. Analyze and evaluate the effectiveness of a public presentation.
 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
1. Listen critically and respond appropriately to presentations.
 2. Listen actively and effectively in one-on-one communication situations.
 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
1. Formulate research questions.
 2. Explore a research topic.
 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
1. Gather relevant sources.
 2. Evaluate the validity and reliability of sources.
 3. Synthesize and organize information effectively.
- C. Produce and design a document.
1. Design and present an effective product.
 2. Use source material ethically.

Texas College and Career Readiness Science Standards: III. Foundational Skills: Applications of Communication

- A. Scientific writing
 - 1. Use correct applications of writing practices in scientific communication.
- B. Scientific reading
 - 1. Read technical and scientific articles to gain understanding of interpretations, apparatuses, techniques or procedures, and data.
 - 3. Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication.
 - 4. List, use, and give examples of specific strategies before, during, and after reading to improve comprehension.
- D. Research skills/information literacy
 - 1. Use search engines, databases, and other digital electronic tools effectively to locate information.
 - 2. Evaluate quality, accuracy, completeness, reliability, and currency of information from any source.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Research articles

Timeframe:

240 minutes

Targeted Vocabulary:

Vocabulary terms to be explained in the poster session.

Activity One

Constructing Arguments (Approx. 25 minutes)

Ask students to examine their notes from their research articles to build their argument for the research poster. Remind them that they are trying to discuss their stance by discussing the following:

- **Data:** these are the facts involved in your argument that support your claims.
- **Claim:** this is the conclusion that is drawn from the data.
- **Warrants:** these are the reasons that justify the connection between the data and the claim. In science, these are often the scientific principles and/or methods.
- **Backing:** these are the basic assumptions that are commonly agreed upon that provide justification for the warrants.
- **Qualifiers:** These are the special conditions under which the claim can be true. They are the limitations on the claim.
- **Rebuttals:** These are the conditions when the claim will not be true.

Ask students to go back through their notes to find the elements of their argument (they can mark each instance in the margins of their notes—D for data, C for claim, etc.). They will use these elements as they work on creating a draft of their poster.

Activity Two

Creating an Outline of the Poster (Approx. 50 minutes)

Common Core State Standards: Writing– 1, 5, 7, 8, 9, 10

Using the notes from their sources, ask student to create an outline of their evaluation argument using the following poster format to help guide their thinking:

FROM THE STUDENT ACADEMIC NOTEBOOK

1. Title of a presentation; name; school name; teacher's name
2. Background and introduction to the topic: This section introduces the topic, describes the questions you are asking, and provides the claim. In this section you will explain the science behind the particular method and connect it to what you have learned in class. Describe the biotechnology—what is it? How is the process accomplished? (The detailed description of your biotechnology application will lead to your **claim**.)
3. Current advances and results: This is the major focus of your poster. This section presents the current issues, themes, and research goals. Where is this technology being used? You will describe the important results and explain how those results shape our current understanding of the topic. You should mention the types of experiments done and discuss their findings but do not report the experimental procedure step-by-step. You might include a figure to help discuss the data. What are the outcomes of this technology? Think about the following:
Which studies support your hypothesis/claim/question?

Do some studies support alternative hypotheses?

Is there controversy in the scientific community over this topic, or is there general agreement?

What graphs, figures or tables might be relevant to include?

(This is where you discuss the **data**, **warrants** and **backing**.)

4. Discussion: This section discusses the current advances and results by putting them in context. Highlight any agreements or disagreements in the field and comment on possible reasons for those disagreements.

(This is where you discuss the **qualifiers** and **rebuttals**.)

5. Conclusions/future directions: This section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.
6. References in APA style.

Tell students that they do not need to start with item one and move through item six (listed above) as they draft. To that end, we will start with the main focus of the poster.

Ask students to start by writing an outline of item three—current advances. Have them examine their notes and think about what they need to explain in their poster. Remind them that it will be important to define terms and ideas for their audience. They will also need to think about what data they will include and how they will represent that data.

Then ask students to move to items two and one. Have them think about the background that the audience will need to understand to interpret their findings listed in item three. Then ask them to create a title for their presentation that incorporates their stance (e.g. The future potential of X; The negative impact of Y, etc).

Ask students to write an outline of items four and five. They will need to include the qualifiers and rebuttals as they discuss the current advances.

For homework, ask students to further refine their outline to be ready to create a draft of their poster during the next class.

Assessments:

Outcome 1: Students will be able to identify important concepts from science articles and use the information to support their ideas.

Outcome 2: Students will be able to explain the science topic they are researching by citing specific evidence from their sources.

Outcome 3: Students will engage in scientific inquiry creating an evaluative argument about their topic.

- Outline of poster

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides an opening to include a controlling idea and an opening strategy relevant to the prompt. | No | Somewhat | Yes |
| • Provides an initial draft with all elements of the prompt addressed. | No | Somewhat | Yes |
| • Writes in readable prose. | No | Somewhat | Yes |

Activity Three

Drafting the poster (Approx. 75 minutes)

Tell students they will have 75 minutes to work on their draft. Ask them to refer to their project timeline and the project directions to adjust their goals as needed to make the most of class time.

Ask students to share their outlines with a partner to be sure that they understand all of the elements and have a good sense of the material. They will use the outline to create a draft of the poster.

Remind students to examine the poster template from lesson eight to remind them of how the final product will look. The headings on their poster will be those used in their outline:

FROM THE STUDENT ACADEMIC NOTEBOOK

1. Title of a presentation; name; school name; teacher's name
2. Background and introduction to the topic: This section introduces the topic, describes the questions you are asking, and provides the claim. In this section you will explain the science behind the particular method and connect it to what you have learned in class. Describe the biotechnology—what is it? How is the process accomplished? (The detailed description of your biotechnology application will lead to your **claim**.)
3. Current advances and results: This is the major focus of your poster. This section presents the current issues, themes, and research goals. Where is this technology being used? You will describe the important results and explain how those results shape our current understanding of the topic. You should mention the types of experiments done and discuss their findings but do not report the experimental

procedure step-by-step. You might include a figure to help discuss the data. What are the outcomes of this technology? Think about the following:

Which studies support your hypothesis/claim/question?

Do some studies support alternative hypotheses?

Is there controversy in the scientific community over this topic, or is there general agreement?

What graphs, figures or tables might be relevant to include?

(This is where you discuss the **data**, **warrants** and **backing**.)

4. Discussion: This section discusses the current advances and results by putting them in context. Highlight any agreements or disagreements in the field and comment on possible reasons for those disagreements.

(This is where you discuss the **qualifiers** and **rebuttals**.)

5. Conclusions/future directions: This section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.

6. References in APA style.

Discuss some ways that students can begin their introduction. They will want to grab the audience in some way. As students draft, they might find it useful to use one of the following sentence starters:

- Current theories and research on...indicate...
- Researchers have predicted that ...will...
- Current data on...indicates that...
- Although researchers do not agree on...the data suggests...
- There is a good deal of controversy surrounding... this poster will...
- ...is currently defined as/used as/conceived of...however, current advances show the potential for...

(Note: these are just suggestions for getting started. Students do not have to use one of the sentence starters—and even if they use one as they draft, it will likely change as they revise.)

Ask students to draft the introduction of their poster using their outline, notes and the articles.

After students have worked for about 15 minutes, ask students to pair up to share what they have accomplished so far. As a whole class, respond to student questions about drafting the poster.

Ask students to think about the data they plan to include from their outline.

Discuss the ways that students can represent that data. They should include at least one figure from their research that explains the points they want to make about the biotechnology. As they include the figure, they must be sure it is properly labeled and complete. They will not be able to visually represent all of the data they have gathered.

Ask them to examine their outline with a partner to decide what to summarize in text or chart format and what to represent using a figure.

Ask students to continue to draft each section on paper using their outline, notes, and the articles.

As students work on their discussion and conclusion sections it might be helpful for them to use one of the following sentence starters:

- Current evidence supports the idea/use/innovation...
- (My topic) has the potential to...
- Future advances in...may...
- After a careful examination of ... is appears that...
- Based on the current research on...we can conclude that...
- Based on the current research on...scientists predict that...
- The advantages of ...outweigh the drawbacks of...because...

(Note: these are just suggestions for getting started. Students do not have to use one of the sentence starters—and even if they use one as they draft, it will likely change as they revise.)

Check in on students as they continue to work on their drafts. Remind them that they will need a full draft before the next class period.

Activity Four

Editing and Revision (Approx. 50 minutes)

Ask students to work in pairs or small groups to evaluate the drafts using the checklist found in the academic notebook. First, ask students to read each other's papers using the revising—broad structure checklist.

FROM THE STUDENT ACADEMIC NOTEBOOK

Revising and Editing Worksheet

Adaped from: J. Cline, (2009) The Writing Program, j-cline@northwestern.edu.

Writing and Speaking About Science

Student's Name _____

Topic _____

Key Message(s): _____

Revising = Checking Broad Structure R

Does the introduction

- Introduce topic and significance?
- Describe the research questions?
- Explain the technology?
- Provide a thesis outlining the argument?

Does the Current Advancements and Results Section

- Present current issues?
- Discuss where the technology is being used?
- Describe important results?
- Provide clear and supported data?
- Illuminate the arguments?
- Are the data persuasive and support the key message?
- Do graphics follow guidelines, including
 - Illustrations self-explanatory?
 - Informative titles ABOVE tables?
 - Informative captions BELOW figures?
 - Integrated explicitly and appropriately in the poster?

Does conclusion and/or discussion

- Highlight agreements and disagreements in the field?
- Address advantages and limits of methods used?
- Explain implications for current practice or theory?
- Outline research questions that remain?

Does the Conclusions and Future Directions section

- Summarize major points?
- Discuss future directions?

Is anything missing that a reader in the target audience needs to know?

Is the key message(s) clear?

Other elements as needed:

Ask students to discuss their ratings in pairs, focusing on ways to make the draft more effective.

Discuss some of the issues that students seem to be having in their drafts (unfocused arguments, too many quotes and not enough synthesis of ideas, lack of graphics, etc.) and have students generate ways they can improve these in the final poster.

Then, ask students to read the draft again looking at the finer structure. They will also write at least one compliment and one area for improvement for their partner.

FROM THE STUDENT ACADEMIC NOTEBOOK

Revising = Checking Broad Structure

R

Does the introduction

Does the poster present a logical flow of ideas?

Are all quotes used necessary? Do the quotes advance the argument?

Are there empty, inflated, or redundant words? (Circle in the draft)

Are there choppy sentences that could be combined?

Is there a good variety of words to begin sentences?
(Circle redundant starters in the draft)

Are there clichés that need to be removed? (Underline in the draft)

Are sentences of varied length used to draw readers in?

Are there grammar and spelling errors that need to be fixes?
(Circle the errors in the draft)

Would subheads improve your understanding?

Is APA style used consistently and correctly? (Underline errors in the draft)

Other elements as needed:

One thing done well in this poster is:

Comments to help the author improve this poster:

Ask students to discuss the finer-structure suggestions for the draft with their partner. They will then use the suggestions to make revisions to their draft before creating their poster.

Assessments:

Outcome 1: Ask students to discuss the finer-structure suggestions for the draft with their partner. They will then use the suggestions to make revisions to their draft before creating their poster.

Outcome 2: Students will be able to explain the science topic they are researching by citing specific evidence from their sources.

Outcome 3: Students will engage in scientific inquiry creating an evaluative argument about their topic.

- Peer Editing Checklist

| Evaluation Rubric | | | |
|---|----|----------|-----|
| • Provides effective feedback to classmate. | No | Somewhat | Yes |
| • Discusses all elements in the checklist. | No | Somewhat | Yes |
| • Both checklists are complete. | No | Somewhat | Yes |
| • Author addresses suggestions in revision. | No | Somewhat | Yes |

Activity Five

Preparing for the Symposium (Approx. 15 minutes)

Discuss the expectations of the research symposium using the guidelines adapted from the University of California Irvine.

Ask students to read the section on preparing effective oral presentations. Discuss the expectations for the presentation. Students will present their work to small groups in two rounds. They will need to be able to present their ideas in about three minutes.

In round one, half of the class will present to small groups for the first 20 minutes and the other half of the class will walk around to listen to the posters. Students will have about three minutes to present their research to the class. Their presentations must be complete and succinct. Students should be prepared to answer questions without reading from the poster.

They will repeat their talk several times as the listeners move through the posters. Then students will switch roles for the last half of class time and those presenting for the first round will now become the listeners and the listeners from round one will become the presenters for round two.

Students will also need to evaluate three to four presentations using the evaluation rubric in their academic notebook.

Ask students to read the section on effective presenting effectively. Discuss the suggestions as a class.

Finally, ask students to read the section on presenting and designing posters. Discuss these ideas as a class. Ask students to discuss the strategies they plan to use to prepare for their talk.

UCI UNDERGRADUATE RESEARCH SYMPOSIUM PRESENTATION GUIDELINES

Adapted from urop@uci.edu

ORAL PRESENTATIONS

An oral presentation is more than just reading a paper or set of slides to an audience. How you deliver your presentation is at least as important in communicating your message effectively as what you say. Use these Guidelines to learn simple tools that help you prepare and present an effective presentation, and design PowerPoint slides that support and enhance your talk.

PREPARING AN EFFECTIVE PRESENTATION

An effective presentation is more than just standing up and giving information. A presenter must consider how best to communicate their information to the audience. Use these tips to create a presentation that is both informative and interesting.

Organize your thoughts. Start with an outline and develop good transitions between sections. Emphasize the real-world significance of your research.

Have a strong opening. Why should the audience listen to you? One good way to get their attention is to start with a question, whether or not you expect an answer.

Define terms early. If you are using terms that may be new to the audience, introduce them early in your presentation. Once an audience gets lost in unfamiliar terminology, it is extremely difficult to get them back on track.

Finish with a bang. Find one or two sentences that sum up the importance of your research. How is the world better off as a result of what you have done?

Time yourself. Do not wait until the last minute to time your presentation.

Create effective notes for yourself. Have notes that you can read. Do not write out your entire talk; use an outline or other brief reminders of what you want to say. Make sure the text is large enough that you can read it from a distance.

Practice, practice, practice. The more you practice your presentation, the more comfortable you will be in front of an audience. Practice in front of a friend or two and ask for their feedback. Record yourself and listen to it critically. Make it better and do it again.

PRESENTING EFFECTIVELY

When you start your presentation, the audience will be interested in what you say. Use these tips to help keep them interested throughout your presentation.

Be excited. You are talking about something you find exciting. If you remember to be excited, your audience will feel it and automatically become more interested.

Speak with confidence. When you are speaking, you are the authority on your topic, but do not pretend that you know everything. If you do not know the answer to a question, admit it. Consider deferring the question to your mentor or offer to look into the matter further.

Make eye contact with the audience. Your purpose is to communicate with your audience, and people listen more if they feel you are talking directly to them. As you speak, let your eyes settle on one person for several seconds before moving on to somebody else. You do not have to make eye contact with everybody, but make sure you connect with all areas of the audience equally.

Avoid reading from the screen. First, if you are reading from the screen, you are not making eye contact with your audience. Second, if you put it on your slide, it is because you wanted them to read it, not you.

Blank the screen when a slide is unnecessary.

A slide that is not related to what you are speaking about can distract the audience. Pressing the letter B or the period key displays a black screen, which lets the audience concentrate solely on your words. Press the same key to restore the display.

Use a pointer only when necessary. If you are using a laser pointer, remember to keep it off unless you need to highlight something on the screen.

Explain your equations and graphs. When you display equations, explain them fully. Point out all constants and dependant and independent variables. With graphs, tell how they support your point. Explain the x- and y-axes and show how the graph progresses from left to right.

Pause. Pauses add audible structure to your presentation. They emphasize important information, make transitions obvious, and give the audience time to catch up between points and to read new slides. Pauses always feel much longer to speakers than to listeners. Practice counting silently to three (slowly) between points.

Avoid filler words. Um, like, you know, and many others. To an audience, these are indications that you do not know what to say; you sound uncomfortable, so they start to feel uncomfortable as well. Speak slowly enough that you can collect your thoughts before moving ahead. If you really do not know what to say, pause silently until you do.

Relax. It is hard to relax when you are nervous, but your audience will be much more comfortable if you are too.

Breathe. It is fine to be nervous. In fact, you should be—all good presenters are nervous every time they are in front of an audience.

The most effective way to keep your nerves in check—aside from a lot of practice beforehand—is to remember to breathe deeply throughout your presentation.

Acknowledge the people who supported your research. Be sure to thank the people who made your research possible, including your mentor, research team, collaborators, and other sources of funding and support.

Keep these Tips in Mind

Establish early a clear and unifying point. Clearly explain the applicability of your research. Be sensitive to those outside your discipline.

Before the Symposium, present to friends and family and invite their feedback. Ask them questions to see if you communicated your points successfully.

Include or discuss the following, if applicable: Introduction, Methods, Results, Discussion, Conclusion, References, and Acknowledgements.

Make sure that your presentation material is readable, grammatically correct, and has been edited and proofread thoroughly.

Cite sources to support your ideas and provide credibility to your findings. Provide credit for text, graphs, etc.

Always acknowledge your sponsors and mentors. Anticipate possible questions and prepare answers.

Be proud of your work, but acknowledge errors. Explain unexpected results and future research that is needed. Always be truthful in presenting your information, and respect your audience. Bring a pen and pad of paper for notes and to record names and addresses of contacts.

POSTER PRESENTATIONS

A poster lets you summarize your research in an engaging visual format. Effective posters communicate the significance of the research, an overview of how the research was conducted, the results, and the implications of those results. These Guidelines help you design a poster to communicate your message clearly.

Prepare and practice a short summary speech—no than 3 minutes—about your project.

DESIGNING YOUR POSTER

Space on a poster is limited, so pick what to present wisely. Your display should be self-explanatory and have a logical flow—viewers should be able to follow the order even if you are not present. Start with a rough draft of your design on paper, using graph paper or Post-it notes to simulate sections. The sample layouts at the end of these Guidelines may give you some layout ideas.

Place your title at the top of the poster and make sure

Is your message clear? Focus on the results and their importance. Avoid overly detailed descriptions of your methods.

Is everything on your poster critical to communicating your message? Remove everything that is not vitally important. Simplify your text by using short bullet points and phrases instead of complete sentences.

Is your organization easy to follow? Most people read from top to bottom, then left to right. Consider numbering your headings to further clarify the flow of information.

Do your headings deliver real information? Good headings by themselves can summarize the main points of your poster if readers are in a hurry.

Is your text easy to read? The poster title should be at least 144 point text, and information about the student(s) and mentor(s) should be 72 points. Headings should be at least 36 point text and easily readable from at least 6 feet. All other text should be at least 18 point and legible from 4 feet. **Is your poster cluttered by too many fonts?** Do not use more than two typefaces. Instead use bold, italic and size to set type differently. Times New Roman, Arial, Garamond, and Verdana are suggested typefaces.

that the text is large and clear. Include your name and major, and the name and department of your faculty mentor, in addition to other co-authors.

Incorporate appropriate graphics in your poster. Label or describe any charts, tables, figures, graphs, or photos that you use. Make sure all edges line up evenly.

Before you attach the pieces to your board, edit and review them and check your spelling. Be sure to attach all materials to your poster board firmly (spray adhesive, found in art supply stores, works best). All posters **MUST** be complete and ready for presentation upon arrival. Incomplete posters will not be displayed.

DOES YOUR POSTER COMMUNICATE ITS MESSAGE?

Many posters look great but fail to communicate their information clearly. Ask yourself these questions when you are designing your poster.

Are your colors distracting? Stick to a simple color scheme (try a couple that complement or contrast with each other, such as black or navy on white). Avoid red/green combinations, as this is the most common form of color blindness.

Are your graphics clear and easy to understand? Avoid elements—such as unnecessary background colors and overly specific labels—that do not add useful information. Explanations should be within or next to figures, not referred to from elsewhere.

Does your poster have a good balance between text, graphics, and white space? Use white space consistently to emphasize separate sections and to keep the poster from becoming too cluttered and difficult to read.

Do readers have to move back and forth to read your poster? Arranging your information in columns makes the poster easy to read in crowded situations, such as the Symposium Poster Session.

Can you talk about your poster without reading directly from it? Be ready to discuss details that questioners cannot read for themselves. People are interested in additional information and your interpretations.

Students should be ready to use the elements of effective presentations to present their poster to the class in about three minutes. They will also need to create handouts for the class.

Activity Six

Research Poster Symposium (Approx. 50 minutes)

Presenting the Research Symposium: The posters will be presented in two rounds.

Round 1

Half of the class will present for the first 20 minutes and the other half will walk around to listen to the posters. Students will have about three minutes to present their research to the class. Their presentations must be complete and succinct. Students should be prepared to answer questions without reading from the poster.

They will repeat their talk several times as the listeners move through the posters.

Round 2

Students will switch roles so that the students listening during the first half of class will present and the presenters from round one will become the audience. Students will have about three minutes to present their research to the class. Their presentations must be complete and succinct. Students should be prepared to answer questions without reading from the poster. They will repeat their talk several times as the listeners move through the posters.

Poster etiquette: Discuss the following etiquette guidelines with students.

- The teacher will call start and stop times for each round (students should be able to present about six to seven times in the 20 minutes).
- Students should not arrive after a presenter has begun his/her talk.
- Students should stay to hear the entire poster (no leaving early).
- If students notice that students are grouping around one poster s, they should go to listen to another poster presentation.
- Students should be sure that each presenter has an audience to talk to for each round.

In addition to teacher evaluation, each presentation will be evaluated by at least two-three classmates using the rubric in the academic notebook. At the beginning of each poster talk, assign at least one listening student to provide feedback.

Assessments:

Outcome 4: Students will be able to synthesize research articles to explain science in a research symposium.

- Poster

LDC Argumentation Classroom Assessment

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|---|-----|---|-----|---|-----|---|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. Makes no mention of counter claims. | | Establishes a claim Makes note of counter claims. | | Establishes a credible claim. Develops claim and counter claims fairly. | | Establishes and maintains a substantive and credible claim or proposal. Develops claims and counter claims fairly and thoroughly. |
| Reading/ Research | Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. Makes no connections or a connection that is irrelevant to argument or claim. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. Makes a connection with a weak or unclear relationship to argument or claim. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. Makes a relevant connection to clarify argument or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim Makes a clarifying connection(s) that illuminates argument and adds depth to reasoning. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation. | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

• Poster presentation

| | | | | | | |
|---|-----------|---|------|---|------|-----------|
| Presenter: | | | | | | |
| Reviewer: | | | | | | |
| Topic: | | | | | | |
| Notes: | | | | | | |
| How effectively did the presenter introduce the audience to the topic? | 5 | 4 | 3 | 2 | 1 | Comments: |
| | Excellent | | Good | | Poor | |
| How clearly and fully was the science evidence presented? Did the speaker use effective and clear examples? | 5 | 4 | 3 | 2 | 1 | |
| | Excellent | | Good | | Poor | |
| Were the conclusions effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 | |
| | Excellent | | Good | | Poor | |
| What was the strongest part of the presentation? | | | | | | |
| What changes would you suggest for improvement? | | | | | | |

Activity Seven

Weekly Reflection (Homework)

Ask students to reflect on the following questions in their academic notebook.

1. Think about the science. What did you learn about critiquing science research?
2. Think about your learning. How will your experiences change the way you approach reading in the sciences?

Teacher
Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Asked students review their research notes to build their argument for the poster.
2. Guided students as they created an outline of their poster.
3. Guided students as they created a draft of their poster.
4. Asked students to share their draft with a partner.
5. Asked students to bring a full draft to class for peer editing.
6. Asked students to work in pairs to evaluate the drafts using the checklist in the academic notebook.
7. Discussed the expectations for the poster symposium.
8. Discussed the presentation and symposium guidelines.
9. Conducted the poster symposium in two rounds with half the class presenting while the other half listens to the posters in round one and the students switching roles for round two.

Unit 2

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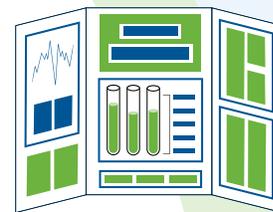
SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

Science Unit 2 . DNA and
Biotechnology

The Academic Notebook

Name



Unit 2

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Course Overview

Welcome to the second disciplinary literacy science unit of the SREB Readiness Course- Literacy Ready. What does disciplinary literacy in science mean? According to Shanahan & Shanahan (2012), disciplinary literacy refers to the specialized skills and strategies needed to learn at higher levels in each discipline. That means that how people approach reading and writing in the sciences would differ from how they approach it in history, English, mathematics, or other fields. It also means that students need to learn more than the content in any particular discipline—they also need to learn how reading and writing are used within that field. So, disciplinary literacy in science in this unit will introduce you to the knowledge, skills, and tools used by scientists.

You will learn to “make explicit connections among the language of science, how science concepts are rendered in various text forms, and resulting science knowledge” by learning ways to “develop the proficiencies needed to engage in science inquiry, including how to read, write, and reason with the language, texts, and dispositions of science.” (Pearson, Moje, Greenleaf, 2010). These ideas are the principal focus of this unit. While certainly the content covered in this course is important, a primary purpose of this unit is to equip you with the tools necessary to be more successful in your college coursework. You will take part in many reading and writing activities aimed at improving your disciplinary literacy in science. To that end, the creators of the course have developed this academic notebook.

Purposes of the Academic Notebook

The academic notebook plays three roles in this course. First, the notebook provides you with a starter kit of tools aimed to prepare you for college science courses. These tools will assist you in learning and comprehending the information from the scientific text, animations and lectures you receive in the class.

A second role of the notebook is to provide you with a personal space to record your work. The academic notebook is where you will take your notes for the class on any materials you are covering. For example, if you are reading an article in class, take notes in this notebook. If you are doing a lab, make your observations and notes here. Likewise, if you are listening to a lecture, take notes here. Use the tools in the resource portion of the notebook to assist you in organizing your notes.

The third and final role of the notebook is that of an assessment tool. Your instructor may periodically collect the notebooks and review your work to ensure that you are remaining on task and to assist you with any material that is causing you difficulty. Your instructor may also assign tasks to be completed in the notebook, such as in-class writing assignments. At the end of this six-week module, your instructor will review the contents of this notebook as part of your overall grade. Thus, it is important that you work seriously as this notebook becomes the record of your activity in this course.

Helpful Hints for Science Literacy Success

About Scientists: How do Scientists think?

As you will spend much of your time in class learning this on your own, it is best to be brief. In short, scientists learn by careful observation of the world around them to discover general principles. They do this through careful experimentation that results in data. Scientists use this data to draw conclusions. You likely have heard of the scientific method. Scientists use this method as a structured way to investigate the questions they have. An important use of the scientific method is to be able to replicate previous work. Scientists strive to organize, analyze, and explain things clearly. Scientists believe that science is an attempt to build understandings of the world and that science findings are tentative and subject to revision based on new understandings.

About Scientists: What do scientists ask?

Scientists ask lots of questions about nature and the world around them. These are questions that you will hopefully come to ask upon completing this coursework, and the tools in the resource materials section of the academic notebook are intended to aid you in asking these questions.

Scientists are systematic when they ask questions. Scientific inquiry helps scientists answer questions through investigation. They begin with observation. They may start with big, broad questions: “Why? What’s going on? How is this explained?” They then may break a larger question into smaller parts to examine. They examine work that has already been done. They use the scientific method to hypothesize, test, analyze and draw conclusions. This inquiry is often cyclical with experience and observation leading to new hypotheses.

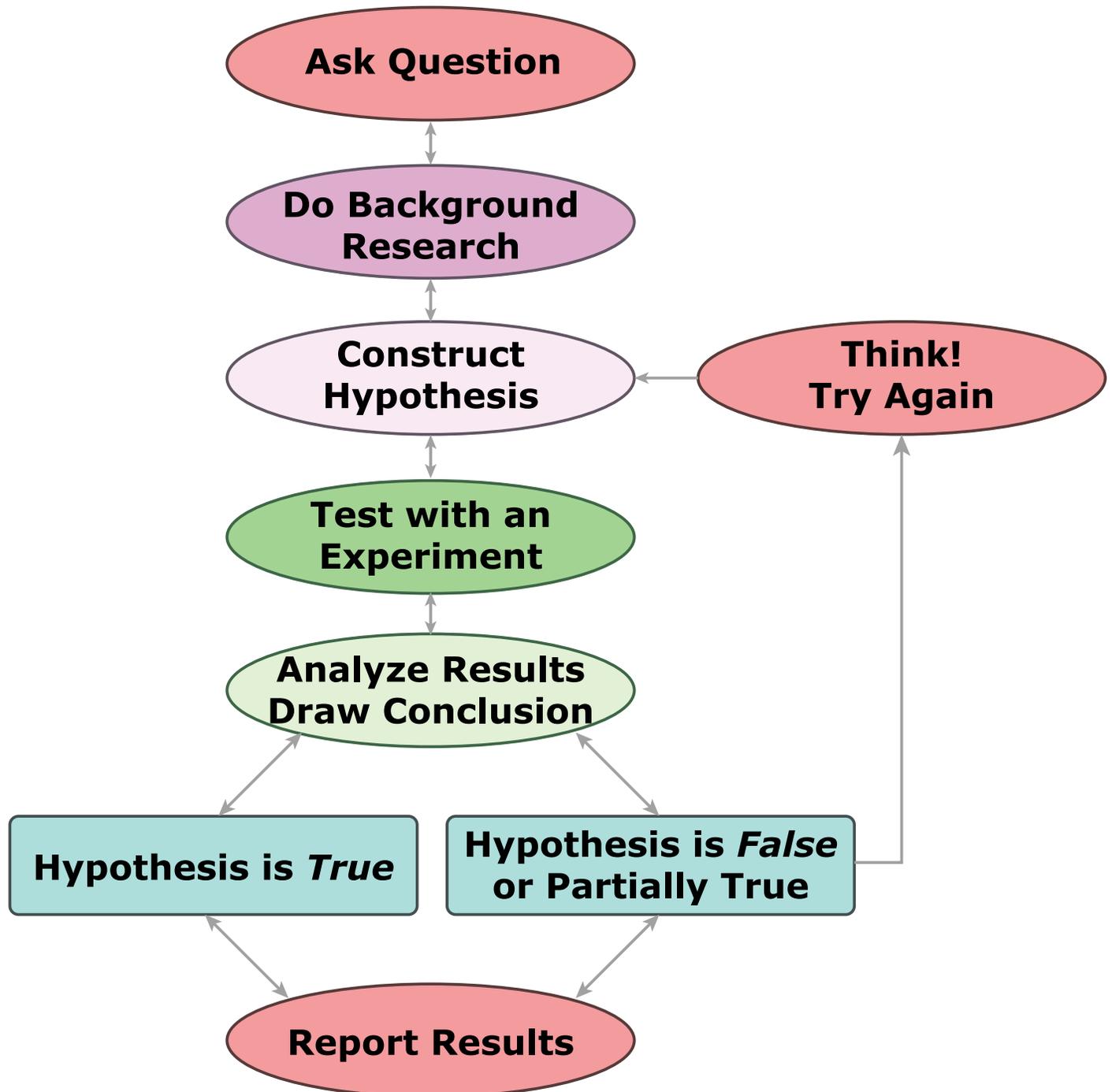
Lesson 1

Gateway Activity

In this lesson, you will . . .

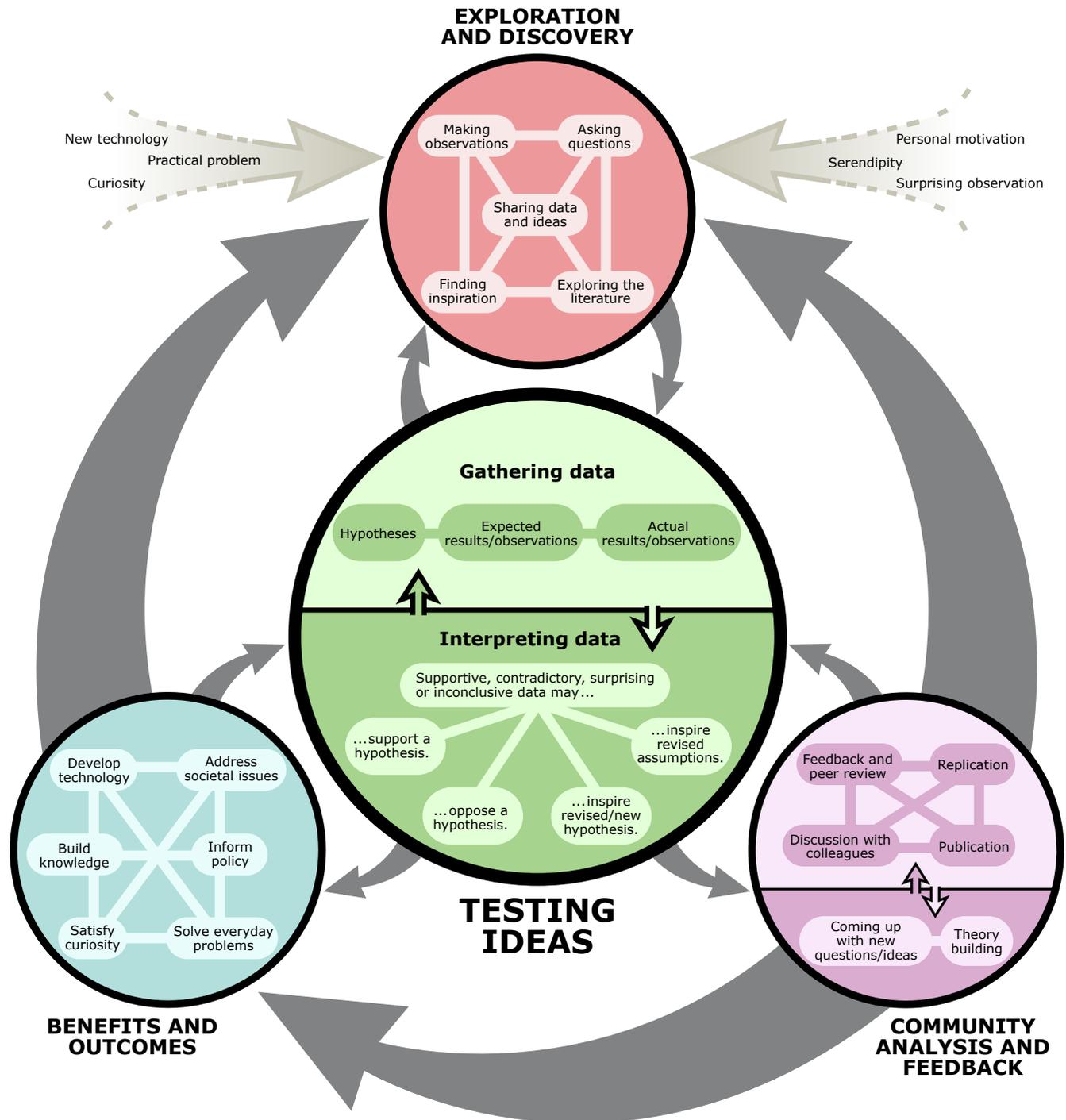
- Add to your understanding of the two levels of thinking required in this course: thinking like a scientist and thinking about learning in the sciences.
- Add to your understanding of the components of science literacy.
- Develop skills to critically examine current science topics.
- Evaluate perspectives from multiple stakeholders using multiple sources of information.
- Apply your knowledge by analyzing science-based arguments.
- Explain the processes involved in critical reasoning in science.

Overview of the Scientific Method



(<http://www.sciencebuddies.org>)

How science works



Overview of the Scientific Method

Compare and contrast the overview of the scientific method diagram above with the diagram entitled, “How science works.”

| | Overview of the scientific method | How science works |
|--|-----------------------------------|-------------------|
| Main premises of the diagram. | | |
| | | |
| | | |
| | | |
| | | |
| How are science outcomes described? | | |
| | | |
| | | |
| | | |
| | | |
| How is science conducted? | | |
| | | |
| | | |
| | | |
| | | |
| Who are the key players involved in science inquiry? | | |
| | | |
| | | |
| | | |
| | | |

Gateway Activity

Notes from BRCA video 1:

Notes from BRCA video 2:

Notes from BRCA video 3:

Explain how BRCA1 and 2 gene mutations impact a person's risk of cancer.

How did the woman in the video interpret her risk?

Reflection: Should people be screened?

Discussion Preparation

As you read the article assigned to your group, think about the following elements of a scientific argument:

- **Data:** these are the facts involved in your argument that support your claims. What data does your article contain?
- **Claim:** this is the conclusion that is drawn from the data. What conclusion do the authors have?
- **Warrants:** these are the reasons that justify the connection between the data and the claim. In science, these are often the scientific principles and/or methods. What warrants are present in your article?
- **Backing:** these are the basic assumptions that are commonly agreed upon that provide justification for the warrants. What are the basic assumptions that the authors used as a justification for their stance?

| Article | Genetic disease description | Science argument | Ethical argument |
|---------|-----------------------------|------------------|------------------|
| | | | |

Question: Use the information you have learned so far to come to a group conclusion. Should people be screened for genetic disease? Students should support their argument with text, refute counterarguments with text and discuss both ethical and scientific concerns.

Lesson 2

Close Reading in Science: DNA

In this lesson, you will . . .

- Learn about and practice close reading with a college-level science chapter on DNA.
- Learn about how to approach both general and discipline specific vocabulary.
- Explain the processes involved while reading in the sciences.

Reading Science Text

(Adapted from Nist-Olejnik & Holschuh, College Success Strategies, 4th Ed., 2013.)

In science textbooks you will find many new terms and definitions. Often, the terms introduced in early chapters will be used later in the text to define other terms. So you need to be sure you understand the new terms as they appear to avoid trouble understanding future reading. Science textbooks also discuss proven principles and theories in terms of their relationship to each other. Therefore, it is important to be aware of and understand how the theories connect and how they explain the science concepts you are learning.

Concepts in science textbooks are usually presented sequentially, which means the concepts build on each other. Your best plan is to test yourself as you read to make sure you fully understand each concept. It is also helpful to create reading goals to monitor what you are learning. This means that rather than focusing on getting through a chapter, focus on learning concepts every time you read. Adopt a scientific approach and ask yourself questions such as:

- What data support this concept or theory?
- What other theories is this concept related to?
- How does this phenomenon work? What is the scientific process involved?
- Why does this phenomenon occur?
- What does it show us?

It is also important to pay attention to the diagrams in each chapter. They are there to help you picture the science process so that you can see what is happening. Understanding diagrams is crucial to doing well in most science courses.

Gearing Up for Reading

To gear up for reading, start by reading the chapter title and thinking about what you already know about that concept. Focus on primary and secondary headings to understand how the chapter is organized and how the ideas are related together. If your text has an outline of topics at the beginning of each chapter, use it to help you think about the key points. If not, skim through the chapter for key terms and think about how they are related to the appropriate heading or subheading. Pay special attention to diagrams and figures, and think about how they relate to the overall focus of the chapter. Finally, read the chapter objectives and guiding questions if your textbook has these features.

What and How to Annotate During Reading

Because of the large amount of new terminology involved in learning science, it is important for you to read your science textbooks before class. In this way, you will be familiar with the terms and concepts discussed in the text and you will be able to build your understanding of the concepts as you listen in class. It is also a good idea to connect the concepts discussed in class with the concepts described in your text by comparing your lecture notes to your text annotations each time you read. This will help you follow the flow of the concepts and will help you understand how the ideas are connected.

When you annotate your science text, you need to match your annotations to the course expectations. For example, if you are expected to think at higher levels, be sure your annotations include more than just the bold-faced terms. If you are expected to be able to explain science processes, be sure your annotations help you learn to do just that.

In general, it is a good idea to limit the amount of material you annotate. Annotate big concepts and save the details for your rehearsal strategies. A big mistake that students make when annotating science is that they tend to annotate too much. It is also essential to focus on putting the ideas into your own words. This will help you monitor your understanding of what you have read and will keep you from copying exactly from the text. In addition, look for experiments and results or conclusions drawn from scientific theories, and seek to make connections between the experiments and the concepts they generate.

Science texts often contain diagrams or charts to explain concepts. Because science exams usually contain questions about the concepts described in diagrams or charts, you must be able to read and understand each one. As you read your text, annotate the diagrams and take the time to reflect on what they are depicting. A good self-testing strategy to make sure you fully understand the concept is to cover up the words in the diagram and try to talk through the information. If you can explain how the concept works, you've shown that you understand it. If you find that you cannot explain it, reread your annotations or the diagram text to be sure you understand the key points.

In the annotation example on the next page, notice how the annotations focus on explaining the concepts rather than just memorizing the terms.

Example of Annotations in a Science Textbook

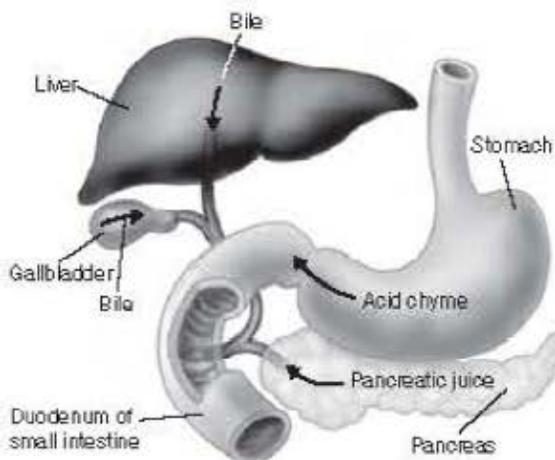


Figure 22.12
The duodenum.

Acid chyme squirted from the stomach into the duodenum (the beginning of the small intestine) is mixed with pancreatic juice, bile from the liver and gallbladder, and intestinal juice produced by the duodenal lining itself. As peristalsis propels the mix along the small intestine, hydrolases break food molecules down to their monomers.

The duodenum receives digestive juices from the pancreas, liver, and gallbladder (Figure 22.12). The **pancreas** is a large gland that secretes pancreatic juice into the duodenum via a duct. Pancreatic juice neutralizes the stomach acids that enter the duodenum and contains hydrolases that participate in the chemical digestion of carbohydrates, fats, proteins, and nucleic acids.

Bile is a juice produced by the **liver**, stored in the **gallbladder**, and secreted through a duct into the duodenum. Bile contains no digestive enzymes but does have substances called bile salts that make fats more accessible to lipase. Fats, including those from the cheese of the pizza we're following, are a special problem for the digestive system because they do not dissolve in water. The fats in chyme start out as relatively large globules. Only those molecules on the surface of the globules are in contact with the lipase dissolved in the surrounding solution. Agitation from the rhythmic contraction of muscles in the intestinal wall breaks the fat globules into small droplets, but without the help of bile salts, those droplets would quickly fuse again into larger globules that would be difficult to digest. Through a process called emulsification, bile salts essentially coat the tiny fat droplets and prevent them from fusing. Similarly, emulsification by a chemical additive helps keep oil permanently mixed with vinegar in some commercial salad dressings.

The intestinal lining itself also aids in enzymatic digestion by producing a variety of hydrolases. The cumulative activities of all these hydrolytic enzymes break the different classes of food molecules completely down into monomers, which are now ready for absorption into the body.

Absorption of Nutrients Wait a minute! The previous sentence said that nutrients "are now ready for absorption by the body." Aren't these nutrients already in the body? Not really. The alimentary canal is a tunnel running through the body, and its cavity is continuous with the great outdoors. The doughnut analogy in Figure 22.13 should convince you that this is so. Until nutrients actually cross the tissue lining of the alimentary canal to enter the bloodstream, they are still outside the body. If it were not for nutrient absorption, we could eat and digest huge meals but still starve to death, in a sense.

Most digestion is complete by the time our pizza meal reaches the end of the duodenum. The next several meters of small intestine (called the jejunum and the ileum) are specialized for nutrient absorption. The structure of the intestinal lining, or epithelium, fits this function (Figure 22.14). The surface area of this epithelium is huge—roughly 300m², equal to the floor space of a one bedroom apartment. The intestinal lining not only has large folds, like the stomach, but also fingerlike outgrowths called villi, which makes the epithelium something like the absorptive surface of a fluffy bath towel. Each cell of the epithelium adds even more surface by having microscopic projections called microvilli. Across this expansive surface of intestinal epithelium, nutrients are transported into the network of small blood vessels and lymphatic vessels in the core of each villus.

Digestion Sm Intestine

- when food reaches sm int. it has been thru mech. and chem digestion
- hydrolysis is initiated

Duodenum

1st ft. of sm int.

- where food is broken into monomers
- gets digest. juice from pancreas (pancreatic juice via duct—neutralizes stomach acid & contains hydrolases for chem digest), liver (bile), gallbladder (where bile is stored and via duct)
- Bile salts—make fats accessible to lipase thru emulsification—bile salts coat fat droplets to keep them separated (like oil and water in dressing). Int. lining produces hydrolases to get food ready for absorption

Absorption

Nutrients don't really 'enter' body until entering bloodstream. Nut abs occurs in jejunum and ileum (next parts of sm int.) Epithelium—int. lining (huge—300m², folded, and has villi). Very absorptive. Each cell has microvilli—all help transport nutrients

The Annotation System of Text Marking

What is Annotation?

- Writing brief summaries in the textbook's margin.
- Enumerating multiple ideas (i.e., causes, effects, reasons characteristics).
- Sketching pictures or charts to explain difficult processes/concepts.
- Writing possible test questions.
- Noting puzzling or confusing ideas that need clarification.
- Underlining key ideas.

Why Should I Annotate?

- It will improve your concentration so you will not become distracted and have to reread.
- It can provide an immediate self-check for your understanding of the textbook's key ideas.
- It will help you remember more.
- It can assist you in test preparation.
- It will negate the need of time spent in rereading the chapters.
- It will help you state ideas in your words.

What should you annotate?

- Definitions.
- Lists, features, causes, effects, reasons, characteristics.
- Diagrams and Processes.
- Examples of main idea[.
- Good summaries.
- Possible test questions.
- Something you do not understand.

SCIENTIFIC ROOT WORDS, PREFIXES, AND SUFFIXES

<http://www.succeedinscience.com/apbio/assignments/generalinfo/rootwords.pdf>

| | | | | | |
|---|--|--|--|--|--|
| a-; an- ab- -able | not; without; lacking; deficient away from; out from capable of | cente- centi- centr- | pierce hundredth center | -err- erythro- -escent | wander; go astray red becoming |
| ac- -aceous | to; toward of or pertaining to | cephal- cerat- | head horn | eso- eu- | inward; within; inner well; good; true; normal |
| acou-; acous - | hear | cerebr- | brain | eury- | widen |
| ad- aden- adip- | to; toward gland fat | cervic- chel- chem- | neck claw dealing with chemicals | ex- extra- -fer- | out of; away from beyond; outside bear; carry; produce |
| aero- agri- -al alb- | air field; soil having the character of white | chir- chlor- chondr- chrom-; -chrome | hand green cartilage color | ferro- fibr- -fid; fiss- -flect; -flex | iron fiber; thread split; divided into bend |
| alg-; -algia alto- ambi- ameb- amni- amphi-; am- pho- amyl- ana- andro- anemo- ang- angi- ante- anter- antho- anti- anthropo- -ap-; -aph- apo-; ap- aqu- archaeo- -ary; -arium arteri- arth- -ase aster-; astr- -ate ather- -ation atmo- audi- aur- auto- bacter-; bactr- barb- baro- bath- bene- bi- (Latin) bi-; bio- (Greek) -blast- | pain high both change; alternation fetal membrane both starch up; back; again man; masculine wind choke; feel pain blood vessel; duct before; ahead of time front flower against; opposite man; human touch away from water primitive; ancient place for something artery joint; articulation forms names of enzymes star verb form - the act of... fatty deposit noun form - the act of... vapor hear ear self bacterium; stick; club beard weight depth; height well; good two; twice life; living sprout; germ; bud | chron- -chym- -cid-; -cis - circa-; circum- cirru- co- cocc- coel- coll- coni- contra- corp- cort-; cortic- cosmo- cotyl- counter- crani- cresc-; cret- crypt- -cul-; -cule cumul- cuti- cyan- -cycle; cycl- -cyst- cyt-; -cyte dactyl- de- deca- deci- deliquesc- demi- dendr- dent- derm- di-; dipl- (Latin) di-; dia- (Greek) dia- (Latin) digit- din- dis- | time juice cut; kill; fall around; about hairlike curls with; together seed; berry hollow glue cone against body outer layer world; order; form cup against skull begin to grow hidden; covered small; diminutive heaped skin blue ring; circle sac; pouch; bladder cell; hollow container finger away from; down ten tenth become fluid half tree tooth skin two; double through; across; apart day finger; toe terrible apart; out | flor- flu-; fluct-; flux foli- fract- -gam- gastr- geo- -gen; -gine -gene- -gest- -glen- -glob- gloss- gluc-; glyc- glut- gnath- -gon -grad- -gram; graph grav- -gross- gymno- gyn- gyr- -hal-; -hale halo- hapl- hecto- -helminth- hem- hemi- hepar-; hepat- herb- hetero- hex- hibern- hidr- hipp- hist- holo- homo- (Latin) | flower flow leaf break marriage stomach land; earth producer; former origin; birth carry; produce; bear eyeball ball; round tongue sweet; sugar buttock jaw angle; corner step record; writing heavy thick naked; bare female ring; circle; spiral breathe; breath salt simple hundred worm blood half liver grass; plants different; other six winter sweat horse tissue entire; whole man; human |

| | | | | | |
|---------------------|------------------------------|------------------|-------------------------------|--------------------|-------------------------------|
| brachi- | arm | dorm- | sleep | homo- (Greek) | same; alike |
| brachy - | short | dors- | back | hort- | garden |
| brady- | slow | du-; duo- | two | hydr- | water |
| branchi- | fin | -duct | lead | hygr- | moist; wet |
| brev- | short | dynam- | power | hyper- | above; beyond; over |
| bronch- | windpipe | dys- | bad; abnormal; difficult | hyph- | weaving; web |
| cac- | bad | ec- | out of; away from | hypno- | sleep |
| calor- | heat | echin- | spiny; prickly | hypo- | below; under; less |
| capill- | hair | eco- | house | hyster- | womb; uterus |
| capit- | head | ecto- | outside of | -iac | person afflicted with disease |
| carcin- | cancer | -elle | small | -iasis | disease; abnormal condition |
| cardi- | heart | -emia | blood | -ic | (adjective former) |
| carn- | meat; flesh | en-; endo-; ent- | in; into; within | ichthy- | fish |
| carp- | fruit | -en | made of | ign- | fire |
| carpal- | wrist | encephal- | brain | in-; il-; im-; ir- | not |
| cata- | breakdown; downward | enter- | intestine; gut | in-; il-; im-; ir- | to; toward; into |
| caud- | tail | entom- | insects | in- | very; thoroughly |
| -cell- | chamber; small room | -eous | nature of; like | -ine | of or pertaining to |
| cen-; -cene | now; recent | epi- | upon; above; over | infra- | below; beneath |
| inter- intra- | between within; inside | -oma omni- | abnormal condition; tumor all | sacchar- sapr- | sugar rotten |
| -ism | a state or condition | onc- | mass; tumor | sarc- | flesh |
| iso- | equal; same | oo- | egg | saur- | lizard |
| -ist | person who deals with... | ophthalm- | eye | schis -; schiz- | split; divide |
| -itis | inflammation; disease | opt- | eye | sci- | know |
| -ium | refers to a part of the body | orb- | circle; round; ring | scler- | hard |
| -kary- | cell nucleus | -orium; -ory | place for something | -scop- | look; device for seeing |
| kel- | tumor; swelling | ornith- | bird | -scribe; -script | write |
| kerat- | horn | orth- | straight; correct; right | semi- | half; partly |
| kilo- | thousand | oscu- | mouth | sept- | partition; seven |
| kine- | move | -osis | abnormal condition | -septic | infection; putrefaction |
| lachry- | tear | oste- | bone | sess- | sit |
| lact- | milk | oto- | ear | sex- | six |
| lat- | side | -ous | full of | -sis | condition; state |
| leio- | smooth | ov- | egg | sol- | sun |
| -less | without | oxy- | sharp; acid; oxygen | solv- | loosen; free |
| leuc-; leuk- | white; bright; light | pachy - | thick | som-; somat-; - | body |
| lign- | wood | paleo- | old; ancient | somn- | sleep |
| lin- | line | palm- | broad; flat | son- | sound |
| lingu- | tongue | pan- | all | spec-; spic- | look at |
| lip- | fat | par-; para- | beside; near; equal | -sperm- | seed |
| lith-; -lite | stone; petrifying | path-; -pathy | disease; suffering | -spher- | ball; round |
| loc- | place | -ped- | foot | spir-; -spire | breathe |
| -log- | word; speech | -ped- | child | -spor- | seed |
| -logist | one who studies... | pent- | five | stat-; -stasis | standing; placed; staying |
| -logy | study of... | per- | through | stell- | stars |
| lumin- | light | peri- | around | sten- | narrow |
| -lys-; -lyt-; -lyst | decompose; split; dissolve | permea- | pass; go | stern- | chest; breast |

| | | | | | |
|----------------|----------------------------|-----------------|---------------------------|---------------|----------------------------|
| macr- | large | phag- | eat | stom-; -stome | mouth |
| malac- | soft | pheno- | show | strat- | layer |
| malle- | hammer | -phil- | loving; fond of | stereo- | solid; 3-dimensional |
| mamm- | breast | phon-; -phone | sound | strict- | drawn tight |
| marg- | border; edge | -phore; pher- | bear; carry | styl- | pillar |
| mast- | breast | photo- | light | sub- | under; below |
| med- | middle | phren- | mind; diaphragm | super-; sur- | over; above; on top |
| meg- | million; great | phyc- | seaweed; algae | sym-; syn- | together |
| mela-; melan- | black; dark | phyl- | related group | tachy- | quick; swift |
| -mer | part | -phyll | leaf | tarso- | ankle |
| mes- | middle; half; intermediate | physi- | nature; natural qualities | tax- | arrange; put in order |
| met-; meta- | between; along; after | phyt-; -phyte | plant | tele- | far off; distant |
| -meter; -metry | measurement | pino- | drink | telo- | end |
| micro- | small; millionth | pinni- | feather | terr- | earth; land |
| milli- | thousandth | plan- | roaming; wandering | tetr- | four |
| mis- | wrong; incorrect | plasm-; -plast- | form; formed into | thall- | young shoot |
| mito- | thread | platy- | flat | -the-; -thes- | put |
| mole- | mass | pleur- | lung; rib; side | -thel- | cover a surface |
| mono- | one; single | pneumo- | lungs; air | -therm- | heat |
| mort- | death | -pod | foot | -tom- | cut; slice |
| -mot- | move | poly- | many; several | toxico- | poison |
| morph- | shape; form | por- | opening | top- | place |
| multi- | many | port- | carry | trache- | windpipe |
| mut- | change | post- | after; behind | trans- | across |
| my- | muscle | pom- | fruit | tri- | three |
| myc- | fungus | pre- | before; ahead of time | trich- | hair |
| mycel- | threadlike | prim- | first | -trop- | turn; change |
| myria- | many | pro- | forward; favoring; before | -troph- | nourishment; one who feeds |
| moll- | soft | proto- | first; primary | turb- | whirl |
| nas- | nose | pseudo- | false; deceptive | -ul-; -ule | diminutive; small |
| necr- | corpse; dead | psych- | mind | ultra- | beyond |
| nemat- | thread | pter- | having wings or fins | uni- | one |
| neo- | new; recent | pulmo- | lung | ur- | urine |
| nephro- | kidney | puls- | drive; push | -ura | tail |
| -ner- | moist; liquid | pyr- | heat; fire | vas- | vessel |
| neur- | nerve | quadr- | four | vect- | carry |
| noct-; nox- | night | quin- | five | ven-; vent- | come |
| -node | knot | radi- | ray | ventr- | belly; underside |
| -nom-; -nomy | ordered knowledge; law | re- | again; back | -verge | turn; slant |
| non- | not | rect- | right; correct | vig- | strong |
| not- | back | ren- | kidney | vit-; viv- | life |
| nuc- | center | ret- | net; made like a net | volv- | roll; wander |
| ob- | against | rhag-; -rrhage | burst forth | -vor- | devour; eat |
| ocul- | eye | rhe-; -rrhea | flow | xanth- | yellow |
| oct- | eight | rhin- | nose | xero- | dry |
| odont- | tooth | rhiz- | root | xyl- | wood |
| -oid | form; appearance | rhodo- | rose | zo-; -zoa | animal |
| olf- | smell | roto- | wheel | zyg- | joined together |
| oligo- | few; little | rubr- | red | zym- | yeast |

Lesson 3

Discovery of DNA Structure

In this lesson, you will . . .

- Understand the characteristics of DNA.
- Read historical scientific articles regarding the discovery of the structure of DNA.
- Create a diagram of DNA based on multiple sources, adding to and editing their model with each new source.

Building your Understanding of DNA Structure

Part 1: After reading the Watson and Crick's article in Nature on their discovery of the structure of DNA, draw a diagram of DNA below, labeling all components of your diagram.

Building your Understanding of DNA Structure

Part II: After reading the *Popular Science* article describing the Nobel Prize-winning scientists' discovery of DNA, go back to your original diagram of DNA. Make changes or add to your diagram based on additional understanding gained from this article. You can also re-draw your diagram.

Building your Understanding of DNA Structure

Part III: After reading and annotating Phelan 5.2, paying special attention to the diagrams and figures, go back to your original diagram of DNA. Make changes or add to your diagram based on additional understanding gained from this article. You can also re-draw your diagram.

Lesson 4

DNA: Structure to Function

In this lesson, you will . . .

- Develop skills to analyze information from a variety of sources.
- Integrate ideas to develop a larger understanding of contributions made by researchers on the discovery of DNA.
- Extend your knowledge by transforming the information into a concept map.
- Learn to summarize and synthesize your findings to discuss how our understanding of DNA developed.

Concept Maps

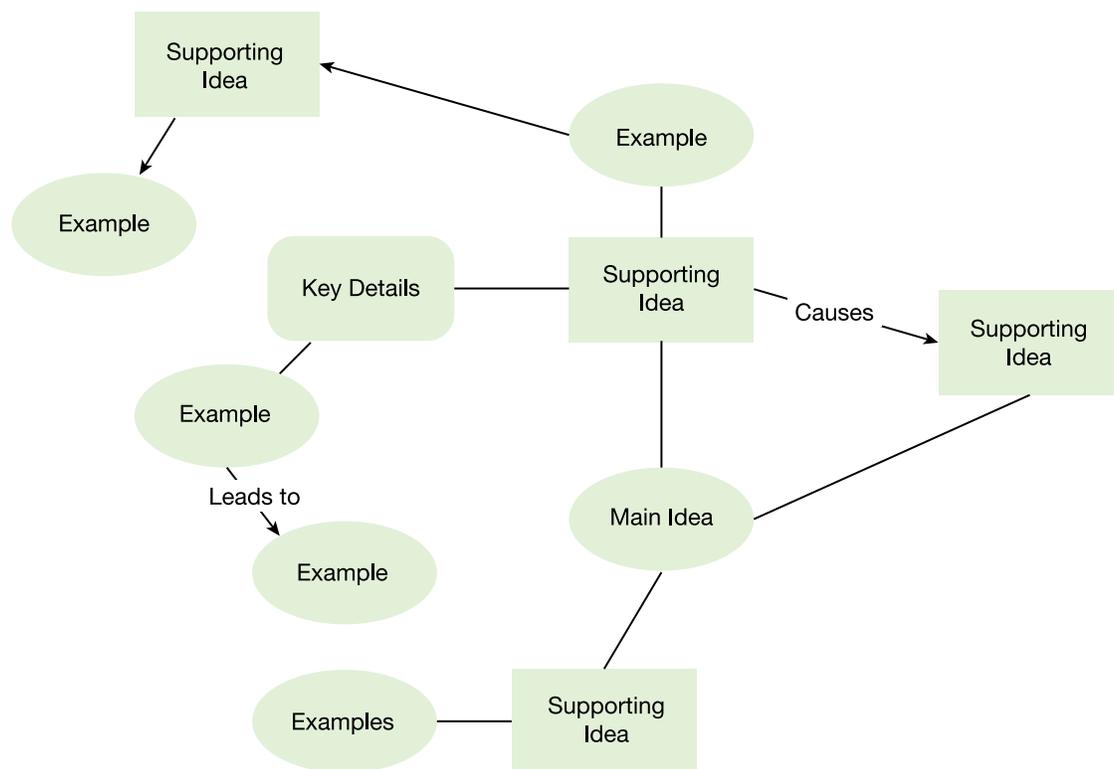
Concept maps are visual representations of information, so using this strategy is very useful for students who tend to learn visually. A concept map is organized in such a way that it is easy to see the major concept that is being mapped, related concepts, and how everything is related.

Concept mapping works well when it is important to see the relationship between complex concepts, and it works particularly well in courses where many ideas are related or interconnected. For example, mapping might work well to see the relationship between hormones of the endocrine system or the stages of meiosis. Mapping is especially useful for students who like to personalize strategies because there is no right or wrong way to map. The important thing is that the way ideas are linked together be clearly shown in your concept map.

How Do You Use Maps to Study? When you study your map, you can begin by rehearsing one concept at a time. Then cover up everything except the main concept, and begin to talk the information through. Say the related material and then check your accuracy. Focus on how the concepts are related to each other because that is the major strength of mapping. Rather than viewing ideas one at a time, as you would with CARDS, mapping enables you to understand how these ideas fit together.

(Adapted from Nist-Olejnik, S. L. & Holschuh, J. P. (2013). *College Success Strategies 4th ed.*)

General Structure of a Concept Map

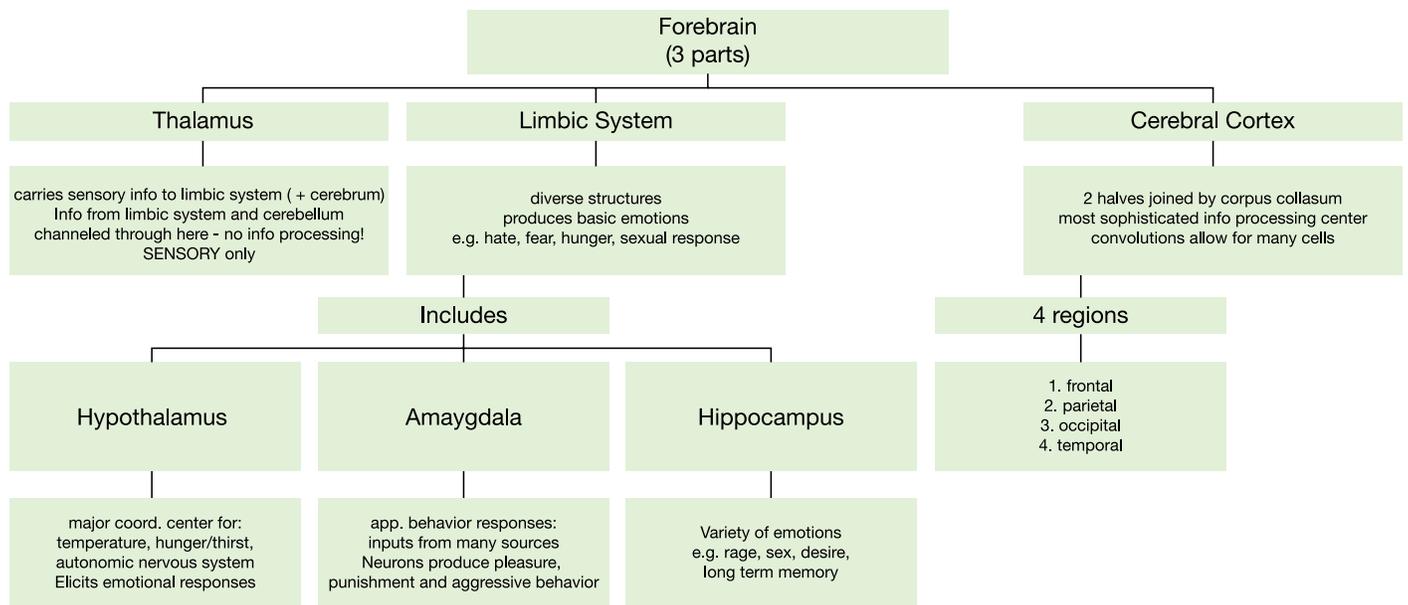


You can see in this example that the map includes both main and supporting ideas as well as details and examples.

Components of a concept map:

1. Enclosed space (circle, box, etc.) to represent the concepts
2. Lines to represent the relationship between the concepts
3. Labels on the line to describe the relationship, such as:
 - causes,
 - composed of,
 - depends on,
 - affects (increases, decreases, inhibits, generates, etc.),
 - includes,
 - leads to.
4. Arrows indicate the direction(s) of the relationship.

It also can show how one concept leads to another or how concepts are interrelated. In the example below, a student has depicted the parts of the forebrain.



Concept Map Grading Rubric

| | Excellent | Good | Below Average | Poor |
|--------------|--|--|--|---|
| Organization | Well organized. Logical format. Contains main concepts. Contains an appropriate number of concepts. | Thoughtfully organized. Easy to follow most of the time. Contains most of the main concepts. Contains an adequate number of concepts. | Somewhat organized. Somewhat incoherent. Contains only a few of the main concepts. | Choppy and confusing. Contains a limited number of concepts. |
| Content | Linking words demonstrate superior conceptual understanding. Links are precisely labeled. | Linking words easy to follow but at times ideas unclear. Links are not precisely labeled. | Linking words are clear but present a flawed rationale. Links are not labeled. | Difficult to follow. No links. |
| Cooperation | Worked extremely well with each. Respected and complemented each others ideas. | Worked very well with each other. Worked to get everyone involved. | Attempted to work well with others. At times “off task” and not everyone was actively involved. | Little or no teamwork. |

Lesson 5

DNA: Modeling in the Sciences

In this lesson, you will . . .

- Understand the role and functions of modeling in science.
- Learn to create scientific models.
- Learn to use scientific models for prediction.

Protein Synthesis — Transcription and Translation: A Modeling Activity

INTRODUCTION

DNA is the molecule that stores the genetic information in your cells. That information is coded in the four **nitrogenous bases** of DNA: C (cytosine), G (guanine), A (adenine), and T (thymine). The DNA directs the functions of the cell on a daily basis and will also be used to pass on the genetic information to the next generation. Because of its critical role in all the functions of the cell, DNA is kept protected in the nucleus of your cells.

DNA is organized in sections called **genes**. Genes code for **proteins**, and it is proteins that do all the work in the cell. They function as structural proteins—serving as the building blocks of cells and bodies. And they function as enzymes—directing all the chemical reactions in living organisms. Proteins are made in the cytoplasm on ribosomes.

Since DNA cannot leave the nucleus, the *information* from DNA must be transmitted from the nucleus to the cytoplasm. During **transcription**, each gene on the DNA is read and codes directly for a **messenger RNA (mRNA)** molecule. The mRNA is made by matching its complementary bases—C, G, A, and **U (uracil)**—to the DNA bases. This process is called transcription, because the message is going from one version of nucleic acid language (DNA code) to another version of nucleic acid language (RNA code), so it is like transcribing from the key of G to the key of C in music. Before leaving the nucleus, this primary mRNA transcript is modified in several ways. **Introns** (intervening non-coding units) are edited out and **exons** (expressed coding sequences) are spliced together. In addition, a **5” GTP cap** and a **3” poly-A tail** are added to the mRNA to protect it from RNase enzymes in the cytoplasm. This mature mRNA transcript then leaves the nucleus and carries the code for making the protein from the DNA gene in the nucleus to the ribosome in the cytoplasm. During **translation**, the ribosome reads the sequence of bases on the mRNA in sets of three—the triplet **codons**. Another type of RNA—**transfer RNA (tRNA)**—brings the protein building blocks—**amino acids**—to the ribosome as they are needed. The ribosome bonds the amino acids together to build the protein coded for by the gene back in the nucleus. This process is called *translation*, because the message is going from nucleic acid language (DNA/RNA code) to the completely different amino acid language (protein code), so it is like translating from English to Chinese.

PURPOSE

You will create a model to simulate the process of protein synthesis, including transcription and translation. You will then use this model to predict the effects of different types of mutations.

MATERIALS

- DNA template strand
- mRNA bases A, U, C, and G
- tRNA molecules
- amino acid codon chart
- colored paper
- poster paper
- scissors
- glue/ tape

PROCEDURE

1. Form your DNA template strand as shown below.



2. Using the materials provided, create a model of both the transcription and translation of this gene. Be sure to represent and label the following in your model:
 - RNA polymerase enzyme
 - primary mRNA transcript
 - 5' GTP cap
 - 3' poly-A tail
 - Small and large ribosomal subunits
 - A, P, and E sites of the ribosome
 - Completed polypeptide
3. Label your model and be prepared to share your completed mRNA and polypeptide with your classmates and teacher.
4. Use your DNA, your mRNA, and your polypeptide to answer the Model Analysis Questions on the next page.

d. Why could a mutation in a gamete (egg or sperm) have more profound biological consequences than a mutation in a somatic (body) cell?

10. **FRAMESHIFT MUTATION 1:** Another group of mutations is called frameshift mutations where at least one base is either added to or deleted from the DNA as it is copied during DNA replication. Let's investigate the effects of these.

a. Here is your original DNA sequence from this lab and the amino acid sequence that was translated from it:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|-----|---|-----|---|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| 3' 5' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | |
| C | T | G | A | G | C | T | A | C | T | G | A | G | C | T | G | A | G | C | T | G | C | A | G | A | G | C | C | G | A | G | C | T | C | C | T | G | T | G | T | A | A | A | C | T | T | G | |
| X | | X | | MET | | THR | | ARG | | LEU | | ASP | | VAL | | SER | | ALA | | ARG | | GLY | | HIS | | ILE | | STOP | | | | | | | | | | | | | | | | | | | |

b. Let's simulate a frameshift mutation by adding an additional base between the 36th & 37th bases. The base A was accidentally added to the sequence of the gene. Now transcribe this new DNA strand into mRNA, and then also translate it into its amino acid sequence.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 3' 5' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| C | T | G | A | G | C | T | A | C | T | G | A | G | C | T | G | A | G | C | T | G | C | A | G | A | G | C | C | G | A | G | C | T | C | C | T | A | G | T | G | T | A | A | A | C | T | T | G |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

c. Did this change in the DNA sequence cause any significant change to the protein produced? Explain.

Lesson 6

Taking Notes from Lecture

In this lesson, you will . . .

- Understand the five steps involved in biotechnology.
- Learn note-taking strategies for science documentaries.

Note-taking from Lecture

(adapted from Nist-Olejnik & Holschuh 2013 *College Success Strategies, 4th ed.*)

Because many scientists view the textbook as a supplement and class lecture to be the most important, up-to-date material, it is crucial that you go to class every day and take excellent notes. Your notes are the only record of what was said in class.

If the lecture includes diagrams, figures, or illustrations, it is important to put the visuals in your notes. It is also important to write down any formulas, equations, charts, or graphs accurately and completely. Although we have discussed paraphrasing ideas and putting them into your own words as much as possible, in science there are some technical ideas that have specific meanings and should be written exactly as the professor specifies. In addition, use scientific notation and abbreviations as much as possible as you take notes so that you are comfortable with their meaning come exam time.

Strategies for note taking during a lecture

One form of culture shock that high school students always encounter when they go to college is how to cope with the lecture in science class. The college lecture can be an intense 50 minute to one and a half hour narrative presented by a professional scientist who is attempting to explain scientific processes and phenomena. Unlike small high school classrooms, college classrooms at large universities may contain 300 students. As a result, there is little interaction with the instructor beyond the lecture. You have to do a good deal of self-imposed studying. The best way to deal with this daunting task is to be prepared and organized. Here are a few strategies that may help with note taking during a lecture.

- *Read ahead of time:* Most college instructors provide outlines in their syllabi of what materials will be read and when. Read these closely before attending class. A close reading of the assigned materials beforehand will alleviate the need to take tons of notes because lectures often repeat material covered in the textbooks.
- *Take reading notes:* Again, in preparation for the lecture, find a system that works for you and take reading notes. You may read a small section of the text, then review it, and then take notes.
- *Listen closely:* This may seem simple but during a long lecture it is easy to drift away and not listen. Stay focused during class and try to identify aspects of the lecture that are not covered in the assigned readings. These new components are perfect note taking opportunities. Keep your mind actively engaged.

Be organized in your note taking: Date each lecture. Leave a space at the top of the page so that you can come back later and outline the major topics covered in the lecture. This mini-outline creates a kind of running table of contents for you that you can review on a day-to-day basis. Use a note-taking tool, like a graphic organizer, that helps you identify the key science processes, terms, and ideas.

Deal with Diagrams: An important component in most science lectures is diagrams, tables, and illustrations. When this information is discussed, it is sometimes difficult to take notes on both the diagrams and what the instructor is saying. One way to deal with this problem is to write down the title of the diagram (e.g., the Fluid Mosaic Model) but focus your note taking on the instructor's explanation. Then, refer to your textbook after class to connect the visual with your notes.

Introduction to Biotechnology

Based on the video you watched and the text you read, respond to the following questions:

Why might a scientist want to modify organisms?

What are the current concerns and advancements in biotechnology?

What interests you about biotechnology?

Lesson 7

Preparing for Science Exams

In this lesson, you will . . .

- Utilize strategies to generate your own exam reviews.
- Learn to ask and answer higher-level questions.
- Learn to organize concepts as a way to comprehend science processes.
- Take a multiple-choice and short essay exam.

Concept Maps

(Adapted from Nist & Holschuh, 2012 *College Success Strategies*, 4th edition)

How Do You Use Maps to Study?

When you study your map, you can begin by rehearsing one concept at a time. Then cover up everything except the main concept, and begin to talk the information through. Say the related material and then check your accuracy. Focus on how the concepts are related to each other because that is the major strength of mapping.

Question and Answer Strategy Predict 10 higher-level questions about the material. You will use these questions with classmates as part of your exam review. Write a response for each answer (note: your answers do not need to be in full sentences—you need enough information to know if your classmate's response is correct when you are quizzing them during the exam review).

| | Question | Answer |
|----|----------|--------|
| 1 | | |
| 2 | | |
| 3 | | |
| 3 | | |
| 4 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Lesson 8

Analyzing Science Arguments

In this lesson, you will . . .

- Learn to analyze scientific arguments.
- Construct diagrams to visualize the arguments.
- Learn that science argumentation is based on evidence to support claims and science principles used as warrants.

DNA Final project: Biotechnology Research Symposium

General Instructions

The purpose of the project is to research an issue on how DNA and biotechnology impacts our daily lives by reviewing the current research literature. You can choose a topic relating to biotechnology and health or biotechnology and agriculture. This is not a term paper or book report. It is not merely a report on your sources. Instead, your poster report will synthesize the sources to present a coherent explanation of the topic. A key aspect is that it provides evidence for a particular point of view. Thus, you will need to read multiple research articles on the same topic to be able to draw conclusions on the findings. Use the following prompt to help guide your thinking:

Critical Focus Question: This will help you focus your research and the development of your project: “What are the current trends and future applications of biotechnology?”

After researching peer-reviewed journal articles on a topic related to biotechnology and health or biotechnology and agriculture, write a research report in the form of a scientific poster in which you discuss the science behind the technology and evaluate current and future applications. Be sure to support your position with evidence from your research. Cite at least six to eight (6-8) sources, pointing out key elements from each source. One of your sources will be a section from Phelan 5.11-5.19.

Use the following websites as a way to start your search for materials:

www.sciencemag.org

www.scientificamerican.com

www.nature.com

www.newscientist.com

<http://learn.genetics.utah.edu/>

You will create a poster presentation on your topic. To complete this assignment you will read research articles, synthesize the information and write an evaluative argument on your topic.

You will present the poster of your project to the class in a research symposium and create a handout for your classmates.

Research symposium.

For this symposium you will create a poster of your work. Your poster must include the following information:

1. **Title** of a presentation; name; school name; teacher’s name
2. **Background** and introduction to the topic—this section introduces the topic, describes the questions you are asking, and provides a thesis. In this section you will also explain the science behind the particular method and connect it to what you have learned in class. (Describe the biotechnology—what is it? How is the process accomplished? The detailed description of your biotechnology application will lead to your hypothesis/position.)
3. **Current advances** and results—this is the major focus of your poster. This section presents the current issues, themes, research goals. Where is this technology being used? You will describe the important results and explain how those results shape our

current understanding of the topic. Be sure to mention the types of experiments done and discuss their findings but do not report the experimental procedure step-by-step. Include a figure to help discuss the data. What are the outcomes of this technology?

Think about the following:

- Which studies support your hypothesis/thesis/question?
 - Do some studies support alternative hypotheses?
 - Is there controversy in the scientific community over this topic, or is there general agreement?
 - What are the real and potential benefits and dangers of this scientific development?
 - What graphs, figures or tables might be relevant to include?
4. **Discussion**—this section discusses the current advances and results by putting them in context. Highlight any agreements or disagreements in the field and comment on possible reasons for those disagreements. How will the scientific development impact or potentially impact our lives?
 5. **Conclusions/future directions**—this section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.
 6. **References** in APA style.

Here are a few websites to help you with APA style —

<http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>.

<http://owl.english.purdue.edu/owl/resource/560/01/>.

<http://www.library.cornell.edu/resrch/citmanage/apa>.

Symposium

You will present your poster by discussing your work with the class. Be prepared to talk about your work without reading directly from your poster. Remember, you should have a good understand of your topic and you should be prepared to answer questions about your work.

Handout

Create a handout for your classmates outlining your work. Be sure to include:

- **Title** of a presentation; name; class.
- **Background** and introduction.
- **Current advances** and results.
- **Discussion**.
- **Conclusions/future directions**.
- **References** in APA style.

Your poster title goes here. (You can make the text bigger or smaller if needed).

Name

Teacher's Name

Class

Background and Introduction

This section introduces the topic, describes the questions you are asking, and provides a claim. In this section you will explain the science behind the particular method and connect it to what you have learned in class.

Describe the biotechnology— what is it?

How is the process accomplished? (The detailed description of your biotechnology application will lead to your claim.)

Current Advances and Results

This section presents the current issues, themes, and research goals. Where is this technology being used? Describe the important results and explain how those results shape our current understanding of the topic. Mention the types of experiments done and discuss their findings but do not report the experimental procedure step-by-step.

Think about the following:

- Which studies support your hypothesis/claim/question?
- Do some studies support alternative hypotheses?
- Is there controversy in the scientific community over this topic, or is there general agreement?
- What graphs, figures or tables might be relevant to include?

Include a figure to help discuss the data. What are the outcomes of this technology?)

Conclusion/future directions

This section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.

References

List full references in APA style.

| Possible Topics | | |
|--|---------------------------|-----------------------------------|
| Biotechnology Topic | Rate your interest | Possible research question |
| Human Cloning | | |
| Animal Cloning | | |
| Transgenic (GM) Plants | | |
| Transgenic (GM) Animals | | |
| Gene Therapy | | |
| Forensic DNA Data Banks | | |
| Human Genome Project | | |
| Pharmacogenetics | | |
| Xenotransplantation | | |
| Herbicide tolerance | | |
| Engineered crops | | |
| Insect tolerance | | |
| Golden Rice | | |
| Disease detection | | |
| Repair of damaged organs and tissues | | |
| Engineered proteins for treating disease | | |
| Preserving endangered species | | |

Analyzing Science Arguments

In textbooks science is often presented as a series of experiments and observations. Reading these books can make it seem like all scientists agree on every idea. Actually, the majority of scientific concepts are continually contested and modified in the scientific community. Scientists can agree on one thing: arguing science creates better understandings. Once you learn to spot scientific arguments, you will find them in most science writing—including your textbooks.

In this lesson you will examine some of the argument made an article on GMOs from the journal *Nature Education*.

A good argument includes all of the following:

Data: these are the facts involved in your argument that support your claims.

Claim: this is the conclusion that is drawn from the data.

Warrants: these are the reasons that justify the connection between the data and the claim.

Backing: these are the basic assumptions that are commonly agreed upon that provide justification for the warrants.

The overall goal is to present the argument in a sentence: “The author argues . . . because (*data*) . . . since (*warrant*) . . . on account of (*backing*) . . . although some believe/are concerned about (*qualifiers*) . . . however, the data suggests (*rebuttal*) . . . therefore (*conclusion*).”

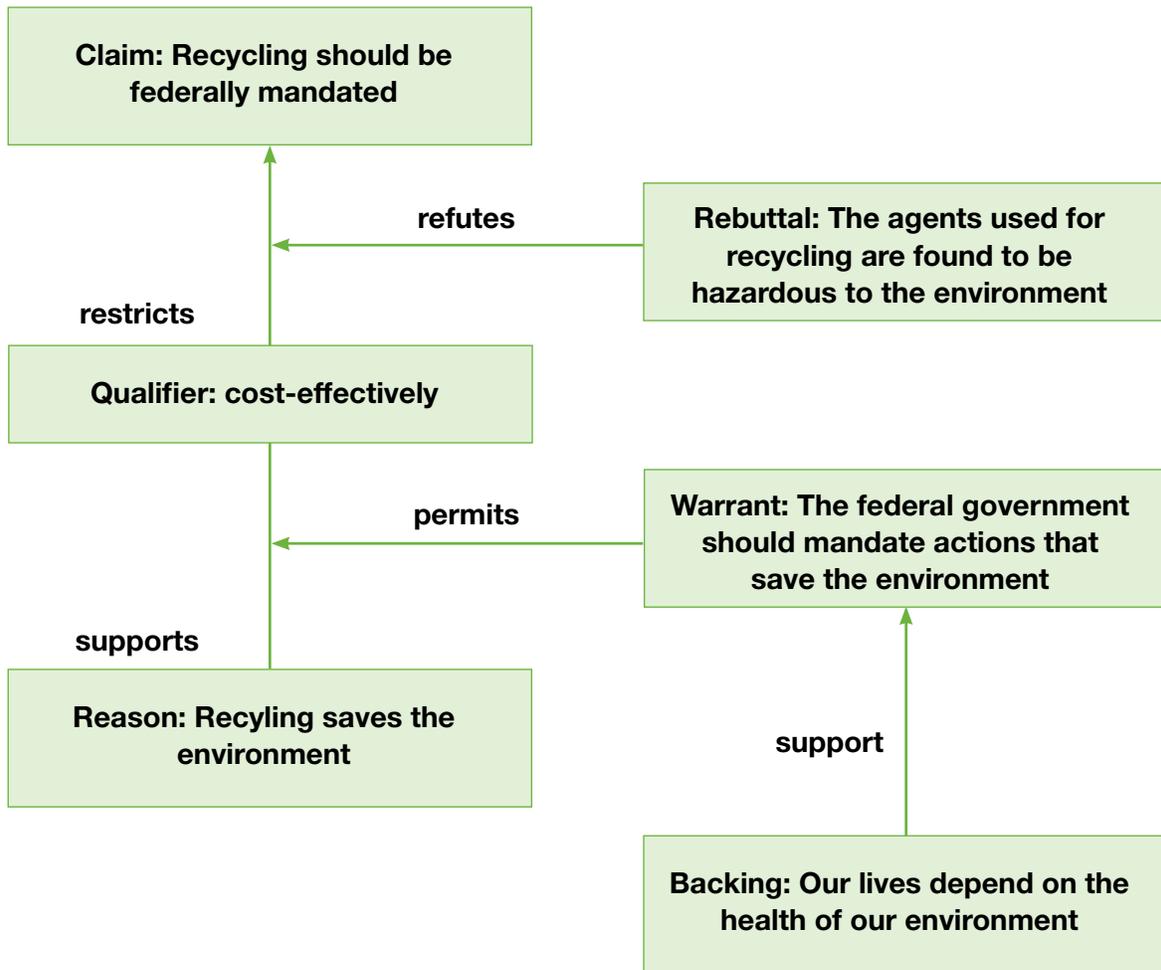
(Adapted from Driver, R., Newton, P., Osborne, J. (1998). Establishing the norms of scientific argumentation in classrooms.)

In more complex arguments, the following ideas are added:

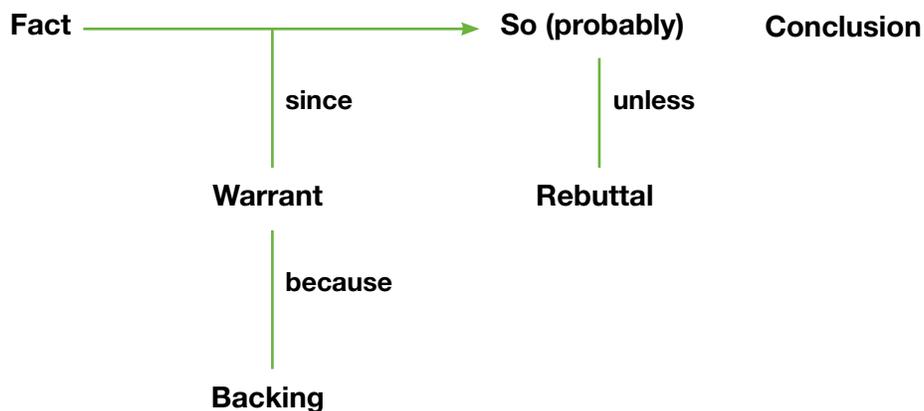
Qualifiers: These are the special conditions under which the claim can be true. They are the limitations on the claim.

Rebuttals: These are the conditions when the claim will not be true.

Use the following examples to help your group diagram the arguments in the text.



From Britt, M. A., & Larson, A. A. (2003) Constructing representations of arguments. *Journal of Memory and Language*, 48, 794-810.



Write your argument as a sentence using the following example as your guide:

The overall goal is to present the argument in a sentence: “The author argues . . . because (*data*) . . . since (*warrant*) . . . on account of (*backing*) . . . although some believe/are concerned about (*qualifiers*) . . . however, the data suggests (*rebuttal*) . . . therefore (*conclusion*).”

(Adapted from Driver, R., Newton, P., Osborne, J. (1998). Establishing the norms of scientific argumentation in classrooms.)

Writing a Purpose Statement

From https://writing.wisc.edu/Handbook/Thesis_or_Purpose.html

Thesis and Purpose Statements

Use the guidelines below to learn the differences between thesis and purpose statements.

- In the first stages of writing, thesis or purpose statements are usually rough or ill-formed and are useful primarily as planning tools.
- A thesis statement or purpose statement will emerge as you think and write about a topic. The statement can be restricted or clarified and eventually worked into an introduction.
- As you revise your paper, try to phrase your thesis or purpose statement in a precise way so that it matches the content and organization of your paper.

Thesis statements

- A thesis statement is a sentence that makes an assertion about a topic and predicts how the topic will be developed. It does not simply announce a topic: it says something about the topic.

Good: X has made a significant impact on the teenage population due to its . . .

Bad: In this paper, I will discuss X.

- A thesis statement makes a promise to the reader about the scope, purpose, and direction of the paper. It summarizes the conclusions that the writer has reached about the topic.
- A thesis statement is generally located near the end of the introduction. Sometimes in a long paper, the thesis will be expressed in several sentences or an entire paragraph.
- A thesis statement is focused and specific enough to be proven within the boundaries of the paper. Key words (nouns and verbs) should be specific, accurate, and indicative of the range of research, thrust of the argument or analysis, and the organization of supporting information.

Purpose statements

- A purpose statement announces the purpose, scope, and direction of the paper. It tells the reader what to expect in a paper and what the specific focus will be.

Common beginnings include:

“This paper examines . . .,” “The aim of this paper is to . . .,” and “The purpose of this essay is to . . .”

- A purpose statement makes a promise to the reader about the development of the argument but does not preview the particular conclusions that the writer has drawn.
- A purpose statement usually appears toward the end of the introduction. The purpose statement may be expressed in several sentences or even an entire paragraph.
- A purpose statement is specific enough to satisfy the requirements of the assignment. Purpose statements are common in research papers in some academic disciplines, while in other disciplines they are considered too blunt or direct. If you are unsure about using a purpose statement, ask your instructor.

This paper will examine the ecological destruction of the Sahel preceding the drought and the causes of this disintegration of the land. The focus will be on the economic, political, and social relationships which brought about the environmental problems in the Sahel.

DNA Final Project Topic Idea and Purpose Statement

*After researching peer-reviewed journal articles on a topic related to biotechnology and health or biotechnology and agriculture, write a research report in the form of a scientific poster that discusses the science behind the technology and evaluates current and future applications. Be sure to support your position with evidence from your research. Cite at least **six to eight** sources, pointing out key elements from each source.*

You will create a poster presentation on your topic. To complete this assignment you will read research articles, synthesize the information and write an evaluative argument on your topic.

You will present the poster of your project to the class in a research symposium and create a handout for your classmates.

Select your research topic. Write up a purpose statement outlining the following:

- **What is your topic?** You can choose one of the suggested topics or come up with one of your own.

Example:

Topic: Engineered crops

- **What is your question?** This is where you take your topic idea and transform it into a question to ask the literature.

Example:

Question: How does genetic engineering of crops impact efforts to fight disease in third world countries?

This question is tentative at this point, but it will help you enter the research with some kind of focus. Next you need to figure out how to answer this question.

- **What will you need in order to answer this question?**

Example: First I will need to find out exactly what is being done in the area of engineered crops and disease. I know that there are some studies on “edible vaccinations.” I need to find research on how that is being done and what else the field is working on.

Lesson 9

Critiquing Science Research

In this lesson, you will . . .

- Gather and critically evaluate information.
- Identify important concepts from science articles and use the information to support your ideas.
- Explain the science topic you are researching by citing specific evidence from your sources.
- Engage in scientific inquiry by forming hypotheses, researching evidence and providing support across text by synthesizing research from multiple sources to support your claims.

Project Planning Timeline

Make a plan for completing the project by the due date. Be sure to include deadlines for finding and reading your sources, creating a rough draft and practicing your presentation for the class.

Project Title

What will be done?

By when?

What resources will I need?

What goals do I have?

| | |
|-------|-------|
| <hr/> | <hr/> |

Notes

Library sources

| | |
|--|--|
| <p>What will be done?</p> <hr/> <hr/> | <p>By when?</p> |
| <p>What resources will I need?</p> <hr/> <hr/> <hr/> | <p>What goals do I have?</p> <hr/> <hr/> <hr/> |
| <p>Notes</p> <hr/> <hr/> <hr/> | |
| <p>Library sources</p> <hr/> <hr/> <hr/> | |
| <p>What will be done?</p> <hr/> <hr/> | <p>By when?</p> |
| <p>What resources will I need?</p> <hr/> <hr/> <hr/> | <p>What goals do I have?</p> <hr/> <hr/> <hr/> |
| <p>Notes</p> <hr/> <hr/> <hr/> | |
| <p>Library sources</p> <hr/> <hr/> <hr/> | |

| | |
|--|--|
| <p>What will be done?</p> <hr/> <hr/> | <p>By when?</p> |
| <p>What resources will I need?</p> <hr/> <hr/> <hr/> | <p>What goals do I have?</p> <hr/> <hr/> <hr/> |
| <p>Notes</p> <hr/> <hr/> <hr/> | |
| <p>Library sources</p> <hr/> <hr/> <hr/> | |
| <p>What will be done?</p> <hr/> <hr/> | <p>By when?</p> |
| <p>What resources will I need?</p> <hr/> <hr/> <hr/> | <p>What goals do I have?</p> <hr/> <hr/> <hr/> |
| <p>Notes</p> <hr/> <hr/> <hr/> | |
| <p>Library sources</p> <hr/> <hr/> <hr/> | |

How to Read a Scientific Article

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Reading a scientific article is a complex task. The *worst* way to approach this task is to treat it like the reading of a textbook—reading from title to literature cited, digesting every word along the way without any reflection or criticism. Rather, you should begin by skimming the article to identify its structure and features. As you read, look for the author’s main points. Generate questions before, during, and after reading. Draw inferences based on your own experiences and knowledge. And to really improve understanding and recall, take notes as you read. This handout discusses each of these strategies in more detail.

1. Skim the article and identify its structure.

Most journals use a conventional IMRD structure: An abstract followed by **I**ntroduction, **M**ethods, **R**esults, and **D**iscussion. Each of these sections normally contains easily recognized conventional features, and if you read with an anticipation of these features, you will read an article more quickly and comprehend more.

Features of Abstracts

Abstracts usually contain four kinds of information:

- purpose or rationale of study (why they did it)
- methodology (how they did it)
- results (what they found)
- conclusion (what it means)

Most scientists read the abstract first. Others—especially experts in the field—skip right from the title to the visuals because the visuals, in many cases, tell the reader what kinds of experiments were done and what results were obtained. You should probably begin reading a paper by reading the abstract carefully and noting the four kinds of information outlined above. Then move first to the visuals and then to the rest of the paper.

Features of Introductions

Introductions serve two purposes: creating readers’ interest in the subject and providing them with enough information to understand the article. Generally, introductions accomplish this by leading readers from broad information (what is *known* about the topic) to more specific information (what is *not known*) to a focal point (what *question* the author asked and answered). Thus, authors describe previous work that led to current understanding of the topic (the broad) and then situate their work (the specific) within the field.

Features of Methods

The Methods section tells the reader what experiments were done to answer the question stated in the Introduction. Methods are often difficult to read, especially for graduate students, because of technical language and a level of detail sufficient for another trained scientist to repeat the experiments. However, you can more fully understand the design of the experiments and evaluate their validity by reading the Methods section carefully.

Features of Results and Discussion

The Results section contains results—statements of what was found, and reference to the data shown in visuals (figures and tables). Normally, authors do not include information that would need to be referenced, such as comparison to others' results. Instead, that material is placed in the Discussion—placing the work in context of the broader field. The Discussion also functions to provide a clear answer to the question posed in the Introduction and to explain how the results support that conclusion.

Atypical Structure

Some articles you read will deviate from the conventional content of IMRD sections. For instance, Letters to *Nature* appear to begin with an abstract, followed by the body of the article. Upon reading, however, you will see that the “abstract” is a summary of the work filled with extensive introduction (for the purpose of catching the attention of a wide audience), and the next paragraph begins a description of the experiments.

Therefore, when you begin to read an article for the first time, skim the article to analyze the document as a whole. Are the sections labeled with headings that identify the structure? If not, note what the structure is. Decide which sections contain the material most essential to your understanding of the article. Then decide the order in which you will read the sections.

2. Distinguish main points.

Because articles contain so much information, it may be difficult to distinguish the main points of an article from the *subordinate points*. Fortunately, there are many indicators of the author's main points:

Document level

| | |
|----------|--|
| Title | visuals (especially figure and table titles) |
| Abstract | first sentence or the last 1-2 sentences of the Introduction |
| Keywords | |

Paragraph level: words or phrases to look for

| | |
|----------------------------|---------------------------------------|
| <i>surprising</i> | <i>in contrast with previous work</i> |
| <i>unexpected</i> | <i>has seldom been addressed</i> |
| <i>we hypothesize that</i> | <i>we develop</i> |
| <i>we propose</i> | <i>the data suggest</i> |
| <i>we introduce</i> | |

3. Generate questions and be aware of your understanding.

Reading is an active task. Before and during your reading, ask yourself these questions:

- Who are these authors? What journal is this? Might I question the credibility of the work?
- Have I taken the time to understand all the terminology?
- Have I gone back to read an article or review that would help me understand this work better?
- Am I spending too much time reading the less important parts of this article?

- Is there someone I can talk to about confusing parts of this article?

After reading, ask yourself these questions:

- What specific problem does this research address? Why is it important?
- Is the method used a good one? The best one?
- What are the specific findings? Am I able to summarize them in one or two sentences?
- Are the findings supported by persuasive evidence?
- Is there an alternative interpretation of the data that the author did not address?
- How are the findings unique/new/unusual or supportive of other work in the field?
- How do these results relate to the work I'm interested in? To other work I've read about?
- What are some of the specific applications of the ideas presented here? What are some further experiments that would answer remaining questions?

4. Draw inferences.

Not everything that you learn from an article is stated explicitly. As you read, rely on your prior knowledge and world experience, as well as the background provided in the article, to draw inferences from the material. Research has shown that readers who actively draw inferences are better able to understand and recall information.

As an example, in the box below is an excerpt from the Introduction of an article in the journal *Biochemistry* (Ballestar et al., 2000). The comments in italics are questions and inferences that might be drawn by a student reader.

Rett Syndrome is a childhood neurodevelopmental disorder and one of the most common causes of mental retardation in females *Comment: Hmmm...must be related to a gene on the X-chromosome, with an incidence of 1 in 10000-15000.* *Comment: How common is that? Not too likely to happen to me, but there must be several such children born in Houston every year.* Rett syndrome patients are characterized by a period of normal growth and development (6-18 months) followed by regression with loss of speech and purposeful hand use. *Comment: What happens? Something must be triggered or activated at late infancy.* Patients also develop seizures, autism, and ataxia. After initial regression, the condition stabilizes and patients survive into adulthood. Studies of familial cases provided evidence that Rett is caused by X-linked dominant mutations in a gene subject to X-chromosome inactivation. Recently, a number of mutations in the gene encoding the methyl-CpG binding transcriptional repressor MeCP2 have been associated with Rett Syndrome. *Comment: MeCP2 mutations probably cause Rett Syndrome. This must be an important master-regulator to affect so many processes in the brain. I wonder what they know about it...*

5. Take notes as you read.

Effective readers take notes—it improves recall and comprehension. You may think you'll remember everything you read in researching class assignments, professional papers, proposals, or your thesis, but details will slip away. Develop a template for recording notes on articles you read, or adapt the template below for use. As you accumulate a

large collection of articles, this template will help you distinguish articles and quickly locate the correct reference for your own writing. The time spent filling out the form will save you hours of rereading when you write a Background, Related Work or a Literature Review section.

Template for Taking Notes on Research Articles: Easy access for later use

Whenever you read an article, pertinent book chapter, or research on the web, use the following format (or something similar) to make an electronic record of your notes for later easy access. Put quotation marks around any exact wording you write down so that you can avoid accidental plagiarism when you later cite the article.

Complete citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

General subject:

Specific subject:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

References

Ballestar, E., Yusufzai, T.M., and Wolffe, A.P. (2000) Effects of Rett Syndrome Mutations of the Methyl-CpG Binding Domain of the Transcriptional Repressor MeCP2 on Selectivity for Association with Methylated DNA. *Biochemistry* 31, 7100-7106.

Burnett, R. (2001) *Technical Communication*. 5th ed. San Antonio: Harcourt College Publishers.

Zeiger, M. (2000) *Essentials of Writing Biomedical Research Papers*. 2nd Ed. St. Louis: McGraw-Hill.

Supported by the Cain Project for Engineering and Professional Communication
Rice University, 2004.

Citing Sources: Using APA Style

Within the text cite the author and the year of publication.

According to Jones (2013) biotechnology can benefit poor nations by increasing access to nutritious food.

Jones (2013) stated that biotechnology can benefit poor nations by increasing access to nutritious food.

Jones (2013) suggested that “biotechnology is our greatest tool for addressing the needs of the undernourished poor” (p. 207).

<http://owl.english.purdue.edu/owl/resource/560/07/>

APA Basic Form:

Articles

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical, volume number* (issue number), pages. doi:<http://dx.doi.org/xx.xxx/yyyy>

Books

Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle.*
Location: Publisher. (this type also uses a hanging indentation)

Online periodical

Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Online Periodical, volume number* (issue number if available). Retrieved from <http://www.someaddress.com/full/url/>

For other APA style citations, please visit the Purdue OWL website —

<https://owl.english.purdue.edu/owl/resource/560/02/>.

SOURCE 1:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 2:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 3:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 4:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 5:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 6:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 7:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

SOURCE 8:

Complete APA citation. Author(s), Date of publication, Title (book or article), Journal, Volume #, Issue #, pages:

If web access: url; date accessed

Key Words:

Hypothesis:

Methodology:

Result(s):

Summary of key points:

Context (how this article relates to other work in the field; how it ties in with key issues and findings by others, including yourself):

Significance (to the field; in relation to your own work):

Important Figures and/or Tables (brief description; page number):

Cited References to follow up on (cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):

Other Comments:

Lesson 10

Research Poster Symposium

In this lesson, you will . . .

- Identify important concepts from science articles and use the information to support your ideas.
- Explain the science topic you are researching by citing specific evidence from your sources.
- Engage in scientific inquiry creating an evaluative argument about your topic.
- Synthesize research articles to explain science in a research symposium.

Work on an outline of your poster using the following guidelines:

1. Title of a presentation; name; school name; teacher's name.
2. Background and introduction to the topic: This section introduces the topic, describes the questions you are asking, and provides the claim. In this section you will explain the science behind the particular method and connect it to what you have learned in class. Describe the biotechnology—what is it? How is the process accomplished? (The detailed description of your biotechnology application will lead to your **claim**.)
3. Current advances and results: This is the major focus of your poster. This section presents the current issues, themes, and research goals. Where is this technology being used? You will describe the important results and explain how those results shape our current understanding of the topic. You should mention the types of experiments done and discuss their findings but do not report the experimental procedure step-by-step. You might include a figure to help discuss the data. What are the outcomes of this technology? Think about the following:
Which studies support your hypothesis/claim/question?
Do some studies support alternative hypotheses?
Is there controversy in the scientific community over this topic, or is there general agreement?
What graphs, figures or tables might be relevant to include?
(This is where you discuss the **data**, **warrants** and **backing**.)
4. Discussion: This section discusses the current advances and results by putting them in context. Highlight any agreements or disagreements in the field and comment on possible reasons for those disagreements.
(This is where you discuss the **qualifiers** and **rebuttals**.)
5. Conclusions/future directions: This section summarizes your major points and points out the significance. It also discusses where the science is headed in the future and questions that remain based upon the current findings.
6. References in APA style.

Revising and Editing Worksheet

Adaped from: J. Cline, (2009) The Writing Program, j-cline@northwestern.edu

Writing and Speaking About Science

Student's Name _____

Topic _____

Key Message(s): _____

Revising = Checking Broad Structure

R

Does the introduction

- Introduce topic and significance?
- Describe the research questions?
- Explain the technology?
- Provide a thesis outlining the argument?

Does the Current Advancements and Results Section

- Present current issues?
- Discuss where the technology is being used?
- Describe important results?
- Provide clear and supported data?
- Illuminate the arguments?
- Are the data persuasive and support the key message?
- Do graphics follow guidelines, including
 - Illustrations self-explanatory?
 - Informative titles ABOVE tables?
 - Informative captions BELOW figures?
 - Integrated explicitly and appropriately in the poster?

Does the conclusion and/or discussion

- Highlight agreements and disagreements in the field?
- Address advantages and limits of methods used?
- Explain implications for current practice or theory?
- Outline research questions that remain?

Does the Conclusions and Future Directions section

- Summarize major points?
- Discuss future directions?

Is anything missing that a reader in the target audience needs to know?

Is the key message(s) clear?

Other elements as needed:

Revising = Checking Broad Structure

R

- Does the poster present a logical flow of ideas?
- Are all quotes used necessary? Do the quotes advance the argument?
- Are there empty, inflated, or redundant words? (Circle in the draft)
- Are there choppy sentences that could be combined?
- Is there a good variety of words to begin sentences? (Circle redundant starters in the draft)
- Are there clichés that need to be removed? (Underline in the draft)
- Are sentences of varied length used to draw readers in?
- Are there grammar and spelling errors that need to be fixes? (Circle the errors in the draft)
- Would subheads improve your understanding?
- Is APA style used consistently and correctly? (Underline errors in the draft)

Other elements as needed:

UCI UNDERGRADUATE RESEARCH SYMPOSIUM PRESENTATION GUIDELINES

Adapted from urop@uci.edu

ORAL PRESENTATIONS

An oral presentation is more than just reading a paper or set of slides to an audience. How you deliver your presentation is at least as important in communicating your message effectively as what you say. Use these Guidelines to learn simple tools that help you prepare and present an effective presentation, and design PowerPoint slides that support and enhance your talk.

PREPARING AN EFFECTIVE PRESENTATION

An effective presentation is more than just standing up and giving information. A presenter must consider how best to communicate their information to the audience. Use these tips to create a presentation that is both informative and interesting.

Organize your thoughts. Start with an outline and develop good transitions between sections. Emphasize the real-world significance of your research.

Have a strong opening. Why should the audience listen to you? One good way to get their attention is to start with a question, whether or not you expect an answer.

Define terms early. If you are using terms that may be new to the audience, introduce them early in your presentation. Once an audience gets lost in unfamiliar terminology, it is extremely difficult to get them back on track.

Finish with a bang. Find one or two sentences that sum up the importance of your research. How is the world better off as a result of what you have done?

Time yourself. Do not wait until the last minute to time your presentation.

Create effective notes for yourself. Have notes that you can read. Do not write out your entire talk; use an outline or other brief reminders of what you want to say. Make sure the text is large enough that you can read it from a distance.

Practice, practice, practice. The more you practice your presentation, the more comfortable you will be in front of an audience. Practice in front of a friend or two and ask for their feedback. Record yourself and listen to it critically. Make it better and do it again.

PRESENTING EFFECTIVELY

When you start your presentation, the audience will be interested in what you say. Use these tips to help keep them interested throughout your presentation.

Be excited. You are talking about something you find exciting. If you remember to be excited, your audience will feel it and automatically become more interested.

Speak with confidence. When you are speaking, you are the authority on your topic, but do not pretend that you know everything. If you do not know the answer to a question, admit it. Consider deferring the question to your mentor or offer to look into the matter further.

Make eye contact with the audience. Your purpose is to communicate with your audience, and people listen more if they feel you are talking directly to them. As you speak, let your eyes settle on one person for several seconds before moving on to somebody else. You do not have to make eye contact with everybody, but make sure you connect with all areas of the audience equally.

Avoid reading from the screen. First, if you are reading from the screen, you are not making eye contact with your audience. Second, if you put it on your slide, it is because you wanted them to read it, not you.

Blank the screen when a slide is unnecessary.

A slide that is not related to what you are speaking about can distract the audience. Pressing the letter B or the period key displays a black screen, which lets the audience concentrate solely on your words. Press the same key to restore the display.

Use a pointer only when necessary. If you are using a laser pointer, remember to keep it off unless you need to highlight something on the screen.

Explain your equations and graphs. When you display equations, explain them fully. Point out all constants and dependant and independent variables. With graphs, tell how they support your point. Explain the x- and y-axes and show how the graph progresses from left to right.

Pause. Pauses add audible structure to your presentation. They emphasize important information, make transitions obvious, and give the audience time to catch up between points and to read new slides. Pauses always feel much longer to speakers than to listeners. Practice counting silently to three (slowly) between points.

Avoid filler words. Um, like, you know, and many others. To an audience, these are indications that you do not know what to say; you sound uncomfortable, so they start to feel uncomfortable as well. Speak slowly enough that you can collect your thoughts before moving ahead. If you really do not know what to say, pause silently until you do.

Relax. It is hard to relax when you are nervous, but your audience will be much more comfortable if you are too.

Breathe. It is fine to be nervous. In fact, you should be—all good presenters are nervous every time they are in front of an audience.

The most effective way to keep your nerves in check—aside from a lot of practice beforehand—is to remember to breathe deeply throughout your presentation.

Acknowledge the people who supported your research. Be sure to thank the people who made your research possible, including your mentor, research team, collaborators, and other sources of funding and support.

Keep these Tips in Mind

Establish early a clear and unifying point. Clearly explain the applicability of your research. Be sensitive to those outside your discipline.

Before the Symposium, present to friends and family and invite their feedback. Ask them questions to see if you communicated your points successfully.

Include or discuss the following, if applicable: Introduction, Methods, Results, Discussion, Conclusion, References, and Acknowledgements.

Make sure that your presentation material is readable, grammatically correct, and has been edited and proofread thoroughly.

Cite sources to support your ideas and provide credibility to your findings. Provide credit for text, graphs, etc.

Always acknowledge your sponsors and mentors. Anticipate possible questions and prepare answers.

Be proud of your work, but acknowledge errors. Explain unexpected results and future research that is needed. Always be truthful in presenting your information, and respect your audience. Bring a pen and pad of paper for notes and to record names and addresses of contacts.

POSTER PRESENTATIONS

A poster lets you summarize your research in an engaging visual format. Effective posters communicate the significance of the research, an overview of how the research was conducted, the results, and the implications of those results. These Guidelines help you design a poster to communicate your message clearly.

Prepare and practice a short summary speech—no than 3 minutes—about your project.

DESIGNING YOUR POSTER

Space on a poster is limited, so pick what to present wisely. Your display should be self-explanatory and have a logical flow—viewers should be able to follow the order even if you are not present. Start with a rough draft of your design on paper, using graph paper or Post-it notes to simulate sections. The sample layouts at the end of these Guidelines may give you some layout ideas.

Place your title at the top of the poster and make sure

Is your message clear? Focus on the results and their importance. Avoid overly detailed descriptions of your methods.

Is everything on your poster critical to communicating your message? Remove everything that is not vitally important. Simplify your text by using short bullet points and phrases instead of complete sentences.

Is your organization easy to follow? Most people read from top to bottom, then left to right. Consider numbering your headings to further clarify the flow of information.

Do your headings deliver real information? Good headings by themselves can summarize the main points of your poster if readers are in a hurry.

Is your text easy to read? The poster title should be at least 144 point text, and information about the student(s) and mentor(s) should be 72 points. Headings should be at least 36 point text and easily readable from at least 6 feet. All other text should be at least 18 point and legible from 4 feet. **Is your poster cluttered by too many fonts?** Do not use more than two typefaces. Instead use bold, italic and size to set type differently. Times New Roman, Arial, Garamond, and Verdana are suggested typefaces.

that the text is large and clear. Include your name and major, and the name and department of your faculty mentor, in addition to other co-authors.

Incorporate appropriate graphics in your poster. Label or describe any charts, tables, figures, graphs, or photos that you use. Make sure all edges line up evenly.

Before you attach the pieces to your board, edit and review them and check your spelling. Be sure to attach all materials to your poster board firmly (spray adhesive, found in art supply stores, works best). All posters **MUST** be complete and ready for presentation upon arrival. Incomplete posters will not be displayed.

DOES YOUR POSTER COMMUNICATE ITS MESSAGE?

Many posters look great but fail to communicate their information clearly. Ask yourself these questions when you are designing your poster.

Are your colors distracting? Stick to a simple color scheme (try a couple that complement or contrast with each other, such as black or navy on white). Avoid red/green combinations, as this is the most common form of color blindness.

Are your graphics clear and easy to understand? Avoid elements—such as unnecessary background colors and overly specific labels—that do not add useful information. Explanations should be within or next to figures, not referred to from elsewhere.

Does your poster have a good balance between text, graphics, and white space? Use white space consistently to emphasize separate sections and to keep the poster from becoming too cluttered and difficult to read.

Do readers have to move back and forth to read your poster? Arranging your information in columns makes the poster easy to read in crowded situations, such as the Symposium Poster Session.

Can you talk about your poster without reading directly from it? Be ready to discuss details that questioners cannot read for themselves. People are interested in additional information and your interpretations.

| | | | | | | |
|---|-----------|---|------|-------------|------|-----------|
| Poster presentation | | | | | | |
| Presenter: _____ | | | | | | |
| Reviewer: _____ | | | | | | |
| Topic: _____ | | | | Date: _____ | | |
| Notes: | | | | | | |
| How effectively did the presenter introduce the audience to the topic? | 5 | 4 | 3 | 2 | 1 | Comments: |
| | Excellent | | Good | | Poor | |
| How clearly and fully was the science evidence presented? Did the speaker use effective and clear examples? | 5 | 4 | 3 | 2 | 1 | |
| | Excellent | | Good | | Poor | |
| Were the conclusions effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 | |
| | Excellent | | Good | | Poor | |
| What was the strongest part of the presentation? | | | | | | |
| What changes would you suggest for improvement? | | | | | | |

| | | | | | | |
|---|-----------|---|------|-------------|------|-----------|
| Poster presentation | | | | | | |
| Presenter: _____ | | | | | | |
| Reviewer: _____ | | | | | | |
| Topic: _____ | | | | Date: _____ | | |
| Notes: | | | | | | |
| How effectively did the presenter introduce the audience to the topic? | 5 | 4 | 3 | 2 | 1 | Comments: |
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| How clearly and fully was the science evidence presented? Did the speaker use effective and clear examples? | 5 | 4 | 3 | 2 | 1 | |
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| What changes would you suggest for improvement? | | | | | | |

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| Poster presentation | | | | | | |
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| Reviewer: _____ | | | | | | |
| Topic: _____ | | | | Date: _____ | | |
| Notes: | | | | | | |
| How effectively did the presenter introduce the audience to the topic? | 5 | 4 | 3 | 2 | 1 | Comments: |
| | Excellent | | Good | | Poor | |
| How clearly and fully was the science evidence presented? Did the speaker use effective and clear examples? | 5 | 4 | 3 | 2 | 1 | |
| | Excellent | | Good | | Poor | |
| Were the conclusions effective, logical, and complete? | 5 | 4 | 3 | 2 | 1 | |
| | Excellent | | Good | | Poor | |
| What was the strongest part of the presentation? | | | | | | |
| What changes would you suggest for improvement? | | | | | | |

| | | |
|---|--|-------------|
| Poster presentation | | |
| Presenter: _____ | | |
| Reviewer: _____ | | |
| Topic: _____ | | Date: _____ |
| Notes: | | |
| How effectively did the presenter introduce the audience to the topic? | 5 4 3 2 1 Excellent Good Poor | Comments: |
| How clearly and fully was the science evidence presented? Did the speaker use effective and clear examples? | 5 4 3 2 1 Excellent Good Poor | |
| Were the conclusions effective, logical, and complete? | 5 4 3 2 1 Excellent Good Poor | |
| What was the strongest part of the presentation? | | |
| What changes would you suggest for improvement? | | |



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History Unit 1 . Civil Rights Movement

Unit 1

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Course Overview

Overview and Rationale:

This first unit involves students in reading about the Civil Rights Movement, with a special focus on the Freedom Rides. Students discover what we learn as history is not the story of what happened in the past, but historian's *interpretations* of what happened based upon artifacts, primary source and other documents and upon what other historians have said. The unit begins with exploring documents that have different points of view about the Little Rock Nine. Through the unit, students read textbooks and other documents including photographs, speeches, newspaper articles and political cartoons in order to answer the essential question. Students also do their own investigation of a topic related to the Civil Rights Movement, take a history test and write a historical account.

Unit Objectives

1. Students recognize the disciplinary constructs that influence how reading and writing take place in history classes.
2. Students will be provided with a guided approach to the critical thinking tasks that students will be expected to do independently in college or career environments.
3. Students will engage in close readings of complex texts. This involves identifying claims and evidence as well as the ability to read critically.
4. Students will find textual support or evidence for an author's and their own inferences/claims.
5. Students will annotate texts and to organize the texts and their own ideas.
6. Students will read multiple texts, including non-print texts, and analyze how their content, style, genre and perspective help determine meaning.
7. Students will develop reading endurance, or the ability to read lengthy, complex texts independently.

Essential Question

How did the Civil Rights Movement of the 1960s transform the concept and practice of liberty in America?

Sub-questions:

1. What changed? Was the change legal, social, political, economic or cultural?
2. Who was responsible?
3. What tactics were used? Were these legal, social, political, economic or cultural?
4. What challenges were faced?

Week 1

Lesson 1: What is History?

1. Students will learn what history is by reading four short documents about the Little Rock Nine in order to answer the question: What was Governor Faubus' motivation in trying to keep the nine African American students out of Central High School?
2. Students will consider the source and the context of each document and they will be seeing what is corroborated or not across documents.
3. Students will learn the difference between primary source documents and tertiary source documents.
4. Students will learn to use textual evidence to support their claim about Governor Faubus' motivation.

Lesson 2: Gateway Activity—Civil Rights

1. Given a group of photographs depicting scenes from the Civil Rights Movement, students will use the National Archives and Records Administration process for analyzing a photograph.
2. Students will interpret photographs using information about context and source in addition to content.
3. Students will begin a timeline of the Civil Rights Movement using the photographs and prior knowledge of Civil Rights Movement events.
4. Students will be able to explain that sourcing, contextualization, corroboration and chronology are aspects of history reading.

Lesson 3: Anchor Text and Essential Questions

1. Students will demonstrate their understanding of the focus of the unit, the time period in which it takes place and the kinds of questions their reading will help answer.
2. Students will demonstrate that they are actively engaging in close reading of the textual material through their annotations and reading behaviors.
3. Students will show understanding of the targeted vocabulary.

Week 2

Lesson 4: Everything but the Paper: Introduction to the Research Project

1. Students will use primary and secondary sources in writing, demonstrating that they understand the implications of their differences.
2. Students will identify the perspective or bias of a text author and interpret the text in light of that perspective.
3. Students will take into account the context of a text (time period in which it was written, the audience for whom it was intended etc.) when interpreting a text.
4. Students will evaluate the trustworthiness of various sources.

Lesson 5: Reading and Annotating a Chapter

1. Students will demonstrate their ability to engage in close reading by their interpretations of sentences from a history text.
2. Students will show through their annotations that they are identifying historically important information about the Civil Rights Movement from reading.

Week 3

Lesson 6: Taking and Integrating Notes from Lecture

1. Students will demonstrate that they have understood the lecture through their lecture notes.
2. Students will demonstrate the ability to synthesize two sources of information.
3. Students will show understanding of the targeted vocabulary words through an exit slip.

Lesson 7: Research Project—Identifying and Annotating Source

1. Students will find five sources for their research project using their school's Internet sources.
2. Students will annotate the sources, summarize and evaluate them.
3. Students will follow MLA or other format for citing the sources.

Week 4

Lesson 8: Identifying Historical Claims and Evidence

1. Students will be able to identify both implicit and explicit claims made by the historians in the PBS special and describe the evidence for those claims.
2. Students will show their understanding of corroboration by identifying corroborating evidence in the PBS special.

Lesson 9: Taking History Exams

1. Students will utilize strategies to generate their own exam review questions.
2. Students will learn to ask and answer higher-level questions.
3. Students will learn to use group testing as a way to increase their ability to explain and understand history concepts.
4. Students will be able to evaluate their own exam performance.

Week 5

Lesson 10: Analyzing Political Cartoons

1. Students will describe the claim implicit in a political cartoon about the Civil Rights Movement.
2. Students will describe the techniques of exaggeration, labeling, analogy, and irony as they appear in political cartoons.
3. Students will use sourcing, contextual information and the cartoon content to describe the viewpoint of the cartoonist.

Lesson 11: Comparing Two Presidential Speeches

1. After reading two speeches and reading a portion of a textbook chapter, students will identify similarities and differences in the two speeches and explain them using information about sourcing and contextualization.
2. Students will determine whether or not they can explain the similarities and differences using the contextual information in the chapter or whether there is some other explanation.

Week 6

Lesson 12: Creating a Presentation

1. Students will complete an outline of their research project.
2. Students will complete a PowerPoint that discusses their research.
3. Students will present the PowerPoint to their peers.
4. Students will evaluate the PowerPoint presentations.

Lesson 13: Answering the Essential Question

1. Students will make a claim about the essential question and provide reasonable evidence using at least five sources from their readings.
2. Students will explain why they chose the sources and evidence.
3. Students will explain why they did not make an alternative claim, based on evidence.

Lesson 1

What is History?

Overview and Rationale:

Students *begin* to explore what history and history reading entails—how historians approach the reading of texts and how they use evidence from texts to make implicit as well as explicit arguments about events in history. This understanding about what historians do and how they approach reading is an important element of disciplinary reading. It recognizes an underlying belief, or epistemology of historians, that accounts of the past are not truth. Students learn that reading history means approaching texts as *historical arguments*, interpretations of history based upon historians' analyses of texts and artifacts. Students begin by writing what they think historians do before writing an historical account. They then read excerpts from two documents that differ in perspective and claim. From these documents, students are asked to make sense of the perspectives of the authors. Students are asked how historians decide what documents are credible to use as they write history. After the discussion, they revise their previous statements about what historians do. Finally, they read two more documents. They are asked to think about what this use of evidence says about the historian and revise their previous statements one more time. Through this activity, students are introduced to the historical reading strategies of sourcing and contextualization, and introduced to documents as text types. From this unit students will not only learn about the Civil Rights Movement from texts written by historians, they will analyze documents as evidence, approximating what historians do.

Tasks/Expected Outcomes:

1. Students will show they have refined their notions of history through changes in their writing about what historians do.
2. Students will show through their writing about what historians do, they have learned that *sourcing*, *contextualization* and *corroboration* are tools historians use to help them weigh the perspective and trustworthiness of documents from the time period they are studying.
3. Students will provide text-based reasons for their answer to the question: Why did Governor Faubus try to keep the Little Rock Nine from attending Central High School?

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 3. Evaluate sources from multiple perspectives.
 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 5. Read narrative texts critically.
 6. Read research data critically.
- C. Critical listening
1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- Document Excerpts
- Academic notebook

Timeframe:

100 minutes

Targeted Vocabulary:

Words that Help You Discuss the Discipline

- Sourcing
- Document
- Contextualization
- Corroboration

Activity One

Introduction (Approx. 15 minutes)

Pass out academic notebooks to students and explain these notebooks will be where they will record their thoughts and do their assignments as they complete a unit on the Civil Rights Movement. Recognize that students have probably already studied the Civil Rights Movement, but in this unit, students will be asked to change the way they read and think about historical accounts. In this way, they will be gaining a more sophisticated notion of the past and will be preparing for college level history classes and for becoming an informed citizen.

Ask students to turn to Lesson 1, Activity 1 (What Do Historians Do?) in their academic notebook. Ask them to think for a moment and then in the space provided, write down what they think historians do (five minutes). The green boxes in the lessons show you what students see.

Ask students to share with the class some of the ideas they wrote down and record these as they write (on white board, Smart Board, chart paper, etc.).

Tell students you want them to remember their thoughts about what historians do as they complete the next assignment, because you are going to come back to this assignment (five minutes).

FROM THE STUDENT ACADEMIC NOTEBOOK

In this lesson, you will...

- Reflect and write about what historians do.
- Read and annotate the kind of documents that historians read.
- Reflect and write again about what historians do.

Activity

1 What Do Historians Do?

Think about this question for a moment, and, based upon your past experiences reading and studying history, write for five minutes in the space provided to answer this question.

(space provided)

Activity Two

Examining Documents (Approx. 35 minutes)

Read the first two texts.

Ask students to turn to Lesson 1, Activity 2, to the two short documents. Read the introductory paragraph together and ask students to restate the task. Be sure they understand that the documents they will read differ in perspective and the claim being made about Governor Faubus and his role in the integration of Central High School in Little Rock, Arkansas. The students' goal is to determine what each text says about Governor Faubus' motivation to keep the nine black students from entering the school in order for them to determine for themselves what they believe was his motivation.

Have students read in pairs and discuss the differences with their partner. Give them a time limit for reading and discussing together.

Students can write down their thoughts on the documents, but assure them they don't have to do this if they are uncertain about what to do. In a subsequent lesson, you will teach them an annotation technique. The point in this lesson is for them to notice the different points of view regarding the motivations of Governor Faubus. They can take notes in any way they wish.

For students who are not used to reading in class, consider modeling the process. That is, perhaps read the introductory text and stop at appropriate places to describe what you are thinking. For example, you might comment that you have heard about southern segregation before, that you remembered two court decisions, *Plessy v. Ferguson* and *Brown v. Board of Education*, that you are paying attention to the dates about when things happen, etc. These thoughts will help students know what to pay attention to as they read.

A word about academic vocabulary: Students may be struggling with some of the academic vocabulary words in these documents, especially if they are not used to reading in history. For example, the legalistic language in the first document may be something they have not read before (e.g. "WHEREAS"). They may also struggle with the following words:

- Imminent
- Breach
- Tumult
- Colored*
- Concerted
- Cognizant
- Vain
- Thwart
- Token
- Virulently
- Flouted
- Impunity

Except for the word, “colored,” these words are part of an educated person’s academic vocabulary. In the context of these texts, they are key to the meaning of the documents. For example, if students didn’t understand that cognizant meant “aware,” they wouldn’t understand that Mayor Mann was accusing the governor of knowing about the riots ahead of time. And they wouldn’t understand that “at least was cognizant” meant that the Mayor was saying that Faubus may have not only been aware that the riots were taking place but may have encouraged or at least not discouraged them.

Thus, when students come to words they don’t know that keep them from understanding a key point, it is important for you to help them have some ways of finding out their meanings. These could include:

- Seeing if they can make a guess about the meaning from the surrounding text.
- Asking the students they are grouped with.
- Consulting a glossary or dictionary.
- Asking you, the teacher.
- Breaking words into meaningful parts, if appropriate.

As students are reading, go around the room to see how they are doing with vocabulary, helping to use the strategies just mentioned. If they find a good synonym for the word they are having difficulty with, ask them to write it above the word in the text. Choose a couple of words with which they had the most difficulty and rewrite the sentences on the board. Have students interpret the sentences to find the meaning of the vocabulary word.

The word “colored” might evoke some negative reactions from students, because this word is no longer considered appropriate when referring to African Americans. This is a good time to begin developing a sense of historical empathy—an understanding that *the past is interpreted in light of the ethics and norms of the time period being studied*, and that historians try very hard not to impose their own ethical and normative standards.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Read Historical Documents

In the 1950s, the South was segregated. African Americans could not attend the same schools or drink from the same fountains as whites. Black schools did not have the same resources as white schools even though the Supreme Court had said that the schools must be equal. On September 4, 1957, after a court decision called for an end to school segregation, nine black students in Little Rock, Arkansas, tried to attend Central High—a formerly all white high school. The governor of Arkansas, Governor Faubus, ordered the State Militia to keep the students from entering the building. A judge required the governor to call off the militia, and on September 24, the Little Rock Police helped the nine students enter the school. When a mob gathered that same day, the students had to escape, again with the help of the police. It finally took federal troops ordered by President Eisenhower to get the students permanently placed in the school (on September 25). Why did Governor Faubus try to keep the African Americans out of Central High? Historians argue about his motivations. Your job is to decide why you think he ordered the guards to keep the students out.

You will read documents that differ in perspective and in the claim that is being made about Governor Faubus' actions in the integration of Central High School. Read each of them to determine what they are saying about him and how and why they differ. If you would like, you may take notes on the texts themselves to help you remember the key parts that are different. Historians refer to the documents written during the time period as *primary source documents*. They use primary source documents as evidence for their interpretations of what happened in the past; the first two documents are considered primary sources.

FROM THE STUDENT ACADEMIC NOTEBOOK

Document #1: retrieved on 1/5/13
from: http://scipio.uark.edu/cdm4/item_viewer.php?CISOROOT=/Civ-ilrights&CISOPTR=341&CISOBOX=1&REC=5.

Transcript:

TO ALL TO WHOM THESE PRESENTS SHALL COME—
GREETINGS:

WHEREAS:

The Governor of the State of Arkansas is vested with the authority to order to active duty the Militia of the State in case to tumult, riot, or breach of the peace, or imminent danger thereof; and

WHEREAS:

It has been made known to me as Governor, from many sources, that there is imminent danger of tumult, riot, and breach of the peace and the doing of violence to persons and property in Pulaski County, Arkansas;

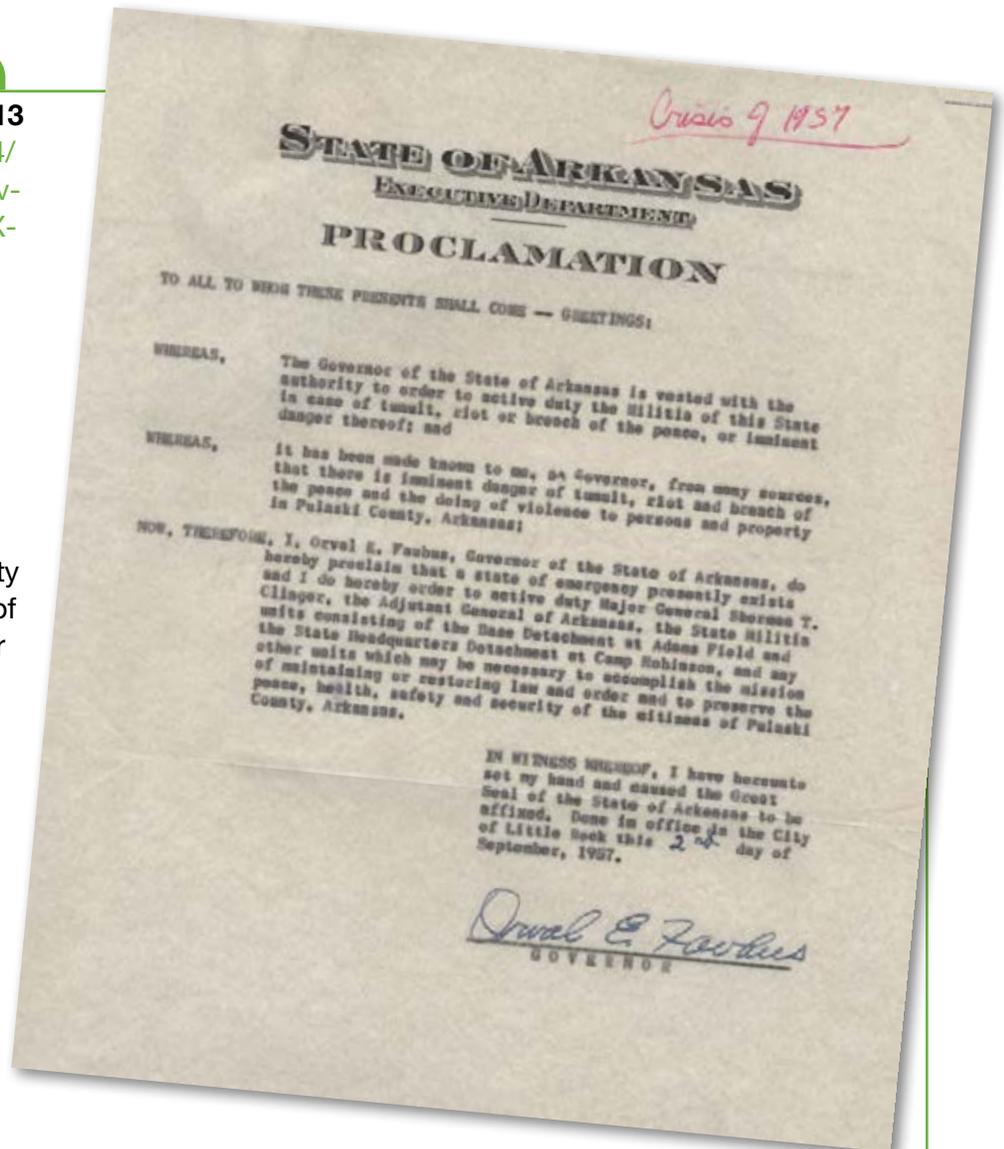
NOW, THEREFORE, I, Orval E. Faubus, Governor of the State of Arkansas do hereby proclaim that a state of emergency presently exists and I do hereby order to active duty Major General Sherman T. Clinger, the Adjutant General of Arkansas, the State Militia units consisting of the Base Detachment at Adams Field and the State Headquarters Detachment at Camp Robinson, and any other units which may be necessary to accomplish the mission of maintaining or restoring law and order to preserve the peace, health, safety and security of the citizens of Pulaski County, Arkansas.

IN WITNESS THEREOF, I have hereunto

Set my hand and caused the Great Seal of the State of Arkansas to be affixed. Done in office in the City of Little Rock this 2nd day of September, 1957.

Orval E. Faubus (signature)

GOVERNOR



FROM THE STUDENT ACADEMIC NOTEBOOK

Document 2: Retrieved on 1/5/13 from:
http://www.eisenhower.archives.gov/research/online_documents/civil_rights_little_rock/.

Transcript:

WAC24PD
LITTLE ROCK ARK SEP 23 344PNC
THE PRESIDENT
THE WHITE HOUSE

THE CITY POLICE, TOGETHER WITH THE STATE POLICE, MADE A VALIANT EFFORT TO CONTROL THE MOB TODAY AT CENTRAL HIGH SCHOOL. IN THE FINAL ANALYSIS, IT WAS DEEMED ADVISABLE BY THE OFFICER ON THE GROUND AND IN CHARGE TO HAVE THE COLORED CHILDREN REMOVED TO THEIR HOMES FOR SAFETY PURPOSES.

THE MOB THAT GATHERED WAS NO SPONTANEOUS ASSEMBLY. IT WAS AGITATED, AROUSED, AND ASSEMBLED BY A CONCERTED PLAN OF ACTION.

ONE OF THE PRINCIPAL AGITATORS IN THE CROWD WAS A MAN BY THE NAME OF JIMMY KARAM, WHO IS A POLITICAL AND SOCIAL INTIMATE OF GOVERNOR FAUBUS, AND WHOSE WIFE IS NOW WITH THE GOVERNOR'S PARTY AT THE SOUTHERN GOVERNOR'S CONFERENCE. KARAM HAS A LONG RECORD OF EXPERIENCE IN STRIKE-BREAKING, AND OTHER ACTIVITIES SUCH AS HE ENGAGED IN TODAY.

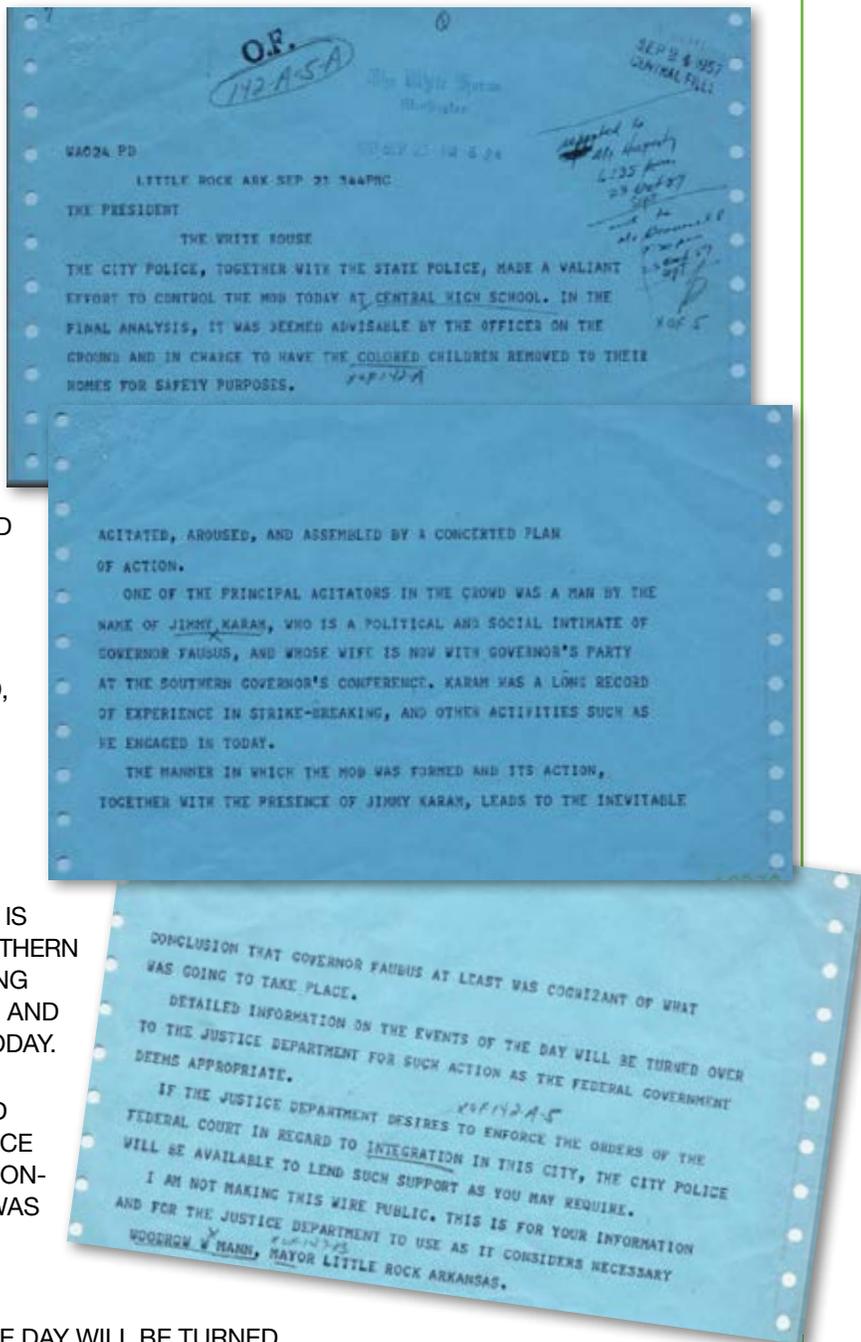
THE MANNER IN WHICH THE MOB WAS FORMED AND ITS ACTION, TOGETHER WITH THE PRESENCE OF JIMMY KARAM, LEADS TO THE INEVITABLE CONCLUSION THAT GOVERNOR FAUBUS AT LEAST WAS COGNIZANT OF WHAT WAS GOING TO TAKE PLACE.

DETAILED INFORMATION ON THE EVENTS OF THE DAY WILL BE TURNED OVER TO THE JUSTICE DEPARTMENT FOR SUCH ACTION AS THE FEDERAL GOVERNMENT DEEMS APPROPRIATE.

IF THE JUSTICE DEPARTMENT DESIRES TO ENFORCE THE ORDERS OF THE FEDERAL COURT IN REGARD TO INTEGRATION IN THIS CITY, THE CITY POLICE WILL BE AVAILABLE TO LEND SUCH SUPPORT AS YOU MAY REQUIRE.

I AM NOT MAKING THIS WIRE PUBLIC. THIS IS FOR YOUR INFORMATION AND FOR THE JUSTICE DEPARTMENT TO USE AT IT CONSIDERS NECESSARY.

WOODROW W MANN, MAYOR, LITTLE ROCK ARKANSAS.



Whole class discussion:

When students are finished reading, bring them back together for a class discussion. Emphasize that these documents—referred to by historians as *primary source documents*—were written at the time. Ask them what they discovered to help them answer the question. Listen to their answers, letting them do most of the talking until they have run out of things to say. Have them read parts of the texts that are helpful. At the point where they have run out of things to say, you could ask text-based questions such as the following, if the answers to these haven't already been addressed:

- *Who* wrote the documents?
- *When* did they write them?
- For *what purpose* were they written?
- To whom were the authors of these documents writing?
- What perspectives did these authors have?
- What claims did Governor Faubus make about his placement of troops at Central High School? What was Woodrow Mann's claim about that?
- Did they provide evidence for that claim? If so, what is it?

Note: During this discussion, refrain from dominating, and encourage students to share when their thoughts differ by talking to each other rather than you. Emphasize there is no one right answer, but if they can point to what in the text is leading them to say something, they are using the text as evidence, which adds to the case they are making.

It is especially important that students note the difference in the dates of the two documents. September 2nd was the first day of school, and Governor Faubus used the guards to keep the black students from entering Central High School.

Write the two sentences below (from the green box) on the board, overhead or PowerPoint—one from each of the documents—and have students explain their meaning. Students may have difficulty with words such as “imminent,” “tumult,” “breach (of the peace),” “cognizant,” and “inevitable.” This is a good time to reinforce strategies for determining the meaning of unknown words that you taught before reading. Once the class has agreed on appropriate synonyms, write each synonym by the word. (suggestions: imminent—immediate; tumult—chaos; breach—break; cognizant—aware; inevitable—unavoidable).

FROM THE STUDENT ACADEMIC NOTEBOOK

It has been made known to me, as Governor, from many sources, that there is imminent danger of tumult, riot, and breach of the peace and the doing of violence to persons and property in Pulaski County, Arkansas.

The manner in which the mob was formed, its action, together with the presence of Jimmy Karam, leads to the inevitable conclusion that Governor Faubus at least was cognizant of what was about to take place.

Have them determine who said each of the sentences. Interestingly, both statements point to the same conclusion—that Governor Faubus did, indeed, know of plans to

disrupt the entry of the Little Rock Nine into Central High. Ask students to think about how this evidence is being used in each case. What is Governor Faubus claiming he had to do based upon the evidence? What is Jimmy Karam trying to convey about Governor Faubus?

Ask: How do historians decide what documents are credible to use as they write history? Explain that the questions they are answering and the thinking they are doing reflects what historians have to do as they study the documents they uncover in their research. They *source*—that is they find out about the author—they *contextualize*—pay attention to the time period in which it was written and the significance of that time period—and they *corroborate*—they look at the way the different documents agree and disagree in order to come up with a plausible historical account. Write these terms on an overhead, the board, a PowerPoint, or a piece of chart paper and tell them that they will be using these tools as they complete the unit.

Ask students to: (1) write down what they think Governor Faubus' motivations were in denying the nine students access to the school, and (2) take a look at what they originally wrote about what historians do and revise if necessary.

Activity Three

Read a Historical Account (Approx. 20 minutes)

Ask students to read the third text, an excerpt taken from an account of Governor Faubus' life from the *Encyclopedia of Arkansas History and Culture*. Students can also take notes on this excerpt in their academic notebook. They should pay attention to: (1) what the author believed about Governor Faubus' motivations, and (2) what evidence the author was using in writing this account.

FROM THE STUDENT ACADEMIC NOTEBOOK

History Text Excerpt

On September 2, 1957, Faubus called out the **National Guard** to block the admission of nine black pupils to Central High School. His justification was that violence threatened and he had to preserve the peace. A federal judge ordered the guardsmen removed. The students, known as the **Little Rock Nine**, returned to the school but were met by a mob of enraged segregationists. The local police, unable to control the crowd, spirited the Nine out of the building. President Dwight D. Eisenhower federalized the National Guard and dispatched Army troops to restore order and enforce the court's ruling. The troops stayed through the school year. Little Rock voted to **close its high schools** the following year in a vain attempt to thwart further integration. Then, stung by bad publicity and facing economic decline, the city voted to reopen them with token integration.

Faubus lost the battle with Eisenhower, but his actions ensured his election as governor four more times. He left office undefeated in 1967, knocking off one opponent after another, including former governor Sid McMath, the millionaire **Winthrop Rockefeller**, and Congressman Dale Alford—all one-time allies who had turned against him.

He accumulated unprecedented power over Arkansas politics. His followers remained loyal even after the race conflict subsided. He was opposed by a substantial coalition of **African Americans** and white liberals and moderates, led by the *Arkansas Gazette*, from 1957 until he left office. During his later years in office, he reached out to black voters and won substantial support there...

Catering to the clamors of white supremacists seemed out of character for Faubus, a figure of pronounced country, dignity and unusual public reserve. His personal convictions at the time were not virulently racist; indeed, his administration had favored the black minority in several instances. For example, he hired a number of black people in state government and saw to it that historically black colleges and other institutions received financial support. He joined a fight to abolish the discriminatory **poll tax** and replace it with a modern voter registration system. And the voters who repeatedly returned him to office were apparently driven by something more than the obvious motive of racism. They seemed in part to be applauding their governor for standing up to an all-powerful federal government.

By Roy Reed, Hogeys, Arkansas in *The Encyclopedia of Arkansas History and Culture*, retrieved at <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=102> on Nov 4, 2012.

Roy Reed also wrote a biography of Faubus: *The Life and Time of an American Prodigal*. Fayetteville, AR: University of Arkansas Press, 1997 and was a writer and reporter for the Arkansas Gazette. One can read about him at: <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=1051>

This entry, originally published in *Arkansas Biography: A Collection of Notable Lives*, appears in the *Encyclopedia of Arkansas History & Culture* in an altered form. *Arkansas Biography* is available from the University of Arkansas Press.

Finally, have students read the following Newspaper article from the Arkansas Gazette, the **day after the telegram was sent**. Ask them to read this to answer the same questions. What did this author have to say about Faubus' motivations?

FROM THE STUDENT ACADEMIC NOTEBOOK

Transcript:

Now We Face Federal Troops

The march of events in Little Rock over the last three weeks has now led to an inevitable climax.

Yesterday President Eisenhower made the hard and bitter decision he has sought to avoid. He will use federal troops to restore law and order to the City of Little Rock.

The president's language made his meaning unmistakable. To the White House reporters at Newport he read a statement in the numbered paragraphs of the old military man:

"I want to make several things very clear in connection with the disgraceful occurrences of today at Central High School in the city of Little Rock.

"1. The federal law and orders of a United States District Court implementing that law cannot be flouted with impunity by an individual or any mob of extremists.

"2. I will use the full power of the United States – including whatever force may be necessary to prevent any obstruction of the law and to carry out the orders of the federal court."

We can hope that we may yet escape the tragic spectacle of federal soldiers deployed on the streets of Little Rock for the first time since the post-Civil War period of Reconstruction.

The decision is up to the members of the riotous mob, which assembled yesterday at Central High School and finally passed beyond the control of the local police—who did their duty and did it well.

If these reckless men force the issue again this morning the federal troops will march—as they must march to restore order and end the intolerable situation in which this city now finds itself.

Arkansas Gazette, September 24, 1957

Now We Face Federal Troops

The march of events in Little Rock over the last three weeks has now led to an inevitable climax.

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We can hope that we may yet escape the tragic spectacle of federal soldiers deployed on the streets of Little Rock for the first time since the post-Civil War period of Reconstruction.

The decision is up to the members of the riotous mob which assembled yesterday at Central High School and finally passed beyond the control of the local police—who did their duty and did it well.

If these reckless men force the issue again this morning the federal troops will march—as they must march to restore order and end the intolerable situation in which this city now finds itself.

Hold a discussion about these texts. Ask what the author of the biography believed about Governor Faubus, and have students read places in the text that make them think that way (text-based activity). Have the same discussion regarding the newspaper article. At the end of the discussion, ask, “According to these authors, was Faubus merely trying to keep the public safe, was he determined to keep Central High School segregated for his own political purposes, or was he a racist?” Students might be asked to identify passages or terms used in the documents to support their conclusions.

Note that historians read not only from primary source documents, but also secondary sources—texts that have used primary source and secondary source documents as evidence—such as the biography. Discuss what evidence the authors seem to be drawing on and what opinion the authors had of Faubus. Ask, “Would you trust Roy Reed’s interpretation? *The Arkansas Gazette’s* interpretation? Why or why not?” As in the first discussion, encourage students to talk to each other and to present textual evidence for what they are saying.

Finally, ask what *they* believe about Faubus’ motivations, and to write their answers in their academic notebook, along with at least three pieces of evidence for their decisions. (They can write a numbered list and use any of the four texts.)

Students have once again acted as historians by reading primary and secondary sources in order to *interpret* the past, relying on their judgment to figure out a story about the past that makes sense and having different opinions about the texts.

FROM THE STUDENT ACADEMIC NOTEBOOK

After reading the four documents, what do *you* think Faubus’ motivations were for trying to keep the Little Rock Nine out of Central High School? Write down at least three key ideas from the texts that helped you come to that conclusion. You may write these in a numbered list.

Assessment:

Outcome 1:

Students’ can provide text-based reasons for their answers to the question: Why did Governor Faubus try to keep the Little Rock Nine from attending Central High School?

| Evaluation Rubric | | | |
|---|----|----------|-----|
| Students state a reasonable claim about Faubus’ intentions. | No | Somewhat | Yes |
| Students write at least three ideas from the text. | No | Somewhat | Yes |
| Ideas come from more than one text. | No | Somewhat | Yes |
| Ideas provide clear support for the claim. | No | Somewhat | Yes |
| Total points = 8 | | | |

Activity Four

Vocabulary (Approx. 15 minutes)

Remind them of what they learned by showing the words you have written on chart paper or in another visual aid. Add “primary source document” and “secondary source document” to the list. Let them know they will be returning to these words throughout the unit.

- Primary source document.
- Secondary source document.
- Sourcing.
- Contextualization.
- Corroboration.

Assessment: see below

Activity Five

Returning to the Definition of What Historians Do (Approx. 15 minutes)

Have students return to what they wrote about what historians do and revise based upon what they have learned from the lesson.

Assessment:

Outcome 2:

Students will show that they have refined their notions of history through changes in the writing about what historians do.

Outcome 3:

Students will show through their writing about what historians do, they have learned that *sourcing*, *contextualization* and *corroboration* are tools historians use to help them weigh the perspective and trustworthiness of documents considering the time period they are studying.

| Evaluation Rubric | | | |
|--|----|----------|-----|
| History requires reading documents and other sources. | No | Somewhat | Yes |
| Historians have to interpret these documents. | No | Somewhat | Yes |
| Historians have to come up with a plausible story, given the materials they have read and studied. | No | Somewhat | Yes |
| Historians engage in sourcing, contextualization, and corroboration. | No | Somewhat | Yes |
| Total points = 8 | | | |

Have students read the short explanation of historical reading in their academic notebook for homework.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Introduced the academic notebook.
2. Asked students to write an answer to the question, “What do historians do?”
3. Set up and assigned reading of the first two texts.
4. Discussed vocabulary strategies and the changing connotations of words over time, using the word “colored” as an example (historical empathy).
5. Defined primary source document, secondary source document, sourcing, contextualization and corroboration, providing a visual for students to refer to as they continue the unit.
6. Engaged class in discussion of the two texts.
7. Asked students to discuss the meaning of the selected sentences.
8. Set up and assigned the next two texts.
9. Engaged class in discussion.
10. Asked students to refine their answer to the question, “What do historians do?”
11. Asked students to write their answer to the question, “What do *you* think Faubus’ motivations were for trying to keep the Little Rock Nine out of Central High School?” and provide at least three pieces of textual evidence that supports their answer.

Lesson 2

Gateway Activity–Civil Rights

Overview and Rationale:

Students are introduced to the content of the unit as they engage in a photographic analysis. The photographs are designed to pique students' interest in the topic of the Civil Rights Movement while helping to build historical thinking skills they will use as they read in subsequent lessons. Sourcing and contextualization are two key skills that can begin to be taught through photographs. Students can learn to pay attention to where a picture came from and when it was taken in addition to identifying what the picture is showing. They can use this information to think about a *chronology* of events over time (one of the key ways that historians relate events to each other), and they can speculate about the purpose the photographer had in taking the picture. This speculation is akin to what historians do as they read primary source documents to construct a plausible narrative of events in history. They interpret documents in light of the perspective taken by the author, knowing that they get a deeper understanding of historical events if they have an understanding of the various perspectives that existed at the time. Students will also use the guidelines outlined by the National Archives and Records Administration to analyze the photographs.

Tasks/Expected Outcomes:

1. Given a group of photographs depicting scenes from the Civil Rights Movement, students will use the National Archives and Records Administration process for analyzing a photograph.
2. Students will interpret photographs using information about context and source in addition to their content.
3. Students will begin a timeline of the Civil Rights Movement using the photographs and prior knowledge of Civil Rights Movement events.
4. Students will explain that sourcing, contextualization, corroboration and chronology are aspects of history reading.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint set of primary source photographs
- Academic notebook

Timeframe:

100 minutes

Targeted Vocabulary:

Words that Help You Discuss the Discipline

- Sourcing (reinforced from previous lesson)
- Contextualization (reinforced from previous lesson)
- Primary Source Document
- Chronology
- Timeline

Activity One

Preparing for the Lesson (Approx. 5 minutes)

Have students discuss what they think when they see photographs from the past. Ask students to consider the role that photographs play in providing historians with evidence. Ask: What can a photograph tell a historian? What can't it tell?

Activity Two

Analyzing Photographs (Approx. 20 minutes)

Explain to students they will begin the Civil Rights unit by studying primary source photographs, and show them the first PowerPoint slide (also in their academic notebook). Ask them to analyze this photograph using the National Archives procedure on slides four, five, and six. Go over this procedure and **model one or two observations and the inferences they can make.** Answer any questions. Then, as a whole class, give students two minutes to look at the photograph. Ask them to describe items, people and actions while you write on the overhead, PowerPoint, Smart Board or chart paper, and (1) make three inferences about the photograph, (2) think of questions they have about it, and (3) speculate about what happened before and after the photograph was taken. In the discussion, encourage students to speculate about the time period and the perspective of the photographer (e.g., what was the photographer trying to show?) and the context in which the picture was taken (e.g., when do you think this picture was taken? What was happening in history at that time?).

Show students *source information* about the photograph and ask how that information adds to their understanding of the photograph. Entertain all answers and push for an understanding that the source can help you determine the perspective of the picture taker—who they are targeting and what they are trying to show. Remind them that thinking about the source of the document and what that means for interpretation is what historians call *sourcing*. Explain that when they think about what happened before and after, they are thinking of the context in which the photograph took place—something that historians call *contextualization*. Given the date of this photograph, what do they know about what was happening at the time? Historians use these strategies when they read history. These two terms and their definitions should already be placed on chart paper or some other medium and displayed in the room.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Analyze Photographs

Photographs from the time period are considered *primary sources*.
Analyze this photograph using the steps following it.



Photo Analysis Worksheet

Complete the information on the worksheet for your assigned photograph(s).

Step 1. Observation

A. Study the photograph for two minutes. Form an overall impression of the photograph and examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

Photo title or number:

FROM THE STUDENT ACADEMIC NOTEBOOK

B. Use the chart below to list people, objects and activities in the photograph.

| People | Objects | Activities |
|--------|---------|------------|
| | | |

Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

1. _____
2. _____
2. _____

FROM THE STUDENT ACADEMIC NOTEBOOK

Step 3. Questions

A. What questions does this photograph raise in your mind?

B. Where could you find answers to those questions?

Look at the source and contextual information for this photograph. How does this information add to your understanding of the photograph?

Designed and developed by the Education Staff, National Archives and Records Administration, Washington, DC 20408. Modified by J. Barger 9-9-12.

- **Title:** Drinking fountain on the county courthouse lawn, Halifax, North Carolina
- **Creator(s):** Vachon, John, 1914-1975, photographer
- **Date Created/Published:** 1938 Apr.

Retrieved from Library of Congress: <http://hdl.loc.gov/loc.pnp/pp.print>.

Activity Three and Four

Analyze Photographs in Groups and Reflect (Approx. 30 minutes)

Divide the rest of the photographs among small groups and ask each group to analyze two photographs, including the source information, so that each photograph is analyzed by at least two groups. While students are working, help them notice discrepancies or things that cause them to question what they are seeing. Help them see the role of the photographer in framing what will be seen and to ask what is NOT being shown? Students should share some of these analyses in the whole group. Again, help students to discuss the source and the context of the photos. Have students reflect on the photographs, guided by the questions in student Activity 3, and discuss these reflections.

The rest of the photographs appear on the next page and in the academic notebook, and the source and context appear after the photographs are presented. There are also two Photograph Analysis worksheets in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

- Interpret photographs using the National Archives process and information about context and source.
- Begin a timeline of the Civil Rights Movement.
- Explain the role sourcing, contextualization and chronology have in history reading.

Activity

3 Analyze Photographs in Groups

Analyze two more photographs. First conduct the National Archives analysis, then read about the source and context of the photograph in order to gain further insights.



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10

Source and context of the photos:

- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: September 4, 1957
Context: Elizabeth Eckford—one of nine black students attempting to attend Central High School, in Little Rock, Arkansas—is met with jeers and turned back by National Guard troops.
- Retrieved from Library of Congress:** http://www.loc.gov/rr/print/list/085_disc.html.
Taken: May, 1940, by Delano, photographer
Context: Durham, North Carolina. “At the Bus Station.” The segregation laws known as “Jim Crow” dominated the American South for three quarters of a century beginning in the 1890s. The laws affected almost every aspect of daily life, and included segregation of schools, parks, libraries, drinking fountains, restrooms, buses, trains and restaurants. “Whites Only” and “Colored” signs were constant reminders of the enforced racial order.
- Retrieved from Dallas News:**
<http://photographyblog.dallasnews.com/2013/05/today-in-photo-history-14-3.html/>.
Taken: May 14, 1961
Context: A Freedom Riders bus goes up in flames on May 14, 1961 after a firebomb was tossed through a window near Anniston, Alabama. The bus, which was testing bus station segregation in the south, had stopped because of a flat tire. Passengers escaped without serious injury (AP Photo).
- Retrieved from:**
http://biology.clc.uc.edu/fankhauser/society/freedom_rides/freedom_ride_dbf.htm.
Taken: May 21, 1961
Context: The surviving contingent of Freedom Riders took a bus from Birmingham to Montgomery, Alabama, protected by a contingent of the Alabama State Highway Patrol. However, when they reached the Montgomery city limits, the Highway Patrol abandoned them. At the bus station, a large white mob was waiting with baseball bats and iron pipes. The local police allowed them to viciously beat the Freedom Riders uninterrupted. Again, white Freedom Riders, branded “Nigger-Lovers,” were singled out for particularly brutal beatings.
- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: March 7, 1965
Context: John Lewis, the leader of Student Nonviolent Coordinating Committee, is beaten by a state trooper March 7, 1965, as he attempts to march with 600 others from Selma to Montgomery, Alabama, in a right-to-vote demonstration. The day is known as “Bloody Sunday.”
- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: November, 1960
Context: U.S. Deputy Marshals escort six year-old Ruby Bridges from William Frantz Elementary School in New Orleans in November 1960. The first grader was the only black child enrolled in the school.
- Retrieved from Library of Congress:** <http://www.loc.gov/pictures/item/2002709628/>.
Taken: 1961
Context: Interior of Freedom Riders’ Bus, with view through window of six police cars and soldiers lining pavement.
- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: 1960
Context: Members of the North Carolina Student Nonviolent Coordinating Committee sparked sit-ins by students across the South by sitting at segregated lunch counters.

9. **Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.

Taken: June 11, 1963

Context: Governor George Wallace prevents black students from registering at the University of Alabama in Tuscaloosa on June 11, 1963. At right, Nicholas Katzenbach, deputy attorney general of the United States listens to Wallace.

10. **Photograph shown by permission of Ken Guthrie, (private photograph)**

Taken: April 9, 1968

Context: Martin Luther King funeral procession. The photograph shows a three-mile procession to Morehouse College, King’s alma mater, for a public service from Ebenezer Baptist Church, where King and his father both served as senior pastors.

Activity

4 Reflecting on the Photographs

Think about the photographs you analyzed today. Answer the following questions:

What concepts of freedom and liberty are addressed in the photographs?

What tactics are individuals and groups using in the photographs?

What reactions do you have to the photographs?

Assessment:

Outcome 1:

Given a group of photographs depicting scenes from the Civil Rights Movement, students will use the National Archives and Records Administration process for analyzing a photograph, and

Outcome 2:

Students will interpret photographs using information about context and source as well as their content.

| Evaluation Rubric (Circle the appropriate number of points) | | | |
|--|---------------|----------|----------------------------------|
| Student (in group) fully completed assignment. | | | |
| No 0 | Some 1 2 3 | Yes 4 | |
| Students correctly distinguished between observations and inferences. | | | |
| No 0 | Some 1 2 3 | Yes 4 | |
| Inferences were reasonable considering photograph observations. | | | |
| No 0 | Some 1 2 3 | Yes 4 | |
| Student asked reasonable questions considering photograph observations | | | |
| No 0 | Some 1 2 3 | Yes 4 | |
| | | | Total possible points =16 |

Activity Five

Create a Timeline (Approx. 40 minutes)

Explain that the Civil Rights Movement is a topic many have studied before. **Ask students to brainstorm events that took place during the Civil Rights Movement and write these on chart, overhead or Smart Board (or have a student recorder do it).** Some of the photographs will represent the events they have remembered and students can match any of the pictures to the event. Then, ask students to choose among the list the five to ten most significant events—the events that stand out as having the most widespread effect—and decide which event came first, next and so on, numbering them so that the events (and pictures) are in the order in which students think they occurred. Explain that this is a chronology, an ordering by time, and that this **chronology** and their determinations of **significance** have been based upon their memory rather than on *evidence* they have at hand. They will have to verify, add to, and edit these events as they read about the Civil Rights Movement.

Have students turn to the blank timeline in their academic notebooks and place each event along the timeline. Explain that a timeline is one typical way historians depict change over time. Events following in chronological order do not mean necessarily that there is cause-effect relationship among events; it could be coincidence that one event follows another, but a chronology allows historians to make inferences about what kind of relationship there is. Then say that, as the unit unfolds, they will be making a timeline that includes the events they brainstormed as well as other events they are going to be reading about. Students may need to correct their chronology of the events they brainstormed as they go through the unit.

One adaptation to individual timelines is to construct a class timeline—a visual placed on the wall to which students can refer, supplement and edit as they learn about new events.

The timeline page from the academic notebook is on the next page.

Assessment:

Outcome 3:

Students will begin a timeline of the Civil Rights Movement using the photographs and prior knowledge of Civil Rights Movement events.

Informally note who completes or participates in the assignment and who does not. Since the timeline will continue to be developed, no formal assessment is given at this time.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Create a Timeline

Return to the photographs and number in chronological order. Then, place the events depicted in the photographs on the timeline below. Add other dates that you remember. As you complete the unit, you will continue to add dates to this timeline.

| | | | |
|----------------------------|------------------------------|----------------------------|----------------------------|
| 1950 <hr/> <hr/> | 1951 <hr/> <hr/> | 1952 <hr/> <hr/> | 1953 <hr/> <hr/> |
| 1954 <hr/> <hr/> | 1955 <hr/> <hr/> | 1956 <hr/> <hr/> | 1957 <hr/> <hr/> |
| 1958 <hr/> <hr/> | 1959 <hr/> <hr/> | 1960 <hr/> <hr/> | 1961 <hr/> <hr/> |
| 1962 <hr/> <hr/> | 1963 <hr/> <hr/> | 1964 <hr/> <hr/> | 1965 <hr/> <hr/> |
| 1966 <hr/> <hr/> | 1967 <hr/> <hr/> | 1968 <hr/> <hr/> | 1969 <hr/> <hr/> |
| 1970 <hr/> <hr/> | Notes: <hr/> <hr/> | | |

Activity Six

Exit Slip

Ask students to write an “exit slip” explanation of the following historical tools used in the lesson. Their explanation should include a definition and a description of what role each term played in their analysis of photographs (see below).

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

6 Vocabulary

Define the following terms and write down the ways in which you used the following tools of historians in this lesson.

Sourcing:

Contextualization:

Primary source documents:

Secondary Source documents:

Chronology:

Assessment:

Outcome 4:

Students will be able to explain how sourcing, contextualization, and chronology are aspects of history reading (including the reading of photographs).

| Evaluation Rubric | | | |
|--|----|------|-----|
| Student showed knowledge of definition for each term. | No | Some | Yes |
| Student explained how he/she used sourcing and contextualization in reading the photographs. | No | Some | Yes |
| Students mentioned that a photograph was a primary source. | No | Some | Yes |
| Total points = 6 | | | |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Set up the activity by discussing, in general, how photographs might help a historian (what they can and can't tell someone trying to Interpret the past).
- 2. Modeled making observations and inferences from the first photograph.
- 3. Discussed what the source information can add to the analysis (when and where it was taken and by whom).
- 4. Helped students to ask, "What was the photographer trying to show?" "What was he/she not showing?"
- 5. Engaged students in group practice using the first photograph.
- 6. Assigned groups to analyze two more photographs.
- 7. Discussed a subset of the photographs in the group.
- 8. Worked with students to construct a tentative timeline.
- 9. Reinforced vocabulary (chronology, sourcing, contextualization, timeline).

Lesson 3

Anchor Text and Essential Questions

Overview and Rationale:

An anchor text is a text that sets the stage and provides the context for the reading tasks that are to come. It fills in background knowledge that students need to help interpret the various texts they will encounter and it is based upon a rich history of research that shows the advantage to reading comprehension that prior knowledge provides. The essential question focuses readers on the key concepts with which they will grapple as they engage in historical inquiry while other questions allow teachers an opportunity to talk about the kinds of questions that are appropriate to the study of history. The lesson prepares students to engage in *close reading*—setting the stage for a classroom culture where the collaborative grappling with complex ideas in text is valued and expected.

This lesson asks students to read and think about background knowledge and ask questions about this unit. Concepts of close reading are introduced.

Read about closer reading before teaching this lesson.

Tasks/Expected Outcomes:

1. Students will demonstrate their understanding of the focus of the unit, the time period in which this unit takes place and the kinds of questions their reading will help answer through annotation and the questions they generate.
2. Students will demonstrate that they are actively engaging in close reading of textual material through their annotations and reading behaviors.
3. Students will show understanding of the targeted vocabulary words through annotations and discussion.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 5. Read narrative texts critically.
 - 6. Read research data critically.

Throughout this course, only grade 12 standards are used.

Materials:

- Anchor Text and Essential Questions
- Academic Notebook

Resources:

- Close Reading Checklist

Timeframe:

50 minutes

Targeted Vocabulary:

Discipline specific vocabulary

- Universal manhood suffrage
- Abolitionist
- Jim Crow Laws
- *Brown v. Board of Education*

Words that help you discuss the discipline

- Close Reading
- Annotation
- Anchor Text

General Academic Vocabulary

- Endowed
- Unalienable

Activity One:

Reading an Anchor Text (Approx. 50 minutes)

Instruct students that they have been preparing through the previous two lessons to read deeply about an era and a topic they have undoubtedly already studied and know something about. This time, however, they are going to be reading about this era and topic with the mindset of historians, who understand that the history they have learned is really an *interpretation* of events. Because they know what they read is an interpretation, historians have to read carefully to not only learn what they can from primary documents, artifacts and historical accounts written by various authors; they also must question the truth of the interpretations they are reading—to weigh what they read based upon the *source* of information and the *context* in which it was written and to look for *corroborative* evidence that an interpretation is a plausible one. This *close reading* often entails paying attention to the word choices an author makes.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Reading an Anchor Text

Read an anchor text and consider an essential question that will guide your reading of the unit. An anchor text sets the stage and provides the context for the reading you will be doing in the rest of this unit. The *essential question* will keep you focused on key issues as you read the texts in the unit. This lesson will also ask you to engage in *close reading*—reading the text carefully, interpreting the meaning of what you are reading at the word level and beyond, even if you experience difficulty. It is okay to struggle with meaning and to work your way through those struggles to arrive at the most precise interpretation you can muster.

- Read the following anchor text. Highlight or mark important parts of the text and key words or words you don't know.
- As you read, write your thoughts and questions in the margin.
- If you are reading with a partner or group, stop after each paragraph and share your difficulties, thoughts and questions.
- If you are reading with a partner or group, compile a master list of questions that you have.

Ask students to read the anchor text in groups of two to four. First, set up the task by noting this anchor text is written by the unit authors and the purpose of the text is to help them get an idea of the context in which this particular unit is set. It will help them think about the kinds of questions that their reading of subsequent texts might answer. The anchor text will end with *Essential Questions*—ones they will return to throughout the entire unit and answer fully at the end of the unit, but that there are other questions they will think of as they read the anchor text, and these also should be noted. Students should read the text with a pen or pencil to mark or *annotate* important words (that they may or may not know), highlight key ideas, and to write their thoughts and questions in the margins. They will be reading this text closely—paying attention even at the word level. (In the next lesson, they will be learning a history-specific annotation method—this lesson is a lead-up to the next one.)

Students will need to see what you mean by close reading, and so you should model reading the excerpt of the Declaration of Independence closely, also showing how you would annotate it and ask questions about it. In Lesson 5, they will be refining their annotations to make them more specific to history. You may now just be getting them used to writing on their readings—especially if they haven't done this before and were hesitant to do it with the previous lessons. Discuss the meanings of the two highlighted words—endowed and inalienable. Go over your strategies for determining these word meanings.

When finished reading, ask students to share these annotations with their pairs or small groups and then with the whole class. They can add what others have annotated to their own if these other annotations help them understand and think about the text more fully. You will also have read and annotated the text and will share your thoughts with the group as well. (If this is a first or second pass at annotation, students will become better at it as time goes on and as they are exposed to various models of annotation and notetaking). Go over strategies for determining the meaning of unknown vocabulary. If they have asked their reading partners, looked at the context of the sentence, tried breaking the word into parts, or gone to a glossary or dictionary, and still do not know the meaning of the word, then that word is one they can bring up in the larger group.

Ask students to turn to the anchor text in the academic notebook. Tell them to write their annotations on the page. As they write and discuss, use the *Close Reading Checklist* to note the way students are engaged in close reading of the text.

Students read, annotate and discuss, ending with a list of questions. Compile a class list of interesting questions that students bring up.

(Anchor text is in the academic notebook *without* highlighted words.)

FROM THE STUDENT ACADEMIC NOTEBOOK

The Changing Concept of Liberty and Equality in the 60's: From the Freedom Rides to the War on Poverty

We hold these truths to be self-evident, that all men are created equal; that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness. – Thomas Jefferson, the Declaration of Independence (1776)

More than two centuries ago, our founding fathers created a new nation based on the principles discussed in this quote. Unfortunately, to many Americans, their words rang hollow. Unalienable rights were apparently meant only for white men of property. That, of course, would change over time—a long period of time. Could the first generation of Americans have predicted what the future would bring for the new republic they had forged? Perhaps. Jefferson became an advocate for the small farmer and the concept of universal manhood suffrage, and women like Abigail Adams and Phillis Wheatley spoke out for their gender and against the institution of slavery.

The 1820s and 30s became the “Age of the Common Man.” The abolitionist movement emerged to challenge slavery, and the bloody Civil War ended that institution in the 1860s. It led to the Fourteenth and Fifteenth Amendments that conferred citizenship on former slaves and denied the states from withholding the right to vote from any citizen on the basis of race, color or previous condition of servitude. But, in the South, an exploitive sharecropping system took the place of slavery, and the individual states passed a series of Jim Crow laws to segregate the races and deny equal rights to their black citizens. The south even got around the Fifteenth Amendment by resorting to poll taxes and literacy tests to keep blacks from voting. The long struggle for equal rights for blacks seemingly came to a successful conclusion with the 1954 case of *Brown v. Board of Education* in which the U.S. Supreme Court declared school segregation to be unconstitutional. The following year Rosa Parks refused to give up her seat on a city bus in Montgomery, Alabama, and newly-ordained minister Dr. Martin Luther King, Jr. led a successful boycott to end segregation of the city bus system there. Black Americans were elated, believing that the Brown decision and the leadership of Dr. King in the South would quickly undermine the Jim Crow system. Yet, in 1960, most public schools remained segregated, most blacks were still forced to the back of the bus and a black citizen still could not sit down at a lunch counter and have a sandwich next to a white man. It would take a major civil rights movement emanating from the citizens themselves, mostly students and young people, to compel the federal government to enforce its own laws.

On June 11, 1963, President John F. Kennedy made his first major speech on Civil Rights in which he publicly embraced the standards of liberty and equality for which the young activists had strived. Almost a year later, President Lyndon B. Johnson delivered his “Great Society” speech at Ann Arbor, Michigan. These two speeches frame this Civil Rights unit and an era that some say was transformative for African Americans and others say was not.

Did the concept of liberty and equality change in the United States in the 1960? If so, how? If not, what kept change from happening?

1. If yes, what changed? Was the change legal, social, political, economic, or cultural? If no, which of these factors kept change from happening? Explain.

2. Who was responsible (for helping or hindering change)?

3. What tactics were used? Were these legal, social, political, economic or cultural?

4. What challenges were faced?

While seeking the answers to this question you will also address other questions. Take a moment to ask your own questions, then discuss.

After students have finished reading and discussing their thoughts in groups, ask each student to choose one word—a word that they think is most important in the text—and write that word on a chart on a wall in your room. As students finish, they should go to the chart and write their word with a marker you have supplied. Ask them to write the word big enough so that the students can see it from their seats.

Once students have finished reading and have written their word on the chart, have them choose two words they see on the chart that go together in some way (one does not have to be their word). Have them tell the other members of their group which two words they picked and how they think they go together in a meaningful way that has to do with what they just read. Then, have several students share out to the entire class.

Next, engage them in a discussion of the anchor text, asking an open-ended question, such as: “As you read this text, what stood out for you?” “What questions did you have as you read the text?” As they discuss their ideas, ask questions such as, “Where in the text did you find that?” “What in the text made you think that?” “What in the text made you ask that question?” The idea is to get students to dig back into the text to support their answers.

As students discuss their close reading of the text, ensure that target vocabulary is noted and discussed (as well as the other words that students bring up).

Continue to discuss the ways in which students can find word meanings as they read.

Students might have questions about the term, Jim Crow Laws. If they do, you could take them to this website: <http://www.ferris.edu/jimcrow/who.htm>.

If there are still key ideas that have not been discussed, ask questions such as the following:

1. Here is a quote from the anchor text:

It would take a major Civil Rights Movement coming from the citizens themselves, mostly students and young people, to **compel** the federal government to enforce its own laws.

What claim is the author making? Why did the author make the claim that it took the citizens themselves to get the government to act? Upon what evidence in the text is he basing that statement? Do you agree with the statement? Why or why not?

2. What does *seemingly* mean in this sentence?

The long struggle for equal rights for blacks seemingly came to a successful conclusion with the 1954 case of *Brown v. Board of Education* in which the U.S. Supreme Court declared school segregation to be unconstitutional.

Ensure that they understand the purpose of the guiding question(s). They do need to understand that historians analyze history through different lenses, and one way they think about what happened is to think in terms of social, economic, religious, political, legal or other categories. Looking for events, motives, causes/effects and so on with these categories in mind helps them make better interpretations of what happened in the past. If this is a new idea to students, take them back into the anchor text to find instances that represent political, social, economic and legal categories.

Start a “Discipline-Specific” word chart for the following words:

- Universal manhood suffrage
- Abolitionist
- Jim Crow laws
- *Brown v. Board of Education*

Assessments:

Outcome 1:

Students will demonstrate understanding the focus of the unit, the time period in which this unit takes place and the kinds of questions their reading will help answer through text markings, discussion and the questions they generate and through engagement in close reading.

Outcome 2:

Students will demonstrate actively engaging in close reading of textual material through their annotations and reading behaviors.

Use the Close Reading Behavior Checklist to informally assess the extent to which students are engaged with the text. Read about “Close Reading in History” below and use the checklist provided.

Outcome 3:

Students will show understanding of the targeted vocabulary words through annotations and discussion.

Informally assess what is being discussed, what questions students are raising, what they find challenging in the text and the words they identify. Consider keeping a class roster on hand and checking off the names of students who add to the discussion in order to determine who needs more support.

Ask students to define “endowed” and “inalienable” on an exit slip.

**Teacher
Checklist**

In this lesson, I . . .

- 1. Explained the definition of an anchor text.
- 2. Explained (and modeled) how students could mark the text as they read.
- 3. Placed students in pairs or small groups to read and discuss the anchor text and to ask questions.
- 4. Discussed students' questions.
- 5. Engaged in targeted discussion.
- 6. Focused on guiding question(s)—taking students back into the text to look at political, social, economic and legal aspects.

Lesson 4

Everything but the Paper: Introduction to the Research Project

Overview and Rationale:

It is vital that students acquire basic research skills and be able to think thematically. Both of these elements of historical literacy are built into the research assignment. In this series of research assignments, students will choose a topic of research relating to the theme of the unit, which is the changing perceptions of liberty in the United States during the 1960s, and generate a thesis statement that ties the topic to this overarching theme. This project gives students the opportunity to explore the Civil Rights Movement and the 1960s beyond the content covered in the course material itself. The instructor's role is to facilitate students with identifying topics outside of the course curriculum (i.e., sit-ins, voter registration, etc.) and to help them develop an appropriate historical argument using relevant sources. Students should use the reasoning sheets in their academic notebook to get started. Students will need assistance with proper source citation and annotation. While the assignment, as written, suggests the use of MLA or Turabian citation, the individual instructor can modify this to their department's preferred citation format (e.g., APA, Chicago, etc.).

To accomplish these hefty tasks, the timeline for the unit allows for visits to the library so that students may complete their research. Students can use any free time that develops during the class for this project or complete it as a standing homework assignment. Again, the instructor's job is to facilitate the project so that it is completed on time and correctly. This project should be a significant element of the course assessment. Adapt the assignment directions to suit individual needs in terms of grades and due dates. The example assignments were purposefully designed using an entirely off-subject example so that students could see form and content for each assignment without being provided a document for simple replication.

This lesson plan lays out the first assignment of this paper.

Tasks/Expected Outcomes (for the entire project):

Students will be able to:

1. Use primary and secondary sources in writing, demonstrating that they understand the implications of their differences.
2. Identify the perspective or bias of a text author and interpret the text in light of that perspective.

3. Take into account the context of a text (time period in which it was written, who the intended audience was, etc.) when interpreting a text.
4. Evaluate the trustworthiness of various sources.
5. Make valid interpretations of complex historical sources in writing.
6. Identify the relationship among events (as contingent, coincidental, etc.).
7. Engage in historical inquiry by forming hypotheses, making historical claims and providing textual evidence across multiple sources to support the claims.
8. Cite appropriate sources in spoken and written arguments.

Task for Assignment—Research Paper:

How did your research topic influence changes in the concept of liberty and equality during the Civil Rights Movement of the 1960's? After researching various sources on your topic, you will create a PowerPoint that showcases your topic and explains how their topic relates to that question.

- Cite at least 5 sources
- Point out key elements from each source
- Address the credibility and origin of the sources
- Include a bibliography

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (15) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:
- (D) produce a multimedia presentation (e.g., documentary, class newspaper, docudrama, infomercial, visual or textual parodies, theatrical production) with graphics, images, and sound that appeals to a specific audience and synthesizes information from multiple points of view.
- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (C) an organizing structure appropriate to the purpose, audience, and context;
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;
- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:
- (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
- 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
- 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.

3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
1. Participate actively and effectively in one-on-one oral communication situations.
 2. Participate actively and effectively in group discussions.
 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.

- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- Various

Resources:

- Close Reading Checklist

Timeframe:

40 minutes

Targeted Vocabulary:

Words that help you discuss the discipline

- Document
- Sourcing
- Contextualization
- Corroboration

Activity One

Orientation to the Task (Approx. 20 minutes)

Refer students to their previous discussions about civil rights and the events they used to begin their timeline. Explain they will be reading sections of a survey chapter in a history textbook about the Civil Rights Movement and studying documents and other information about the freedom riders, but that they will get a chance to dig into a particular event or find out more about a key person in the Civil Rights Movement through a research project. This research project will take place over the next five weeks and they will build their project step-by-step. Have students turn to the prompt for the paper in their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the task

How did your research topic influence changes in the concept of liberty and equality during the Civil Rights Movement of the 1960's? After researching various sources on your topic, you will create a PowerPoint that showcases your topic and explains how their topic relates to that question.

- Cite at least 5 sources
- Point out key elements from each source
- Address the credibility and origin of the sources
- Include a bibliography

Read the task above, and in a quick write, write your first reaction to the prompt. Do you have in topic in mind yet? If not, what strategies do you have to help you pick?

Week-by-week timeline for the project:

Week 1: Topic and proposed "thesis statement" (or claim).

Week 2: Find at least five sources on topic addressing your claim.

Week 3: Read, annotate and take organized notes on the sources and create an outline for your PowerPoint.

Week 4: Create a first draft, seek input from others and revise.

Week 5: Present revised PowerPoint to class.

What are the benefits of having a step-by-step timeline? What challenges will you face?

Ask aloud: What are the benefits of having a step-by-step timeline? What challenges will you face?

Activity Two

Introduction to the Assignment (Approx. 20 minutes)

Ask students to read the first assignment together. Explain that, even though they are required to create a thesis statement or overarching claim, their research may lead them in a different direction and should understand that they could change this statement as they learn more about their topic.

FROM THE STUDENT ACADEMIC NOTEBOOK

Assignment: Topic and Thesis Statement

Provide a topic of your choosing so long as it remains within the overall era of the American Civil Rights Movement of the 1960s and does not duplicate any of the topics being discussed in the normal course materials. For instance, you may use a topic related to sit-ins but should avoid topics related to the freedom riders since that is something we will examine in depth during the course.

In addition to a topic of research, you should also provide a thesis statement about the topic. The purpose of the thesis statement is to state the position you think you will be taking or the point you think you will be making in relation to your topic. Avoid large topics—the more specific the better. It may help to ask yourself a question about the topic. Your guess at an answer (your hypothesis) is your thesis statement (which may change as you gather evidence from what you read). If you have questions or need help finding a topic, please ask. Do not wait until the last minute to do this assignment as it will require you to spend some time in the library making sure there are plenty of relevant sources.

One final note: your topic and thesis statement should contribute in some way to the overarching theme of the course: the changing perceptions of liberty in this era.

Assignment 1 is due at the beginning of class on _____.
The assignment is worth ____ points.

See the following example on a topic in history that is not from the Civil Rights era. This example should help you write your thesis statement.

Example 1:

Topic: Discrimination against Japanese Americans in World War II.

Question about the topic: Why did the government allow discrimination against Japanese Americans during World War II?

Thesis: The government allowed discrimination against Japanese American's in World War II because it gave people an enemy to focus on.

Example 2:

Topic: African American Women in the South after Emancipation

Question about the topic: How did African American women in the South fare compared to men after emancipation?

Thesis: Although all freed slaves were better off after emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.

Discuss with students strategies for determining a research topic. These may include scanning the textbook chapter and other reading materials for topics that catch their interest, searching for topics on the internet, thinking of topics that they have been previously interested in, or other strategies students suggest.

Also, discuss the characteristics of the thesis statement example. The statement is in sentence form, and it not only includes the topic, but also makes an overarching claim about the topic. The claim, at this point (before research), is an educated guess, or hypothesis. The research done on the topic should help each student to decide if this thesis is supported or if another thesis might make more sense.

To many students, constructing a thesis statement may be a new experience. If this is the case, model the process and provide some guided practice before students finish this activity. To help them, you might have students note the difference between a topic and a thesis.

Below are some topics and some theses. Ask students to differentiate the two and tell you how they knew the difference.

FROM THE STUDENT ACADEMIC NOTEBOOK

1. Jazz music revolutionized music because it was one of the first forms of African-American music to cross into “mainstream” white society.
2. Eleanor Roosevelt
3. The influence of African American’s on jazz in the 1950s.
4. Eleanor Roosevelt recreated the role of the first lady by her active political leadership in the Democratic Party.
5. Lyndon B. Johnson and the Great Society.

Next, characterize what makes a thesis statement good. There are a number of websites that may be helpful. The following comes from: http://www.chicago historyfair.org/images/stories/pdfs/2_how_to_write_a_thesis_statement_easy.pdf.

FROM THE STUDENT ACADEMIC NOTEBOOK

Evaluate the thesis statements that follow. Ask these questions for each thesis:

1. Is it clear what the project will be about?
2. Is it arguable? Is there something that has to be proven?
3. Will research be necessary to prove the thesis?

Martin Luther King died in 1963.

Strong Weak *Reasons:*

Artists in the South: 1960s

Strong Weak *Reasons:*

The Juvenile Court system was established to remove children from the adult criminal justice system and help youth reform, but over the years it became a source of punishment and imprisonment.

Strong Weak *Reasons:*

Pesticides kill thousands of farmworkers and must be stopped.

Strong Weak *Reasons:*

How did *The Jungle* make an impact on the foods we eat?

Strong Weak *Reasons:*

Also, provide a formula for writing a good thesis statement. Here’s one:

1. Begin with a dependent clause (although...; even though...). (You may make this clause optional.)
2. Add your independent clause—this is the argument you are making or what you hope to prove.
3. Add a “because” clause—this will make your thesis more specific.

Example: *Although all freed slaves were better off after emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.*

Have students complete the assignment in the time frame agreed upon.

Assessment:

Outcome 1:

Students will be able to provide a topic and thesis statement for their project, “Everything but the paper.” You can assign points for each of these characteristics.

| Evaluation Rubric | | | |
|--|----|------|-----|
| Criteria | | | |
| Has a narrowly defined topic. | No | Some | Yes |
| Topic is within the correct historical time period. | No | Some | Yes |
| Topic is related to the overarching theme of the course. | No | Some | Yes |
| Thesis statement makes a point or takes a position on the topic. | No | Some | Yes |
| Thesis is something that can be researched. | No | Some | Yes |
| Thesis is grammatically correct. | No | Some | Yes |
| Total | | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced the overall project.
- 2. Had students read and react to the task.
- 3. Had students read the Assignment 1 together and discuss.
- 4. Discussed the examples.

AND, if thesis statements are new:

- 5. Modeled writing a thesis statement.
- 6. Had students distinguish between topics and thesis statements.
- 7. Discussed the characteristics of thesis statements.
- 8. Had students evaluate good and bad thesis statements.
- 9. Modeled with students a thesis statement “formula.”

Lesson 5

Reading and Annotating a Chapter

Overview and Rationale:

Students will need to read various kinds of sources in order to gain a deep understanding of history. One of these, in college, will undoubtedly be a history textbook. Textbooks in history represent an important genre, in that they provide students with an overview of a particular topic. They are somewhat deceiving, however. Readers assume that what they are reading is absolutely true because the chapters are written mostly in narrative form, not in traditional argument form. Yet, the narratives are the creation of historians' analysis of other historians' writings and their interpretation of documents and other artifacts in relation to their own conjectures about how the past unfolded.

Statements that specify that causes were political, legal, social or that some events are more significant than others, for example, are not statements of fact but reasonable interpretations of historical information. Thus, historians know that history textbook chapters contain implicit *arguments*, or *claims* and that the source (author) and context in which a textbook is written is important. Interpretation is complicated by the fact that textbooks can be considered *tertiary* sources. That is, textbook authors are often relying on secondary sources of information (written by historians) rather than their own assessments of primary documents. Nevertheless, what they choose to emphasize and what they leave out, the claims they make, and the details they provide are *decisions*. Thus, two textbooks may treat the same topic differently. In later lessons, students will compare and contrast two textbook sections on the same topic so that they can understand this.

The first two sections of the textbook chapter in this unit present a somewhat chronological treatment of the Civil Rights Movement from 1939 to 1962. In addition, the chapter includes several features: guiding questions that prompt students to notice legal and political contributions to the movement and tactics or strategies used to further the cause of civil rights; headings and subheadings that specify different topics within the overarching chronological timeframe; photographs from the time period with captions; special topics inserts; lists of key topics; explanations of key terms; quick review facts; maps, and; excerpts from primary sources. Students need to consider all of these elements if they are going to understand what this source has to say.

Annotation is a way for students to mark the text while they are reading. Annotations can be used in *any* field, because *what* is annotated can be tailored to the specific requirements of the discipline. In history, they should focus on the elements of the text that are important to historians: events, people, places, policies and

documents; statements of cause and effect, chronology, significance; comparisons and contrasts; geographical, political, social, legal and other categorizations of events, and so on. Paying attention to these elements will help students to understand important historical information. At the same time, students need to pay attention to the source of this information, to identify claims the author is making, to find evidence for the claims and to question those claims and evidence.

This lesson focuses on understanding the information in the chapter sections, but it also extends the learning from previous lessons. Specifically, students add to their timeline and continue to study vocabulary, and they begin a process that will help them gather evidence across texts to answer the essential question.

Tasks/Expected Outcomes:

1. Students will demonstrate their ability to engage in close reading by their interpretations of sentences from a history textbook.
2. Students will show through their annotations that they are identifying historically important information about the Civil Rights Movement from reading.
3. Students will show their understanding of chronology and significance by adding to the Civil Rights timeline.
4. Students will increase their understanding of vocabulary, evidenced by the terms they annotate and the strategies they use when reading.
5. Students will begin to collect textual evidence that addresses the essential question.

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 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
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- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (C) an organizing structure appropriate to the purpose, audience, and context;
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;

- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:
 - (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
 - (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- “The Origins of the Movement,” from Chapter 28 of Faragher’s *Out of Many* textbook.
- Annotation Evaluation
- Timeline
- Academic notebook

Timeframe:

205 minutes

Vocabulary:

Discipline specific vocabulary

Organizations:

- CORE
- NAACP

People:

- Thurgood Marshall
- President Truman
- President Eisenhower
- Earl Warren
- Governor Faubus

Documents:

- *Plessy v. Ferguson*
- *Brown v. Board of Education*
- Southern Manifesto

Words that Help You Discuss the Discipline:

- Annotation
- Cause-effect
- Claim
- Close reading
- Evidence
- Previewing
- Tertiary text

Places:

- Little Rock, Arkansas
- Birmingham, Alabama
- Montgomery, Alabama

Events:

- Segregation barred from Armed Forces
- Presidential election of 1948
- Major League baseball broke color barrier
- Creation of “bebop”

Other:

- The Doll Test

Activity One

Orientation to the Task (Approx. 20 minutes)

Remind students a textbook chapter can be a good source to help them decide what their research topic will be because it provides an *overview* of events and their interpretation. Also tell them that chapters are often the mainstay of college-level history courses and that reading them is good practice for much of the reading they will do in any postsecondary course. Students will begin reading a chapter, and while reading, should be thinking about their topics as well as constructing an understanding of the information in the chapter.

Sourcing: Instruct students to SOURCE the chapter by finding out about the author. Put the following description of the author on the board, overhead, Smart Board etc., and ask students to read about him.

FROM THE STUDENT ACADEMIC NOTEBOOK

Who wrote this chapter?

The chapter is written by John Mack Faragher, a previous social worker and current history professor at Yale University who directs the Howard H. Lamar Center for the Study of Frontiers and Borders.

Ask students: “Is this information about the author important? Why or why not?”

After they have answered, follow up, if necessary, with the following questions: What influence might his social work background have on his interpretation of history? What do you know about Yale University that might tell you something about this author’s expertise or perspective? Is the study of frontiers and borders relevant?

Preview the chapter with students. Ask them to look at headings and subheadings and the extra features this chapter includes, and remind them that these features will aid their understanding of what Faragher has to say. (It is important to refer to the chapter as Faragher’s chapter, in order to remind students that the chapter has a source.) Ask them to turn to their academic notebook and in the space provided, summarize from their preview the range of events in this chapter. If time allows, have students share their summary with a partner. Then discuss this preview with students, asking questions such as: Are there topics you know about that happened during this time period that Faragher is leaving out? Judging from the guiding questions, what do you think Faragher would like you to understand about the Civil Rights Movement? In looking at the map, what conjectures did Faragher want you to make about the movement?

FROM THE STUDENT ACADEMIC NOTEBOOK

Preview this chapter by reading:

- Headings, subheadings,
- Graphics such as photographs, artwork, charts, diagrams, etc.,
- Marginal notes,
- Bold-faced and italicized portions of text,
- Information in insets, and
- Any other features of the chapter.

Based on this preview, what time period is being discussed?

In the space provided, summarize what this chapter is about.

Are there topics you know about that happened during this time period that Faragher is leaving out?

Judging from the guiding questions, what do you think Faragher would like you to understand about the Civil Rights Movement?

In looking at the map, what conjectures did Faragher want you to make about the movement?

(space provided)

Activity Two

Analyzing History Text (Close Reading) (Approx. 50 minutes)

Place this sentence on the board or overhead and ask students to engage in *close reading*. That is, you would like them to read the sentence very carefully to determine everything it might mean.

President Eisenhower ordered federal troops to Little Rock, Arkansas to ensure that the nine African American students could attend Central High School without the outbreak of violence.

Ask students what is important to know in that sentence. Entertain their conjectures. They should identify “President Eisenhower,” “Little Rock, Arkansas,” “Central High School” and information about what Eisenhower did and why he did it. Also important: “federal” (vs. state or local) and “ordered” (rather than requested).

Ask, “how did the author of this sentence know this happened?” Help them to see that, in order for this historian to say that sentence, he had to have some sort of evidence. This sentence is a *claim*, based upon *evidence*, but what this evidence actually is isn’t clear because it’s not stated. History textbooks make many of these kinds of claims in order to show us an unfolding story of the past. Sometimes they explain the evidence, but not always. Explain that history textbook authors often rely on the writings of other historians, and so they are thought of as *tertiary texts* (texts that are three times removed from the event itself: there are documents and artifacts from the times (*primary or first level documents*), historian’s interpretations of the documents

and artifacts (*secondary documents*), and historians' interpretations of historians' interpretations (*tertiary documents*). Add "tertiary documents" to the chart that includes sourcing, contextualization, corroboration and primary and secondary document.

Tell students that the information in history textbooks is important because the interpretations presented about the past are generally agreed upon by other historians. But that doesn't mean that students should take the interpretation to be the absolute truth or the only story that could be told about the past. So, in addition to learning the information, they also should question it.

Right now, however, students are going to focus on what information is important to pay attention. Knowing that will help them with close reading. Return to what they said they should pay attention to in the sentence about President Eisenhower. Have them look at the following list in their academic notebook. You might wish to place them on chart paper somewhere in the room so that students can refer to the list, without having to always go back to the page in their academic notebook.

- Relationships among events—chronology, cause-effect.
- Actors—who (individuals or groups) is engaging in actions aimed at meeting goals.
- Actions—what the actors (are) doing, the tactics or methods they are using.
- Characteristics—of actions, actors, policies, movements, events.
- Motivations—the goals that lead the actors towards action.
- Categorizations of actions into political, social, economic, religious, cultural, etc.
- Comparison and Contrast—of interpretations of cause/effect, motivations, characteristics, etc.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts and words that signal relationships among events.

Note that in narrative history writing, authors write about *actors* who engage in activities or *tactics* to meet their *goals* within a particular *time period* and *place* or in a particular *manner* (e.g. *swiftly*) that *cause* particular *consequences* or *effects*. Sometimes authors contend that these tactics or actions have political, social, cultural or other kinds of implications.

Repeat the notion that many of these important aspects of history, such as the relations among events and an actor's motivations are not necessarily known—these are *interpretations* by historians who have read a number of texts and artifacts. Therefore, when students read, they are reading confirmed facts such as dates, places, actors, but also interpretations of cause/effect, motivations and so on. Illustrate these points by studying the following sentences, taken from Faragher's chapter:

(Text-based analysis)

The boom in wartime production spurred a mass migration of nearly a million black Southerners to northern cities.

Model the interpretation of this statement: A million black Southerners are the actors. Their goal was to engage in the boom in wartime production. To do that, they migrated from the South to northern cities (Where, presumably, this production was taking place). The manner in which they migrated was en masse.

Discuss that this sentence represents the first of a cause/effect chain. The boom in production *caused* black Southerners to move. The next sentence tells the *effect* of the move and the time frame in which this effect took place:

Forty-three northern and western cities saw their population double during the 1940s.

Ask students to read the next example sentence:

In the 1940s, African American musicians created a new form of jazz that revolutionized American music and asserted a militant black consciousness.

Look for and guide students to determine that African Americans were the actors. Their action was to create a new form of jazz. The time period was the 1940s. The effect of the action was a new *militant* black consciousness. Have students discuss why they think Faragher used the phrase *militant black consciousness* here. They could read the entire paragraph to get a better idea of Faragher’s thinking. Ask if, after reading the paragraph and thinking about what they already know about this time period, they believe it to be the right phrase.

Have students work in pairs or small groups to read the following sentences (in their academic notebook). Tell them that they are engaging in close reading and that it is okay to struggle with interpreting the text.

In the late 1940s only about 10 percent of eligible southern black people voted, most of these in urban areas. A combination of legal and extralegal measures kept all but the most determined black people disenfranchised.

(Students should note the time period, note that the actors could be the unstated individuals who used the measures, or could be the southern black people. The goal of the measures is to keep black people from voting, the effect is that these measures kept blacks from voting and that the characteristics of the measures was that they were legal and extralegal. If they don’t know the meanings of disenfranchised and extralegal, they should discuss plausible meanings.)

Regarding the social differences in the North and the South:

One black preacher neatly summarized the nation’s regional differences this way: “In the South, they don’t care how close you get as long as you don’t get too big; in the North, they don’t care how big you get as long as you don’t get too close.”

(Students should recognize this as a comparison/contrast statement rather than a cause/effect one, comparing the North and the South regarding how blacks and whites interacted.)

Regarding *Brown v. Board of Education*:

Since the late 1930s, the NAACP had chipped away at the legal foundations of segregation.

(Students should note, (1) the time frame, (2) the actor is the NAACP, (3) the action is “chipping away,” and (4) chipping implies a manner in which the action takes place—a little at time. The goal is to take away the legal foundations of segregation—to make it illegal.)

FROM THE STUDENT ACADEMIC NOTEBOOK

History writing tends to be about actors engaged in actions/tactics to meet goals within certain time periods. These actions have effects or consequences. Actors have particular motivations for pursuing their goals. Sometimes there are comparisons and contrasts between actors, goals, methods, etc.

1. *In the 1940s, African American musicians created a new form of jazz that revolutionized American music and asserted a militant black consciousness.*

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

2. *In the late 1940s only about 10 percent of eligible southern black people voted, most of these in urban areas.*

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

3. *A combination of legal and extralegal measures kept all but the most determined black people disenfranchised.*

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

4. Regarding the social differences in the North and the South... *One black preacher neatly summarized the nation's regional differences this way: "In the South, they don't care how close you get as long as you don't get too big; in the North, they don't care how big you get as long as you don't get too close."*

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

5. Regarding *Brown v. Board of Education*...*Since the late 1930s, the NAACP had chipped away at the legal foundations of segregation.*

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

Debrief by having a whole class discussion of the meaning of these sentences.

Vocabulary:

As you debrief, discuss the fact that they may have encountered some difficult academic words, such as “extralegal,” “disenfranchised,” and “spurred.” Return to the sentences above and ask how students could go about determining their meaning. Spurred may be inferred from the context of the sentence. Extralegal and disenfranchised can be broken apart and their meanings built from the parts (extra = outside of; dis – not; (en)franchise = give a right to).

Assessment:

Outcome 1:

Students will demonstrate their ability to engage in close reading by their interpretations of sentences from a history textbook.

Listen to each group’s conversations to see that students are understanding the sentences at the targeted level. You can also use the Close Reading Checklist at the end of this lesson to note appropriate close reading behaviors. Finally, you can formally assign a grade to the work that is in the academic notebook.

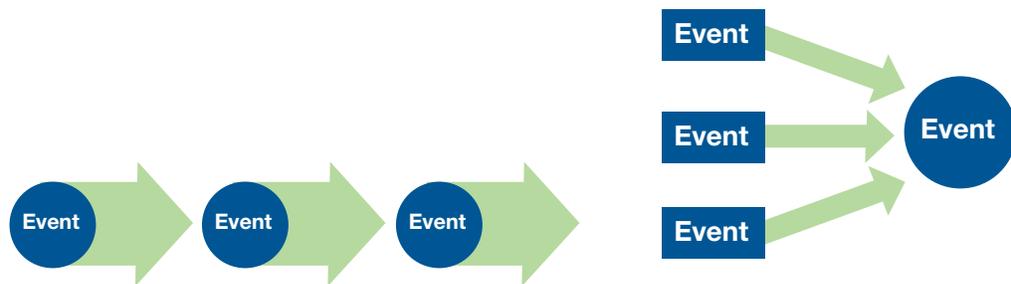
Activity Three **Annotating the Text (Approx. 40 minutes)**

Explain to students the exercise they just completed will help them to engage in close reading of important parts of the chapter sections they are about to read, but they can't possibly talk about every sentence in every section that they read. What they can do to help them pay attention to meaning, however, is to annotate, or to take notes right on the textbook pages. If they have not annotated before, tell them that they can do a number of things to the words on the page. If you prefer for students not to write on text pages, you can provide sticky notes.

FROM THE STUDENT ACADEMIC NOTEBOOK

When you annotate, you may:

- Circle key vocabulary words (discipline-specific, general words with discipline specific meanings, general academic vocabulary; words that signal bias or judgment, words that signal relationships).
- Underline or highlight key ideas (actors, actions, relationships among events, characteristics, comparison/contrast, etc).
- Write key words or summarizing phrases in the margins.
- Define vocabulary words in the margins.
- Write your reactions to the text in the margins.
- Make connections and inferences in the margins (this is like “aha!!”).
- Draw cause-effect chains.



- Make Comparison-Contrast graphs or Venn diagrams.

| Event 1 | Event 2 |
|---------|---------|
| | |

- Make or add to a timeline.
- Make any other annotation that helps you understand and think about the information.

Model annotation of the first section of the chapter (*The Montgomery Bus Boycott*) and talk through the different kinds of annotations and their purpose.

Provide 20 minutes for students to read and annotate the first subsection (*Civil Rights after World War II*) of the assigned section of the chapter—*The Origins of the Movement*. The purposes for their reading are to:

- Determine what this author had to say about the significant actors at the beginning of the Civil Rights Movement, what goals they had, what tactics they used, where and when the events took place and how successful the actors were at meeting their goals as a result of these events.
- Practice the skill of annotating in history and building their capacity to read difficult history textbooks.
- Determine if one of the people, events or tactics is of interest to them to use as a topic of “Everything but the paper.”
- Determine if there is information in the reading that might help them answer the essential question that is being asked in this unit.

When they are done, have students tell you the kinds of things they annotated and provide feedback on their annotations. You can also put your annotations up and explain how other ways of annotating may also be acceptable.

Have students read and annotate the rest of the section.

You may have them work in pairs or small groups and divide up this section by the rest of the headings, so that students can practice on a smaller portion of the section, allowing them time to talk over what they are reading together. Have each group pick a spokesperson to explain their group’s portion of the chapter to the rest of the class or do a jigsaw, with a second grouping of students containing one person who read and annotated each section. The sections of the chapter are as follows:

- The Segregated South
- *Brown v. Board of Education*
- Crisis in Little Rock.

Jigsaw—a possible configuration: In a class of 30, five students could be in each of six groups, with two of the groups each assigned to a section in common. After annotating and discussing, 10 groups of three people each could be formed (one from each previous group) and each person would explain their part of the chapter to the others in the group, using their annotations as a guide.

Alternately, you could provide 30 minutes of time to read all three, then call on individuals to discuss what they annotated from each section. This may not be enough time for slower readers, and they may need to complete the rest for homework.

Assessment:

Outcome 2:

Students will show through their annotations that they are identifying historically important information about the Civil Rights Movement from reading.

When they are done reading and annotating, have students fill out the **Annotation Evaluation for History** that is in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

When you are finished, please complete this checklist.

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source
- 2. Information that signaled
 - a. Cause/effect
 - b. Comparison contrast
 - c. Bias or judgment
 - d. chronology (words signaling time)
 - c. Bias or judgment
 - c. Bias or judgment
 - d. discipline-specific information and vocabulary
 - Other _____
- 3. Unknown general academic vocabulary
- 4. Key actors, actions, goals, and tactics, etc.
- 5. Political, social, economic, legal, or other characterizations of information
- 6. Marginal notations that show
 - a. summarizing
 - b. inferencing
 - c. reacting
 - d. connecting to other information
 - e. graphic or pictorial representations of information (e.g. cause-effect chains, time lines)

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

You can use the assessment yourself to provide feedback to them about how they did. You can also assign a grade based upon the quality of their annotations.

| Evaluation Rubric | | | |
|--------------------------|---|----|----------|
| <input type="checkbox"/> | Annotations are complete | No | Some Yes |
| <input type="checkbox"/> | Annotations focus on more important information | No | Some Yes |
| <input type="checkbox"/> | Annotations have variety | No | Some Yes |
| <input type="checkbox"/> | Annotations have right amount of detail | No | Some Yes |
| <input type="checkbox"/> | Other _____ | No | Some Yes |
| <input type="checkbox"/> | Amount of annotation is appropriate | No | Some Yes |
| <input type="checkbox"/> | Variety of annotations is appropriate | No | Some Yes |
| <input type="checkbox"/> | Annotations are paraphrased or key words are used | No | Some Yes |
| <input type="checkbox"/> | Other _____ | No | Some Yes |

Activity Four

Vocabulary (Approx. 30 minutes)

Help students understand that there are different kinds of vocabulary words that are important when they read history. There are the words and phrases that make up the important content—consisting of people, places, events, etc. These are the kind of words that, if they can explain them, will prepare them for a test of the content. Pass out or show on a PowerPoint or overhead the list of content words at the beginning of this lesson. Ask them if they noted those terms in their annotations and if they could explain the author’s view of their roles in the Civil Rights Movement. If time allows, have students work with each other, taking turns “talking through” or explaining each of the terms.

Other words help describe the processes they are learning. For this unit, they are adding new terms: *annotation, close reading, tertiary texts, cause-effect, claim and evidence.* Write these words on chart paper as you have done for sourcing, contextualization, corroboration and primary document and have students explain their meaning.

Finally discuss the fact that some words are just difficult academic words, such as “extralegal,” “disenfranchised” and “spurred.”

Ask students for examples of other words (and the sentences they came in) they struggled with as they read the portion of the chapter. Discuss with the class the strategies used to determine meaning. Remind them of previous discussions of glossaries and dictionaries, getting help from other students or the teacher, trying to figure out words from context and now, breaking words down into their component parts.

Vocabulary: Add to the discipline-specific vocabulary chart the following words:

Discipline specific vocabulary

Organizations:

- CORE
- NAACP

People:

- Thurgood Marshall
- President Truman
- President Eisenhower
- Earl Warren
- Governor Faubus

Documents:

- *Plessy v. Ferguson*
- *Brown v. Board of Education*
- Southern Manifesto

Places:

- Little Rock, Arkansas
- Birmingham, Alabama
- Montgomery, Alabama

Events:

- Segregation barred from Armed Forces
- Presidential election of 1948
- Major League baseball broke color barrier
- Creation of “bebop”

Other:

- The Doll Test

Add to the chart, “Words that help you understand the discipline:”

- Annotation
- Cause-effect
- Close reading
- Claim
- Evidence
- Previewing
- Tertiary text

Tell students to use the discipline specific words to test their understanding of the key events in history, and the “words that help you understand the discipline” to talk about the strategies they are using when reading and writing.

Assessment:

Outcome 3:

Students will increase their understanding of vocabulary, evidenced by the terms they annotate and the strategies they use when reading.

As you read students' annotations, note what words they have identified and whether or not they have thought of appropriate synonyms. Also, have students write the definitions of "words that help you understand the discipline" on an exit slip and if time allows, have pairs of students explain to each other what five of the discipline-specific words mean.

After Reading Questions:

To ensure students are thinking deeply about the chapter excerpt they just read, ask discussion-starting questions. When they answer, it's important to insist that they tell you what text information they are basing the answers on.

1. This chapter section describes the civil rights movement after World War II. What was happening culturally? Why was this important?
2. Besides cultural changes, what other kinds of changes does this author describe (political/economic)? What was the author saying happened with these? Why were these important?

3. Agree or disagree with the following statement:

The Court system (e.g., Brown v. Board of Education) played the most important role in the crisis in Little Rock.

What evidence is there in the text that makes you think this statement is true?

What evidence is there in the text that makes you think this statement is false?

4. Remember the author of this text—he is a professor at Yale who is interested in frontiers and borders and a former social worker. Can you find any evidence in the text that he was influenced by these factors?
5. Here is an excerpt taken from the section, A Crisis in Little Rock:

But Governor Orval Faubus, facing a tough reelection fight, decided to make a campaign issue out of defying the court order. He dispatched Arkansas National Guard troops to Central High School to prevent nine black students from entering. For three weeks, armed troops stood guard at the school. Screaming crowds, encouraged by Faubus, menaced the black students, beat up two black reporters, and chanted "Two, four, six, eight, we ain't going to integrate."

Remember when we read documents about the Little Rock Nine? We had to decide Faubus' motivations—if he was just trying to prevent violence, only trying to get reelected or if he was a racist. What position on that question do you think this author takes? Why? What in this excerpt would make you think that?

Activity Five

Adding to the Timeline (Approx. 15 minutes)

Ask students what events they think are significant enough to add to the timeline and ask them to defend their suggestions with reasoning. Add these to the wall timeline and make any corrections that need to be made given the information in the chapter.

Significance: It will help if you discuss what makes something significant, so students don't just add *all* of the events they read. You might try one of these strategies to get them to make choices about significance:

- Limit the number of items they can add to three to five.
- Make more than one timeline (e.g., one on top of the other). For example, you could make a timeline for cultural events, political events, economic events, etc.
- Limit significance to national versus local significance.

Notions of significance are important to historians. They cannot write everything, so they are *always* making choices about what to put into a historical narrative and what to leave out. Students are acting as historians when they make these choices. As they work through these choices, they are developing *criteria* for significance. **Be explicit to students that they are acting as historians when they determine significance,** and help them determine the criteria (you might write their thoughts on an overhead or whiteboard).

It will be helpful to have the timeline on a wall in your room. Students can refer to it throughout the unit, and keep coming back to add significant events.

FROM THE STUDENT ACADEMIC NOTEBOOK

As you complete the unit, you will continue to add dates to this timeline.

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

Notes:

Assessment: (Informal)

Outcome 4:

Students will show understanding of chronology and significance by adding to the Civil Rights timeline.

Check students' answers and provide feedback about their reasoning. Note which students are having difficulty picking significant events and consider providing instruction on that concept. For example, students might be asked to think about the most significant event that took place during their summer vacation and to explain why it was significant. Events in history are determined to be significant by historians who have to make judgments of significance based upon what their effects are. Significant events have long lasting and/or widespread effects.

Activity Six

Returning to the Essential Questions (Approx. 50 minutes)

Have students return to the essential question in the academic notebook:

FROM THE STUDENT ACADEMIC NOTEBOOK

Here is the essential question and some related ones:

How did the concept of liberty and equality change in the United States in the 1960s as a result of the Civil Rights Movement?

Offer these related questions:

Did the concept of liberty and equality change?

If so, what changed? Was the change legal? Social? Economic? Political? Cultural?

If no, which of these factors kept change from happening?

Who was responsible for helping or hindering the change?

What tactics were used? Were these legal, social, political, economic or cultural?

What challenges did civil rights activists face?

What have you read that helps you begin to think about this information?

Explain why breaking down the question in this way can develop a better understanding of how to answer, and find evidence for answers to these questions as students complete the unit so they can answer the larger question at the end. Ask if there is anything they have found in this chapter or in the texts they have read previously that addresses these questions. Give some time to return to the section in Chapter 28 and identify at least one piece of information. If necessary, provide this model:

African American communities led these fights, developing a variety of tactics, leaders and ideologies. With white allies, they engaged in direct-action protests such as boycotts, sit-ins and mass civil disobedience, as well as strategic legal battles in state and federal courts.

What questions above can be addressed in this text excerpt?

Who was responsible? African Americans.

What tactics? Civil disobedience—boycotts, sit-ins and legal battles in state and federal courts.

Remind students what they read encompasses only the first few years of the 60s. As they complete the unit, they should be able to draw comparisons and contrasts with the beginning of the movement to the end of the movement and to be able to describe changes along the way of how American’s thought of liberty and equality.

Have students review the evidence chart graphic organizer in their academic notebook. Ask them to refer to their annotations and to use the graphic organizer to record what they found in this text section that addresses answers to the essential question. Because they will be coming back to this section a number of times during the unit, have them mark the page in some way so they can come back to it. It might be hard to write in the small spaces, so you might also consider putting it on chart paper.

FROM THE STUDENT ACADEMIC NOTEBOOK

Name of text: Faragher, Chapter 28, “Origins of the Movement”

| | |
|--|--|
| What time period did this text section cover? | |
| What was the concept of liberty and equality at that time? | |
| Were the influences during the time period political, economic or cultural? | |
| Who were the major figures? | |
| What were their goals? | |
| What tactics were used? Were these legal, social, political, economic or cultural? | |
| What challenges were faced? | |

Name of text: Faragher, Chapter 28, “No easy road to freedom”

| | |
|--|--|
| What time period did this text section cover? | |
| What was the concept of liberty and equality at that time? | |
| Were the influences during the time period political, economic or cultural? | |
| Who were the major figures? | |
| What were their goals? | |
| What tactics were used? Were these legal, social, political, economic or cultural? | |
| What challenges were faced? | |

(space provided)

| Text | Author / Source | Context | Author Perspective | Trustworthiness |
|----------------------|--|---------------------|--|-----------------|
| Faragher, Chapter 28 | Author: Faragher, a historian and Yale, former social worker. This is a tertiary document. | Last edited in 2009 | High school students who are taking AP American history. | |
| | | | | |

(space provided)

Provide students approximately 20 minutes to work on this graphic organizer. Engage in a discussion of the things they wrote down.

Some interesting discussions might occur regarding whose America is being discussed. In other words, some students might observe that African Americans would have a different answer than white Americans. This is a very interesting observation, because it makes a point that historians really want students to make—one’s interpretation of events depends on one’s perspective.

Assessments:

Outcome 5:

Students will begin to collect textual evidence to address the essential question. You can assess this outcome by looking at the graphic organizer in the academic notebooks. Evaluate the organizer for reasonable answers and use of textual evidence.

Close Reading Behaviors Checklist

- 1. Students are talking to each other about their interpretations of the text, entertaining hypotheses about what the text means and resolving problems and confusions in at the word level and beyond.
- 2. Students are referencing and cross-referencing the text in these discussions, pointing to particular places in the text, reading particular words and sentences from the text, etc.
- 3. When students are reading alone or with others, they are annotating the text, taking notes in other forms, circling words, marking points of confusion, using instructional supports. These annotations, notes, and instructional supports should indicate significant reader text interaction and attention to elements of historical reading (from the Skills and Strategies section).

- 4. Students develop their own text-based questions and discuss the textual evidence that answers those questions (in addition to grappling with the questions that are meant to guide the reading).
- 5. Students' notes and discussions include evidence of sourcing, contextualization, corroboration, author's use of language, and other elements in the Skills and Strategies section.
- 6. In Whole Class Discussions, students participate actively and make comments that reference the texts and their notes about them. When others make interesting comments, they write notes about these comments and respond to them.

Score each on a scale of 1-4.

0 = not evident; 1 = beginning; 2 = developing; 3 = proficient; provide commentary

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced the text author, John Mack Faragher.
- 2. Helped students to preview the chapter.
- 3. Analyzed sentences from the text.
- 4. Modeled and provided guided practice for annotations.
- 5. Had students annotate the rest of the section and complete the annotation checklist.
- 6. Added new words to charts that help students describe the processes they are learning: annotation, close reading, tertiary texts, cause-effect, claim and evidence.
- 7. Helped students talk through the content words.
- 8. Discussed difficult academic words.
- 9. Asked discussion questions.
- 10. Added "significant" events to the timeline.
- 11. Began working on the essential question using the graphic organizer.

Lesson 6

Taking and Integrating Notes from Lecture

Overview and Rationale:

In college, students will be required to take notes on course lectures and synthesize the information from the lecture with information from the textbook and other readings to gain a full understanding of the topic. The synthesis of ideas across different sources of information is a skill often not taught and is the source of some confusion and struggle for students.

In the discipline of history, synthesis is complicated by the fact that two or more sources (e.g., lecture, textbook, document) may contradict one another or present information from different perspectives. When this happens, the tendency is for students to dismiss the contradictory information or to not recognize or think about the disparity. However, noting the contradiction and reflecting on issues of perspective or bias is part of what one does as a historian. The idea that history is both contested and contestable is at the core of historians' beliefs.

In this lesson, students learn to take notes from a lecture and combine the notes with information from the textbook chapter in order to study for a test on the information. In completing this lesson, students will note disparities between the notes and the lecture and will have to resolve these disparities.

Tasks/Expected Outcomes:

1. Students will demonstrate understanding of the lecture through their lecture notes.
2. Students will demonstrate the ability to synthesize two sources of information.
3. Students will show understanding of the targeted vocabulary words in an exit slip.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:

- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
- (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 3. Evaluate sources from multiple perspectives.
 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 5. Read narrative texts critically.
 6. Read research data critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint Lecture
- Academic notebook

Targeted Vocabulary:

Discipline Specific Vocabulary

Events/legislation:

Jim Crow Laws
Plessy v. Ferguson
Great Migration
Brown v. Board of Education
Columbia Race Riot

Timeframe:

105 minutes

People:

Julias Blair
James and Gladys Stephenson
Lynn Bomar
Thurgood Marshall
Alexander Looby
Linda Brown
President Truman
President Eisenhower
Governor Orval Faubus

Activity One

Modified Cornell Notes (Approx. 15 minutes)

Explain to students the necessity of taking notes on history professors' lectures in college courses. Today they will practice note-taking using a PowerPoint presentation as the "lecture." Review the list of important things to annotate from the previous days. These are important when reading any historical text.

They will be learning to take notes using a modified Cornell Notes method. That is, taking notes on a part of the pages leaving a margin on each page to return to later. Have them turn to their academic notebooks to see what the note-page looks like. Also have them read the instructions for this kind of notetaking.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Modified Cornell Notes

Take notes on a lecture by your instructor using only one column on the page below.

- Because the lecture will be fast, you will need to paraphrase rather than write notes word-for-word.
- Don't use complete sentences and don't try to copy down every word from the text or the lecture.
- Use abbreviations whenever possible. Develop a shorthand of your own, such as using "&" for the word "and", w/ for with, b/c for because, and so on.
- Using a laptop? No problem; make yourself a template using the 'tables' feature and mark off the lines for each page using the line in the appropriate feature on your toolbar, just as you would on a sheet of notebook paper. Type your notes in the boxes.

| | | |
|----------------|----------------|-------|
| Name: | | Date: |
| Topic: | | |
| Lecture | Chapter | |
| | | |

Review with students the importance of taking notes on one side of the page only, because later they will be adding information from their chapter reading.

Also remind them not to try to copy every word from the lecture, but use phrases or “paraphrase” and abbreviations whenever possible. Ask them to think about developing a short way to write certain words that re-occur, such as “&” for the word “and,” “w/” for “with”, “b/c” for because, and so on. (This is where their texting skills might come in handy!)

Use the PowerPoint: The Civil Rights Movement. Model the activity, using the first slide. Show the slide and talk through the decisions you make as you write the important points down about this slide. Then lecture using the second slide and have students practice taking notes. Debrief with the whole class.

Activity Two

Examining Documents (Approx. 35 minutes)

You can use the “notes” at the bottom of each slide as you lecture, or you can download the audio version of the PowerPoint. When showing actual PowerPoint pages, discourage students from copying down exact words.

When the lecture is finished, ask students to work with a partner, comparing notes. Teacher sample notes can also be shared.

Assessment:

Outcome 1:

Students will demonstrate that they have understood the lecture through their lecture notes.

| Notetaking Rubric | | | |
|---|----|------|-----|
| Notes capture significant information (People, events, motivations/goals, tactics, etc.) | No | Some | Yes |
| Notes paraphrase rather than copy | No | Some | Yes |
| Notes use symbols and /or abbreviations | No | Some | Yes |
| Notes are accurate | No | Some | Yes |

Activity Three

Integrating Lecture and Chapter Notes (Approx. 40 minutes)

Ask students to return to their annotated pages of Faragher. Ask: What did Faragher discuss that the lecture also discussed? What in the lecture was new? What did Faragher discuss that was not discussed in the lecture? You could list the topics in three columns, as shown below:

Only in Lecture

literacy tests & poll taxes,
districting, laws, purpose:
to keep black southerners
from property ownership
and

In Both

Jim Crow

Only in Faragher

(The major addition in the lecture notes up to the incident in Little Rock was the Columbia Race Riot of 1945, which the lecturer said was the major incident that led the nation to realize discrimination had to change! Why is it omitted from the chapter?)

Ask students to compare the following statements from the lecture and the chapter:

- **Lecture:** *Once in the North, black Americans found they could vote, but they often faced the same residential and educational segregation they had experienced in the South.*
 - **Chapter:** *With the growth of African American communities in northern cities, black people gained significant influence in local political machines in cities such as New York, Chicago, and Detroit. Within industrial unions such as the United Automobile Workers and the United Steel Workers, white and black workers learned the power of biracial unity in fighting for better wages and working conditions.*
-
- **Lecture:** *Ike reluctantly became the first President since Radical Reconstruction to use troops in support of black rights.*
 - **Chapter:** *At first, President Eisenhower tried to intervene quietly, gaining Faubus's assurance that he would protect the nine black children. But when Faubus suddenly withdrew his troops, leaving the black students at the mercy of the white mob, Eisenhower had to move.*

Discuss the disparities between the two texts. What differences may have been due to the source of the information (history instructor versus historian)? Thinking about the lecture, what do you think the lecturer's perspective might be?

Ask students to write information from the chapter in the space next to the topic of the lecture notes. In the space at the bottom, have students summarize the most important information from both texts. If there are differences in perspective, tell students to use words such as “on the other hand,” “in contrast,” “alternately.”

FROM THE STUDENT ACADEMIC NOTEBOOK

When completed with taking notes, look at the topics the lecture covered. Then look at Faragher, Chapter 28. If that topic was covered in the same way or it was not covered, or it said the same thing but not as completely, do not write notes from Faragher. If Faragher added information or added another topic or insight—write notes from Faragher on the right side of the paper, next to the related topic in the lecture. In this way, you are integrating the two sets of notes. This will be helpful when studying this information for a test.

When students are finished summarizing, have them share their summaries in pairs or small groups. If time permits, have each group choose the best summary to share with the class. Use this opportunity to discuss what a good summary should include.

Assessment:

Outcome 2:

Students will demonstrate the ability to synthesize two sources of information.

- Lecture notes

| Notetaking Integration Rubric | | | |
|--|----|------|-----|
| Notes include relevant information from both sources | No | Some | Yes |
| Summary includes information from both sources | No | Some | Yes |
| Information is accurate | No | Some | Yes |

Activity Four

Vocabulary (Approx. 15 minutes)

Ask students to discuss the vocabulary with which they had difficulty. Help them decide if these are content words or general academic words and think about the ways they have already learned to figure out word meaning (context, breaking a word into meaningful parts, consulting reading partners, a dictionary or glossary, etc.). Some likely general academic words may be:

- Accommodations
- Intolerable
- Assertiveness
- Altercation
- Subservient
- Intimidation
- Confrontation
- Confiscated
- Vandalized
- Defaced
- Dispatched
- Acquitted
- Catalyst
- Intimidate

When students have finished, have each of the groups present their words and definitions. It should clearly be stated that at the end of the day, each student will be asked to define one of the words from each group, so everyone needs to pay attention to the words presented.

Next, have students pay attention to the content words (people, places, events, legislation) they may need to remember. (Possibilities are at the top.)

Add these to the chart of words displayed in the room.

Assessment:

Outcome 3:

Students will show understanding of the targeted vocabulary words through the definitions they write in their academic notebooks.

Choose, at random, one general academic vocabulary word from each of the groups and three content vocabulary words. Have students define these on an exit slip.

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced note-taking task.
- 2. Modeled note-taking using one slide.
- 3. Had students practice note-taking using another slide.
- 4. Lectured using PowerPoint, having students take notes.
- 5. Discussed differences and similarities in lecture and chapter.
- 6. Had students write chapter information on note-taking pages.
- 7. Had students write summary of both the chapter and the lecture.
- 8. Discussed discipline-specific and general academic vocabulary and made lists.
- 9. Assigned groups of students to determine meanings of identified academic vocabulary using format.
- 10. Asked students to define a subset of these words on an exit slip.

Lesson 7

Research Project – Identifying and Annotating Sources

Overview and Rationale:

This is the second phase of the research project—finding, reading and annotating, summarizing and evaluating at least five sources that address each students' topic and thesis statement. In this phase, students will practice using the skills learned in previous lessons; it is important, for example, to look at sourcing information, especially since they will be using the Internet to find sources. Sources will need to be identified as trustworthy and address the topic they are studying within the context they are studying it. Students will also have to determine if the source corroborates their thesis statement. If the source provides contradictory information to what they claimed, they will have to decide what to do—if the source is credible, they may need to change their claim in order to incorporate the source.

Once students have identified good sources, they need to read and annotate them. Because they are looking for specific kinds of information (information that addresses the topic), their annotations will need to be focused on that information. That is, they should not get off track by paying attention to information that is extraneous. After reading and annotating, students will need to summarize what each of the sources says in relation to the topic. Summarizing is sometimes difficult for students to do, and some will need models and guidance in choosing what to include and what to leave out of the summary.

Finally, students will need to use MLA, Turabian or other format to write the citation for each source. Using this format will help prepare students for history courses in college.

Tasks/Expected Outcomes:

1. Students will find five sources for their research project using their school's Internet sources.
2. Students will annotate, summarize, and evaluate the sources.
3. Students will follow MLA, Turabian or other format for citing the sources.
4. Students will define at least five vocabulary words from their readings.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);

- (C) an organizing structure appropriate to the purpose, audience, and context;
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;
- (20) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:
- (A) brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic; and
 - (B) formulate a plan for engaging in in-depth research on a complex, multi-faceted topic.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.
- (23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into an extended written or oral presentation that:
- (A) provides an analysis that supports and develops personal opinions, as opposed to simply restating existing information;
 - (B) uses a variety of formats and rhetorical strategies to argue for the thesis;
 - (C) develops an argument that incorporates the complexities of and discrepancies in information from multiple sources and perspectives while anticipating and refuting counter-arguments;

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author’s purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer’s purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work’s purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author’s purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author’s use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- Various
- Academic notebook
- Writing rubric

Timeframe:

150 minutes

Targeted Vocabulary:

- Various

Activity One

Pre-Reading (Approx. 30 minutes)

Ask students to take out the thesis statement or claim they originally wrote for their research project.

Ask students to read the directions for the next phase of their research project in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Assignment Identifying and Annotating Sources

The next assignment for your research project is to supply five sources. Please follow MLA format or a format approved by your instructor when citing your sources. You are welcome to use Internet sources; however, remember to use the websites sanctioned by the school library rather than random Internet sources. If you have any doubts about whether a website is appropriate or not, please ask for assistance. In this course, we will spend time with the librarians on campus discussing the resources available in the library and in the online databases. A librarian can quickly bring you up to speed on the resources available online and on appropriate search techniques.

In addition, you will be required to annotate your sources. After annotating you will write a brief summary and an evaluation of each of your sources. Following each of your MLA citations, add a paragraph about the source's content and evaluate the author's perspective, the time period of writing and the source's relevance to your research topic.

This assignment is worth _____ and is due _____ at the beginning of class. Late assignments will not be accepted.

Do not hesitate to ask if you have questions.

FROM THE STUDENT ACADEMIC NOTEBOOK

Example:

Topic: African American Women in the South after Emancipation

Question about the topic: How did African American women in the South fare compared to men after emancipation?

Thesis: Although all freed slaves were better off after emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.

Tolman, Tristan L. "The Effects of Slavery and Emancipation on African-American Families and Family History Research." Crossroads (March 2011): 6. Database you used, Your School Library Name, Your City. dd Mon.yyyy <internet URL>

Tolman says that, after emancipation, most black mothers quit working in the fields, even though some white planters tried to keep them working, according to the Freedmen's Bureau in Georgia. But they didn't stay at home for long. According to a journalist from the time period, because there was so much poverty, women and their children had to help out their husbands who rented land or were sharecroppers.

Credibility: Somewhat to very credible

Tolman is a genealogist writing in a journal from Missouri Southern State University fairly recently (2011). One reason for writing the article is to discuss how to find out about African American genealogy (which can be hard because of slavery). Because she is a genealogist, she is careful to write based upon evidence. Every time she makes a statement, she tells what her sources of information are. For example, she found out that land owners tried to keep African American women in the fields from the Freedmen's Bureau in Georgia, and she quoted a journalist from 1875 as her source that women had to return to the fields. Therefore, I think that what she says is as trustworthy as it can be, given her sources. That is, I'm not sure how trustworthy a journalist might be, but that may have been the only information she had. Also, she seems to paint a positive picture of African American life, saying at one point that, "The evidence testifies in favor of the resilience of the African-American family."

This article doesn't really say that women's lives were harder than men's, except that many had to work in the fields AND take care of their households.

Discuss these directions, resolving confusions and answering questions. Take a moment to discuss writing a summary, since this task has not been required in this unit before now. Because this summary is directed towards a specific research claim, the summary should focus on the information that is pertinent to that claim.

Show the example of the summary/discussion in the academic notebook and discuss the different parts that fulfill the assignment (the summary, the discussion of the source, time of writing, perspective and relevance). You may want to show how the summary of the content was derived from the actual text. Here is the actual text:

Parents and children were more often able to live under the same roof, and by 1870, a large majority of blacks lived in two parent households. Newly freed blacks reaffirmed their commitment to God and religion by organizing churches that sunk deep roots in Southern soil.

After emancipation, most black mothers quit working in the fields and became full-time homemakers. Some white planters lamented this loss in the labor force, and one planter even appealed to the head of the Freedmen’s Bureau in Georgia for measures to require black women to return to the fields. Nevertheless, black women almost universally withdrew from field labor, sending a clear message that their families came first. Unfortunately, the opportunity for black women to remain at home was often short-lived. The dire poverty of most black families made it necessary for fathers and mothers to contribute to the family income. One journalist, Charles Nordhoff, explained in 1875, “Where the Negro works for wages, he tries to keep his wife at home. If he rents land, or plants on shares, the wife and children help him in the field.” Even if they worked in the fields, however, freedwomen continued to fulfill their housekeeping roles as well.

After the class discussion, if students need more practice, choose a short document and have students work together in pairs to create a summary. Share the following checklist to guide their work.

FROM THE STUDENT ACADEMIC NOTEBOOK

Checklist for Writing a Summary in History

- 1. Summary begins with main point or claim from reading related to topic or question.
- 2. Summary includes major support for the claim.
- 3. Summary does not include smaller details or unrelated topics or facts.
- 4. Summary is in your own words—no quotes (these can be identified in your annotations).
- 5. When reading your summary, it makes sense—it is coherent and logical.
- 6. Citation uses MLA or teacher approved format.

Review the features of MLA format.

Activity Two

Identifying, Reading, and Annotating Sources (Approx. 85 minutes)

Spend some time in the library or computer lab (or if you have computers for students in your classroom, in your classroom) helping students find five sources for their topic. If having difficulty finding information that matches their thesis statement or claim, help students to revise their claim, and remind them it is just a hypothesis they could confirm or disconfirm through their reading. That is, it is okay to revise their claim throughout the research process based upon what they have read. And, if they read conflicting information, they can even decide to make a claim that acknowledges the conflict (e.g., historians disagree about whether...) or they can decide to support one position based upon the preponderance of evidence.

Students can organize their research in one of two ways—find a good source, read, annotate, summarize and evaluate it and then look for another source, or find all of the sources at once and then read, annotate, summarize and evaluate. In the end, students may have to read more sources than five because some of the sources are not trustworthy or some may not really address the topic. Explain that it will be more efficient to source and contextualize each text first. If it appears to be credible—that is, the author seems to have some knowledge and is relying on evidence rather than conjecture, the context about which the author is writing matches the context students are studying, the author doesn't belong to a group with obvious bias, etc.—then and only then should a student spend the time it takes to do close reading/annotating. When reading the text, a student may recognize bias in the argument through an evaluation of evidence or language, but are less likely to if they vet the article first.

After reading each text, have students write a summary using the chart in the academic notebook shown on the next page to fulfill the assignment. Students are to fill out this chart for every source used in their research project.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Identify, Read and Annotate Sources

- Evaluate your source and context before you decide a source is worthwhile.
- Make sure it provides information about your topic.
- Once you've identified a trustworthy source, annotate it, paying attention to the information that addresses your topic.
- After reading and annotating your source, fill out the following chart.

Reading 1 Citation

Summary:

Credibility:

Rate the text's credibility: 1 = not credible; 2 = somewhat credible; 3 = very credible

1 2 3

Explain:

Relevance: Describe how this text addresses your research topic.

Assessment:

Outcome 4:

Students will define at least five vocabulary words from their readings.

Activity Four

Essential Question (Approx. 15 minutes)

If time allows and if appropriate given sources, ask students to add pertinent information from these sources to their essential question graphic organizer (from Lesson 5). That is, if their readings help them answer the question about the changes in the civil rights movement, students should add these sources to their essential question chart. Help students determine if their readings address the question or not. Remind them that their readings may not talk about change, but mention a particular time period and describe what the Civil Rights Movement was like during that time period. By writing that information in the graphic organizer, they can compare the information to information from other dates to see if there were changes or not.

Assessment:

Outcome 5:

Students will add to essential question graphic organizer, if appropriate.

Check the essential question graphic organizers to see if students added information from their readings. If not, help them to review their materials to see if any of the sources could address the question.

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Asked students to look at their original thesis statement and read the directions for the next phase of their research.
- 2. Showed the example of the summary/discussion that is in the Academic Notebook.
- 3. Reviewed the features of the MLA format.
- 4. Gave students time to find sources for their topics.
- 5. Asked students to evaluate their sources, using the chart in their academic notebooks.
- 6. Asked students to learn the meanings of five unknown words from their readings, using the vocabulary format in their notebooks.
- 7. Had students add information to their essential question graphic organizer from lesson 5.

Lesson 8

Identifying Historical Claims and Evidence

Overview and Rationale:

Another source commonly used by history professors in college classrooms is the video. As with other sources, students should realize that this is a compilation of claims and evidence. In the case of the PBS special seen here, the evidence comes from interviews of those who were freedom riders, historians, and photographers; photographs of the events themselves; and documentary evidence such as newspaper reports and telegrams, and some video. Those who are interviewed tell the story of the Freedom Rides chronologically (with the days being the source of “chapter” changes, while video and photographs are shown). This special provides an opportunity to discuss corroboration, claims, and evidence in history. Historians are more inclined to believe corroborated versions of a story. That is, when the photographs and the different story tellers all seem to be telling the same story, they are more likely to trust it, especially if people who have different perspectives and biases point to the same conclusions. In this PBS special, for example, a video segment shows Bull Connor forcefully advocating white supremacy, which adds credence to the claim of those fighting for integration that Bull Connor did nothing to stop a mob attack people at a bus stop.

Tasks/Expected Outcomes:

1. Students will be able to identify both implicit and explicit claims made by the historians in the PBS special and describe the evidence for those claims.
2. Students will show their understanding of corroboration by identifying corroborating evidence in the PBS special with information about the Freedom Riders in the Faragher chapter and the lecture.
3. Students will add the Freedom Rides to the timeline.
4. Students will add the Freedom Rides to their essential question graphic organizer.
5. Students will add to their discipline specific vocabulary.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
 - (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (D) information on the complete range of relevant perspectives;
 - (E) demonstrated consideration of the validity and reliability of all primary and secondary sources used;

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 2. Use conventions of standard written English.
- B. Academic integrity
 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- PBS Special on the Freedom Riders: <http://video.pbs.org/video/1925571160>.
- Faragher Chapter: “Freedom Rides,” pages 1021-1023
- Lecture PowerPoint: Slides 45-50
- Academic Notebook

Timeframe:

200 minutes

Targeted Vocabulary:

Discipline-Specific Vocabulary:

People:

- James Farmer
- Jim Peck
- J. Edgar Hoover
- Robert Kennedy
- Governor John Patterson
- Governor Ross Barnett
- Bull Connor
- Diane Nash
- CORE
- Nashville student movement
- John Lewis

Words that Help You Discuss the Discipline:

- claim
- evidence
- corroboration
- argument

Events:

- Birmingham violence (CORE buses)
- Montgomery Violence—second wave
- First Baptist Church attack
- Mississippi arrests
- Parchman Prison

Activity One

Orientation to the Task (Approx. 5 minutes)

Ask students to take a few minutes to think about what they could say about the Freedom Riders based upon what they have read and heard and to write three of these observations down in their academic notebooks in complete sentences. If you would prefer, let them work with a partner. Students may come up with sentences such as, “The Freedom Riders were brave,” or “The Freedom Riders overcame great obstacles.” Ask students to share these and make a list (on the board, whiteboard or chart paper), consolidating similar statements.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

Write down three observations about the Freedom Riders.
(space provided)

Tell students that these are *claims* based upon what they have read and heard. Ask what evidence they used to come to those claims. Because they have not yet read about the Freedom Rides, they may not have such evidence at hand. If they don't have any evidence, have them think about and discuss the kind of evidence they would need to back up those claims.

Explain that, in the same vein, historians make claims about the topics they study based upon evidence found during their research. When making these claims and supporting them with evidence, they are putting forth an *argument*. Write on the board, whiteboard or chart paper: *Argument = claim + evidence*.

A good argument is one in which the claim is supported by *trustworthy* evidence. In other words, one has to have good reasons for using a piece of evidence to support a claim. Not everything historians read leads to the same conclusions. They have to make judgments about what evidence is trustworthy and what is not to know what claims have enough support. Corroborated evidence is thought to be more trustworthy than non-corroborated evidence. It is especially compelling if two or three people who have different beliefs and biases tell the same story or provide evidence supporting the same interpretation.

For example, if there were four people in the room when an ugly argument broke out, but only one person in the room will talk about it afterwards, the story is not corroborated. The person who is telling the story could be lying or at least slanting it for his or her own advantage. If another person in the room independently tells the same story, that corroboration lends credence to the story. If they were on the same side of the argument, however, they might have slanted the story in the same way, and it still might not be accurate. But if a third person, one on the other side of the argument independently tells the same story, it is more likely the story is accurate. Historians look for that kind of corroboration before making a strong claim. Write **corroboration** on the board and tell them it means *support with evidence or to make more certain*.

Activity Two

Argumentation (Approx. 70 minutes)

Point students to the Faragher chapter and the section discussing the freedom rides. On the board, write these sentences from that section.

By creating a crisis, the Freedom Rides had forced the Kennedy administration to act. But they also revealed the unwillingness of the federal government to fully enforce the law of the land.

Tell students to read and annotate this section, especially looking for evidence that supports or does not support the claim written above. They can read in pairs or small groups if this support is needed.

FROM THE STUDENT ACADEMIC NOTEBOOK

In your Faragher textbook chapter, pages 1021-1023, find evidence for the following claim:

By creating a crisis, the Freedom Rides had forced the Kennedy administration to act. But they also revealed the unwillingness of the federal government to fully enforce the law of the land.

Some possibilities that students might choose:

- *It also informed the Justice Department and the Federal Bureau of Investigation of its plans, but received no reply.*
- *FBI agents observed (the Birmingham attack) and took notes but did nothing.*
- *Stranded and frightened, they reluctantly boarded a special flight to New Orleans arranged by the Justice Department.*
- *Newspapers in Europe, Africa, and Asia denounced the hypocrisy of the federal government.*
- *A hastily assembled group of 400 U.S. marshals, sent by Robert Kennedy, barely managed to keep the peace.*
- *In exchange for a guarantee of safe passage through Mississippi, the federal government promised not to intervene with the arrest of the Freedom Riders in Jackson. (More than 300 arrested.)*
- *The Justice Department eventually petitioned the Interstate Commerce Commission to issue clear rules prohibiting segregation on interstate carriers.*

Note that the last paragraph of the section ends with the claim, and emphasizes that sometimes a claim can appear after the evidence.

Questions:

1. What words signaled support for the statement? For example, “a **hastily** assembled group,” “*the Justice Department **eventually** petitioned.*” Why did the author of the text choose these words?
2. Was the author supporting the statement when he said that the Justice Department had arranged a special flight to get stranded freedom riders out of New Orleans? Why or why not?

3. Why do you think the Justice Department was so reluctant to help?

To answer this last question, you may want students to read the section prior to the Freedom Ride section in Faragher. The author in this section says that Kennedy had to walk a tightrope because of the close 1960 presidential election and his fear of losing white southern votes.

Show students another claim:

At the same time, (the Freedom Riders) reinforced white resistance to desegregation.

Ask students if they can find evidence for that claim. There isn't really any direct evidence. Use that finding to suggest to students that not all claims have explicit evidence.

FROM THE STUDENT ACADEMIC NOTEBOOK

When you are finished and have discussed your evidence in class, find evidence for this claim:

At the same time, (the Freedom Riders) reinforced white resistance to desegregation

Also, help students understand that some claims are implicit or not stated. For example, if a historian provided the following evidence, what claim is s/he implicitly making about Bull Connor?

A video clip of Bull Connor (Birmingham police chief) denouncing integration.

A picture of Bull Connor ordering his troops to attack marchers.

Finally, provide students with the lecture from the PowerPoint that covers the Freedom Riders. This is a historian's college lecture material on the Freedom Rides. Ask students to take notes to see if any of the material in the lecture corroborates the text they just read, following the directions in their academic notebook. Explain again that corroborated evidence is more likely to be believed.

For example, the video clip and picture of Bull Connor provide corroboration that Bull Connor was a racist. To determine if something is corroborated or not, historians have to find agreements and disagreements across sources.

When they are finished listening and taking notes about the lecture, ask the class for their ideas about the similarities and differences between the text and lecture.

FROM THE STUDENT ACADEMIC NOTEBOOK

Listen to the lecture your teacher presents (from a PowerPoint). Take Notes. If the information was the same as in the textbook section you just read, mark it with a check mark. If it adds to the information in the textbook, mark it with a plus sign. If it disagrees with the textbook, mark it with a minus sign. Then list at least two pieces of information in the textbook that are not in the lecture.

| Lecture Notes | Similarities/Differences |
|---------------|--------------------------|
| | |

Possible answers:

- James Farmer and CORE started the rides – in both.
- Purpose of the rides (to induce a crises) – in both.
- Places where Freedom Riders encountered violence in both (text says windows were smashed and tires were slashed; lecture only mentions tires).
- Lecture does not mention flight of Freedom Riders—just says they “disbanded).
- John Lewis and Jim Zwerg mentioned in both.
- Text has more detail.
- Lecture: ***But the courage of the riders induced President Kennedy to announce that he had issued an executive order directing the ICC to ban segregation in all interstate travel facilities.***
- Text: ***By creating a crisis, the Freedom Rides had forced the Kennedy administration to act.***

The last bullet point is a contrast of two claims about the motivation of the historical actor, Kennedy. Ask students to discuss the differences in these two claims and their ideas about why they are different (different sources, different evidence, etc).

Activity Three

Watch the PBS Special (Approx. 80 min)

Show students a portion of a PBS special on the Freedom Riders, and instruct them to take notes using the format in the academic notebook. While watching the special, they should try to identify and write down any claims the historians are making about the Freedom Riders, President Kennedy, Governor Patterson (Governor of Alabama), or Martin Luther King, Jr. and also write down what kind of evidence they are using to back up the claims. Remind them that these claims can be implicit.

FROM THE STUDENT ACADEMIC NOTEBOOK

Watch and take notes on the PBS Special on the Freedom Riders. Try to identify claims the historians are making and the evidence they are using to back up those claims.

| Notes | Claims | Evidence |
|-------|--------|----------|
| | | |

Questions:

Have students watch “Chapters” three through six and nine through 11, or approximately one hour and 20 minutes if stretched for time. If you have more time, they could watch the entire special (it is just short of two hours long). It’s worth the entire watch—the first and last parts of the special make some claims and draw conclusions. If students have access to the Internet in their homes they could watch some of this at home.

When students have finished watching those sections of the special, have them review their notes in pairs or small groups.

Ask students what claims are being made about the Freedom Riders, President Kennedy, Governor Patterson, and Martin Luther King, Jr..

Write these on the board, chart paper, Smart Board, etc., and discuss the evidence used to make these claims.

If students do not come up with claims, supply them with the following claims and ask them to decide if they were being made by the special, and if so, what evidence was used.

1. President Kennedy did not care about the Freedom Riders until the violence became embarrassing internationally. *(Robert Kennedy did not initially get involved, and neither did the FBI. The FBI knew there would be violence in Birmingham but didn’t tell Kennedy and did nothing. Kennedy didn’t provide protection until after Montgomery (state troopers, National Guardsmen). Later, in Mississippi, he allowed Freedom Riders to get arrested to prevent violence. Evidence was in the form of interviews (e.g., Julian Bond, historian Raymond Arsenault), newspaper clippings, video and pictures).*
2. Martin Luther King, Jr. was not a supporter of the Freedom Riders. *(He was not until violence occurred in Montgomery, Alabama.) Same evidence types as above.*
3. Governor Patterson at first did nothing to protect Freedom Riders. Later, he did so reluctantly. *When asked by Kennedy to protect Freedom Riders, he did, but previously said he wouldn’t offer protection because that would get the Freedom Riders to stop. Same evidence types as above.*
4. The Freedom Riders showed great courage in continuing the Freedom Rides.

Some points to make:

- Documentaries are a particular kind of “text.” The documentarian acts like an author in that he/she makes decisions about what to show and what not to show, makes claims and provides evidence.
- Corroboration is shown in different ways:
 - Interview technique: One interviewee starts with a story that is continued by someone else—as one continuous story. The assumption is that they have the same story.
 - More than one historian makes the same claim; a claim is corroborated by the testimony of Freedom Riders who were interviewed, newspaper clippings, pictures and video.

Assessments:

Outcome 1:

Students will be able to identify both implicit and explicit claims made by the historians in the PBS special and describe the evidence for those claims.

Outcome 2:

Students will show their understanding of corroboration by identifying corroborating evidence used in the PBS special.

| | | | |
|--|----|------|-----|
| Student's notes identified multiple claims. | No | Some | Yes |
| Evidence was noted for claims. | No | Some | Yes |
| Student was able to identify types of evidence used to support claims. | No | Some | Yes |
| Student looked for corroboration across sources and across evidence. | No | Some | Yes |

Activity Four

Writing an Argument Paragraph (Approx. 15 min.)

Each student should pick one claim (perhaps one they wrote) and the evidence for it— one argument. In pairs, they should each write the claim and at least three pieces of evidence, then discuss how strong the argument is given the evidence. For each piece of evidence, they should be asking: *Is this a trustworthy piece of evidence? Is it compelling? Why or why not?*

FROM THE STUDENT ACADEMIC NOTEBOOK

Identify one claim from the PBS special and the evidence provided for the claim. Rate the trustworthiness of the evidence on a one to four scale (1 = not at all trustworthiness; 4 = extremely trustworthy), and explain your rating.

Claim and Evidence 1:

Rating: 1 2 3 4

Explanation:

Have students discuss their ratings of claims and evidence.

Have students discuss various aspects of the types of evidence used in the sources—photographs, interviews of people who were there, video-clips, documents such as newspaper stories and telegrams and comments and narrative accounts of historians. Discuss how effective or compelling this presentation of evidence was.

FROM THE STUDENT ACADEMIC NOTEBOOK

List the various sources used in the PBS special:

1.

2.

3.

4.

5.

Ask students to use one of the claims they identified in the video to write a short summary of the argument that is being made. Model the kind of summary you are expecting.

Bull Connor was responsible for the Birmingham riot. (Claim) Based upon a video clip of his speaking to a crowd, we know that he already established himself as a rabid segregationist (Evidence 1). Photographs of the riot itself showed that policemen were not on hand to protect the Freedom Riders when they reached Birmingham (Evidence 2), and we know that Bull Connor was in charge of the police. Also, Governor Patterson, in an interview, claimed that Bull Connor had given the Ku Klux Klan 15 minutes to do whatever they wanted (Evidence 3), and this claim was supported by the recollections of the current Alabama governor, a historian, and Gary Thomas Rowe, an FBI informant (Evidence 4).

FROM THE STUDENT ACADEMIC NOTEBOOK

Write a summary of the argument you identified previously. Remember an argument consists of a claim and evidence. The evidence has to be reasonable and put into a context that makes sense. Pay attention to the model your teacher provided.

Assessment:

Outcome 3:

Assign a grade for the work by assigning points for, (1) writing a claim, and (2) providing evidence for the claim.

Activity Five

Return to the Essential Question Charts (Approx. 10 min)

Have students add the PBS special to their essential question charts.

Activity Six

Add to the Timeline: (Approx. 10 min)

Add significant events to the timeline in the room.

(The telling is chronological and days are highlighted. You can also find a timeline at <http://www.pbs.org/wgbh/americanexperience/freedomriders/timeline>.)

Possible Dates for Timeline:

| | |
|-----------|--|
| May 4-8 | Planning for Freedom Rides (CORE) |
| May 9-13 | Travel to Atlanta |
| May 14 | Firebombing in Anniston, Alabama |
| May 15-18 | Birmingham riots—CORE ends Freedom Rides |
| May 19-12 | First Baptist Church attack, Birmingham, Federal Troops assigned |
| May 24 | Jackson, Mississippi arrests |

FROM THE STUDENT ACADEMIC NOTEBOOK

What events regarding the Freedom Riders are significant enough to add to the timeline? Discuss this in class and have a rationale for adding each event.

Activity Seven

Vocabulary (Approx. 10 min)

Have students brainstorm words that should be added to the discipline-specific word chart (see words at the beginning of the lesson). Give students time to discuss these words in pairs. Add *corroboration*, *argument*, *claim* and *evidence* to the list of words used to talk about the discipline, discussing each one.

FROM THE STUDENT ACADEMIC NOTEBOOK

As a class, determine which discipline-specific words to add to the discipline-specific word list. Also, talk through with a partner the meaning of the following words that help you talk about the discipline:

Corroboration Claim Evidence Argument

Assessment:

Outcome 4:

Choose two words at random from the discipline-specific word list and have students write down what role this word had in the Freedom Rides and why it is significant. Also have them write a definition of corroboration.

Teacher
Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Had students write three observations about the Freedom Riders.
2. Taught that an argument consists of claims and evidence.
3. Introduced students to the term “corroboration.”
4. Had students annotate the Freedom Riders section of the Faragher chapter for evidence for a written claim.
5. Had students listen to and take notes to lecture slides 45-50 about the Freedom Riders, looking for corroboration.
6. Showed portions of the PBS Special on the Freedom Rides, looking for claims and evidence.
7. Had students write an argument paragraph after viewing an example paragraph.
8. Had students add information to the essential question organizer.
9. Added significant Freedom Ride events to the timeline.
10. Had students determine discipline-specific words worth understanding.
11. Asked students to tell the meanings of *corroboration*, *claim*, *evidence* and *argument*.

Lesson 9

Taking History Exams

Overview and Rationale:

Students will learn to prepare for, take and learn from a history exam. Students will generate their own exam review by thinking about the types of questions teachers ask, the amount of material they need to know and the strategies that will help them master the material. By creating their own exam review rather than relying on the teacher to supply a review, students must be able to select the information to be learned and create a way to learn it. In this lesson, they will learn two strategies to help them generate effective exam reviews. Students will take an exam that asks mainly higher-level questions. They will take the exam twice: individually and collaboratively. The purpose of the collaborative, or group, exam is not to make the job easier for students. Rather, the group exam is used to get students talking about and debating history information. Research has indicated that collaborative exams promote comprehension, improve test-taking skills and provide an opportunity for all students to participate in discussion.

Tasks/Expected Outcomes:

1. Students will utilize strategies to generate their own exam reviews.
2. Students will learn to ask and answer higher-level questions.
3. Students will learn to use group testing as a way to increase their ability to explain and understand history concepts.
4. Students will be able to evaluate their own exam performance.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;

- (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
- (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 3. Evaluate sources from multiple perspectives.
 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 5. Read narrative texts critically.
 6. Read research data critically.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook
- Faragher Chapter 28
- Video: *Freedom Riders*
- *Freedom Riders* exam

Timeframe:

170 minutes

Targeted Vocabulary:

Discipline-Specific Vocabulary from chart in room

Activity One

Orientation to the Task (Approx. 5 minutes)

Introduce the concept of group exams to students with instructions like the following:

In this class, you will take a short exam. However, this exam may work a little differently than you are used to. First, you will take the exam individually and turn it in. Your individual exam will count for two-thirds of your total exam score.

Then, you will retake the same exam with a group of students.

In your group, you need to discuss each question and come to a consensus regarding the appropriate answer in order to fill out a single answer sheet that you will submit as a group. The group exam scores will count up to one-third of your total exam score.

To encourage everyone to participate and to prevent “freeloading” during the group exam, you will be asked to evaluate the other members of your group on how well they contributed to group functioning. This evaluation will be used to determine how many group exam points each student will receive. For example if a student receives an average score of 80 percent from their peers, that student would receive 80 percent of their group’s test points. (Of course, the instructor reserves the right to overrule any peer evaluation score if it appears to be inaccurate or inappropriate such as when evaluations have been biased because of personality conflicts.)

Activity Two

Exam Preparation (Approx. 85 minutes – broken into one session of 35 minutes and one session of 50 minutes)

Explain to students that prior to taking the exam they will generate their own exam review. Rather than using a teacher-generated review, they will work together to create a review that covers the textbook reading, the video and other reading they have done up to this point. They can use their Cornell notes with integrated information across sources. Tell students to use two strategies to help them create the review: talk-throughs and reciprocal questioning. If students have completed prior science or English units, these strategies will be familiar to them, except that they will be using them in a new subject area context. Ask them to read about the two strategies in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

The Talk-Through

A talk-through is a method of preparing and reviewing for an exam that involves practicing and rehearsing aloud the key ideas of a text or events in history. A talk-through is very similar to a lecture that you would give someone. In fact, when giving a talk-through, you should imagine being an instructor giving a lecture to students who know very little about the topic you are teaching. Use your notes and the texts as prompts to help you say the information out loud, but when you are doing the talk-through, you should not be looking at your notes. Refer to them only when you get stuck.

Reciprocal Questioning

In this strategy, you will use the history information you have learned so far to create 10 questions. Use these questions to quiz classmates over the material as a way to prepare for the exam, and they will use their questions to quiz you. You should remember to include questions from the textbook, documents and videos.

Ask students to use the following guidelines to create questions.

Guidelines for Creating Questions:

- Avoid definition questions. Ask higher-level questions using words such as *why*, *how*, *explain*, or *compare* and *contrast*. For example, it is much better to ask a question/give an instruction such as “*Compare and contrast the strategies used by MLK to those used by Malcolm X*” or, “*Explain the arguments used by southern states to defy Brown v. Board of Education,*” rather than “*What is Brown v. Board of Education?*”
- Think about what you know is important to understand in history and create questions that get at those understandings: *cause/effect, chronology, or other relationships among events; analysis of actors, goals, and methods; perspective taking (which requires a focus on sourcing and contextualization), etc.*
- Predict short answer and essay items (even if you are taking multiple-choice tests) because it will help you check your knowledge of an entire concept, rather than one small part.
- Ask questions that require application, analysis, or interpretation of ideas. These are the types of questions you will be asked on the exam.
- Rather than focus on dates, focus on chronology and cause/effect.
- Ask questions that make people really think about history.

(General hint: if it takes more words to ask the question than to answer it, ask a tougher question).

- Talk-throughs. Have students meet in pairs and talk through their notes and textbook annotations. The partner should ask clarifying questions and make sure students’ talk-throughs are accurate and that inferences are reasonable, given the evidence. Students will trade partners several times to hear as many talk-throughs as possible (they can do this as homework).

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity Two: Engage in the talk-through

First, engage in the talk-through. Using notes, the chapter, and other materials, take turns talking through the information with a partner. As you talk (without looking), your partner will monitor what you are saying for accuracy and completeness. When your partner talks, you will monitor the information.

- Give students time to create 10 questions that are broad enough to cover the material.

Activity Three

Create Questions and Quiz Each Other (Approx. 30 minutes)

The group can work together to respond. Then another student should ask a question using the same process. This continues until each student has asked at least one question. Then students will regroup to ask questions with a new set of peers.

FROM THE STUDENT ACADEMIC NOTEBOOK

Second, using your notes, chapter and other materials, create 10 questions and answer them. Then use these questions to quiz people in your group.

(space provided)

Reciprocal Questioning: Place students in small groups (four to six students). Tell one student to ask a predicted question and the rest of the group to try to answer it without looking at their notes or text.

Assessments:

Outcome 1:

Students will utilize strategies to generate their own exam reviews.

Outcome 2:

Students will learn to ask and answer higher-level questions.

- Predicted questions and answers

Provide points using the following criteria.

| | | | |
|--|----|------|-----|
| Contains at least 10 questions and answers. | No | Some | Yes |
| Questions come from all the sources used so far. | No | Some | Yes |
| Questions are at inferential and applied levels. | No | Some | Yes |
| Answers include accurate chronology and description of events, actors, actions, legislation. | No | Some | Yes |
| Student participates in the discussion. | No | Some | Yes |
| Adds meaningful information or insights. | No | Some | Yes |

Activity Four Taking the Exam (Approx. 30 minutes)

Take the best questions from the ones your students generated and use these for the exam. Be sure to pick those that require not just knowledge of details, but ask students to engage in reasoning.

Have students take the exam in both individual and group format.

Assessment:

Outcome 3:

Students will learn to use group testing as a way to increase their ability to explain and understand historical information.

- Exam Performance

Provide points using the following criteria.

| | | | |
|--|----|------|-----|
| Student contributes to group exam. | No | Some | Yes |
| Group performance is higher than average single performance. | No | Some | Yes |

Activity Five Evaluation of Exam Performance (Approx. 10 minutes)

Evaluation of the exam: before students do this, have students read and discuss these directions in the academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Group Exam Evaluation

The purpose of this evaluation is to help you learn from your experience preparing for and taking the exam. Think about how you felt about your level of preparation before the exam, where you focused your effort and how you felt taking both the individual and group portions of the exam.

What went right? Analyze the exam to discuss what you did well and what helped your thinking about this information.

What went wrong? Analyze the exam to discuss areas you might want to work on. In this analysis:

Think about the errors you made and diagnose the nature of your difficulties as they relate to the information, higher level thinking expected, or your beliefs about history and history learning. Note: don't just describe a difficulty; you need to analyze your thinking. (For example, a poor diagnosis would be "I was confused" or "I picked the wrong answer." A good diagnosis would provide a reason for the errors; "I thought that the Civil Rights Act of 1964 was the Voting Rights Act.")

What will I do differently next time? Conduct an overall assessment of your exam performance. This is where you will look for patterns to your errors, think about particular aspects of the exam that may have been difficult for you, types of questions you missed, general concepts that were difficult, etc. In your assessment, write about how understanding these issues will impact your history exam taking in the future.

Activity Six

Peer Evaluation (Approx. 10 minutes)

Explain to students that it is time to do evaluations. Have them read and discuss peer evaluations.

FROM THE STUDENT ACADEMIC NOTEBOOK

Peer Evaluations

This is an opportunity to evaluate the contributions of your teammates to group exams. Please write the names of your teammates in the spaces below and give them the scores that you believe they earned. You will have 10 points available to distribute for each member or your group, not counting yourself (e.g., if you are in a group of six people, you each will have 50 points to distribute, a group of five would have 40 points, etc.). If you believe everyone contributed equally, then you should give everyone 10 points. If everyone in the group feels the same way, you will all have an average of 10 points and receive 100 percent of the group score. An average of nine would receive 90 percent of the group exam score, etc. Be fair and accurate in your assessments. If someone in your group didn't contribute adequately (i.e., had not studied, didn't communicate with the rest of the group) give him or her fewer points. If someone worked harder than the others, you have the option of giving that person a larger share of the points.

There are some rules that you must observe in assigning points.

- This is not a popularity contest. Don't give anyone a grade they don't deserve (high or low) for personal reasons or otherwise.
- Contributing to the group does not simply mean someone gave the most correct answers. Asking good questions, challenging the group, etc., are also ways to contribute.
- You cannot give anyone in your group more than 15 points.
- You do not have to assign all of your group points, but you cannot assign more than the total number of points allowed for each group (i.e., (number of group members minus one) times 10 points).

Period (include period, time and day):

Name:

Group Member:

Score:

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |

Indicate why you gave someone more than 10 points.

Indicate why you gave someone less than 10 points.

If you were to give yourself a score, what would it be? Why?

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced the idea of group exams and group preparation of exam review.
- 2. Had students read about talk-throughs, reciprocal questioning and guidelines for creating questions.
- 3. Had students engage in talk-throughs using notes, the chapter and other materials.
- 4. Had students create 10 questions covering material.
- 5. Placed students in small groups and have them question each other, using their created questions.
- 6. Had students take the exam.
- 7. Helped students to evaluate their exam performance (and their peers).

Lesson 10

Analyzing Political Cartoons

Overview and Rationale:

Political cartoons are often an anathema to students, who lack the knowledge of context that it takes to interpret them. Yet, we often use political cartoons as a source. When considered as a group, they can provide insight into varying public opinions (from the viewpoint of the cartoonists) at the time an event occurred, if students know enough about the event the cartoon is portraying. For that reason, they are part of this unit but are not introduced until after students are given several opportunities to learn about the events from the chapter reading, the lecture and the video.

Students should understand the purpose for political cartoons. Beginning in the 1500s, political cartoons were used to convey a message without relying on someone's ability to read. Political cartoons convey messages by using pictures portraying publicly understood symbols. In addition to using symbolism, political cartoonists also use exaggeration, labeling, analogy and irony. These elements need to be taught to students in order for them to better understand political cartoons.

Tasks/Expected Outcomes:

1. Students will be able to describe the claim implicit in a political cartoon about the Civil Rights Movement.
2. Students will be able to describe the techniques of exaggeration, labeling, analogy and irony as they appear in political cartoons.
3. Students will be able to use sourcing and contextual information and the political cartoon to describe the viewpoint of the cartoonist.
4. Students will learn to analyze cartoons for the techniques of symbolism, exaggeration, irony, labeling and analogy.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;

- (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
- (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 - 8. Compare and analyze how generic features are used across texts.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 3. Evaluate sources from multiple perspectives.
 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.

Throughout this course, only grade 12 standards are used.

Materials:

- Civil Rights political cartoons
- Academic notebook

Timeframe:

50 minutes

Targeted Vocabulary:

Discipline-Specific Vocabulary

- Exaggeration
- Labeling
- Analogy
- Irony
- Symbolism

Activity One

Orientation to the Task (Approx. 10 minutes)

Project the information about Bill Mauldin and the following political cartoon for your students. Explain to students that political cartoons are considered artifacts that historians study to learn about the various opinions people had at the time about the events they are studying. Also, mention that these cartoons are meant to persuade the public (e.g., newspaper readers) to take on certain opinions about current topics. Be sure to mention political cartoons have been around since the 1500s, used at first to get messages across to people who couldn't read.

Ask students to pay attention to the political cartoon on the screen, or students can turn to their academic notebooks. Have them read about the cartoonist, Bill Mauldin.

FROM THE STUDENT ACADEMIC NOTEBOOK

These photographs show Bill Mauldin, a political cartoonist; the first photograph is from World War II, and the second is in 1945, when, at the age of 23, he won his first Pulitzer Prize. The third is from 1965.



Bill Mauldin began drawing cartoons as a teenager growing up in New Mexico. He joined the U.S. Army at age 19 and fought on the European front during World War II. In 1944, Mauldin, who had been producing cartoons for his unit's 45th Division News, became a full-time cartoonist for Stars and Stripes, a military newspaper. His work on that newspaper won him a Pulitzer Prize. Bill Mauldin was a champion of the oppressed. Soon after his return to the United States in 1945 he began attacking segregationists and the Ku Klux Klan. By the 1960s, when the Civil Rights Movement gathered momentum, he had further honed his skills as a cartoonist. Bill Mauldin never left his readers in doubt about his opinions, and on the issue of race relations in the United States he was forceful. While he tackled a number of issues as a political cartoonist, Mauldin would say in an interview at his retirement: "The one thing that meant the most to me and that I got involved in was the whole civil rights thing in the sixties."



“Let that one go. He says he don’t wanna be mah equal.” March 2, 1960

Look at this cartoon. Before you analyze the cartoon itself, describe what was happening at the time the cartoon was created. You may review your annotations, timelines and other materials for help.

Ask students what they already know about sourcing and context that they could use in determining the claim this cartoon is making. They should be able to note the data and look on their timelines for what might have been happening at that time.

The Greensboro Lunch Counter sit-ins were in February, 1960 and on April 10, Eisenhower’s Civil Rights bill was passed allowing for federal oversight of elections. On April 15, the Student Non-Violent Coordinating Committee (SNCC) had its first meeting. The Montgomery Bus Boycott, and the desegregation of Central High School had already taken place during the 1950s and sit-ins were continuing. Students should also be able to determine Mauldin’s viewpoint from the short bio and the cartoon itself.

Activity Two

Identifying a Claim in a Political Cartoon (Approx. 40 minutes)

Ask the students what claim they think Mauldin is making, and do a “think-pair-share.” That is, have students think about it, talk to a partner and then choose several pairs to share with the group. Ask, “What evidence led you to make that interpretation?” Some possible questions to further the discussion are:

- What can be inferred about the men in the cartoon from their appearance and language?
- What is ironic about the speaker’s statement?
- What is the attitude of the speaker toward the unseen civil rights activist?
- What is the attitude of the unseen civil rights activist?

FROM THE STUDENT ACADEMIC NOTEBOOK

- What claim is Mauldin making in the above cartoon?
- What evidence led you to identify that claim?
- What can be inferred about the men in the cartoon from their appearance and language?
- What is ironic about the speaker’s statement?
- What is the attitude of the speaker toward the unseen civil rights activist?
- What is the attitude of the unseen civil rights activist?

Explain to students there are certain questions that are good to ask about political cartoons. According to the Library of Congress, cartoonists use several techniques to get their points across. Have them refer to the cartoon analysis guide in their academic notebooks. In addition to asking questions about the source and the context of the cartoon, it would be a good idea to ask questions about the items in this guide.

FROM THE STUDENT ACADEMIC NOTEBOOK

Political cartoonists used particular techniques to make their points. Read the following cartoon analysis guide, provided by the Library of Congress.

| Political Cartoon Analysis Guide | |
|----------------------------------|---|
| Symbolism | Cartoonists use simple objects, or symbols , to stand for larger concepts or ideas. After you identify the symbols in a cartoon, think about what the cartoonist means each symbol to stand for. |
| Exaggeration | Sometimes cartoonists overdo, or exaggerate , the physical characteristics of people or things in order to make a point. When you study a cartoon, look for any characteristics that seem overdone or overblown. (Facial characteristics and clothing are some of the most commonly exaggerated characteristics.) Then, try to decide what point the cartoonist was trying to make by exaggerating them. |
| Labeling | Cartoonists often label objects or people to make it clear exactly what they stand for. Watch out for the different labels that appear in a cartoon, and ask yourself why the cartoonist chose to label that particular person or object. Does the label make the meaning of the object clearer? |
| Analogy | An analogy is a comparison between two unlike things. By comparing a complex issue or situation with a more familiar one, cartoonists can help their readers see it in a different light. After you've studied a cartoon for a while, try to decide the cartoon's main analogy. What two situations does the cartoon compare? Once you understand the main analogy, decide if this comparison makes the cartoonist's point more clear to you. |
| Irony | Irony is the difference between the ways things are and the way things should be, or the way things are expected to be. Cartoonists often use irony to express their opinion on an issue. When you look at a cartoon, see if you can find any irony in the situation the cartoon depicts. If you can, think about what point the irony might be intended to emphasize. Does the irony help the cartoonist express his or her opinion more effectively? |

In addition to identifying the persuasive techniques, thinking about the source and context of the cartoon, ask these questions:

What issue is this political cartoon about?

What do you think is the cartoonist's opinion or claim about this issue?

What other opinion can you imagine another person having on this issue?

Did you find this cartoon persuasive? Why or why not?

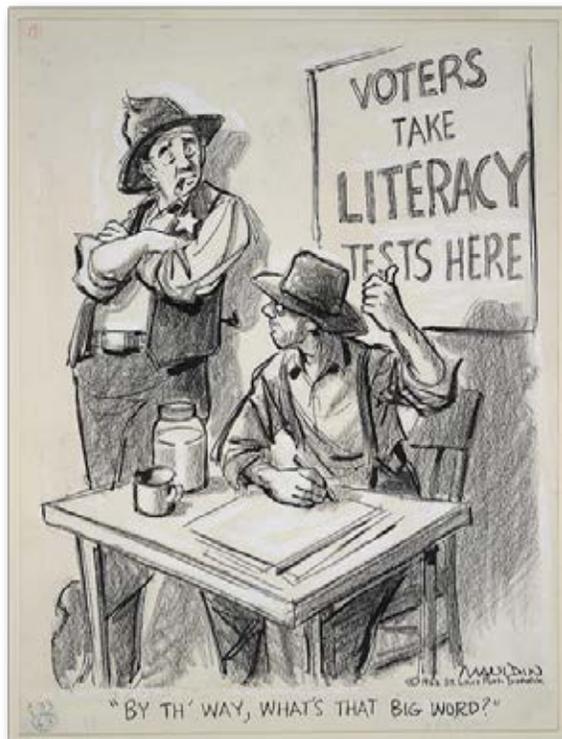
Ask the students what techniques Bill Mauldin used in this cartoon (e.g., irony, exaggeration).

FROM THE STUDENT ACADEMIC NOTEBOOK

What techniques did Bill Mauldin use the in above political cartoon?
Analyze one or two of the following cartoons by Bill Mauldin using the graphic organizer at the bottom of the cartoons.

Ask the students to work in pairs or small groups to analyze the rest of the cartoons. You can have a group do one or two photographs, and then share out with the whole group, so that all of the class sees all of the photos, but less time is used. Have students use the graphic organizer in their academic notebooks to aid in the analysis of the photographs.

| | Cartoon 1: | Cartoon 2: |
|---|--|------------|
| Who is the cartoonist and in what context was this cartoon written? | The cartoonist will be the same, but the date may be different, so context may change. | |
| Who was the cartoonist's audience? | | |
| For what purpose was this cartoon made? What reaction from the audience is he seeking? | | |
| What is this cartoon about? | | |
| What persuasive techniques did the cartoonist use? | | |
| What claim is the cartoonist making? (What opinion is he stating? What is his attitude?) | | |
| What evidence do you have that this is his claim? | | |
| What other opinions might people from that time period have? | | |
| Does this cartoon help you to understand the Civil Rights Movement better? Why or why not? | | |



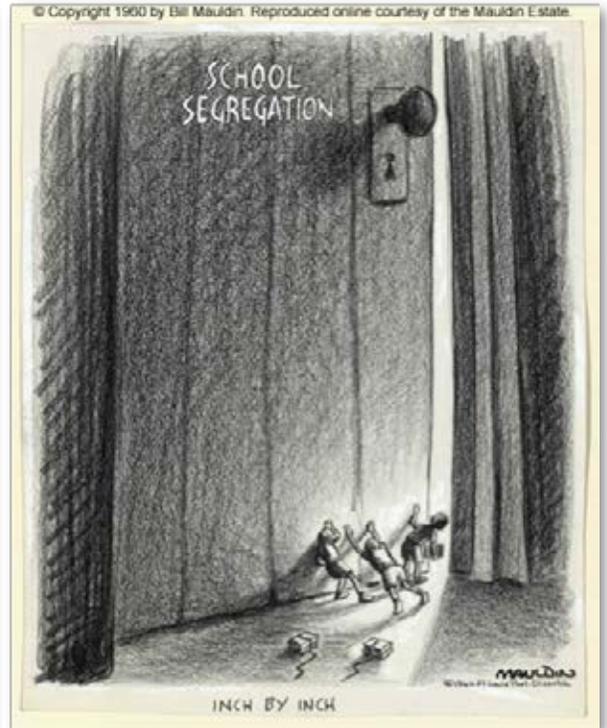
1962. St. Louis Post-Dispatch



1962. Chicago Sun Times



1963. Chicago Sun Times



1960. Mauldin Estate

In the discussion, help students to provide evidence from the cartoon, from Bill Mauldin's short biography or from the context of the period that supports their interpretations.

Assessments:

Outcome 1:

Students will learn to analyze cartoons for the techniques of symbolism, exaggeration, irony, labeling and analogy.

Outcome 2:

Students will be able to use sourcing information and the context of the time period to describe the viewpoint of the cartoonist.

Outcome 3:

Students will be able to describe the claim implicit in a political cartoon about the Civil Rights Movement.

Outcome 4:

Students will be able to describe the techniques of exaggeration, labeling, analogy and irony as they appear in political cartoons.

- Informal monitoring of student whole class and group conversations.
- What to look for in discussions:

| Discussions show that ... | | | |
|--|----|------|-----|
| 1. Students have used references to determine what might have prompted the cartoon (chapter, timeline, notes, etc.). | No | Some | Yes |
| 2. Students can identify persuasive techniques used in the cartoon. | No | Some | Yes |
| 3. Students can identify the claim. | No | Some | Yes |

- Evaluation of the graphic organizers they have prepared.

Determine a score for each of the nine elements of the graphic organizer used when viewing each cartoon. There are nine questions and each one can be scored on a three-point scale, as follows:

- 0 No answer/Completely unsupported answer.
- 1 Incomplete/Partially supported answer.
- 2 Sufficient/Supported but without elaboration.
- 3 Proficient/Supported with elaboration.

Thus, if a student analyzed two cartoons, the score could range from zero to 81.

Here are some possible answers for the question: “What persuasive techniques did the cartoonist use?” (Accept any other reasonable answers.)

1. “Voters take literacy tests here”

Irony: The ones who enforce literacy laws can’t read.

Symbolism: Marshall’s badge symbolizes someone who ensures that laws are followed.

2. “And you incited those innocent rioters to violence”

Irony: Juxtaposition of innocent and rioters/US Marshall is the one injured when he’s supposed to ensure everyone’s safety.

Labeling: “Mississippi Grand Jury” and US Marshall.

3. “What do you mean, not so fast?”

Symbolism: • Thorny Rose bush symbolizes the difficulty of the journey.

- Rose symbolizes equality.
- Two dead roses—failures?

Exaggeration: Thorny rose bush is much bigger than the person (as is the rose).

Labeling: The rose is labeled “equality” so you know what the rose symbolizes.

4. “Inch by Inch”

Exaggeration: Door is huge, and very hard to push open, and students can’t reach the doorknob.

Symbolism: Door symbolized an entryway to school integration.

Labeling: School segregation.

Irony: Two students have to put their books down in order to get the door open. This could mean that, in the effort to integrate, some students lost out on their education.

**Analogies were not a part of these cartoons. Help students to see that Bill Mauldin did not use this technique in this set of cartoons, or if they find it, be able to explain their reasoning.*

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Showed information about Bill Mauldin and political cartoons and discussed purpose of political cartoons.
- 2. Had students determine context for the first cartoon, then analyzed the claim and provided evidence for analysis.
- 3. Read and discussed with students the way cartoons are analyzed.
- 4. Had students analyze two cartoons in pairs or small groups, using the guide.

Lesson 11

Comparing Two Presidential Speeches

Overview and Rationale:

This lesson asks students to read from multiple texts in order to make sense of the changes taking place in the Civil Rights Movement. The two texts are primary documents, both speeches—Kennedy’s Civil Rights Address and Lyndon Johnson’s Great Society speech. In order to make sense of the differences in these speeches, students will read a portion of a textbook chapter. The task is to identify and explain the similarities and differences in the two speeches. This activity will prepare them for answering the essential question at the end of this unit.

In completing the task, students will need to practice many of the skills they have already learned: sourcing, contextualization, corroboration, taking notes from film, annotating text, organizing notes into a graphic organizer, close reading and argumentation. They will find the task clearer, too, if they can think about frameworks such as social, legal, political and economic.

Tasks/Expected Outcomes:

1. After reading two speeches and reading a portion of a textbook chapter, students will identify similarities and differences in the two speeches and explain them.
2. Students will determine whether or not they can explain the differences and the similarities in the speeches using the contextual information in the chapter or whether there is some other explanation for the differences.
3. Students will add information to the essential question organizer from the chapter excerpt.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Throughout this course, only grade 12 standards are used.

Materials:

- Kennedy’s Civil Rights Address of June 11, 1963
- YouTube video of Kennedy’s speech: <http://www.youtube.com/watch?v=rS4Qw4llckg&feature=related>.
- Lyndon Johnson’s “Great Society” speech
- YouTube video of Johnson’s War on Poverty
- Faragher’s *Out of Many*, Chapter 28, “The Movement at High Tide,” pages 19-30

Timeframe:

155 minutes

Targeted Vocabulary:

General academic vocabulary (possibilities)

- | | |
|------------------------|--------------|
| • unequivocal | • repressive |
| • public accommodation | • equity law |
| • partisan | • arbitrary |
| • oppression | • harassment |
| • redress | • unbridled |

Discipline-specific vocabulary

Events/Legislation:

- Children’s Crusade
- March on Washington
- Civil Rights Act of 1964
- Civil Rights Act of 1965
- Freedom Summer

Places:

- Selma
- Birmingham
- Washington, DC
- Mississippi

People:

- Bull Connor
- MLK
- Medgar Evars
- John Lewis
- Bob Moses
- Fanny Lou Hamer
- Malcolm X
- Elijah Muhammad and the Nation of Islam

Vocabulary used to talk about the discipline

- | | |
|--|-----------------|
| • Political, social, economic, legal, frameworks for categorizing historical information | • political |
| • G-Sprite | • religious |
| • geographical | • intellectual |
| • social | • technological |
| | • economic |

Activity One

Pre-reading (Approx. 30 minutes)

Show students a statement of the task and have them read it:

After reading two speeches, and reading a portion of a textbook chapter, you will identify similarities and differences in the two speeches and explain the similarities and differences using information about sourcing and contextualization. Determine whether or not you can explain the differences and the similarities in the speeches using the contextual information in the documents or whether there is some other explanation for the differences.

Explain to students that this is the first time they have read speeches. Ask them what might be important to understand about a speech. Have them write their initial thoughts in the box provided in their academic notebook and talk to a partner. Then elicit responses from students that show they understand sourcing, contextualization, corroboration and other historical reading strategies such as looking for claims and evidence, cause-effect, chronology, etc.

FROM THE STUDENT ACADEMIC NOTEBOOK

You are about to read two speeches by two different presidents: John F. Kennedy and Lyndon B. Johnson. To what kind of information will you need to pay attention?
(Space provided)

Tell students that another historical reading strategy is called G-Sprite. G-Sprite helps students look at some of the categories historians use to analyze events, their causes and effects and the motivations of historical actors. The letters represent an acronym to help them remember those categories. Have them turn in their academic notebooks to read about G-Sprite.

FROM THE STUDENT ACADEMIC NOTEBOOK

G-SPRITE

You will use a strategy called G-Sprite as you complete the reading of the materials in this lesson. It should help you keep the essential questions in mind as you read from the various sources. G-Sprite helps you pay attention to some of the different categorizations of historical information that historians use (political, social, economic, and so on). Review this strategy and think about what you have already learned. Can you think about in what category an action like *Brown v. Board of Education* can be placed? How did technology affect the Civil Rights Movement? What kinds of tactics did the Civil Rights activists use? Were they political? Social? Religious?

Were they a combination of these things?

G-SPRITE

Geography: (human interactions with the environment) Includes the physical location of civilizations, how geographical features influence people, how people adapted to the geographical features, demography and disease, migration, patterns of settlement.

Social: Includes living conditions, gender roles and relations, leisure time, family and kinship, morals, racial and ethnic constructions, social and economic classes—and ways these are changing or being challenged.

Political: Includes political structures and forms of governance, laws, tax policies, revolts and revolutions, military issues and nationalism.

Religious: Includes belief systems, religious scriptures, the church/religious body, religious leaders, the role of religion in this society, impact of any religious divisions/sects within the society.

Intellectual: Includes thinkers, philosophies and ideologies, scientific concepts, education, literature, music, art and architecture, drama/plays, clothing styles,—and how these products reflect the surrounding events.

Technological: (anything that makes life easier) Includes inventions, machines, tools, weapons, communication tools, infrastructure (e.g., roads, irrigation systems)—and how these advances changed the social and economic patterns.

Economic: Includes agricultural and pastoral production, money, taxes, trade and commerce, labor systems, guilds, capitalism, industrialization—and how the economic decisions of leaders affected the society.

Ask students to watch the first two minutes or so of Kennedy's speech to identify any of these categories. When they have watched the beginning of the speech ask them to express what they noticed. Also, ask what other information would be important to notice—for example, the SOAPStone information.

Then show a minute or two of the Johnson speech. Ask students to talk about the same information but also to note any similarities and differences. On a Smart Board, chalkboard or overhead, write these down.

Have students locate the chapter and the speeches in their academic notebooks and explain they should read the chapter excerpt first to help them think about Faragher's portrayal of what was happening and what changes were taking place in the intervening time between the two speeches. Have students read the directions in their academic notebooks.

Activity Two

Reading the Chapter Excerpt (Approx. 40 minutes)

For the textbook excerpt, assign groups of students to read one of the sections and either have these groups present the information to the class (using white-board or chart paper) as a whole or exchange information in a jigsaw. (Your better readers should tackle the longer sections.) How you handle the length of this reading assignment depends upon the reading level and persistence of your students. If you are dividing up the sections, make sure they are noting relevant information regarding the ultimate purpose to determine the changes in the movement across the 60s. The essential questions graphic organizer should assist.

As students are reading/annotating and working on their essential question organizers from Lesson 5, circulate around the room and guide students in their thinking without providing answers.

FROM THE STUDENT ACADEMIC NOTEBOOK

Read a new portion of the Faragher chapter. Later read the two speeches. As you read the chapter excerpt, consider what was happening in the intervening time between the two speeches. Later, as you read the two speeches for similarities and differences, you will be asked to decide whether or not you can explain the similarities and differences in the two speeches by using the contextual information you read in the chapter, or whether there is some other explanation for the differences.

- Annotate as you read.
- Use G-Sprite as a strategy—that is, read to identify geographical, social, political, religious, intellectual, technological, and economic forces.
- Use SOAPStone as an analysis tool.
- Pay attention to vocabulary, analyzing words in context and supplying synonyms for unknown words.
- Add information to the essential question chart from the chapter excerpt.
- Complete the similarities/differences chart using information from the two speeches.
- Remember that the ultimate purpose for reading these texts is to determine how the Civil Rights movement changed during the 60s.

Consider using the “Close Reading Checklist” to monitor student performance as they are reading. This checklist identifies what behaviors to look for as students are reading together and annotating the text.

The reading is long because the chapter covers 11 pages of dense text. The reading encompasses seven sections. These are:

- Birmingham (approximately three pages).
- JFK and the March on Washington approximately one and a half pages, or two and a half if including the timeline of legislation).
- Civil Rights Act of 1964 (less than one page).
- Mississippi Freedom Summer (approximately one and a half pages).
- Malcolm X and Black Consciousness (1 page).
- Selma and the Voting Rights Act of 1965 (approximately one and a half pages).

Activity Three

Considering the Text (Approx. 20 minutes)

Ask students what information you should add to the timeline (in the room) now that they have read about the events after the Freedom Rides. Ask them to provide a rationale for why it is significant enough to add to the timeline. Their rationale should mention the way this event effected the Civil Rights Movement:

Have an open discussion about what students thought was important in their readings. Ask the following questions to ensure close reading:

1. Who were the historical actors in each of these events? What issue were they trying to address according to Faragher? What tactics did he say they used? Were they successful? What evidence from the text do you have to prove they were (or weren't) from Faragher's perspective? From the perspective of MLK or other historical actors? How do they (or you) define “success?”

Use a chart. That is, choose one event, put the actors on one axis and put goals and tactics on another. For example, in the Birmingham marches, Bull Connor's goal might be to keep segregation intact, using the tactics of arresting, clubbing and intimidating. MLK's goals might be to end segregation in Birmingham, using the tactic of marches that included youth. Make sure that students are referring back to the text and their notes.

2. Determine how you would categorize these tactics using G-Sprite. Put those elements in another column.
3. Display these sentences from the text (especially if students had difficulty identifying changes in the movement:

The black unemployed and working poor who joined in the struggle brought a different perspective from that of the students, professionals and members of the religious middle class who had dominated the movement before Birmingham. They cared less about the philosophy of nonviolence and more about immediate gains in employment and housing and an end to police brutality.

While President Johnson and his liberal allies won the congressional battle for the new civil rights bill, activists in Mississippi mounted a far more radical and dangerous campaign than any yet attempted in the South.

Frustrated with the limits of nonviolent protest and electoral politics, younger activists within SNCC found themselves increasingly drawn to the militant rhetoric and vision of Malcolm X.

Ask students what these three excerpts from the text say about the changes in the civil rights movement. Encourage them to point out specific wording that helps them identify those changes. Ask them to find other sentences that point to changes in the movement.

4. **Vocabulary:** Have students identify words that are still troublesome to them after reading. With the class, develop consensus about the meanings of these words. Add disciplinary terms to the chart in your room.

FROM THE STUDENT ACADEMIC NOTEBOOK

As you read and after, consider the answers to the following questions:

1. What events that you read about are significant enough to add to a timeline? What makes them important?
2. What goals did the historical actors in these events have? What issue were they trying to address? What tactics did they use according to Faragher? Were these tactics successful? How do you define success?
3. Using G-Sprite, how would you categorize each of the tactics?
4. After reading the chapter excerpt and using the essential question organizer, did the Civil Rights Movement change during the 60s? If so, how? What evidence from this chapter excerpt do you have that the movement changed?
5. Read three excerpts. What do these three excerpts say about changes in the Civil Rights movement?
6. What words did you struggle with as you read? Are there any words you are still unsure about that need to be brought to the attention of the class?

Activity Four

Reading Two Presidential Speeches (Approx. 15 minutes)

If desired, have students read the two speeches in pairs or small groups so that they can help each other with confusions, vocabulary or comprehension difficulties. Direct them to the similarities/differences chart in the academic notebook and ask them to complete this when they are finished reading and annotating the speeches.

When students are finished and have completed the similarities/differences chart, have them share their chart responses, writing these down on a board, overhead, Smart Board, etc.

Activity Five

Considering What Was Read (Approx. 50 minutes)

Instruct students to look for similarities and differences in the two speeches. (Some fields may remain blank. These are important.) The following similarities/differences chart is in the academic notebook. Walk around the room to provide support.

FROM THE STUDENT ACADEMIC NOTEBOOK

| Speaker | JFK Speech | LBJ Speech |
|---|------------|------------|
| Occasion | | |
| Audience | | |
| Perspective | | |
| Subject(s) | | |
| Tone | | |
| Geographical | | |
| Social | | |
| Political | | |
| Religious | | |
| Intellectual | | |
| Technological | | |
| Economic | | |
| <p>Summary</p> <p>Similarities</p> <p>Differences</p> <p><i>(space provided)</i></p> | | |

Close Reading Questions:

1. What are the differences between the two speeches? Ask students to provide evidence for the differences they found (e.g., quotes or paraphrases from the speeches).
2. What thought provoking sentences did you find in these two speeches? Share a sentence with the class. How did you interpret it? What made this sentence particularly meaningful?

3. What categories of information do the two presidents use in their speeches?

Students should note when the presidents reference geographical, social, political, religious, intellectual, technological and/or economic issues.

4. Compare and contrast these excerpts from the speeches:

It ought to be possible, in short, for every American to enjoy the privileges of being American without regard to his race or his color. In short, every American ought to have the right to be treated as he would wish to be treated, as one would wish his children to be treated. But this is not the case.

The Negro baby born in America today, regardless of the section of the Nation in which he is born, has about one-half as much chance of completing a high school as a white baby born in the same place on the same day, one-third as much chance of completing college, one-third as much chance of becoming a professional man, twice as much chance of becoming unemployed, about one-seventh as much chance of earning \$10,000 a year, a life expectancy which is seven years shorter, and the prospects of earning only half as much.

The Great Society rests on abundance and liberty for all. It demands an end to poverty and racial injustice, to which we are totally committed in our time. But that is just the beginning.

The Great Society is a place where every child can find knowledge to enrich his mind and to enlarge his talents. It is a place where leisure is a welcome chance to build and reflect, not a feared cause of boredom and restlessness. It is a place where the city of man serves not only the needs of the body and the demands of commerce but the desire for beauty and the hunger for community.

5. Can the similarities and differences in the two speeches be explained by the context—the events that took place between them? What is the evidence that it can be explained by the intervening events? What evidence is there that other factors might explain the differences (such as differences in the audience, the purpose for the speeches and other factors noted in G-Sprite).

FROM THE STUDENT ACADEMIC NOTEBOOK

In the chart, write down what you have learned from the chapter on the intervening years that could explain the differences in the speeches in the “Evidence for Yes” column. In the “Evidence for No” column, write down the evidence for any other factors that might explain the differences. These two columns represent evidence and counter-evidence. By paying attention to both, you can make a better decision about which side to believe.

Chapter Events Explain Difference in Speeches

| Evidence for Yes | Evidence for No |
|------------------|-----------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Consider having students do the above assignment in pairs, come to a consensus (on whether the answer is “Yes” or “No” then join another pair. If the two pairs disagree, should use evidence to come to consensus. If the two pairs agree, they should determine the best evidence. Students can then have a whole class discussion.

Check to see that students added the information they just read to their essential question graphic organizer in their academic notebooks.

Vocabulary: Like with the chapter reading, have a discussion about the vocabulary words and add any disciplinary vocabulary to the list in the room. You might consider having students work in groups to determine the meanings in context of the words, using the same strategies as in previous lessons.

Here are some possibilities for general words:

- unequivocal
- public accommodation
- partisan
- oppression
- redress
- repressive
- equity law
- arbitrary
- harassment
- unbridled.

Assessments:

Outcomes 1 and 2:

After reading two speeches and reading a portion of a textbook chapter, students will identify similarities and differences in the two speeches and explain those differences using as evidence information from the textbook chapter, G-Sprite and SOAPStone.

- Organizational charts
- Annotations
- Discussion

| The student: | No | Some | Yes |
|--|----|------|-----|
| Identifies and explains what is geographical, social, political, religious, intellectual, technology and economic in the texts read. | | | |
| Infers the influence of GSPRITE factors in events. | | | |
| Identifies and explains the elements of SOAPStone. | | | |
| Infers the influence of SOAPStone factors on author perspective. | | | |

| The student: | No | Some | Yes |
|---|----|------|-----|
| Explains the differing contexts surrounding the two speeches. | | | |
| Explains the similarities and differences in the two speeches in terms of their perspective, using SOAPStone, the context surrounding when the speeches were given, using the chapter, and the various GSPRITE factors that influenced the context. | | | |

Outcome 3:

Students will add information to the essential question organizer from the chapter excerpt.

This essential question graphic organizer can be graded, using the following criteria:

| Essential Question Organizer | No | Some | Yes |
|--|----|------|-----|
| Information from all relevant readings is present on the charts. | | | |
| Student paraphrases, uses quotes, or references locations in the text. | | | |
| Paraphrases make sense and include important information. | | | |
| Student draws text-based conclusions from the information in charts. | | | |
| Student identifies author perspective, source, and context and uses that information to make judgments about trustworthiness. | | | |
| A progression of time is clear in the charts. The student can make judgments about changes over time from reading the chart information. | | | |
| Overall, the graphic organizer is useful as a tool for thinking about the essential questions. | | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Had students read prompt, write initial thoughts and talk to a partner.
2. Introduced G-Sprite Strategy.
3. Modeled and had students practice G-Sprite strategy and practiced SOAPStone with beginnings of speeches.
4. Had students read instructions for reading and annotating.
5. Allowed students time to read and annotate chapter excerpt.
6. Added to the timeline in the room as a group activity.
7. Held discussion and asked students questions.
8. Discussed vocabulary and disciplinary terms added to the chart.
9. Had students read and annotate two presidential speeches and complete the chart.
10. Asked students close reading questions.
11. Had students fill out evidence chart.
12. Discussed vocabulary.

Lesson 12

Creating a Presentation

Overview and Rationale:

This lesson marks the first of two lessons for the ending point of the unit. Students have been engaged in a research project over the course of the unit. In this lesson, they will complete a PowerPoint, Prezi or other presentation format that presents their research to the class. Students will evaluate each other's presentations and revise based upon peer feedback. You may decide, depending on the ability of the students in your class and the time you have left for this unit, to have students also write the actual essay. After developing their outline, this essay should be relatively easy to write.

The presentation represents an attempt to make a historical argument and back up a claim with evidence from multiple sources of information. The task requires them to evaluate the sources and analyze and synthesize across sources, similar to the activities of historians who write an argument rather than embed an argument into a narrative structure.

Tasks/Expected Outcomes:

1. Students will complete an outline of their research project.
2. Students will complete the presentation about their research project.
3. Students will present the presentation to their peers.
4. Students will evaluate the presentations.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
 - (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (C) an organizing structure appropriate to the purpose, audience, and context;
 - (G) an awareness and anticipation of audience response that is reflected in different levels of formality, style, and tone.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
 - (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;
 - (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
 - (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
 - 1. Understand how style and content of spoken language varies in different contexts and influences the listener’s understanding.
 - 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
 - 1. Participate actively and effectively in one-on-one oral communication situations.
 - 2. Participate actively and effectively in group discussions.
 - 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker’s message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

- C. Produce and design a document.
 - 1. Design and present an effective product.
 - 2. Use source material ethically.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook

Targeted Vocabulary:

None

Timeframe:

150 minutes

Activity One

Orientation to the Task (Approx. 15 minutes)

Ask students to take out the materials for their research paper. Remind them their ending task is to report their research in the form of a presentation. To prepare for this task, they will create an outline of their paper. Review these instructions on creating the outline (in their academic notebook) together. Answer questions and help the class to engage in group problem-solving for problems they may have encountered.

FROM THE STUDENT ACADEMIC NOTEBOOK

Directions for Creating an Outline

Prepare an outline for your “paper” that includes a complete introduction and conclusion along with key points that you would cover. Follow the formatting of the example below. Remember that you cannot have a “point 1” without a “point 2,” or a “point A” without a “point B,” etc. It is also required that you insert a relevant quote from each of your sources into the outline where appropriate. In the example below, areas that would be ideal for inserting a quote are indicated to assist you in developing your outline.

This assignment is worth _____ points and is due _____ at the beginning of class. Late assignments will not be accepted.

Example:

I. Introduction:

Before the Civil War, life was difficult for African American families who were slaves. But once the slaves were freed, the expectation was that life would be better for both men and women. This was only true to some extent. Whereas African American men were able to in some cases own land or in others to engage in sharecropping, women had to not only take care of their families but also work in the fields beside their husbands. They were not granted the same freedoms as their husbands—they couldn’t own land or vote, for example. Therefore, although all freed slaves were after emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.

II. Life for women before the Civil War

A. Lives of slave women

1. Families disrupted and children often taken from parents' home.
2. Slave women not allowed to become educated.
3. Slave women expected to work for their masters.

B. Lives of white women

1. Women denied the vote.
2. Women denied property ownership.
3. Education was not as important for women.
4. Women were considered property of their husbands.
5. Women did not hold positions of authority, but depending on their resources, were sometimes able to spend lives of comparative leisure.

III. Lives for women after the Civil War

A. Lives of slave women

1. Women often had to search for their children and husbands.
2. Women were expected to take care of their husbands and children.
3. Women had to work in the fields with their husbands.
4. Women were considered property of their husbands.
5. Women were not allowed to own property.
6. Women were not allowed to vote.
7. Because of their economic circumstances, they were unable to engage in leisure activities.

B. Lives of white women same as before the war

IV. Conclusion

In summary, African American women who had been slaves did not gain the same freedom as African American men after they were emancipated. They still had to exist in a society that did not allow women to participate fully in the democracy. At the same time, they were not afforded the leisure of many white women who had better economic circumstances, and were expected to work alongside their husbands as well as take care of their families. African American women, then, were worse off than everyone else in American society.

Students should be guided to notice that the outline is actually building an argument—consisting of claims and evidence.

Help students to see that, in using their sources, they will have to make decisions about what information they should use to build the argument. Some information may be more trustworthy than other information. Some information may be more closely tied to the argument they are trying to make while other information could be irrelevant or misleading. Students should be able to articulate the reasons for using

the information that takes these elements into account. As they are working on their outlines, circulate around the room and help students use reasoning to tie the best evidence to their claims.

Some evidence may go against their claim. Discuss with students what they should do with that evidence. This evidence may support a counterclaim—one that is different, even opposite, from the one they created. If there is such evidence and the evidence is credible, they may need to change their claim to take that evidence into account. If it lacks credibility they may want to refute the claim. That is, they could write something like, “although some historians believe... the majority of evidence suggests that...” Depending on the readiness of your students for argument writing, you might spend time helping students who have contradictory evidence change their claim or refute counterclaims.

Activity Two

Prepare the Outline (Approx. 30 minutes)

Give students time in class to prepare the outline and to “talk through” the outline with another classmate. While they work, circulate around the room to help them solve problems.

Activity Three

Create the Presentation (Approx. 50 minutes in class)

Most students, by the time they are in high school, are familiar with media presentations like PowerPoint. If not, schedule time in the computer lab for them to learn about them.

Ask them to follow these simple guidelines for the presentations:

- No more than eight slides.
- Must use at least five sources.
- Must use at least three quotes.
- First slide: Thesis.
- Seventh slide: Conclusion.
- Eighth slide: Sources.
- At least one slide should use graphics: photograph, chart, figure, etc.

Give students time at the computer lab or with personal computers (if they are in the classroom) to prepare slides. They may have to finish as homework.

Activity Four

Get Feedback and Revise (Approx. 50 minutes)

Have students give presentations in groups of three and four, if circumstances allow. If not, they can present them to the whole class, but you will have to limit the time they can spend, and you may not have time for everyone to present.

By this time, you should have created a climate in your class that ensures respectful and thoughtful feedback by peers. If you are still experiencing difficulty with students on this dimension, you could model such feedback.

While students are making their presentations, the audience should use the following form to provide feedback:

| FROM THE STUDENT ACADEMIC NOTEBOOK | | | |
|--|----|------|-----|
| | No | Some | Yes |
| Thesis (Claim) is clear. | | | |
| Evidence clearly supports claim. | | | |
| Evidence is integrated—not just listed or dropped in. | | | |
| The graphic element added to the overall presentation. | | | |
| The presentation seemed trustworthy. | | | |

Activity Five

Revision and Editing (To be completed as homework)

After students give presentations in class, have them use the received peer feedback to edit and revise their presentations as homework.

Assessments:

Outcome 1:

Students will complete an outline of their research project.

- Research Project Outline

Suggested criteria:

1. Outline consists of introduction, outline and conclusion.
2. Claim makes conceptual sense, given information in outline.
3. Evidence in outline is coherent.

Outcome 2:

Students will complete the presentation about their research project.

Outcome 3:

Students will present the presentation to their peers.

Outcome 4:

Students will evaluate the other's presentations.

- Presentation

Use the same criteria as the students use to grade this assignment.

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Had students read directions for creating an outline and example.
2. Discussed assignment with students.
3. Provided time to prepare the outline and to “talk through” it with another classmate.
4. Explained the creation of a presentation.
5. Allowed time for students to create presentations.
6. Had students give presentation in groups, using feedback form.
7. Gave students time to revise and edit presentations.

Lesson 13

Answering the Essential Question

Overview and Rationale:

This lesson marks the ending point of the unit. In this lesson, students will return to their essential question, review the evidence they have gathered over the course of the semester, create a claim that will provide a reasonable answer to the question based upon the evidence, and create an opposing claim that could be refuted by the evidence. They will then choose the best evidence they have for their claim and explain in writing why they chose the sources and evidence they did and why the evidence does not support the counterclaim. Finally, they will write an essay that states a claim, presents evidence, and refutes a counterclaim.

This lesson prepares students to create an argument that is based upon a careful review of evidence rather than opinion; in other words the way historians create arguments. Evidence that is corroborated comes from trustworthy sources and is balanced in perspective trumps evidence that is not. If evidence comes from a biased source, historians look for corroboration from a number of sources especially those sources that may be biased in an opposite direction. For example, if someone who was a proponent of school integration had the same story about the Little Rock Nine as someone who was against school integration, the story would be considered more reliable than if two people against school integration had the same story.

Tasks/Expected Outcomes:

1. Students will make a claim about the essential question and provide reasonable evidence for the claim using at least five sources from their readings.
2. Students will explain why they chose the sources and evidence they chose.
3. Students will explain why they did not make an alternative claim, based upon evidence.
4. Students will plan an essay.
5. Students will write an essay.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
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 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
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- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
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Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (C) an organizing structure appropriate to the purpose, audience, and context;
 - (G) an awareness and anticipation of audience response that is reflected in different levels of formality, style, and tone.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;

- (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- Academic notebook

Targeted Vocabulary:

None

Timeframe:

75 minutes

Activity One

Orientation to the Task (Approx. 15 minutes)

Have students read the following instructions in their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

How did concepts of liberty and equality change during the 1960's Civil Rights Movement?

After reviewing the texts in this unit, write an essay in which you argue the causes of the change, explain the way in which the changes took place, and explain why a counterclaim can be refuted. Support your discussion with evidence from the text.

Refer to your essential question graphic organizer to help you answer this question and the sub-questions. To remind you, the essential question is:

How did the concept of liberty and equality change in the United States in the 1960s as a result of the Civil Rights Movement?

The sub-questions are:

1. **What changed? Was the change legal, social, political, economic, cultural?**
2. **Who was responsible?**
3. **What tactics were used? Were these legal, social, political, economic, cultural?**
4. **What challenges were faced?**

At this point, you should have some idea about what changed during the 60s in the civil rights movement. There could have been legal changes, social changes, political changes, etc. There could have been a change in who took leadership positions. There could have been changes in the tactics that were used, and in the challenges faced. What did liberty and equality mean before 1960? (To whites? To African-Americans?) What did it mean at the end of the 60s to whites? To African-Americans?

Study the evidence you have read and choose the strongest evidence. What claim does the evidence support? Write a claim that states what changes took place in the concept of liberty and equality and how those changes took place. Then, write another claim—a counterclaim.

Ask students to refer to the essential question page in Lesson 5 in their academic notebook. Explain to them that their last activity in this unit is to do what they have been preparing to do for the entire unit—to answer that question.

On an overhead, whiteboard, or chart, have students read the following task prompt:

- You will make a claim about the essential question and provide reasonable evidence for the claim using at least five sources from your readings.
- You will explain why you chose the sources you did, why you chose the evidence you did, and why you chose this claim rather than another one, based upon the evidence you have gathered over the semester.

After they have read it, entertain their questions and discuss the idea that they should be studying their evidence before they decide what claim they want to make.

- *Success in a presidential campaign most often depends upon the likability of the candidate.*
- *Success in a presidential campaign most often depends upon the amount of money that is spent.*

Discuss what kinds of evidence might be the best for each of these claims.

Discuss the concepts of sourcing, context, and corroboration in light of this assignment.

Have students turn to a partner and explain to the partner what they will be doing. Circulate to see that each student understands what has to be done.

Activity Two

Creating a Claim and Identifying Evidence (Approx. 30 minutes)

Give students time to work on this task in class. Ask them to use the chart below.

FROM THE STUDENT ACADEMIC NOTEBOOK

Claim: *(space provided)*

Source Citation:

1.

2.

3.

4.

5.

Summary of Evidence

(space provided)

Counterclaim:

(space provided)

Source Citation:

1.

2.

3.

4.

5.

Summary of Evidence *(space provided)*

Activity Three Explaining Choices (Approx. 30 minutes)

Have students write an explanation of their choices, using the format below:

FROM THE STUDENT ACADEMIC NOTEBOOK

For each source and piece of evidence supporting the claim you are making, explain **why** it is a compelling source and give support for the claim.

1. Why a good source?
 Why good evidence?
 2. Why a good source?
 Why good evidence?
- etc.

(space provided)

Explain on the next page, using a discussion of the evidence, why the claim you chose is better than the counterclaim you made.

(space provided)

Assessments:

Outcome 1:

Students will make a claim about the essential question and provide reasonable evidence for the claim using at least five sources from their readings.

| The Claim/Evidence Chart | No | Some | Yes |
|--|----|------|-----|
| Chart has reasonable claim and counterclaim. | | | |
| Evidence is from at least five sources. | | | |
| Citation of source is accurate. | | | |
| Evidence is tied to claim. | | | |

Outcome 2:

Students will explain why they chose the sources and evidence they chose.

| Answer to Question: | No | Some | Yes |
|--|----|------|-----|
| Provides reasonable explanation for choosing source (trustworthy, corroborated, etc.). | | | |
| Provides reasonable explanation for why evidence is good (related to the source; trustworthy). | | | |

Outcome 3:

Students will explain why they did not make an alternative claim, based upon evidence.

| Answer to Question: | No | Some | Yes |
|--|----|------|-----|
| Explanation includes reasons such as the evidence wasn't corroborated, the evidence was untrustworthy, there wasn't a preponderance of evidence. | | | |

Activity Four

Preparing to Write the Essay

Explain to students that even though they have already written a claim and counter-claim, in the actual essay, these are likely to change, because they will need to be combined in some way and students will need to acknowledge in their claim both (a) what changed, and (b) why. Ask them to review the various models of how these claims could be structured and to rewrite their claims.

FROM THE STUDENT ACADEMIC NOTEBOOK

Writing the claim: Some ways to structure the claim you are making are below. Use these models as guidelines for writing your claim.

America's concept of liberty and equality became (more, less) _____ during the 1960's Civil Rights Movement. Although some argue that the Civil Rights Movement changed because of _____, the evidence points to _____ (or a combination of _____, _____, and _____).

By the end of the 1960's Civil Rights Movement, America's concept of liberty and equality had change from _____ to _____. There were many reasons for that change, but the most significant one(s) was (were) _____.

The 1960's Civil Rights Movement changed the way Americans thought about liberty and equality. At the beginning of the 1960's, Americans believed _____ (or Americans were divided because _____). At the end of the 1960's, Americans believed _____ (or Americans were divided because _____).

Although many believe that _____ was the reason for these changes in belief, the most significant reason(s) was/were that _____.

Discuss these templates, then have them reconstruct their claims. They do not have to use the templates exactly, and you will need to provide guidance as students attempt to write them.

FROM THE STUDENT ACADEMIC NOTEBOOK

Write your claim

Then help them plan their essays. Have them read the outline form in the academic notebook and discuss it with them so that they understand what each part of the essay is accomplishing. Remind them that they have to say how conceptions of liberty and equality changed and why, and that their essays should provide evidence from the texts they read. When the outline has been discussed, ask students to complete the form in the Academic Notebook that structures their essay.

FROM THE STUDENT ACADEMIC NOTEBOOK

Now you will plan your essay. Begin with how you will structure it. A reasonable way to structure the essay is shown in the graphic organizer below.

1. Introductory Paragraph, ending with claim: This paragraph introduces the audience to the topic and states the position you are taking.
2. Supporting Paragraph 1: This paragraph begins to introduce the evidence you have for your claim. This evidence might be cause-effect in nature. That is, an event, key individual, political or legal action, technological reality, etc. caused changes to take place.
3. Supporting Paragraph 2: Same as above

Continue until you have used all of your best evidence. DO NOT present evidence text by text. Rather, combine the evidence for the same reason across texts.

4. Counterclaim: Tell why the opposing claim is not as good as yours.
5. Conclude: End by summarizing what you just said and explaining “so what.” Why should your audience care?

Fill in this template with the parts of your essay.

1. Introductory Paragraph, ending with claim (Write this completely).
2. Supporting paragraphs. (Outline these.)

Paragraph 1:

Paragraph 2:

Paragraph 3:

Paragraph 4:

Paragraph 5:

Etc.

Refutation of Counterclaim:

Concluding Paragraph

Again, circulate around the room, providing support, as needed.

Before they actually write the essay, ask them to look at the rubric by which the essay will be evaluated. Discuss this rubric with them.

Assessment

Outcome 4:

- The essay template planning guide

Use the following criteria to evaluate your students' work.

| | No | Some | Yes |
|---|----|------|-----|
| Claim included what changes took place and why. | | | |
| Paragraphs used evidence from the text about what caused changes to take place. | | | |
| Counterargument rebuttal included made sense. | | | |
| Conclusion both summarized and indicated significance of argument. | | | |

Activity Five

Writing the Essay

Have students write a first draft of their essay. Once that is completed, have them evaluate their essays using the rubric and, if time allows, engage in peer review by having another student read and evaluate the essays. They should discuss their peer reviews with the other student, then use the feedback and their own evaluation to revise them.

Assessment

Outcome 5:

Student will write an essay.

Use the evaluation rubric students used to evaluate their essays.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Had students read and discuss instructions and the prompt for essential questions answer.
- 2. Discussed claims and counter-claims, evidence, sourcing, context and corroboration in this assignment.
- 3. Had students create claim/evidence chart.
- 4. Had students explain why they chose the claim and the evidence they did.
- 5. Prepared students to write essay.
- 6. Had students write essay.
- 7. Had students evaluate essay.

Unit 1

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U.S. Deputy Marshals escort 6-year-old Ruby Bridges from William Frantz Elementary School in New Orleans, 1960. Photograph. AP Images through America.gov — http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/1.html.

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SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

History Unit 1

The Academic Notebook



Name

Unit 1

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Course Overview

Welcome! You are enrolled in the first history unit of the SREB Readiness Course-Literacy Ready. What does historical literacy mean? Historical literacy is the ability to read and determine meaning from historical sources whether they are primary, secondary or tertiary sources. In this course, you will take part in several activities to improving your historical literacy. While the content covered in this course is important, a principal purpose is to equip you with the tools necessary to be more successful in college coursework. To that end, the creators of the course have developed this academic notebook.

Purposes of the Academic Notebook

The academic notebook has two roles in this course. The first role of the notebook is to provide you with a personal space to record your work. The academic notebook is where you should record your thoughts about materials you are reading. For example, if you are hearing a lecture, take notes in this notebook. Use the tools in the notebook to assist you in organizing your notes.

The second role of the notebook is that of an assessment tool. Your instructor may periodically collect the notebooks and review your work to insure that you are remaining on task and to assist with any material that is causing difficulty. Your instructor may also assign tasks to be completed in the notebook, such as in-class writing assignments. At the end of this six-week unit, your instructor will review the contents of this notebook as part of your overall grade. Thus, it is important that you work seriously as this notebook becomes the (historical) record of your activity in this course.

Essential Question

The following essential question for the entire six-week unit should be used to guide your thinking when analyzing the materials presented in this class. When taking notes, come back to the question and consider how the historical sources you are analyzing help to answer these questions. The question is especially important as it represents the theme of the course. In the back of your mind, in every task you complete, you should consider this question. This is partly how historians work, and it is important for you to realize that up front. Historians, like all scientists, approach a problem and try to hypothesize a solution to the problem. Therefore, historians think thematically as they work through source material, which helps account for why two tertiary sources on the same topic may have two different perspectives on the event being studied.

How did the Civil Rights Movement of the 1960s transform the concept and practice of liberty in America?

Sub-questions:

1. What changed? Was the change legal, social, political, economic or cultural?
2. Who was responsible?
3. What tactics were used? Were these legal, social, political, economic or cultural?
4. What challenges were faced?

Lesson 1

What is History?

In this lesson, you will . . .

- Reflect and write about what historians do.
- Read and annotate the kind of documents that historians read.
- Reflect and write again about what historians do.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Read Historical Documents

In the 1950s, the South was segregated. African Americans could not attend the same schools or drink from the same fountains as whites. Black schools did not have the same resources as white schools even though the Supreme Court had said that the schools must be equal. On September 4, 1957, after a court decision called for an end to school segregation, nine black students in Little Rock, Arkansas, tried to attend Central High—a formerly all white high school. The governor of Arkansas, Governor Faubus, ordered the State Militia to keep the students from entering the building. A judge required the governor to call off the militia, and on September 24, the Little Rock Police helped the nine students enter the school. When a mob gathered that same day, the students had to escape, again with the help of the police. It finally took federal troops ordered by President Eisenhower to get the students permanently placed in the school (on September 25). Why did Governor Faubus try to keep the African Americans out of Central High? Historians argue about his motivations. Your job is to decide why you think he ordered the guards to keep the students out.

You will read documents that differ in perspective and in the claim that is being made about Governor Faubus' actions in the integration of Central High School. Read each of them to determine what they are saying about him and how and why they differ. If you would like, you may take notes on the texts themselves to help you remember the key parts that are different. Historians refer to the documents written during the time period as *primary source documents*. They use primary source documents as evidence for their interpretations of what happened in the past; the first two documents are considered primary sources.

Document #1: retrieved on 1/5/13 from:
http://scipio.uark.edu/cdm4/item_viewer.php?CISOROOT=/Civilrights&CISOPTR=341&CISOBOX=1&REC=5.

Transcript:

TO ALL TO WHOM THESE PRESENTS SHALL COME — GREETINGS:

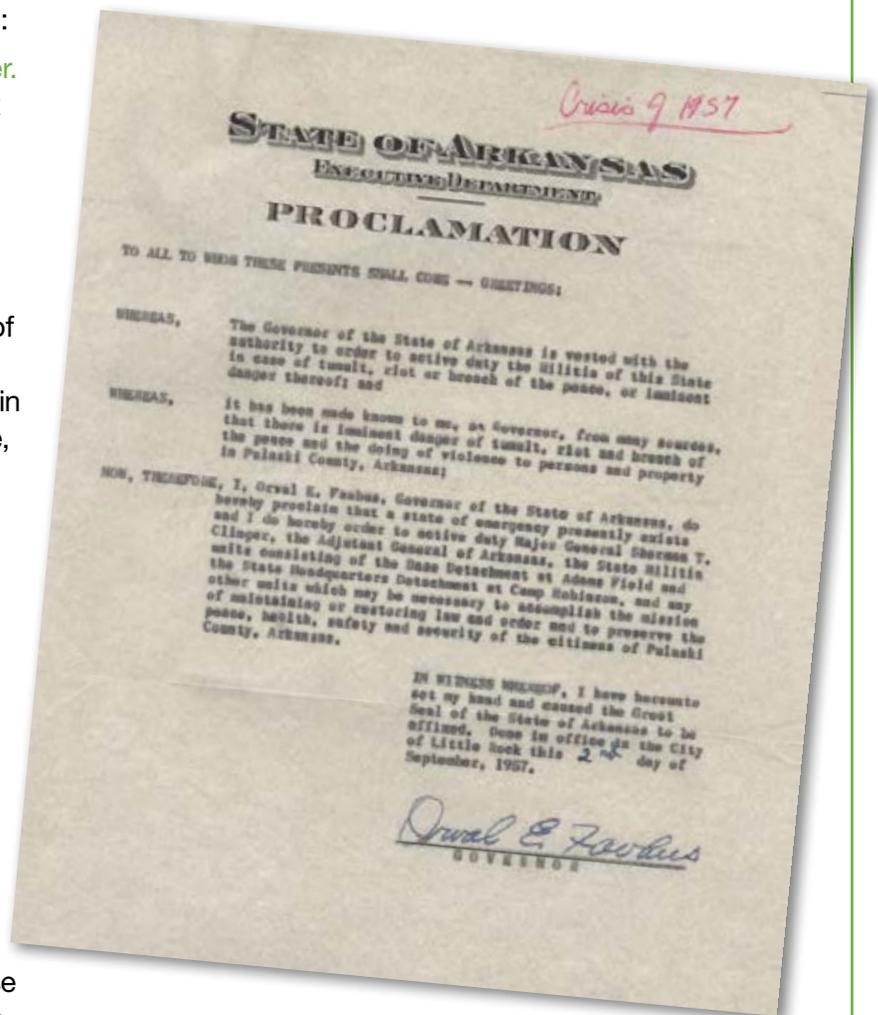
WHEREAS: The Governor of the State of Arkansas is vested with the authority to order to active duty the Militia of the State in case to tumult, riot, or breach of the peace, or imminent danger thereof; and

WHEREAS: It has been made known to me as Governor, from many sources, that there is imminent danger of tumult, riot, and breach of the peace and the doing of violence to persons and property in Pulaski County, Arkansas;

NOW, THEREFORE, I, Orval E. Faubus, Governor of the State of Arkansas do hereby proclaim that a state of emergency presently exists and I do hereby order to active duty Major General Sherman T. Clinger, the Adjutant General of Arkansas, the State Militia units consisting of the Base Detachment at Adams Field and the State Headquarters Detachment at Camp Robinson, and any other units which may be necessary to accomplish the mission of maintaining or restoring law and order to preserve the peace, health, safety and security of the citizens of Pulaski County, Arkansas.

IN WITNESS THEREOF, I have hereunto Set my hand and caused the Great Seal of the State of Arkansas to be affixed. Done in office in the City of Little Rock this 2nd day of September, 1957.

Orval E. Faubus (signature)
GOVERNOR



Document 2: Retrieved on 1/5/13 from:

http://www.eisenhower.archives.gov/research/online_documents/civil_rights_little_rock/.

TRANSCRIPT:

WAC24PD
LITTLE ROCK ARK WEP 23 344PNC
THE PRESIDENT
THE WHITE HOUSE

THE CITY POLICE, TOGETHER WITH THE STATE POLICE, MADE A VALIANT EFFORT TO CONTROL THE MOB TODAY AT CENTRAL HIGH SCHOOL. IN THE FINAL ANALYSIS, IT WAS DEEMED ADVISABLE BY THE OFFICER ON THE GROUND AND IN CHARGE TO HAVE THE COLORED CHILDREN REMOVED TO THEIR HOMES FOR SAFETY PURPOSES.

THE MOB THAT GATHERED WAS NO SPONTANEOUS ASSEMBLY. IT WAS AGITATED, AROUSED, AND ASSEMBLED BY A CONCERTED PLAN OF ACTION.

ONE OF THE PRINCIPAL AGITATORS IN THE CROWD WAS A MAN BY THE NAME OF JIMMY KARAM, WHO IS A POLITICAL AND SOCIAL INTIMATE OF GOVERNOR FAUBUS, AND WHOSE WIFE IS NOW WITH GOVERNOR'S PARTY AT THE SOUTHERN GOVERNOR'S CONFERENCE. KARAM HAS A LONG RECORD OF EXPERIENCE IN STRIKE-BREAKING, AND OTHER ACTIVITIES SUCH AS HE ENGAGED IN TODAY.

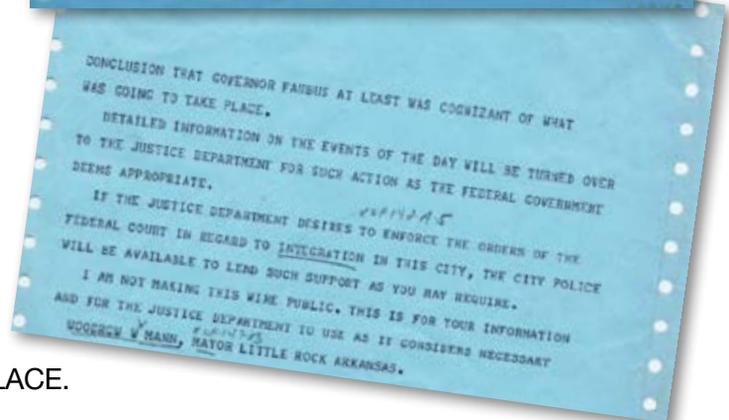
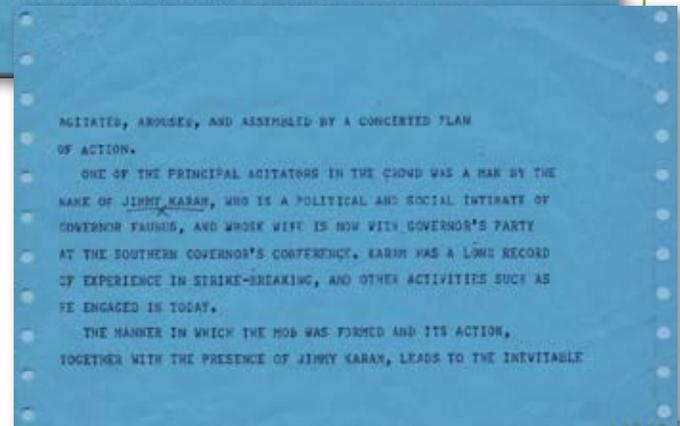
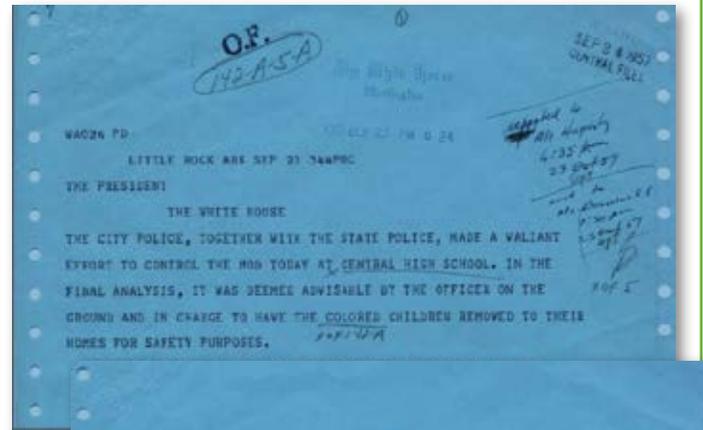
THE MANNER IN WHICH THE MOB WAS FORMED AND ITS ACTION, TOGETHER WITH THE PRESENCE OF JIMMY KARAM, LEADS TO THE INEVITABLE CONCLUSION THAT GOVERNOR FAUBUS AT LEAST WAS COGNIZANT OF WHAT WAS GOING TO TAKE PLACE.

DETAILED INFORMATION ON THE EVENTS OF THE DAY WILL BE TURNED OVER TO THE JUSTICE DEPARTMENT FOR SUCH ACTION AS THE FEDERAL GOVERNMENT DEEMS APPROPRIATE.

IF THE JUSTICE DEPARTMENT DESIRES TO ENFORCE THE ORDERS OF THE FEDERAL COURT IN REGARD TO INTEGRATION IN THIS CITY, THE CITY POLICE WILL BE AVAILABLE TO LEND SUCH SUPPORT AS YOU MAY REQUIRE.

I AM NOT MAKING THIS WIRE PUBLIC. THIS IS FOR YOUR INFORMATION AND FOR THE JUSTICE DEPARTMENT TO USE AT IT CONSIDERS NECESSARY.

WOODROW W MANN, MAYOR, LITTLE ROCK ARKANSAS.



Think about answers to the following questions:

Who wrote the documents?

When did they write them?

For what purpose were they written?

To whom were the authors of these documents writing?

What perspectives do these authors have?

What is the claim Governor Faubus is making about his placement of troops at Central High School?

What is Woodrow Mann's claim about that?

Do they provide evidence for that claim? If so, what is it?

These are questions that historians ask as they try to make sense of the past. They ask questions about the source, they consider the time period in which they were written, and they corroborate—look at the agreements and disagreements across documents.

Activity

3 Read a Historical Account

Read the third text, an excerpt (and a secondary source) taken from an account of Governor Faubus' life taken from the Encyclopedia of Arkansas History and Culture. Determine: (1) what evidence the author was using in writing this account, and (2) what he believed about Governor Faubus. Was Faubus merely trying to keep the public safe or was he determined to keep Central High School segregated for his own political purposes? You can take notes.

Document 3: History Text Excerpt

On September 2, 1957, Faubus called out the **National Guard** to block the admission of nine black pupils to Central High School. His justification was that violence threatened and he had to preserve the peace. A federal judge ordered the guardsmen removed. The students, known as the **Little Rock Nine**, returned to the school but were met by a mob of enraged segregationists. The local police, unable to control the crowd, spirited the Nine out of the building. President Dwight D. Eisenhower federalized the National Guard and dispatched Army troops to restore order and enforce the court's ruling. The troops stayed through the school year. Little Rock voted to **close its high schools** the following year in a vain attempt to thwart further integration. Then, stung by bad publicity and facing economic decline, the city voted to reopen them with token integration.

Faubus lost the battle with Eisenhower, but his actions ensured his election as governor four more times. He left office undefeated in 1967 after knocking off one opponent after another, including former governor Sid McMath, the millionaire **Winthrop Rockefeller**, and Congressman Dale Alford—all one-time allies who had turned against him.

He accumulated unprecedented power over Arkansas politics. His followers remained loyal even after the race conflict subsided. He was opposed by a substantial coalition of **African Americans** and white liberals and moderates, led by the **Arkansas Gazette**, from 1957 until he left office. During his later years in office, he reached out to black voters and won substantial support there.....

Catering to the clamors of white supremacists seemed out of character for Faubus, a figure of pronounced country dignity and unusual public reserve. His personal convictions at the time were not virulently racist; indeed, his administration had favored the black minority in several instances. For example, he hired a number of black people in state government and saw to it that historically black colleges and other institutions received financial support. He joined a fight to abolish the discriminatory **poll tax** and replace it with a modern voter registration system. And the voters who repeatedly returned him to office were apparently driven by something more than the obvious motive of racism. They seemed in part to be applauding their governor for standing up to an all-powerful federal government.

By Roy Reed, Hogeys, Arkansas in The Encyclopedia of Arkansas History and Culture, retrieved at: <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=102> on Nov 4, 2012.

Roy Reed also wrote a biography of Faubus: *The Life and Time of an American Prodigal*. Fayetteville, AR: University of Arkansas Press, 1997 and was a writer and reporter for the Arkansas Gazette. One can read about him at:

<http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=1051>.

This entry, originally published in *Arkansas Biography: A Collection of Notable Lives*, appears in the *Encyclopedia of Arkansas History & Culture* in an altered form. *Arkansas Biography* is available from the University of Arkansas Press.

**Document 4: Arkansas Gazette editorial
September 24, 1957**

The march of events in Little Rock over the last three weeks has now led to an inevitable climax.

Yesterday President Eisenhower made the hard and bitter decision he has sought to avoid. He will use federal troops to restore law and order to the City of Little Rock.

The president's language made his meaning unmistakable. To the White House reporters at Newport he read a statement in the numbered paragraphs of the old military man:

"I want to make several things very clear in connection with the disgraceful occurrences of today at Central High School in the city of Little Rock.

"1. The federal law and orders of a United States District Court implementing that law cannot be flouted with impunity by an individual or any mob of extremists.

"2. I will use the full power of the United States — including whatever force may be necessary to prevent any obstruction of the law and to carry out the orders of the federal court."

We can hope that we may yet escape the tragic spectacle of federal soldiers deployed on the streets of Little Rock for the first time since the post-Civil War period of Reconstruction.

The decision is up to the members of the riotous mob, which assembled yesterday at Central High School and finally passed beyond the control of the local police—who did their duty and did it well.

If these reckless men force the issue again this morning the federal troops will march—as they must march to restore order and end the intolerable situation in which this city now finds itself.

Arkansas Gazette, September 24, 1957

Now We Face Federal Troops

The march of events in Little Rock over the last three weeks has now led to an inevitable climax.

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to prevent any obstruction of the law and to carry out the orders of the federal court."

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The decision is up to the members of the riotous mob which assembled yesterday at Central High School and finally passed beyond the control of the local police—who did their duty and did it well.

If these reckless men force the issue again this morning the federal troops will march—as they must march to restore order and end the intolerable situation in which this city now finds itself.

After reading the four documents, what do *you* think Faubus' motivations were for trying to keep the Little Rock Nine out of Central High School? Write down at least three key ideas from the texts that helped you come to that conclusion. You may write these in a numbered list.

1.

2.

3.

Activity

4 Vocabulary

Can you explain the meaning of these words? These words will help you talk about history the way historians do.

Primary Source Document

Secondary Source Document

Sourcing

Contextualization

Contextualization

Lesson 2

Gateway Activity–Civil Rights

In this lesson, you will . . .

- Interpret photographs using the National Archives process and information about context and source.
- Begin a timeline of the Civil Rights Movement.
- Explain the role that sourcing, contextualization and chronology have in history reading.

Activity 1 will be led by your teacher in class.

Activity

2 Analyze Photographs

Photographs from the time period are considered *primary sources*.

Analyze this photograph using the steps on the next page.



Photo Analysis Worksheet

Complete the information on the worksheet for your assigned photograph(s).

Step 1. Observation

A. Study the photograph for two minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

Photo title or number:

B. Use the chart below to list people, objects and activities in the photograph.

| People | Objects | Activities |
|--------|---------|------------|
| | | |

Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

1.

2.

3.

Step 3. Questions

A. What questions does this photograph raise in your mind?

B. Where could you find answers to them?

Here is the source and contextual information for this photograph:

Designed and developed by the Education Staff, National Archives and Records Administration, Washington, DC 20408. Modified by J. Barger 9-9-12.

How does this information add to your understanding of the photograph?

Activity

3 Analyze Photographs in Groups

Analyze two more photographs in assigned groups. First conduct the National Archives analysis, then read about the source and context of the photograph in order to gain further insights.



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10

Analysis #1

A. Study the photograph for two minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

Photo title or number

B. Use the chart below to list people, objects and activities in the photograph.

| People | Objects | Activities |
|--------|---------|------------|
| | | |

Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

1.

2.

3.

Step 3. Questions

A. What questions does this photograph raise in your mind?

B. Where could you find answers to them?

Analysis #2

A. Study the photograph for two minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

Photo title or number

B. Use the chart below to list people, objects and activities in the photograph.

| People | Objects | Activities |
|--------|---------|------------|
| | | |

Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

- 1. _____
- 2. _____
- 3. _____

Step 3. Questions

A. What questions does this photograph raise in your mind?

B. Where could you find answers to them?

Source and context of the photos:

- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: September 4, 1957
Context: Elizabeth Eckford – one of nine black students attempting to attend Central High School, in Little Rock, Arkansas – is met with jeers and turned back by National Guard troops.
- Retrieved from Library of Congress:** http://www.loc.gov/rr/print/list/085_disc.html.
Taken: May, 1940, by Delano, photographer
Context: Durham, North Carolina. “At the Bus Station.” The segregation laws known as “Jim Crow” dominated the American South for three quarters of a century beginning in the 1890s. The laws affected almost every aspect of daily life, and included segregation of schools, parks, libraries, drinking fountains, restrooms, buses, trains, and restaurants. “Whites Only” and “Colored” signs were constant reminders of the enforced racial order
- Retrieved from Dallas News:**
<http://photographyblog.dallasnews.com/2013/05/today-in-photo-history-14-3.html/>.
Taken: May 14, 1961
Context: A Freedom Riders bus goes up in flames on May 14, 1961 after a firebomb was tossed through a window near Anniston, Ala. The bus, which was testing bus station segregation in the south, had stopped because of a flat tire. Passengers escaped without serious injury. (AP Photo)
- Retrieved from:**
http://biology.clc.uc.edu/fankhauser/society/freedom_rides/freedom_ride_dbf.htm.
Taken: May 21, 1961
Context: The surviving contingent of Riders took a bus from Birmingham to Montgomery, Alabama, protected by a contingent of the Alabama State Highway Patrol. However, when they reached the Montgomery city limits, the Highway Patrol abandoned them. At the bus station, a large white mob was waiting with baseball bats and iron pipes. The local police allowed them to viciously beat the Freedom Riders uninterrupted. Again, white Freedom Riders, branded “Nigger-Lovers,” were singled out for particularly brutal beatings.
- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: March 7, 1965
Context: John Lewis, the leader of Student Nonviolent Coordinating Committee, is beaten by a state trooper March 7, 1965, as he attempts to march with 600 others from Selma to Montgomery, Alabama, in a right-to-vote demonstration. The day is known as “Bloody Sunday.”
- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: November 1960
Context: U.S. Deputy Marshals escort 6-year-old Ruby Bridges from William Frantz Elementary School in New Orleans in November 1960. The first grader was the only black child enrolled in the school.
- Retrieved from Library of Congress:** <http://www.loc.gov/pictures/item/2002709628/>.
Taken: 1961
Context: Interior of Freedom Riders’ Bus, with view through window of six police cars and soldiers lining pavement.
- Retrieved from America.gov:** http://photos.state.gov/galleries/usinfo-photo/39/civil_rights_07/4.html.
Taken: 1960
Context: Members of the North Carolina Student Nonviolent Coordinating Committee, sparked sit-ins by students across the South by sitting at segregated lunch counters.

Activity

4 Reflecting on the Photographs

Think about the photographs you analyzed today. Answer the following questions:

What concepts of freedom and liberty are addressed in the photographs?

Based on what you have observed above, list three things you might infer from this photograph.

1.

2.

3.

What tactics are being used by individuals and groups in the photographs?

What reactions do you have to the photographs?

Activity

5 Create a Timeline

Return to the photographs and number them in chronological order. Then, place the events depicted in the photographs on the timeline below. Add other dates that you remember. As you complete the unit, you will continue to add dates to this timeline.

| | | | |
|----------------------------------|------------------------------------|----------------------------------|----------------------------------|
| 1950 <hr/> <hr/> <hr/> | 1951 <hr/> <hr/> <hr/> | 1952 <hr/> <hr/> <hr/> | 1953 <hr/> <hr/> <hr/> |
| 1954 <hr/> <hr/> <hr/> | 1955 <hr/> <hr/> <hr/> | 1956 <hr/> <hr/> <hr/> | 1957 <hr/> <hr/> <hr/> |
| 1958 <hr/> <hr/> <hr/> | 1959 <hr/> <hr/> <hr/> | 1960 <hr/> <hr/> <hr/> | 1961 <hr/> <hr/> <hr/> |
| 1962 <hr/> <hr/> <hr/> | 1963 <hr/> <hr/> <hr/> | 1964 <hr/> <hr/> <hr/> | 1965 <hr/> <hr/> <hr/> |
| 1966 <hr/> <hr/> <hr/> | 1967 <hr/> <hr/> <hr/> | 1968 <hr/> <hr/> <hr/> | 1969 <hr/> <hr/> <hr/> |
| 1970 <hr/> <hr/> <hr/> | Notes: <hr/> <hr/> <hr/> | | |

Activity

6 Vocabulary

Define the following terms and write down the ways in which you used the following tools of historians in this lesson.

Sourcing:

Contextualization:

Primary source documents:

Secondary Source documents:

Chronology:

Lesson 3

Anchor Text and Essential Questions

In this lesson, you will...

- Show that you understand the focus of the unit, the time period in which this unit takes place, and the kinds of questions your reading will answer through the annotations you make and the questions you ask.
- Engage in close reading of the text.
- Show that you understand targeted vocabulary.

Vocabulary:

Discipline specific vocabulary

- Universal manhood suffrage
- Abolitionist
- Jim Crow Laws
- *Brown v. Board of Education*

Words that help you discuss the discipline

- Close Reading
- Annotation
- Anchor Text

General academic vocabulary

- Endowed
- Unalienable

Activity

1 Reading an Anchor Text

Read an *anchor* text and consider an essential question that will guide your reading of the unit. An anchor text sets the stage and provides the context for the reading you will be doing in the rest of this unit. The *essential question* will keep you focused on key issues as you read the texts in the unit. This lesson will also ask you to engage in *close reading*—reading the text carefully, interpreting the meaning of what you are reading at the word level and beyond, even if you experience difficulty. It is okay to struggle with meaning and to work your way through those struggles to arrive at the most precise interpretation you can muster.

- Read the following anchor text. Highlight or mark important parts of the text and key words or words you don't know.
- As you read, write your thoughts and questions in the margin.
- If you are reading with a partner or group, stop after each paragraph and share your difficulties, thoughts, and questions.
- If you are reading with a partner or group, compile a master list of questions that you have.

The Changing Concept of Liberty and Equality in the 60s: From the Freedom Rides to the War on Poverty

We hold these truths to be self-evident, that all men are created equal; that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness.

– Thomas Jefferson, *the Declaration of Independence* (1776)

More than two centuries ago, our founding fathers created a new nation based on the principles discussed in this quote. Unfortunately, to many Americans, their words rang hollow. Unalienable rights were apparently meant only for white men of property. That, of course, would change over time – a long period of time. Could the first generation of Americans have predicted what the future would bring for the new republic they had forged? Perhaps. Jefferson became an advocate for the small farmer and the concept of universal manhood suffrage, and women like Abigail Adams and Phillis Wheatley spoke out for their gender and against the institution of slavery.

The 1820s and 30s became the “Age of the Common Man.” The abolitionist movement emerged to challenge slavery, and the bloody Civil War ended that institution in the 1860s. It led to the Fourteenth and Fifteenth Amendments that conferred citizenship on former slaves and denied the states from withholding the right to vote from any citizen on the basis of race, color, or previous condition of servitude. But, in the South, an exploitive sharecropping system took the place of slavery, and the individual states passed a series of Jim Crow laws to segregate the races and deny equal rights to their black citizens. The south even got around the Fifteenth Amendment by resorting to poll taxes and literacy tests to keep blacks from voting. The long struggle for equal rights for blacks seemingly came to a successful conclusion with the 1954 case of *Brown v. Board of Education* in which the U.S. Supreme Court declared school segregation to be unconstitutional. The following year Rosa Parks refused to give up her seat on a city bus in Montgomery, Alabama, and newly-ordained minister Dr. Martin Luther King, Jr. led a successful boycott to end segregation of the city bus system there. Black Americans were elated, believing that the Brown decision and the leadership of Dr. King in the South would quickly undermine

the Jim Crow system. Yet, in 1960, most public schools remained segregated, most blacks were still forced to the back of the bus, and a black citizen still could not sit down at a lunch counter and have a sandwich next to a white man. It would take a major civil rights movement emanating from the citizens themselves, mostly students and young people, to compel the federal government to enforce its own laws.

On June 11, 1963, President John F. Kennedy made his first major speech on Civil Rights in which he publicly embraced the standards of liberty and equality for which the young activists had strived. Almost a year later, President Lyndon B. Johnson delivered his “Great Society” speech at Ann Arbor, Michigan. These two speeches frame this Civil Rights module and an era that some say was transformative for African Americans and others say was not.

Did the concept of liberty and equality change in the United States in the 1960s?

If so, how?

If not, what kept change from happening?

Lesson 4

Everything but the Paper: Introduction to the Research Project

In this project, you will . . .

- Use primary and secondary sources in writing, demonstrating that you understand the implications of their differences.
- Identify the perspective or bias of a text author and interpret the text in light of that perspective.
- Take into account the context of a text (time period in which it was written, who the intended audience was, etc.) when interpreting a text.
- Evaluate the trustworthiness of various sources.
- Make valid interpretations of complex historical sources in writing.
- Identify the relationship among events (as contingent, coincidental, chronological, etc.).
- Engage in historical inquiry by forming hypotheses, making historical claims and providing textual evidence across multiple sources to support the claims.
- Cite appropriate sources in spoken and written arguments.

In this lesson, you will...

- Provide a topic and thesis statement for the project, "Everything but the paper."

Your task:

How did your research topic influence changes in the concept of liberty and equality during the Civil Rights Movement of the 1960's? After researching various sources on your topic, you will create a PowerPoint that showcases your topic and explains how their topic relates to question.

- Cite at least 5 sources
- Point out key elements from each source
- Address the credibility and origin of the sources
- Include a bibliography

Targeted Vocabulary:

- Document
- Sourcing
- Contextualization
- Corroboration

Week-by-week timeline for the project:

Week 1: Topic and proposed “thesis statement” (or claim).

Week 2: Find at least five sources on topic addressing your claim.

Week 3: Read, annotate, and take organized notes on the sources and create an outline for your PowerPoint.

Week 4: Create a first draft, seek input from others, and revise

Week 5: Present revised PowerPoint to class.

What are the benefits of having a step-by-step timeline?

What challenges will you face?

Activity

2 Introduction to Assignment

Assignment: Topic and Thesis Statement

Provide a topic of your choosing so long as it remains within the overall era of the American Civil Rights Movement of the 1960s and does not duplicate any of the topics being discussed in the normal course materials. For instance, you may use a topic related to sit-ins but should avoid topics related to the Freedom Riders since that is something we will examine in depth during the course.

In addition to a topic of research, you should also provide a thesis statement about the topic. The purpose of the thesis statement is to state the position you think you will be taking or the point you think you will be making in relation to your topic. Avoid large topics—the more specific the better. It may help to ask yourself a question about the topic. Your guess at an answer (your hypothesis) is your thesis statement (which may change as you gather evidence from what you read). If you have questions or need help finding a topic, please ask. Do not wait until the last minute to do this assignment, as it will require you to spend some time in the library making sure there are plenty of relevant sources.

One final note: your topic and thesis statement should contribute in some way to the overarching theme of the course—the changing perceptions of liberty in this era.

Assignment 1 is due at the beginning of class on _____.

The assignment is worth _____ points.

See the following examples on a topic in history that is not from the Civil Rights era. This example should help you write your thesis statement.

Example 1:

Topic: Discrimination against Japanese Americans in World War II.

Question about the topic: Why did the government allow discrimination against Japanese Americans during World War II?

Thesis: The government allowed discrimination against Japanese Americans in World War II because it gave people an enemy to focus on.

Example 2:

Topic: African American Women in the South after emancipation

Question about the topic: How did African American women in the South fare compared to men after emancipation?

Thesis: Although all freed slaves were better off after emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.

Evaluate the thesis statements that follow. Ask these questions for each thesis:

1. Is it clear what the project will be about?
2. Is it arguable? Is there something that has to be proven?
3. Will research be necessary to prove the thesis?

Martin Luther King died in 1963.

Strong Weak *Reasons:*

Artists in the South: 1960s

Strong Weak *Reasons:*

The Juvenile Court system was established to remove children from the adult criminal justice system and help youth reform, but over the years it became a source of punishment and imprisonment.

Strong Weak *Reasons:*

Pesticides kill thousands of farmworkers and must be stopped.

Strong Weak *Reasons:*

How did *The Jungle* make an impact on the foods we eat?

Strong Weak *Reasons:*

Notes:

Lesson 5

Reading and Annotating a Chapter

In this lesson, you will...

- Demonstrate your ability to engage in close reading by the way you analyze sentences in a history textbook chapter.
- Show through your annotations that you are identifying historically important information about the Civil Rights Movement from reading.
- Show your understanding of chronology and significance by adding to your Civil Rights timeline.
- Increase your understanding of vocabulary.
- Collect textual evidence that addresses the essential question.

Are there topics you know about that happened during this time period that Faragher is leaving out?

Judging from the guiding questions, what do you think Faragher would like you to understand about the Civil Rights Movement?

In looking at the map, what conjectures did Faragher want you to make about the movement?

Activity

2 Analyzing History Text (Close Reading)

History writing tends to be about *actors engaged in actions/tactics to meet goals within certain time periods. These actions have effects or consequences. Actors have particular motivations for pursuing their goals. Sometimes there are comparisons and contrasts between actors, goals, methods, etc.*

Engage in close reading by analyzing the following sentences to identify actors, tactics, goals, motivations and effects. (You may not find every element in every sentence.)

1. In the 1940s, African American musicians created a new form of jazz that revolutionized American music and asserted a militant black consciousness.

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

2. In the late 1940s, only about 10 percent of eligible southern black people voted, most of these in urban areas.

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

3. A combination of legal and extralegal measures kept all but the most determined black people disenfranchised.

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

4. Regarding the social differences in the North and the South...

One black preacher neatly summarized the nation's regional differences this way: *"In the South, they don't care how close you get as long as you don't get too big; in the North, they don't care how big you get as long as you don't get too close."*

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

Comparison/Contrast(s): _____

5. Regarding *Brown v. Board of Education*—Since the late 1930s, the NAACP had chipped away at the legal foundations of segregation.

Actor(s): _____

Time period(s): _____

Action(s): _____

Goal(s): _____

Effect(s): _____

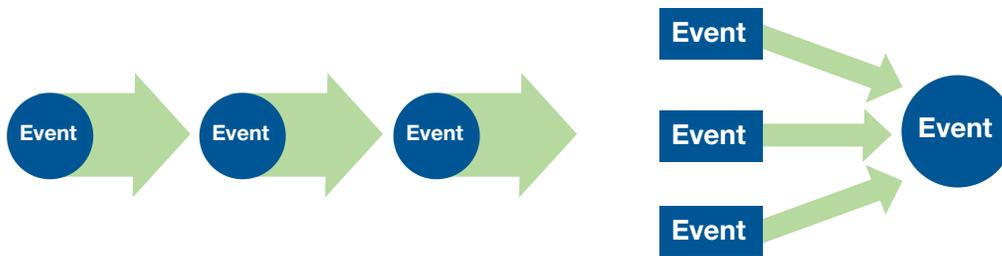
Comparison/Contrast(s): _____

Activity

3 Annotating the Text

When you annotate, you may:

- Circle key vocabulary words (discipline-specific, general words with discipline specific meanings, general academic vocabulary; words that signal bias or judgment, words that signal relationships).
- Underline or highlight key ideas (actors, actions, relationships among events, characteristics, comparison/contrast, etc.).
- Write key words or summarizing phrases in the margins.
- Define vocabulary words in the margins.
- Write your reactions to the text in the margins.
- Make connections and inferences in the margins (like aha!!).
- Draw cause-effect chains.



- Make Compare-Contrast graphs or Venn diagrams.

| Event 1 | Event 2 |
|---------|---------|
| | |

- Make or add to a timeline.
- Make any other annotation that helps you understand and think about the information.

Activity 4 is vocabulary review in class.

Activity

5 Adding to the Timeline

As you complete the unit, you will continue to add dates to this timeline.

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

Notes:

Annotate *Origins of the movement*.

When you are finished, please complete this checklist.

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source.
- 2. Information that signaled:
 - a. cause/effect
 - b. comparison/contrast
 - d. chronology (words signaling time)
 - c. bias or judgment
- 3. Unknown general academic vocabulary.
- 4. Key actors, actions, goals and tactics, etc.
- 5. Political, social, economic, legal or other characterizations of information.
- 6. Marginal notations that show:
 - a. summarizing
 - b. inferencing
 - c. reacting

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

Graphic Organizer

Collect textual evidence that addresses the essential question. Use these graphic organizers to help you keep track of the evidence in each of your readings to help you answer the above question. It will help if you reference the page number(s) or other identifying information that can lead you back to sections of text that helped you answer the questions.

| Name of text: Faragher, Chapter 28, "Origins of the Movement" | |
|--|--|
| What time period did this text section cover? | |
| What was the concept of liberty and equality at that time? | |
| Were the influences during the time period political, economic or cultural? | |
| Who were the major figures? | |
| What were their goals? | |
| What tactics were used? Were these legal, social, political, economic or cultural? | |
| What challenges were faced? | |

Name of text: Faragher, Chapter 28, "No easy road to freedom"

What time period did this text section cover?

What was the concept of liberty and equality at that time?

Were the influences during the time period political, economic or cultural?

Who were the major figures?

What were their goals?

What tactics were used?
Were these legal, social, political, economic or cultural?

What challenges were faced?

| Text | Author / Source | Context | Author Perspective | Trustworthiness |
|-------------------------|--|---------------------|---|-----------------|
| Faragher, Chapter 28 | Author: Faragher, a historian and Yale, former social work- er. This is a tertiary document. | Last edited in 2009 | High school students who are taking AP American history. | |
| | | | | |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |
| | | | | |

Lesson 6

Taking and Integrating Notes from Lecture

In this lesson, you will . . .

- Take lecture notes from a PowerPoint lecture.
- Synthesize your lecture notes with your chapter annotations.
- Add to your vocabulary knowledge.

Activity

1 Modified Cornell Notes

Take notes on a lecture by your instructor using only one column on the page below.

- Because the lecture will be fast, you will need to paraphrase rather than write notes word-for-word.
- Don't use complete sentences, and don't try to copy down every word from the text or the lecture.
- Use abbreviations, whenever possible. Develop a shorthand of your own, such as using "&" for the word "and", w/ for with, b/c for because, and so on.
- Using a laptop? No problem: make yourself a template using the 'tables' feature and mark off the lines for each page using the line in the appropriate feature on your toolbar, just as you would on a sheet of notebook paper. Type your notes in the boxes.

Name:

Date:

Topic:

Lecture

Chapter

| | | |
|----------------|----------------|-------|
| Name: | | Date: |
| Topic: | | |
| Lecture | Chapter | |
| | | |

| | | |
|----------------|----------------|-------|
| Name: | | Date: |
| Topic: | | |
| Lecture | Chapter | |

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|--|----------------|-------|
| Name: | | Date: |
| Topic: | | |
| Lecture | Chapter | |
| <p>When you have completed the notes, take a look at the topics that the lecture covered. Then look at Faragher, Chapter 28. If that topic was covered in the same way or it was not covered, or it said the same thing but not as completely, you do not have to write notes from Faragher. If Faragher added information or added another topic or insight—write notes from Faragher on the right side of the paper, next to the related topic in the lecture. In this way, you are integrating the two sets of notes. This will be helpful to you when you study this information for a test.</p> | | |

Read the following statements and compare and contrast them.

Lecture: *Once in the North, black Americans found they could vote, but they often faced the same residential and educational segregation they had experienced in the South.*

Chapter: *With the growth of African American communities in northern cities, black people gained significant influence in local political machines in cities such as New York, Chicago, and Detroit. Within industrial unions such as the United Automobile Workers and the United Steel Workers, white and black workers learned the power of biracial unity in fighting for better wages and working conditions.*

Lecture: *Ike reluctantly became the first President since Radical Reconstruction to use troops in support of black rights.*

Chapter: *At first, President Eisenhower tried to intervene quietly, gaining Faubus's assurance that he would protect the nine black children. But when Faubus suddenly withdrew his troops, leaving the black students at the mercy of the white mob, Eisenhower had to move.*

How are they different?

What accounts for the difference?

Lesson 7

Research Project– Identifying and Annotating Sources

In this lesson, you will . . .

- Find five sources for your research project using the school’s Internet sources.
- Annotate the sources, summarize and evaluate them.
- Follow MLA format for citing the source.

Activity

1 Pre-reading

1. Refer to your thesis statement or claim. Revise it, if you wish.
2. Read the directions for this next part of your research project.

Assignment: Identifying and Annotating Sources

The next assignment for your research project is to supply five sources. Please follow MLA format when citing your sources. You are welcome to use Internet sources; however, remember to use the websites sanctioned by the school library rather than random Internet sources. If you have any doubts about whether a website is appropriate or not, please ask for assistance. In this course, we will spend time with the librarians on campus discussing the resources available in the library and in the online databases. A librarian can quickly bring you up to speed on the resources available online.

In addition, you will be required to annotate your sources. After annotating you will write a brief summary and an evaluation of each of your sources. Following each of your MLA citations, add a paragraph about the source's content and evaluate the author's perspective, the time period of writing, and the source's relevance to your research topic.

**This assignment is worth _____ and is due _____
at the beginning of class. Late assignments will not be accepted.**

Do not hesitate to contact me if you have questions.

Example:

Topic: African American Women in the South after Emancipation.

Question about the topic: How did African American women in the South fare compared to men after emancipation?

Thesis: Although all freed slaves were better off after emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.

Tolman, Tristan L. "The Effects of Slavery and Emancipation on African-American Families and Family History Research." Crossroads (March 2011): 6. Database you used, Your School Library Name, Your City. dd Mon.yyyy <internet URL>.

Tolman says that after Emancipation, most black mothers quit working in the fields even though some white planters tried to keep them working, according to the Freedmen's Bureau in Georgia. But they didn't stay at home for long. According to a journalist from the time period, there was so much poverty, women and their children had to help out their husbands who rented land or were sharecroppers.

Credibility: Somewhat to very credible

Tolman is a genealogist writing in a journal from Missouri Southern State University fairly recently (2011). One reason for writing the article is to discuss how to find out about African American genealogy (which can be hard because of slavery). Because she is a genealogist, she is careful to write based upon evidence. Every time she makes a statement, she tells what her sources of information are. For example, she found out that land owners tried to keep African American women in the fields from the Freedmen's Bureau in Georgia, and she quotes a journalist from 1875 as her source. Therefore, I think that what she says is as trustworthy as it can be, given her sources. I'm not sure how trustworthy a journalist might be, but that may have been the only information she had. Also, she seems to paint a positive picture of African American life, saying at one point that, "The evidence testifies in favor of the resilience of the African-American family."

This article doesn't really say that women's lives were harder than men's, except that many had to work in the fields AND take care of their households. Here is the actual text from which this summary was created.

Parents and children were more often able to live under the same roof, and by 1870, a large majority of blacks lived in two parent households. Newly freed blacks reaffirmed their commitment to God and religion by organizing churches that sunk deep roots in Southern soil.

After emancipation, most black mothers quit working in the fields and became full-time homemakers. Some white planters lamented this loss in the labor force, and one planter even appealed to the head of the Freedmen's Bureau in Georgia for measures to require black women to return to the fields. Nevertheless, black women almost universally withdrew from field labor, sending a clear message that their families came first. Unfortunately, the opportunity for black women to remain at home was often short-lived. The dire poverty of most black families made it necessary for fathers and mothers to contribute to the family income. One journalist, Charles Nordhoff, explained in 1875, "Where the Negro works for wages, he tries to keep his wife at home. If he rents land, or plants on shares, the wife and children help him in the field." Even if they worked in the fields, however, freedwomen continued to fulfill their housekeeping roles as well.

Evaluate your summary.

Checklist for Writing a Summary in History:

- 1. Summary begins with main point or claim from reading related to topic or question.
- 2. Summary includes major support for the claim.
- 3. Summary does not include smaller details or unrelated topics or facts.
- 4. Summary is in your own words—no quotes (these can be identified in your annotations).
- 5. When you read your summary, it makes sense—it is coherent and logical.
- 6. Citation uses MLA or teacher approved format.

Activity

2 Identify, Read and Annotate Sources

- Evaluate your source and context before you decide a source is worthwhile.
- Make sure it provides information about your topic.
- Once you've identified a trustworthy source, annotate it, paying attention to the information that addresses your topic.
- After reading and annotating your source, fill out the chart on the following pages.

Reading 1 Citation

Summary:

Credibility:

Rate the text's credibility: 1 = not credible; 2 = somewhat credible; 3 = very credible

1 2 3

Explain:

Relevance: Describe how this text addresses your research topic.

Reading 2 Citation

Summary:

Credibility:

Rate the text's credibility: 1 = not credible; 2 = somewhat credible; 3 = very credible

1 2 3

Explain:

Relevance: Describe how this text addresses your research topic.

Reading 3 Citation

Summary:

Credibility:

Rate the text's credibility: 1 = not credible; 2 = somewhat credible; 3 = very credible

1 2 3

Explain:

Relevance: Describe how this text addresses your research topic.

Reading 4 Citation

Summary:

Credibility:

Rate the text's credibility: 1 = not credible; 2 = somewhat credible; 3 = very credible

1 2 3

Explain:

Relevance: Describe how this text addresses your research topic.

Reading 5 Citation

Summary:

Credibility:

Rate the text's credibility: 1 = not credible; 2 = somewhat credible; 3 = very credible

1 2 3

Explain:

Relevance: Describe how this text addresses your research topic.

Your next work in class on this research project will be in a future lesson.

Lesson 8

Identifying Historical Claims and Evidence

In this lesson, you will . . .

- Identify implicit and explicit claims made by historians in a PBS Special video.
- Describe the evidence for those claims.
- Corroborate evidence.
- Develop a sense of argumentation in history.
- Add to your essential question organizer.
- Add to your discipline-specific vocabulary.

Activity

1 Orientation to the Task

Write down three observations that you inferred about the Freedom Riders.

1.

2.

3.

Activity

4 Writing an Argument Paragraph

Identify one claim from the PBS Special and the evidence provided for the claim. Rate the trustworthiness of the evidence on a one to four scale (1 = not at all trustworthy; 4 = extremely trustworthy), and explain your rating.

Claim and Evidence 1:

Rating: 1 2 3 4

Explanation:

Claim and Evidence 2:

Rating: 1 2 3 4

Explanation:

Evidence 3:

Rating: 1 2 3 4

Explanation:

List the various sources used in the PBS Special:

1.

2.

3.

4.

5.

On the next page, write a summary of the argument you identified previously. Remember an argument consists of a claim and evidence. The evidence has to be reasonable and put into a context that makes sense. Pay attention to the model your teacher provided.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a template for student notes or responses.

Activity

6 Add to the Timeline

What events about the Freedom Riders are significant enough to add to the timeline? Discuss this in class and have a rationale for adding each event.

Activity

7 Vocabulary

As a class, determine which discipline-specific words to add to the discipline-specific word list. Also, talk through with a partner the meaning of the following words that help you understand the discipline:

Corroboration

Claim

Evidence

Argument

Lesson 9

Taking History Exams

In this lesson, you will . . .

- Generate your own exam reviews.
- Learn to ask and answer higher-level questions.
- Use group testing as a way to increase your ability to explain and understand history concepts.
- Evaluate your own exam performance.

Activity

1 Exam Preparation

Read about two test preparation strategies.

The Talk-Through

A talk-through is a method of preparing and reviewing for an exam that involves practicing and rehearsing aloud the key ideas of a text or events in history. A talk through is very similar to a lecture that you would give someone. In fact, when giving a talk through, you should imagine being an instructor giving a lecture to students who know very little about the topic you are teaching. Use your notes and the texts as prompts to help you say the information out loud, but when you are doing the talk-through, you should not be looking at their notes. Refer to them only when they get stuck.

Reciprocal Questioning

In this strategy, you will use the history information you have learned so far to create 10 questions. Use these questions to quiz classmates over the material as a way to prepare for the quiz, and they will use their questions to quiz you. You should remember to include questions from the textbook, documents, and videos.

Use the following guidelines to create questions.

- Avoid definitional questions. Ask higher-level questions using words such as *why*, *how*, *explain*, or *compare and contrast*. For example, it is much better to ask a question such as “*Compare and contrast the strategies used by MLK to those used by Malcolm X*” or, “*Explain the arguments used by southern states to defy Brown v. Board of Education,*” rather than “*What is Brown v. Board of Education?*”
- Think about what you know is important to understand in history and create questions that get at those understandings: *cause/effect*, *chronology*, or *other relationships among events; analysis of actors, goals and methods; perspective taking (which requires a focus on sourcing and contextualization)*, etc.
- Predict short answer and essay items (even if you are taking multiple-choice tests) because it will help you check your knowledge of an entire concept, rather than one small part.
- Ask questions that require application, analysis or interpretation of ideas. These are the types of questions you will be asked on the exam.
- Rather than focusing on dates, focus on chronology and cause/effect.
- Ask questions that make people really think about history.

(General hint: if it takes more words to ask the question than to answer it, ask a tougher question.)

Activity

2 Engage in the Talk-Through

First, engage in the talk-through. Using notes, the chapter and other materials, take turns talking through the information with a partner. As you talk (without looking), your partner will monitor what you are saying for accuracy and completeness. When your partner talks, you will monitor the information.

Activity

3 Create Questions and Quiz Each Other

Second, using your notes, chapter and other materials, create 10 questions and answer them. Then use these questions to quiz people in your group.

Questions:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Write answers on the next page.

Activity

4 Taking the Exam

Exam Answers:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Activity

5 Evaluation of Exam Performance

Group Exam Evaluation

The purpose of this evaluation is to help you learn from your experience preparing for and taking the exam. Think about how you felt about your level of preparation before the exam, where you focused your effort and how you felt taking both the individual and group portions of the exam.

- a. What went right? Analyze the exam to discuss what you did well and what helped your thinking about this information?

- b. What went wrong? Analyze the exam to discuss areas you might want to work on. In this analysis, think about the errors you made and diagnose the nature of your difficulties as they relate to the information, higher level thinking expected or your beliefs about history and history learning. Note: Do not just describe a difficulty; you need to analyze your thinking. (e.g., a poor diagnosis would be “I was confused” or “I picked the wrong answer;” a good diagnosis would provide a reason for the errors “I thought that the Civil Rights Act of 1964 was the Voting Rights Act”).

- c. What will I do differently next time? Conduct an overall assessment of your exam performance. This is where you will look for patterns to your errors, think about particular aspects of the exam that may have been difficult for you, types of questions you missed, general concepts that were difficult, etc. In your assessment write about how understanding these issues will impact your history exam taking in the future.

Activity

6 Peer Evaluation

This is an opportunity to evaluate the contributions of your teammates to group exams. Please write the names of your teammates in the spaces below and give them the scores that you believe they earned. You will have 10 points available to distribute for each member or your group, not counting yourself (e.g., if you are in a group of six people, you each will have 50 points to distribute, a group of five would have 40 points, etc.). If you believe everyone contributed equally, then you should give everyone 10 points. If everyone in the group feels the same way, you will all have an average of 10 points and receive 100 percent of the group score. An average of nine would receive 90 percent of the group exam score, etc. Be fair and accurate in your assessments. If someone in your group didn't contribute adequately (i.e., had not studied or didn't communicate with the rest of the group) give him or her fewer points. If someone worked harder than the others you have the option of giving a larger share of the points.

There are some rules that you must observe in assigning points:

- This is not a popularity contest. Don't give anyone a grade that they don't deserve (high or low) for personal reasons or otherwise.
- Contributing to the group does not simply mean they gave the most correct answers. Asking good questions, challenging the group, etc., are also ways to contribute.
- You cannot give anyone in your group more than 15 points.
- You do not have to assign all of your group points, but you cannot assign more than the total number of points allowed for each group (i.e., (number of group members minus one) times 10 points).

Period (include period, time and day):

Name:

Group Member:

Score:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

Indicate why you gave someone more than 10 points.

Indicate why you gave someone less than 10 points.

If you were to give yourself a score, what would it be? Why?

Lesson 10

Analyzing Political Cartoons

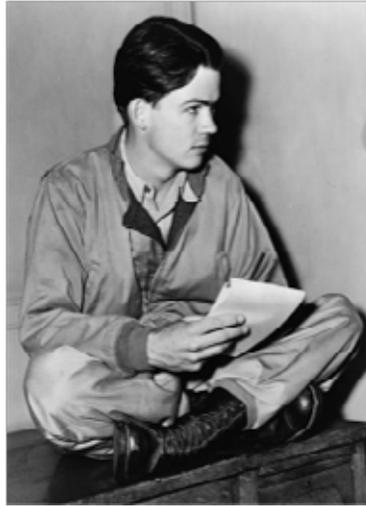
In this lesson, you will . . .

- Describe the claims implicit in political cartoons.
- Describe the techniques used in political cartoons.
- Use sourcing to help you describe the viewpoint of the cartoonist.
- Learn to analyze cartoons for the techniques of symbolism, exaggeration, irony, labeling and analogy.

Activity

1 Orientation to the Task

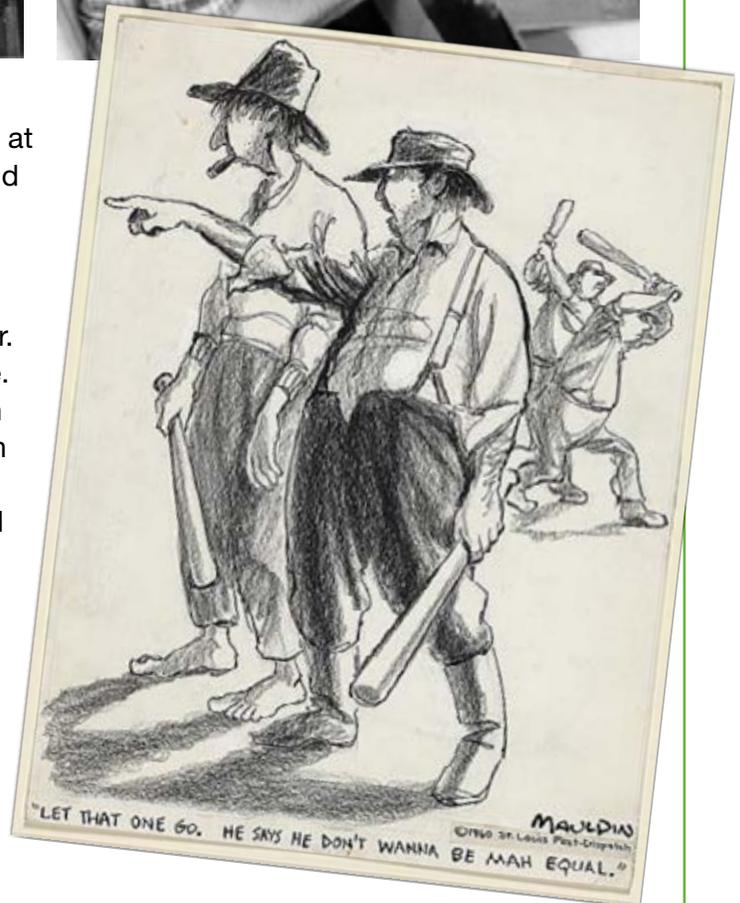
These photographs show Bill Mauldin, a political cartoonist; the first photograph is World War II, and the second is in 1945, when, at the age of 23, he won his first Pulitzer Prize. The third is from 1965.



Bill Mauldin began drawing cartoons as a teenager growing up in New Mexico. He joined the U.S. Army at age 19 and fought on the European front during World War II.

In 1944, Mauldin, who had been producing cartoons for his unit's 45th Division News, became a full-time cartoonist for Stars and Stripes, a military newspaper. His work on that newspaper won him a Pulitzer Prize. Bill Mauldin was a champion of the oppressed. Soon after his return to the United States in 1945 he began attacking segregationists and the Ku Klux Klan. By the 1960s, when the Civil Rights movement gathered momentum, he had further honed his skills as a cartoonist. Bill Mauldin never left his readers in doubt about his opinions, and on the issue of race relations in the United States he was forceful. While he tackled a number of issues as a political cartoonist, Mauldin would say in an interview at his retirement: "The one thing that meant the most to me and that I got involved in was the whole civil rights thing in the sixties."

Look at this cartoon. Before you analyze the cartoon itself, describe what was happening at the time the cartoon was created. You may review your annotations, timelines and other materials for help.



"Let that one go. He says he don't wanna be mah equal." March 2, 1960

Activity

2 Identifying a Claim in a Political Cartoon

- What claim is Mauldin making in the above cartoon?
- What evidence led you to identify that claim?
- What can be inferred about the men in the cartoon from their appearance and language?
- What is ironic about the speaker’s statement?
- What is the attitude of the speaker toward the unseen civil rights activist?
- What is the attitude of the unseen civil rights activist?

Political cartoonists used particular techniques to make their points. Read the following cartoon analysis guide provided by the Library of Congress.

| Political Cartoon Analysis Guide | |
|----------------------------------|--|
| Symbolism | Cartoonists use simple objects or symbols to stand for larger concepts or ideas. After you identify the symbols in a cartoon, think about what the cartoonist means each symbol to stand for. |
| Exaggeration | Sometimes cartoonists overdo, or exaggerate, the physical characteristics of people or things in order to make a point. When you study a cartoon, look for any characteristics that seem overdone or overblown. (Facial characteristics and clothing are some of the most commonly exaggerated characteristics.) Then, try to decide what point the cartoonist was trying to make by exaggerating them. |
| Labeling | Cartoonists often label objects or people to make it clear exactly what they stand for. Watch out for the different labels that appear in a cartoon, and ask yourself why the cartoonist chose to label that particular person or object. Does the label make the meaning of the object clearer? |
| Analogy | An analogy is a comparison between two unlike things. By comparing a complex issue or situation with a more familiar one, cartoonists can help their readers see it in a different light. After you’ve studied a cartoon for a while, try to decide what the cartoon’s main analogy. What two situations does the cartoon compare? Once you understand the main analogy, decide if this comparison makes the cartoonist’s point more clear to you. |
| Irony | Irony is the difference between the ways things are and the way things should be, or the way things are expected to be. Cartoonists often use irony to express their opinion on an issue. When you look at a cartoon, see if you can find any irony in the situation the cartoon depicts. If you can, think about what point the irony might be intended to emphasize. Does the irony help the cartoonist express his or her opinion more effectively? |

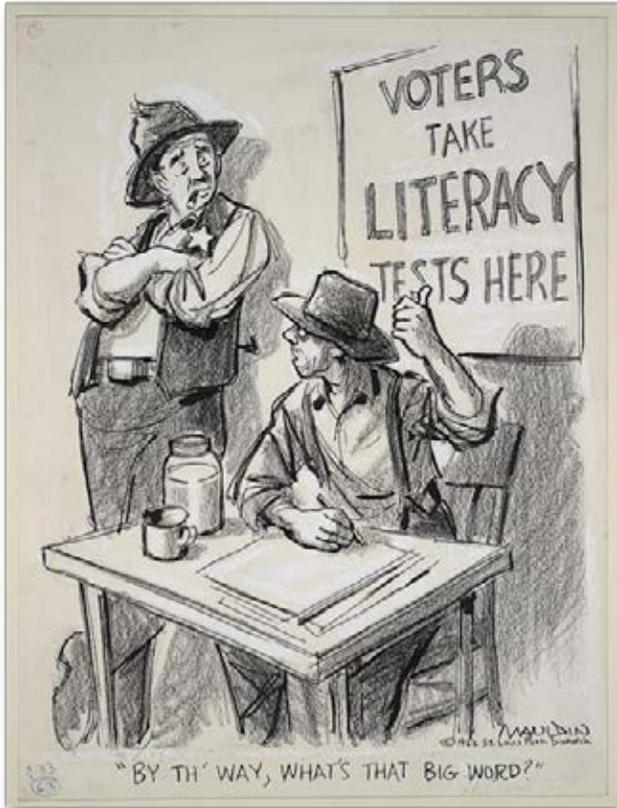
In addition to identifying the persuasive techniques and thinking about the source and context of the cartoon, ask these questions:

What issue is this political cartoon about?

What do you think is the cartoonist's opinion or claim about this issue?

What other opinion can you imagine another person having on this issue?

Analyze one or two of the following cartoons by Bill Mauldin using the graphic organizer on the next page.



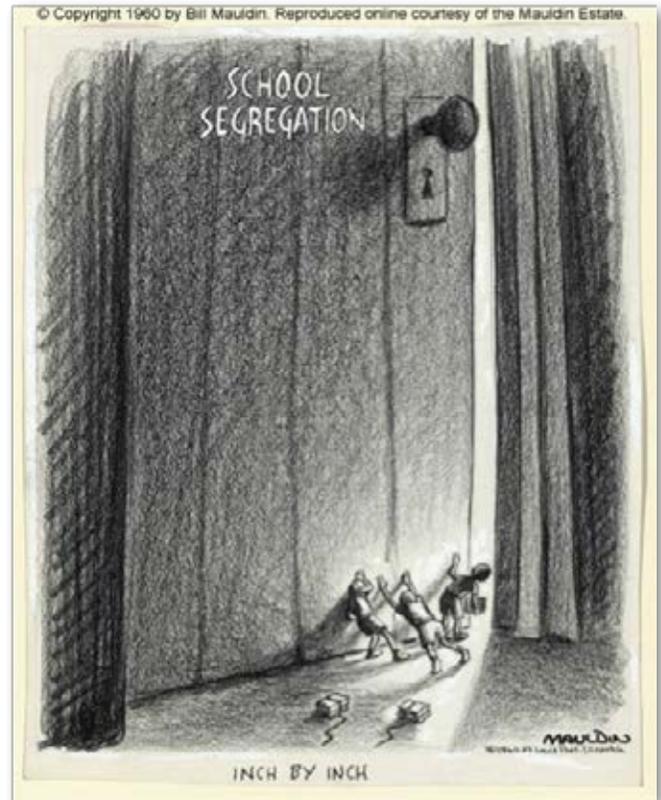
1962. St. Louis Post-Dispatch



1962. Chicago Sun Times



1963. Chicago Sun Times



1960. Mauldin Estate

| | Cartoon 1: | Cartoon 2: |
|--|------------|------------|
| Who is the cartoonist and in what context was this cartoon written? | | |
| Who was the cartoonist's audience? | | |
| For what purpose was this cartoon made? What reaction from the audience is he seeking? | | |
| What is this cartoon about? | | |
| What persuasive techniques did the cartoonist use? | | |
| What claim is the cartoonist making? (What opinion is he stating? What is his attitude?) | | |
| What evidence do you have that this is his claim? | | |
| What other opinions might people from that time period have? | | |
| Does this cartoon help you to understand the Civil Rights Movement better? Why or why not? | | |

Lesson 11

Comparing Two Presidential Speeches

In this lesson, you will . . .

- Identify similarities and differences in the two speeches and explain them.
- Determine whether or not you can explain the differences and the similarities in the speeches using the contextual information in the chapter or whether there is some other explanation for the differences.
- Add information to your essential questions organizer from the chapter excerpt.

G-SPRITE

You will use a strategy called G-Sprite as you complete the reading of the materials in this lesson. It should help you keep the essential questions in mind as you read from the various sources. G-Sprite helps you pay attention to some of the different categorizations of historical information that historians use (political, social, economic, and so on. Review this strategy and think about what you have already learned. Can you think about in what category an action like *Brown v. Board of Education* can be placed? How did technology affect the Civil Rights Movement? What kinds of tactics did the Civil Rights activists use? Were they political? Social? Religious? Were they a combination of these things?

G-SPRITE

Geography: (human interactions with the environment) Includes the physical location of civilizations, how geographical features influence people, how people adapted to the geographical features, demography and disease, migration, patterns of settlement.

Social: Includes living conditions, gender roles and relations, leisure time, family and kinship, morals, racial and ethnic constructions, social and economic classes, and ways these are changing or being challenged.

Political: Includes political structures and forms of governance, laws, tax policies, revolts and revolutions, military issues, nationalism.

Religious: Includes belief systems, religious scriptures, the church/religious body, religious leaders, the role of religion in this society, impact of any religious divisions/sects within the society.

Intellectual: Includes thinkers, philosophies and ideologies, scientific concepts, education, literature, music, art and architecture, drama/plays, clothing styles and how these products reflect the surrounding events.

Technological: (anything that makes life easier) Includes inventions, machines, tools, weapons, communication tools, infrastructure (e.g., roads, irrigation systems), and how these advances changed the social and economic patterns.

Economic: Includes agricultural and pastoral production, money, taxes, trade and commerce, labor systems, guilds, capitalism, industrialization, and how the economic decisions of leaders affected the society.

Activity

2 Reading the Chapter Excerpt

Read this new portion of the Faragher chapter. Later read the two speeches. As you read the chapter excerpt, consider what was happening in the intervening time between the two speeches. Later, as you read the two speeches for similarities and differences, you will be asked to decide whether or not you can explain the similarities and differences in the two speeches by using the contextual information you read in the chapter, or whether there is some other explanation for the differences.

- Annotate as you read.
- Use G-Sprite as a strategy—that is, read to identify geographical, social, political, religious, intellectual, technological, and economic forces.
- Use SOAPStone as an analysis tool.
- Pay attention to vocabulary, analyzing words in context and supplying synonyms for unknown words.
- Add information to the essential question chart from the chapter excerpt.
- Complete the similarities/differences chart using information from the two speeches.
- Remember that the ultimate purpose for reading these texts is to determine how the Civil Rights Movement changed during the 1960s.

Farragher, pages 19-30 (see Appendix).

Essential Questions Organizer—refer to this chart in previous lessons.

Activity

3 Considering the Text

As you read and after, consider the answers to the following questions:

1. What in the text are significant enough to add to a timeline?

What makes them important?

2. What goals did the historical actors in these events have?

What issue were they trying to address?

How would you categorize each of the tactics? Make a chart with goals in one axis and tactics in another. In another column, put what G-SPRITE elements the tactics represent.

Birmingham March

| Goals | Tactics | G-SPRITE |
|--------------|----------------|-----------------|
| 1. | | |
| 2. | | |
| 3. | | |

4. After reading the chapter excerpt and using the essential question organizer, did the Civil Rights Movement change during the 60s?

If so, how?

What evidence from this chapter excerpt do you have that the movement changed?

5. What do these three excerpts say about changes in the Civil Rights Movement?

The black unemployed and working poor who joined in the struggle brought a different perspective from that of the students, professionals and members of the religious middle class who had dominated the movement before Birmingham. They cared less about the philosophy of nonviolence and more about immediate gains in employment and housing and an end to police brutality.

While President Johnson and his liberal allies won the congressional battle for the new civil rights bill, activists in Mississippi mounted a far more radical and dangerous campaign than any yet attempted in the South.

Frustrated with the limits of nonviolent protest and electoral politics, younger activists within SNCC found themselves increasingly drawn to the militant rhetoric and vision of Malcolm X.

6. What words did you struggle with as you read?

Activity

4 Reading Two Presidential Speeches

Kennedy's Civil Rights Speech, June 11, 1963

Retrieved from: <http://millercenter.org/scripps/archive/speeches/detail/3375>.

Miller Center, University of Virginia

Good evening, my fellow citizens:

This afternoon, following a series of threats and defiant statements, the presence of Alabama National Guardsmen was required on the University of Alabama to carry out the final and unequivocal order of the United States District Court of the Northern District of Alabama. That order called for the admission of two clearly qualified young Alabama residents who happened to have been born Negro.

That they were admitted peacefully on the campus is due in good measure to the conduct of the students of the University of Alabama, who met their responsibilities in a constructive way.

I hope that every American, regardless of where he lives, will stop and examine his conscience about this and other related incidents. This Nation was founded by men of many nations and backgrounds. It was founded on the principle that all men are created equal, and that the rights of every man are diminished when the rights of one man are threatened.

Today we are committed to a worldwide struggle to promote and protect the rights of all who wish to be free. And when Americans are sent to Vietnam or West Berlin, we do not ask for whites only. It ought to be possible, therefore, for American students of any color to attend any public institution they select without having to be backed up by troops.

It ought to be possible for American consumers of any color to receive equal service in places of public accommodation, such as hotels and restaurants and theaters and retail stores, without being forced to resort to demonstrations in the street, and it ought to be possible for American citizens of any color to register and to vote in a free election without interference or fear of reprisal.

It ought to be possible, in short, for every American to enjoy the privileges of being American without regard to his race or his color. In short, every American ought to have the right to be treated as he would wish to be treated, as one would wish his children to be treated. But this is not the case.

The Negro baby born in America today, regardless of the section of the Nation in which he is born, has about one-half as much chance of completing a high school as a white baby born in the same place on the same day, one-third as much chance of completing college, one-third as much chance of becoming a professional man, twice as much chance of becoming unemployed, about one-seventh as much chance of earning \$10,000 a year, a life expectancy which is seven years shorter, and the prospects of earning only half as much.

This is not a sectional issue. Difficulties over segregation and discrimination exist in every city, in every State of the Union, producing in many cities a rising tide of discontent that threatens the public safety. Nor is this a partisan issue. In a time of domestic crisis men of good will and generosity should be able to unite regardless of party or politics. This is not even a legal or legislative issue alone. It is better to settle these matters in the courts than on the streets, and new laws are needed at every level, but law alone cannot make men see right.

We are confronted primarily with a moral issue. It is as old as the scriptures and is as clear as the American Constitution.

The heart of the question is whether all Americans are to be afforded equal rights and equal opportunities, whether we are going to treat our fellow Americans as we want to be treated. If an American, because his skin is dark, cannot eat lunch in a restaurant open to the public, if he cannot send his children to the best public school available, if he cannot vote for the public officials who represent him, if, in short, he cannot enjoy the full and free life which all of us want, then who among us would be content to have the color of his skin changed and stand in his place? Who among us would then be content with the counsels of patience and delay?

One hundred years of delay have passed since President Lincoln freed the slaves, yet their heirs, their grandsons, are not fully free. They are not yet freed from the bonds of injustice. They are not yet freed from social and economic oppression. And this Nation, for all its hopes and all its boasts, will not be fully free until all its citizens are free.

We preach freedom around the world, and we mean it, and we cherish our freedom here at home, but are we to say to the world, and much more importantly, to each other that this is a land of the free except for the Negroes; that we have no second-class citizens except Negroes; that we have no class or cast system, no ghettos, no master race except with respect to Negroes?

Now the time has come for this Nation to fulfill its promise. The events in Birmingham and elsewhere have so increased the cries for equality that no city or State or legislative body can prudently choose to ignore them.

The fires of frustration and discord are burning in every city, North and South, where legal remedies are not at hand. Redress is sought in the streets, in demonstrations, parades, and protests which create tensions and threaten violence and threaten lives.

We face, therefore, a moral crisis as a country and as a people. It cannot be met by repressive police action. It cannot be left to increased demonstrations in the streets. It cannot be quieted by token moves or talk. It is a time to act in the Congress, in your State and local legislative body and, above all, in all of our daily lives.

It is not enough to pin the blame on others, to say this is a problem of one section of the country or another, or deplore the fact that we face. A great change is at hand, and our task, our obligation, is to make that revolution, that change, peaceful and constructive for all.

Those who do nothing are inviting shame as well as violence. Those who act boldly are recognizing right as well as reality.

Next week I shall ask the Congress of the United States to act, to make a commitment it has not fully made in this century to the proposition that race has no place in American life or law. The Federal judiciary has upheld that proposition in a series of forthright cases. The executive branch has adopted that proposition in the conduct of its affairs, including the employment of Federal personnel, the use of Federal facilities, and the sale of federally financed housing.

But there are other necessary measures which only the Congress can provide, and they must be provided at this session. The old code of equity law under which we live commands for every wrong a remedy, but in too many communities, in too many parts of the country, wrongs are inflicted on Negro citizens and there are no remedies at law. Unless the Congress acts, their only remedy is in the street.

I am, therefore, asking the Congress to enact legislation giving all Americans the right to be served in facilities which are open to the public—hotels, restaurants, theaters, retail stores, and similar establishments.

This seems to me to be an elementary right. Its denial is an arbitrary indignity that no American in 1963 should have to endure, but many do.

I have recently met with scores of business leaders urging them to take voluntary action to end this discrimination and I have been encouraged by their response, and in the last two weeks over 75 cities have seen progress made in desegregating these kinds of facilities. But many are unwilling to act alone, and for this reason, nationwide legislation is needed if we are to move this problem from the streets to the courts.

I am also asking Congress to authorize the Federal Government to participate more fully in lawsuits designed to end segregation in public education. We have succeeded in persuading many districts to de-segregate voluntarily. Dozens have admitted Negroes without violence. Today a Negro is attending a State-supported institution in every one of our 50 States, but the pace is very slow.

Too many Negro children entering segregated grade schools at the time of the Supreme Court's decision nine years ago will enter segregated high schools this fall, having suffered a loss which can never be restored. The lack of an adequate education denies the Negro a chance to get a decent job.

The orderly implementation of the Supreme Court decision, therefore, cannot be left solely to those who may not have the economic resources to carry the legal action or who may be subject to harassment.

Other features will be also requested, including greater protection for the right to vote. But legislation, I repeat, cannot solve this problem alone. It must be solved in the homes of every American in every community across our country.

In this respect, I want to pay tribute to those citizens North and South who have been working in their communities to make life better for all. They are acting not out of a sense of legal duty but out of a sense of human decency.

Like our soldiers and sailors in all parts of the world they are meeting freedom's challenge on the firing line, and I salute them for their honor and their courage.

My fellow Americans, this is a problem which faces us all—in every city of the North as well as the South. Today there are Negroes unemployed, two or three times as many compared to whites, inadequate in education, moving into the large cities, unable to find work, young people particularly out of work without hope, denied equal rights, denied the opportunity to eat at a restaurant or lunch counter or go to a movie theater, denied the right to a decent education, denied almost today the right to attend a State university even though qualified. It seems to me that these are matters which concern us all, not merely Presidents or Congressmen or Governors, but every citizen of the United States.

This is one country. It has become one country because all of us and all the people who came here had an equal chance to develop their talents.

We cannot say to 10 percent of the population that you can't have that right; that your children can't have the chance to develop whatever talents they have; that the only way that they are going to get their rights is to go into the streets and demonstrate. I think we owe them and we owe ourselves a better country than that.

Therefore, I am asking for your help in making it easier for us to move ahead and to provide the kind of equality of treatment which we would want ourselves; to give a chance for every child to be educated to the limit of his talents.

As I have said before, not every child has an equal talent or an equal ability or an equal motivation, but they should have the equal right to develop their talent and their ability and their motivation, to make something of themselves.

We have a right to expect that the Negro community will be responsible, will uphold the law, but they have a right to expect that the law will be fair, that the Constitution will be color blind, as Justice Harlan said at the turn of the century.

This is what we are talking about and this is a matter which concerns this country and what it stands for, and in meeting it I ask the support of all our citizens.

Thank you very much.

Lyndon Johnson's "Great Society Speech"

Remarks at the University of Michigan, May 22, 1946

Retrieved at: <http://millercenter.org/president/speeches/detail/3383>.

Miller Center, University of Virginia

President Hatcher, Governor Romney, Senators McNamara and Hart, Congressmen Meader and Staebler, and other members of the fine Michigan delegation, members of the graduating class, my fellow Americans:

It is a great pleasure to be here today. This university has been coeducational since 1870, but I do not believe it was on the basis of your accomplishments that a Detroit high school girl said, "In choosing a college, you first have to decide whether you want a coeducational school or an educational school."

Well, we can find both here at Michigan, although perhaps at different hours.

I came out here today very anxious to meet the Michigan student whose father told a friend of mine that his son's education had been a real value. It stopped his mother from bragging about him.

I have come today from the turmoil of your Capital to the tranquility of your campus to speak about the future of your country.

The purpose of protecting the life of our Nation and preserving the liberty of our citizens is to pursue the happiness of our people. Our success in that pursuit is the test of our success as a Nation.

For a century we labored to settle and to subdue a continent. For half a century we called upon unbounded invention and untiring industry to create an order of plenty for all of our people.

The challenge of the next half-century is whether we have the wisdom to use that wealth to enrich and elevate our national life, and to advance the quality of our American civilization.

Your imagination, your initiative, and your indignation will determine whether we build a society where progress is the servant of our needs, or a society where old values and new visions are buried under unbridled growth. For in your time we have the opportunity to move not only toward the rich society and the powerful society, but upward to the Great Society.

The Great Society rests on abundance and liberty for all. It demands an end to poverty and racial injustice, to which we are totally committed in our time. But that is just the beginning.

The Great Society is a place where every child can find knowledge to enrich his mind and to enlarge his talents. It is a place where leisure is a welcome chance to build and reflect, not a feared cause of boredom and restlessness. It is a place where the city of man serves not only the needs of the body and the demands of commerce but the desire for beauty and the hunger for community.

It is a place where man can renew contact with nature. It is a place which honors creation for its own sake and for what it adds to the understanding of the race. It is a place where men are more concerned with the quality of their goals than the quantity of their goods.

But most of all, the Great Society is not a safe harbor, a resting place, a final objective, a finished work. It is a challenge constantly renewed, beckoning us toward a destiny where the meaning of our lives matches the marvelous products of our labor.

So I want to talk to you today about three places where we begin to build the Great Society—in our cities, in our countryside, and in our classrooms.

Many of you will live to see the day, perhaps 50 years from now, when there will be 400 million Americans four-fifths of them in urban areas. In the remainder of this century urban population will double, city land will double, and we will have to build homes, highways, and facilities equal to all those built since this country was first settled. So in the next 40 years we must rebuild the entire urban United States.

Aristotle said: “Men come together in cities in order to live, but they remain together in order to live the good life.” It is harder and harder to live the good life in American cities today.

The catalog of ills is long: there is the decay of the centers and the despoiling of the suburbs. There is not enough housing for our people or transportation for our traffic. Open land is vanishing and old landmarks are violated.

Worst of all expansion is eroding the precious and time honored values of community with neighbors and communion with nature. The loss of these values breeds loneliness and boredom and indifference.

Our society will never be great until our cities are great. Today the frontier of imagination and innovation is inside those cities and not beyond their borders.

New experiments are already going on. It will be the task of your generation to make the American city a place where future generations will come, not only to live but to live the good life.

I understand that if I stayed here tonight I would see that Michigan students are really doing their best to live the good life.

This is the place where the Peace Corps was started. It is inspiring to see how all of you, while you are in this country, are trying so hard to live at the level of the people.

A second place where we begin to build the Great Society is in our countryside. We have always prided ourselves on being not only America the strong and America the free, but America the beautiful. Today that beauty is in danger. The water we drink, the food we eat, the very air that we breathe, are threatened with pollution. Our parks are overcrowded, our seashores overburdened. Green fields and dense forests are disappearing.

A few years ago we were greatly concerned about the “Ugly American.” Today we must act to prevent an ugly America.

For once the battle is lost, once our natural splendor is destroyed, it can never be recaptured. And once man can no longer walk with beauty or wonder at nature his spirit will wither and his sustenance be wasted.

A third place to build the Great Society is in the classrooms of America. There your children’s lives will be shaped. Our society will not be great until every young mind is set free to scan the farthest reaches of thought and imagination. We are still far from that goal.

Today, eight million adult Americans, more than the entire population of Michigan, have not finished five years of school. Nearly 20 million have not finished eight years of school. Nearly 54 million—more than one-quarter of all America—have not even finished high school.

Each year more than 100,000 high school graduates, with proved ability, do not enter college because they cannot afford it. And if we cannot educate today’s youth, what will we do in 1970 when elementary school enrollment will be five million greater than 1960? And high school enrollment will rise by five million. College enrollment will increase by more than three million.

In many places, classrooms are overcrowded and curricula are outdated. Most of our qualified teachers are underpaid, and many of our paid teachers are unqualified. So we must give every child a place to sit and a teacher to learn from. Poverty must not be a bar to learning, and learning must offer an escape from poverty.

But more classrooms and more teachers are not enough. We must seek an educational system which grows in excellence as it grows in size. This means better training for our teachers. It means preparing youth to enjoy their hours of leisure as well as their hours of labor. It means exploring new techniques of teaching, to find new ways to stimulate the love of learning and the capacity for creation.

These are three of the central issues of the Great Society. While our Government has many programs directed at those issues, I do not pretend that we have the full answer to those problems.

But I do promise this: We are going to assemble the best thought and the broadest knowledge from all over the world to find those answers for America. I intend to establish working groups to prepare a series of White House conferences and meetings—on the cities, on natural beauty, on the quality of education, and on other emerging challenges. And from these meetings and from this inspiration and from these studies we will begin to set our course toward the Great Society.

The solution to these problems does not rest on a massive program in Washington, nor can it rely solely on the strained resources of local authority. They require us to create new concepts of cooperation, a creative federalism, between the National Capital and the leaders of local communities.

Woodrow Wilson once wrote: “Every man sent out from his university should be a man of his Nation as well as a man of his time.”

Within your lifetime powerful forces, already loosed, will take us toward a way of life beyond the realm of our experience, almost beyond the bounds of our imagination.

For better or for worse, your generation has been appointed by history to deal with those problems and to lead America toward a new age. You have the chance never before afforded to any people in any age. You can help build a society where the demands of morality, and the needs of the spirit, can be realized in the life of the Nation.

So, will you join in the battle to give every citizen the full equality which God enjoins and the law requires, whatever his belief, or race, or the color of his skin?

Will you join in the battle to give every citizen an escape from the crushing weight of poverty?

Will you join in the battle to make it possible for all nations to live in enduring peace—as neighbors and not as mortal enemies?

Will you join in the battle to build the Great Society, to prove that our material progress is only the foundation on which we will build a richer life of mind and spirit?

There are those timid souls who say this battle cannot be won; that we are condemned to a soulless wealth. I do not agree. We have the power to shape the civilization that we want. But we need your will, your labor, your hearts, if we are to build that kind of society.

Those who came to this land sought to build more than just a new country. They sought a new world. So I have come here today to your campus to say that you can make their vision our reality. So let us from this moment begin our work so that in the future men will look back and say: It was then, after a long and weary way, that man turned the exploits of his genius to the full enrichment of his life.

Thank you. Goodbye.

Activity

5 Considering What Was Read

| Speaker | JFK Speech | LBJ Speech |
|--------------|------------|------------|
| Occasion | | |
| Audience | | |
| Perspective | | |
| Subject(s) | | |
| Tone | | |
| Geographical | | |
| Social | | |

| | | |
|----------------|--|--|
| Political | | |
| Religious | | |
| Intellectual | | |
| Technological | | |
| Economic | | |
| Summary | | |
| Similarities | | |
| Differences | | |

1. What **thought provoking** sentence(s) did you find?

2. What made this sentence particularly meaningful?

3. What are the differences between the two speeches? Provide evidence supporting these differences.

4. What categories of information do the two presidents use in their speeches?

5. Compare and contrast these excerpts from the speeches:

It ought to be possible, in short, for every American to enjoy the privileges of being American without regard to his race or his color. In short, every American ought to have the right to be treated as he would wish to be treated, as one would wish his children to be treated. But this is not the case.

The Negro baby born in America today, regardless of the section of the Nation in which he is born, has about one-half as much chance of completing a high school as a white baby born in the same place on the same day, one-third as much chance of completing college, one-third as much chance of becoming a professional man, twice as much chance of becoming unemployed, about one-seventh as much chance of earning \$10,000 a year, a life expectancy which is seven years shorter, and the prospects of earning only half as much.

The Great Society rests on abundance and liberty for all. It demands an end to poverty and racial injustice, to which we are totally committed in our time. But that is just the beginning.

The Great Society is a place where every child can find knowledge to enrich his mind and to enlarge his talents. It is a place where leisure is a welcome chance to build and reflect, not a feared cause of boredom and restlessness. It is a place where the city of man serves not only the needs of the body and the demands of commerce but the desire for beauty and the hunger for community.

6. Can the similarities and differences in the two speeches be explained by the context—the events that took place between them? What is the evidence that it can be explained by the intervening events? What evidence is there that other factors might explain the differences (such as differences in the audience, the purpose for the speeches and other factors noted in G-Sprite).

Lesson 12

Creating a Presentation

In this lesson, you will . . .

- Compose an outline of a research paper.
- Complete a PowerPoint, Prezi, or other presentation format that summarizes your research project.
- Present the presentation to your peers.
- Evaluate your peers' presentations.

Activity

1 Orientation to the Task

Read the following directions and example that explain the outline that you will compose.

Directions for Creating an Outline

Prepare an outline for your “paper” that includes a complete introduction and conclusion along with key points that you would cover. Follow the formatting of the example below. Remember that you cannot have a “point one” without a “point two,” or a “point A” without a “point B,” etc. It is also required that you insert a relevant quote from each of your sources into the outline where appropriate. In the example below, areas that would be ideal for inserting a quote are indicated to assist you in developing your outline.

This assignment is worth _____ points and is due _____
at the beginning of class. Late assignments will not be accepted.

See the example on the following two pages.

Example:

I. Introduction:

Before the Civil War, life was difficult for African American families who were slaves. But once the slaves were freed, the expectation was that life would be better for both men and women. This was only true to some extent. Whereas African men were able to in some cases own land or in others to engage in sharecropping, women had to not only take care of their families but also work in the fields beside their husbands. They were not granted the same freedoms as their husbands—they couldn't own land or vote, for example. Therefore, although all freed slaves were better off after Emancipation, African American women fared worse than men because of the unimportant role women typically played in free society at the time.

II. Life for women before the Civil War

A. Lives of slave women

1. Families disrupted and children often taken from parents' home.
2. Slave women not allowed to become educated.
3. Slave women expected to work for their masters.

B. Lives of white women

1. Women denied the vote.
2. Women denied property ownership.
3. Education was not as important for women.
4. Women were considered property of their husbands.
5. Women did not hold positions of authority, but depending on their resources, were sometimes able to spend lives of comparative leisure.

III. Lives for women after the Civil War

A. Lives of slave women

1. Women often had to search for their children and husbands.
2. Women were expected to take care of their husbands and children.
3. Women had to work in the fields with their husbands.
4. Women were considered property of their husbands.
5. Women were not allowed to own property.
6. Women were not allowed to vote.
7. Because of their economic circumstances, they were unable to engage in leisure activities.

B. Lives of white women same as before the war

IV. Conclusion

In summary, African American women who had been slaves did not gain the same freedom as African American men after they were emancipated. They still had to exist in a society that did not allow women to participate fully in the democracy. At the same time, they were not afforded the leisure of many white women who had better economic circumstances, and were expected to work alongside their husbands as well as take care of their families. African American women, then, were worse off than everyone else in American society.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a template for a presentation or notes.

Activity

4 Get Feedback from Others and Revise

You will present your presentation, and you will evaluate other’s presentations. Use the following feedback form. Based upon the feedback you get, revise your presentation.

Presenter Name _____

Topic _____ Date _____

No Some Yes

| | No | Some | Yes |
|--|----|------|-----|
| Thesis (Claim) is clear. | | | |
| Evidence clearly supports claim. | | | |
| Evidence is integrated—not just listed or dropped in. | | | |
| The graphic element added to the overall presentation. | | | |
| The presentation seemed trustworthy. | | | |

Notes

Lesson 13

Answering the Essential Question

In this lesson, you will . . .

- Make a claim about the essential question and provide reasonable evidence for the claim using at least five sources from your readings.
- Explain why you chose the sources and evidence you chose.
- Explain why you did not make an alternative claim based upon evidence.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a space for students to take notes or answer questions.

Activity

3 Explaining your Choices

For each source and piece of evidence supporting the claim you are making, explain **why** it is a compelling source and give support for the claim.

1. Why a good source?

Why good evidence?

2. Why a good source?

Why good evidence?

3. Why a good source?

Why good evidence?

4. Why a good source?

Why good evidence?

5. Why a good source?

Why good evidence?

Explain on the next page, using a discussion of the evidence, why the claim you chose is better than the counterclaim you made.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a space for students to take notes or answer questions.

Now you will plan your essay. Begin with how you will structure it. A reasonable way to structure the essay is shown in the graphic organizer below.

1. **Introductory Paragraph, ending with claim:** This paragraph introduces the audience to the topic and states the position you are taking.
2. **Supporting Paragraph 1:** This paragraph begins to introduce the evidence you have for your claim. This evidence might be cause-effect in nature. That is, an event, key individual, political or legal action, technological reality, etc. caused changes to take place.
3. **Supporting Paragraph 2:** Same as above

Continue until you have used all of your best evidence. **DO NOT** present evidence text by text. Rather, combine the evidence for the same reason across texts.

4. **Counterclaim:** Tell why the opposing claim is not as good as yours.
5. **Conclude:** End by summarizing what you just said and explaining “so what.” Why should your audience care?

Fill in this template with the parts of your essay.

1. Introductory Paragraph, ending with claim (Write this completely).

2. Supporting paragraphs. (Outline these.)

Paragraph 1:

Paragraph 2:

Paragraph 3:

Paragraph 4:

Paragraph 5:

Refutation of Counterclaim:

Concluding Paragraph: Write this completely.

Before you write the essay, review the following rubric for arguments. This is the rubric by which your essay will be evaluated.

Rubric for Synthesis Essay

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|---|-----|---|-----|--|-----|--|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. Makes no mention of counter claims. | | Establishes a claim Makes note of counter claims. | | Establishes a credible claim. Develops claim and counter claims fairly. | | Establishes and maintains a substantive and credible claim or proposal. Develops claims and counter claims fairly and thoroughly. |
| Reading/ Research | Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. Makes no connections or a connection that is irrelevant to argument or claim. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. Makes a connection with a weak or unclear relationship to argument or claim. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. Makes a relevant connection to clarify argument or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim Makes a clarifying connection(s) that illuminates argument and adds depth to reasoning. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage and mechanics. Sources are used without citation | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation. | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a space for students to take notes or answer questions.



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History Unit 2: U.S. Foreign Affairs

Unit 2

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Course Overview

Overview and Rationale:

The second unit focuses on the United States and foreign affairs during the 1960s. The unit has students consider the context of the Cold War to analyze the Cuban Missile Crisis and Vietnam War. Students read increasingly longer and more difficult texts as they complete the unit. The texts include photographs, political cartoons, quotes, primary and secondary documents and textbooks.

Unit Objectives

1. Students will engage in close readings of complex historical texts.
2. Students will read multiple documents about the same event.
3. Students will use the historical reading strategies of sourcing, contextualization and corroboration to make sense of multiple perspectives on history.
4. Students will make claims and engage in evidence-based argumentation about events in history.
5. Students will discuss the claims that authors make and the evidence they use to support those claims.
6. Students will use strategies for learning the meanings of vocabulary.
7. Students will increase their reading stamina, or the ability to read lengthy complex text independently.

Essential Questions:

Were American concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? In the Vietnam Conflict?

Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?

Week 1

Lesson 1: Gateway Activity—The Meaning of Liberty

1. Students will view a group of photographs depicting walls around the world.
2. Students will interpret photographs using information about context and source in addition to their content.
3. Students will learn that sourcing, contextualization and chronology are aspects of history reading.
4. Students will begin to think about the liberty of nations and people other than those in the United States.

Lesson 2: Primary Document Analysis—Cuban Missile Crisis

1. Students will analyze a political cartoon, a photograph and two quotes from Nikita Khrushchev in order to better understand the context of the Cold War and the Cuban Missile Crisis.
2. Students will speculate about the concept of liberty during the Cuban Missile Crisis.

Lesson 3: Taking Notes from a Lecture

1. Students will learn to take notes on a lecture about the Cold War, and later, combine textbook information with lecture notes. They will learn key events that helped define the Cold War.
2. Students will show understanding of discipline specific and general academic vocabulary words.

Lesson 4: Annotating a Chapter—Cuban Missile Crisis

1. Students will annotate and discuss the textbook excerpt on the Cuban Missile Crisis.

Week 2

Lesson 4 (continued): Annotating a Chapter—Cuban Missile Crisis

2. Students will combine information from lecture and text and create a graphic organizer to show their understanding of the events, causes and effects of the Cuban Missile Crisis.
3. Students will focus on discipline-specific and general academic vocabulary.
4. Students will reflect on the relationship between what they are reading and the essential questions.

Lesson 5: Reading Primary Documents

1. Students will use a strategy called SOAPStone as they read primary documents that provide the perspectives of Robert Kennedy, Khrushchev and Dobrynin at crucial moments of the Cuban Missile Crisis.
2. Students will explore the differences in Dobrynin and Kennedy's report of the same conversation.
3. Students will explore word meanings to increase understanding of the documents.

Lesson 6: Comparing Two Presidential Speeches

1. Students will read President Eisenhower’s farewell speech and compare it to President Kennedy’s speech at American University.
2. Students will explore the differences in the two speeches and explain those differences using information they have learned about the Cold War and the Cuban Missile Crisis.
3. Students will learn to summarize the documents using historical précis (explanation to follow).

Week 3

Lesson 7: Participating in a Socratic Seminar

1. Students will use evidence from the texts they have read to create and support a preliminary claim about the essential question.
2. Students will organize the claim and evidence using a graphic organizer.
3. Students will participate in a Socratic Seminar.
4. Students will show that they can use vocabulary they have learned in previous lessons.

Lesson 8: Overview—U.S. and Vietnam

1. Students will take notes on a Vietnam overview.
2. Students will explore vocabulary meanings in relation to Vietnam.

Lesson 9: Types of Text

1. Students will learn how historians classify different texts and genres.
2. Students will practice categorizing texts.
3. Students will think about the issues and problems that might arise with different kinds of texts (i.e., memoir, photograph, textbook, etc.)

Lesson 10: Timeline of Vietnam

1. Students will view a timeline and make inferences about the relation among the various events depicted.
2. Students will ask questions brought to mind by the timeline.
3. Students will explore vocabulary meanings.

Week 4

Lesson 11: Reading and Annotating a Chapter about the Vietnam Conflict

1. Students will read and annotate a lengthy chapter about the Vietnam Conflict.
2. Students will show through their annotations, discussion and graphic organizers that they can think critically about Vietnam.
3. Students will add significant information to the Vietnam timeline.
4. Students will explore differences in interpretation about contested events, using what they have already read, other history interpretations and primary documents.
5. Students will reflect on the essential questions.

Week 5

Lesson 12: Interpreting History and Writing an Argument

1. Students will read primary and secondary documents to decide what happened in the Gulf of Tonkin incident, whether or not President Johnson deliberately misled the American public about the event and whether or not he used it to get power to escalate the war.
2. Students will use graphic organizers and participate in discussions to prove they can use evidence to support historical claims.
3. Students will write a historical argument essay that takes a stand on one of the questions about the Gulf of Tonkin incident and provide evidence to support their stand.
4. Students will study the use of evidence and the embedding of quotes by historians who write arguments.

Week 6

Lesson 13: Addressing the Essential Question

1. Students will study the evidence they have gathered over the unit in order to decide how they will address one of the essential questions in an essay.
2. Students will use the evidence and a preliminary claim to engage in a Socratic Seminar.
3. Students will write the argument.
4. Students will explain the choices of evidence they used.

Lesson 1

Gateway Activity— The Meaning of Liberty

Overview and Rationale:

In the first lesson of the second history unit, students are introduced to photographs depicting “walls” to begin thinking about the theme in this unit: the meaning of liberty as expressed in countries where the U.S. had involvement during the 1960s. Students are asked to engage in photographic analysis to pique their interest in subsequent lessons.

Sourcing and contextualization are two key skills to be taught through photographs. Students can be taught to pay attention to where a picture came from and when it was taken, in addition to identifying what the picture is showing. Students can use this information to think about the perspective of the author/photographer/publisher, the intended audience and the context influence the perspective the picture is depicting. Students can use this information to begin to thinking about a *chronology* of events over time (one of the key ways that historians relate events to each other) and they can speculate about the purpose the photographer had in taking the picture. This speculation is akin to the work of historians as they read primary source documents to construct a plausible narrative of events in history. They interpret documents in light of the perspective of the author, knowing they get a deeper understanding of historical events if they have an understanding of the various perspectives existing at the time.

Tasks/Expected Outcomes:

1. Given a group of photographs depicting walls around the world, students will analyze a series of questions.
2. Students will interpret photographs using information about context and source in addition to their content.
3. Students will explain that sourcing, contextualization and chronology are aspects of history reading.
4. Students will think about the liberty of nations and people other than those in the United States.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.

C. Critical listening

1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint set of photographs
- Academic notebook

Timeframe:

70 minutes

Targeted Vocabulary:

Words Useful for Discussing the Discipline

- Sourcing
- Contextualization
- Primary source

Activity One

Preparing for the Task (Approx. 15 minutes)

Pass out the academic notebooks to students and explain that these notebooks are for recording their thoughts and doing their assignments as they complete this unit on the conceptions of liberty in the 1960s. Ask students to take a couple of minutes to read the course overview and purpose, especially if this is the first history unit they have experienced. Explain that, in this unit, they will practice reading and writing like historians. In this way, they will be gaining a more sophisticated notion of the past than if they just approached learning history as a memorization task. In addition, this unit will help prepare them for college-level history classes. It will also prepare them to become an informed citizen because one's conceptions of current events are enhanced by an understanding of past events.

Ask students to think about the role that photographs play in helping historians understand events—in newspapers, books and other documents that historians use as evidence. What do historians have to consider when they look at photographs? Do photographs always represent events accurately?

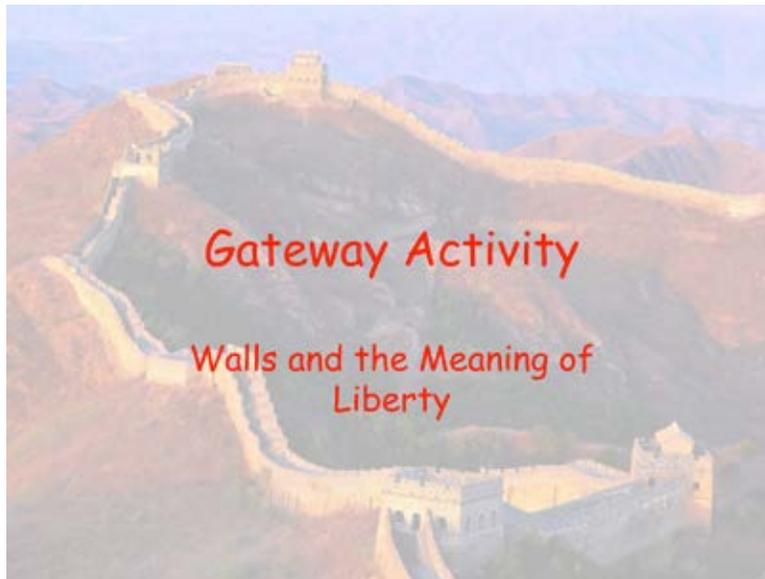
FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

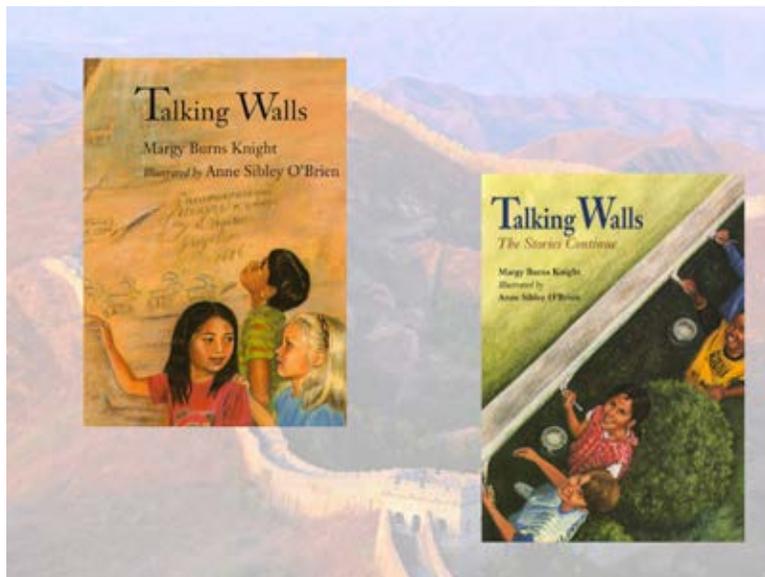
1 Preparing for the Task

What role do photographs play in helping historians understand events? What do historians have to consider when they look at photographs? Do photographs always represent events accurately? Write your answers in the space provided.

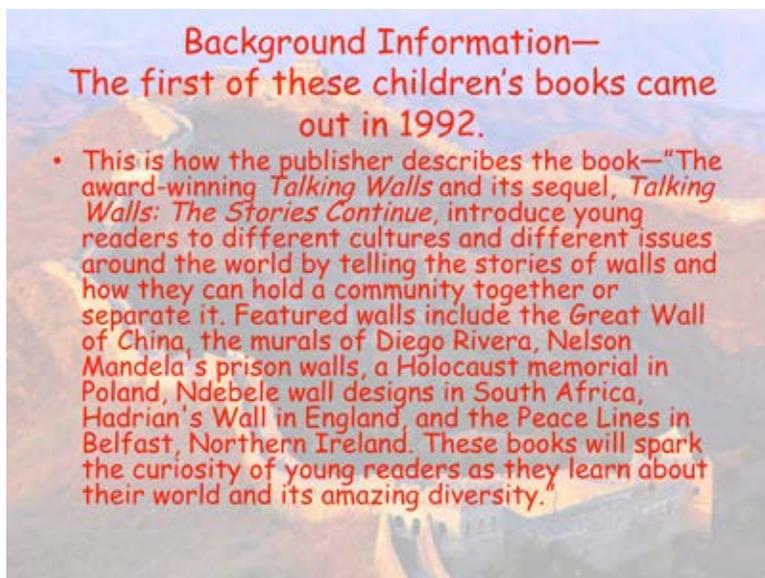
Show PowerPoint slides one, two, and three (title page, book covers, and “Background Information”). Make the students aware that even though these books are for children, the concept of walls conveyed in them is a sophisticated notion that is worth the consideration of adults. (Students will not have copies of the introductory slides in their notebooks.)



Slide 1 - Title Page

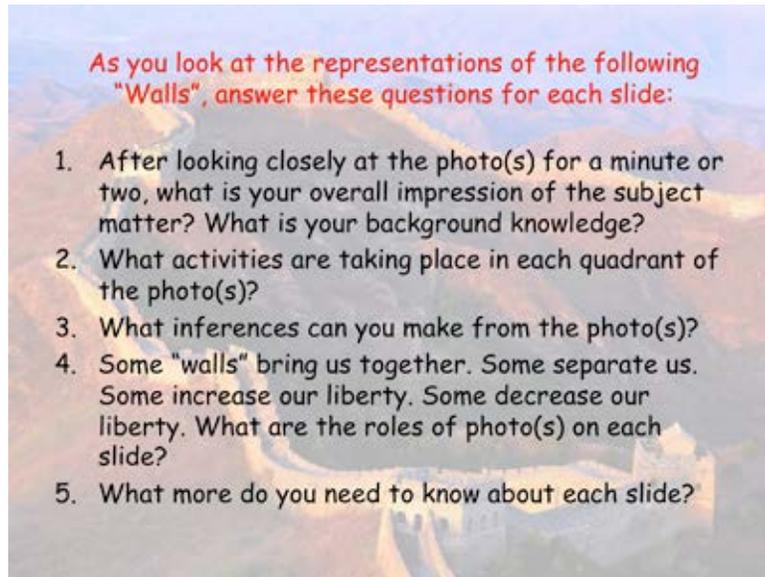


Slide 2 - Book Covers



Slide 3 - Background Information

Explain to students they will be looking at pictures of walls from different countries and, in some cases, different eras. They should use their academic notebooks to record their thoughts as they analyze these photographs, using the directions in their notebooks. Go to slide four and have students read and discuss the directions. (If you have access to these books, they may be valuable to share with your students.)



(These same directions are in the academic notebooks.)

Activity Two

Analyzing Photographs (Approx. 20 minutes)

Students should be given time to analyze the photographs; mention that photographs are usually considered primary documents. Have students analyze the photographs in the rest of the slides, following the guidelines, and answer the five questions for each slide in their academic notebooks. Students can work in pairs or small groups, if you desire. When finished, have students share their thoughts in pairs or groups. In the discussion, encourage students to speculate about the time period, the perspective of the photographer (e.g., what was the photographer trying to show?) and the context in which the picture was taken.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

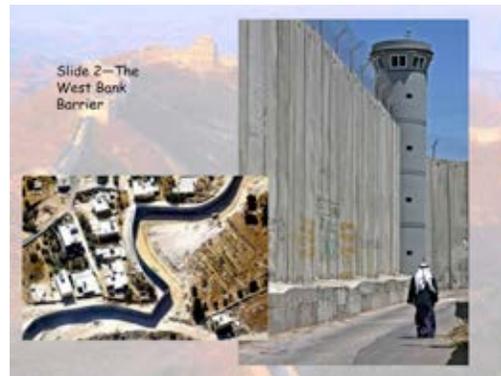
2 Analyzing Photographs

1. After looking closely at the photos for a few minutes, what is your overall impression of the subject matter? What is your background knowledge?
2. What activities are taking place in each quadrant of the photo(s)?
3. What inferences can you make from the photo(s)?
4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?
5. What more do you need to know about this slide?

Slide 1 - Berlin Wall



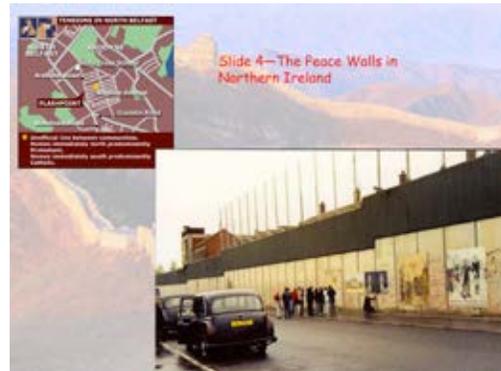
Slide 2 - West Bank Barrier



Slide 3 - Vietnam Memorial



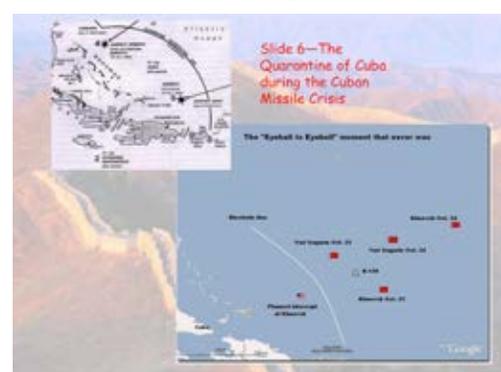
Slide 4 - Peace Walls in Northern Ireland



Slide 5 - U.S. Border Fence between the U.S. and Mexico



Slide 6 - Quarantine during Cuban Missile Crisis



Activity Three

Considering the Context (Approx. 20 minutes)

Have students read about the context of the photos in the academic notebook, then return to their analyses and make adjustments, if needed. Reading the provided explanations engages the students in **contextualization** (i.e., thinking about the time frame in which the photograph was taken and the events that might have triggered the photograph).

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Considering the Context

Read about each of these walls. As you do, consider two questions. First, does the context add to your initial impressions? Second, is the site trustworthy or biased? Be prepared to discuss your ideas.

- 1. Berlin Wall:** “On August 13, 1961, the Communist government of the German Democratic Republic (GDR, or East Germany) began to build a barbed wire and concrete “Antifascistischer Schutzwall,” or “antifascist bulwark,” between East and West Berlin. The official purpose of this Berlin Wall was to keep Western “fascists” from entering East Germany and undermining the socialist state, but it primarily served the objective of stemming mass defections from East to West. The Berlin Wall stood until November 9, 1989, when the head of the East German Communist Party announced that citizens of the GDR could cross the border whenever they pleased. That night, ecstatic crowds swarmed the wall. Some crossed freely into West Berlin, while others brought hammers and picks and began to chip away at the wall itself. To this day, the Berlin Wall remains one of the most powerful and enduring symbols of the Cold War.”

(Retrieved from History.com at: <http://www.history.com/topics/berlin-wall>. Also available on this site are video, other pictures, and links to related topics.)

- 2. West Bank Barrier:** This wall was constructed in 2002 after Israel’s evacuation of settlements in the Gaza strip. Most of its 420 miles is a concrete base with a five-meter high wire-and-mesh over-structure. Rolls of razor wire and a four-meter deep ditch are placed on one side. The structure also has electronic sensors on it and a “trace road” beside it, so that footprints of people crossing the barrier can be seen. Some of the wall is built to act as a “sniper wall to prevent gun attacks against Israeli motorists. The Israeli government says that it built the wall to keep suicide bombers out of Israel. Palestinians argue, among other things, that the wall causes economic and daily living hardship.

(Find more about this barrier from PBS at: http://www.pbs.org/newshour/indepth_coverage/middle_east/conflict/map_westbank.html and from the BBC at: http://news.bbc.co.uk/2/hi/middle_east/3111159.stm.)

- 3. Vietnam Memorial:** The Vietnam Veterans Memorial Wall honors those who died in the Vietnam War. “The Vietnam Veterans Memorial was founded by Jan Scruggs, who served in Vietnam (in the 199th Light Infantry Brigade) from

1969-1970 as a infantry corporal. He wanted the memorial to acknowledge and recognize the service and sacrifice of all who served in Vietnam. The Vietnam Veterans Memorial Fund, Inc. (VVMF), a nonprofit charitable organization, was incorporated on April 27, 1979, by a group of Vietnam veterans... Jan Scruggs (President of VVMF) lobbied Congress for a two-acre plot of land in the Constitution Gardens... On July 1, 1980, in the Rose Garden, President Jimmy Carter signed the legislation (P.L. 96-297) to provide a site in Constitution Gardens near the Lincoln Memorial. It was a three and half year task to build the memorial and to orchestrate a celebration to salute those who served in Vietnam.”

(Retrieved from the Vietnam Veterans Memorial at: <http://thewall-usa.com>.)

- 4. Peace Walls in Northern Ireland:** These walls are built across Northern Ireland’s capital city of Belfast in an attempt to defuse tensions between the nationalist Catholic neighborhoods and the loyalist Protestant ones. Some of the walls date from the earliest years of “the Troubles,” (the conflict between the two sides beginning in the 1960s and substantially ending in 1998, although sporadic violence continues). Some walls have been built since the ceasefire of 1994. Now, various walls have openings in them called “peace gates” that are meant to foster greater cooperation and communication between communities.

(Information found at Wikipedia at: en.wikipedia.org/wiki/Peace_Walls.)

- 5. Border Fencing between U.S. and Mexico:** “The United States’ border with Mexico is nearly 2,000 miles long. Over that vast distance the protective barriers between the two countries vary greatly. It may be interesting to note that nowhere along the entire border has Mexico installed any barrier of its own. All the barriers between the countries have been paid for by the U.S. Taxpayer... The barrier systems along the border vary greatly. In the urban areas these barriers may be doubled to include a “Secondary” barrier with a “No Man’s Land” between. In some of the more violent areas populated by violent gangs or drug cartels, the barrier has been improved with a third obstacle—usually another fence.” Approximately 345 miles of border fencing was constructed between 2008 and 2009.

(Information retrieved from US Border Patrol at: www.usborderpatrol.com/Border_Patrol1301.htm.)

- 6. The Quarantine of Cuba during the Missile Crisis:** “During the Cuban Missile Crisis, leaders of the U.S. and the Soviet Union engaged in a tense, 13-day political and military standoff in October 1962 over the installation of nuclear-armed Soviet missiles on Cuba, just 90 miles from U.S. shores. In a TV address on October 22, 1962, President John Kennedy (1917-63) notified Americans about the presence of the missiles, explained his decision to enact a naval blockade around Cuba and made it clear the U.S. was prepared to use military force if necessary to neutralize this perceived threat to national security. Following this news, many people feared the world was on the brink of nuclear war. However, disaster was avoided when the U.S. agreed to Soviet leader Nikita Khrushchev’s (1894-1971) offer to remove the Cuban missiles in exchange for the U.S. promising not to invade Cuba. Kennedy also secretly agreed to remove U.S. missiles from Turkey.”

(Retrieved from History.com at: www.history.com/topics/cuban-missile-crisis.)

When students are finished, have them consider the perspective of the **sources** of information. **Sourcing** is noting the photographer, the publisher, the date, etc., speculating about the perspective of the photographer or publisher and considering the audience and the purpose for taking the photograph. For example, some of the information came from sources like *history.com* while others came from news agencies (PBS, BBC) and government agencies such as the US Border Patrol. If students have access to computers and you have time, it would be interesting to search these sources to find out more about them. Help them understand the idea that some sources may only show one side of the story or they may leave out perspectives that would give readers a more complete view of the issues regarding the walls.

Write the two words, **sourcing** and **contextualization**, on chart paper and place on the wall for future reference.

FROM THE STUDENT ACADEMIC NOTEBOOK

After reading about these walls, are there things you would like to change in your responses to each of the slides? If so, what would you change?

What did you think of the sources of information about the context? Did any have the potential for bias? If so, which ones? What could be biased about the sources?

(space provided)

Assessments:

Outcome 1:

Given a group of photographs depicting walls around the world, students will analyze them in light of a group of questions.

Outcome 2:

Students will interpret photographs using information about context and source in addition to their content.

| | No | Some | Yes |
|--|----|------|-----|
| All answers are completed. | | | |
| Answers show evidence of reasoning and critical thinking. | | | |
| Context and Source provided information that spurred more reasoning/critical thinking. | | | |

Activity Four

Considering Concepts of Liberty (Approx. 10 minutes)

Have students read and discuss the following prompt, then complete the task:

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Considering Concepts of Liberty

Using these depictions of walls as a springboard, begin to think about what liberty means to the people on the opposite sides of each wall—the Israelis and Palestinians; the Mexicans and the U.S. residents; the Cubans and the Americans who quarantined them; people living under communist rule in East Berlin and the West Germans; the Catholics and Protestants in Northern Ireland. Are some ideas about liberty universal? Are some ideas about liberty unique to a particular people? How is it that different groups’ concepts of liberty can be the source of contention—causing conflict? Choose at least one of your thoughts and engage in a five minute free-write about it.

A free-write is an activity designed to get your thoughts flowing without the pressure of being evaluated. Grammar, spelling, and punctuation do not matter, and you can write in either paragraph or list form. You should continuously write whatever pops in your mind about the subject for the entire time, without stopping, even if your thoughts aren’t brilliant or they are not in a logical sequence. If you can’t think of anything about the topic, write down that you can’t think of anything. Keep pen to paper and let your ideas flow!

(space provided)

Assessment:

Outcome 3:

Students will begin to think about concepts of liberty of nations and people other than in the United States.

- Five minute free-write.

You should informally assess whether or not students continue writing for the entire five-minutes. Since this is an activity where *what* students write is not evaluated, however, the quality of the ideas should not be graded.

| | No | Some | Yes |
|---|----|------|-----|
| Student engaged in the free write activity. | | | |

Activity Five

Considering the Vocabulary of Historians (Approx. 5 minutes)

Ask students to explain how they used the following historical tools in the lesson:

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Considering the Vocabulary of Historians

Define each of the following terms. Explain how you used each of them in this lesson and explain why historians use them (i.e., what they help historians think about).

Sourcing:

Contextualization:

Primary sources:

Assessment:

Outcome 4:

Students will be able to explain that sourcing, contextualization and chronology are aspects of history reading.

- Use Activity Five as your “exit slip” for the day.

| | No | Some | Yes |
|--|----|------|-----|
| Each “tool” is correctly identified. | | | |
| Student describes how each tool was used during the lesson. | | | |
| Student’s description included <i>why</i> each of the tools is used by historians. | | | |
| Sourcing- to help determine the perspective of the source, the purpose of the document and any bias that might be present. | | | |
| Contextualization- same as sourcing, placing the document in a time frame of events. | | | |
| Primary sources- documents from the time period or at the scene that help historians see various perspectives on an event (not just a historian’s perspective). | | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced students to the academic notebook.
- 2. Discussed the role of photographs in history.
- 3. Showed background information on “Walls” and discussed the procedure students will use to interpret the photographs.
- 4. Had students read the context and revise their ideas based upon the new information.
- 5. Helped students to reflect on their ideas about liberty.
- 6. Asked students to define sourcing, contextualization and primary sources.

Lesson 2

Primary Document Analysis— Cuban Missile Crisis

Overview and Rationale:

Students are introduced to the content of the unit as they engage in a photographic analysis. The documents are designed to pique students' interest in the topic of the Cuban Missile Crisis while helping to build historical thinking skills they will use as they read in subsequent lessons. Students are asked to speculate about liberty as they analyze a photograph, political cartoon and two quotes. This speculation leads to a focus on the essential question guiding this unit. For students who have already completed Unit One in the history series, this lesson reinforces the way they learned to interpret photos and political cartoons in that unit.

Tasks/Expected Outcomes:

1. Students will analyze a political cartoon, a photograph and two quotes from Nikita Khrushchev in order to better understand the context of the Cold War and the Cuban Missile Crisis.
2. Students will speculate about the concept of liberty during the Cuban Missile Crisis.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:

- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
- (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
- (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
- (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work’s purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author’s purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint of documents
- Academic notebook

Timeframe:

50 minutes

Targeted Vocabulary:

Words that help you talk about the discipline reinforced from previous lessons:

- Sourcing
- Contextualization
- Primary source

Activity One

Preparing for the Task (Approx. 10 minutes)

Introduce students to *historical event*, the Cuban Missile Crisis, which was a major event in the Cold War. Ask students what they already know about the Cold War in order to gauge their background knowledge. Have students write what they know in a free-write, then discuss. Provide just enough background information about the Cold War so students are not confused.

For example, you might let students know that the President at the time of the Cuban Missile Crisis was John F. Kennedy and the Soviet leader was Nikita Krushchev. However, let the documents that are in this lesson lead to questions about what happen, because they will read about this later.

Ask students, “How do people learn about events like the Cuban Missile Crisis if they were not there at the time?” Students should include in their answers the need for utilizing documents from the time period. If this is the first unit in history they have encountered, extend the discussion with questions such as:

- Do the documents from the past always tell the same story?
- If not, how do historians decide what interpretation of the past they will create?
- How trustworthy might the following documents be?
 - A photograph.
 - A memoir of a prominent politician.
 - An audiotaped account of an event by a bystander.
 - A painting of a battlefield.
 - Another historian’s account.
- Why might they not be trustworthy?

As the students discuss these different documents, they should be realizing “truth” is elusive, and that historians have to make decisions about what information they will use.

Introduce the documents that will be analyzed in this lesson. Instruct students to analyze these documents using techniques that they may have learned in Unit One

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Preparing for the Task

Question to ponder: How would a historian learn about the Cuban Missile Crisis if s/he knew nothing about it?

(space provided)

(Civil Rights). If they participated in that unit, they may recall the techniques shared by the National Archives for analyzing photographs and the consideration of these elements in political cartoons: symbolism, exaggeration, labeling, analogy and irony. If they did not, be sure to have students read the guide for political cartoons (below and in their academic notebooks) and discuss together. You can access the Unit One lesson in order to model it and provide some examples. Students should also understand that historians always consider the source and the context of the documents they analyze. That is, in order to tell if a document is trustworthy or not, they need to know something about where the document came from, who the audience was, what the author's (or photographer's) purpose was, when the document was created and what was happening at that time. Remind them of the first lesson, in which students read the context and source after looking at the photographs. These pieces of information help the historian (and students) to determine the perspective of the document and consider the climate or context in which the document was created. Finally, ask them be thinking about the theme of this unit—liberty—as they look at the photograph.

Activity Two

Analyzing the Documents (Approx. 20 minutes)

Ask students to analyze the photograph below using the National Archives procedure and answering the questions in their academic notebook. Give students two minutes to look at the photograph and: (1) describe the items, person and actions, (2) make three inferences about the photograph, (3) think of questions they have about it, and (4) speculate about what happened just before and right after the photograph was taken. Let students share these thoughts with each other in pairs or small groups, and then discuss as a whole group. During the discussion, encourage students to speculate about the time period, the perspective of the photographer (e.g., What was the photographer trying to show?) and the context in which the picture was taken.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Analyzing the Documents

1. Analyze this photograph using the technique suggested by the National Archives and Records Administration.

“We will bury you”



Picture taken sometime in autumn, 1960. Nikita Khrushchev addresses the United Nations.

Photo Analysis Worksheet

Complete the information on the worksheet for your assigned photograph(s).

Step 1. Observation

- A. Study the photograph for two minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.
- B. Use the chart below to list people, objects and activities in the photograph.

| People | Objects | Activities |
|--------|---------|------------|
| | | |
| | | |
| | | |
| | | |
| | | |

Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

Step 3. Questions

A. What questions does this photograph raise in your mind?

B. Where could you find answers to them?

Designed and developed by the Education Staff, National Archives and Records Administration, Washington, DC 20408. Modified by J. Barger 9-9-12.

For the cartoon, ask students to begin the same way they did the photograph—describing the items, people and actions. Then have students think of the techniques used in the cartoon (in this case symbolism [arm wrestling] and labeling). Ask students to decide the meaning of the cartoon. Students can discuss in pairs or small groups and then report out to the class, or you can have them do this exercise individually before a whole group discussion.

FROM THE STUDENT ACADEMIC NOTEBOOK

Welsh-born cartoonist Leslie Gilbert Illingworth drew the famous cartoon of John F. Kennedy and Soviet Premier Nikita Khrushchev arm wrestling while sitting on hydrogen bombs. It appeared in the October 29, 1962 edition of the British newspaper The Daily Mail.



“OK Mr. President, let’s talk”

(Cartoon retrieved from Multimedia Learning at: <http://multimedialearningllc.wordpress.com/2010/05/02/kennedy-versus-khrushchev-cold-war-political-cartoon/>.)

- a. Describe the items, people and actions in the cartoon.
- b. What technique is being used in this cartoon? (Refer to the list of techniques in the document below.)
- c. What does the arm wrestling tell you about the relationship between Khrushchev and JFK?
- d. What is the meaning of the cartoon?

(Space provided for answers to each question.)

Political Cartoon Analysis Guide

| | |
|---------------------|---|
| Symbolism | Cartoonists use simple objects, or symbols , to stand for larger concepts or ideas. After you identify the symbols in a cartoon, think about what the cartoonist means each symbol to stand for. |
| Exaggeration | Sometimes cartoonists overdo, or exaggerate , the physical characteristics of people or things in order to make a point. When you study a cartoon, look for any characteristics that seem overdone or overblown. (Facial characteristics and clothing are some of the most commonly exaggerated characteristics.) Then, try to decide what point the cartoonist was trying to make by exaggerating them. |
| Labeling | Cartoonists often label objects or people to make it clear exactly what they stand for. Watch out for the different labels that appear in a cartoon, and ask yourself why the cartoonist chose to label that particular person or object. Does the label make the meaning of the object clearer? |
| Analogy | An analogy is a comparison between two unlike things. By comparing a complex issue or situation with a more familiar one, cartoonists can help their readers see it in a different light. After you've studied a cartoon for a while, try to decide what the cartoon's main analogy is. What two situations does the cartoon compare? Once you understand the main analogy, decide if this comparison makes the cartoonist's point clearer to you. |
| Irony | Irony is the difference between the ways things are and the way things should be, or the way things are expected to be. Cartoonists often use irony to express their opinion on an issue. When you look at a cartoon, see if you can find any irony in the situation the cartoon depicts. If you can, think about what point the irony might be intended to emphasize. Does the irony help the cartoonist express his or her opinion more effectively? |

After they have analyzed the two documents, tell students that you have something to share: the photograph is a fake. There were no pictures of Khrushchev banging his shoe. Also, when this picture was taken (without the shoe), he was not saying, “We will bury you.” Ask students, “Does this change your previous reasoning? Why or why not? What does that tell you about using photographs as evidence? How would you go about deciding if a photograph is trustworthy?” (There is some controversy about the shoe-banging incident, with one person recalling that he did pick up his shoe after his watch broke from fist pounding, but others remember it differently. There is no video or photograph showing the incident. More can be read about this at Wikipedia at: http://en.wikipedia.org/wiki/Shoe-banging_incident.)

Ask students to read the two quotes in their academic notebook. After doing so, they should answer these questions:

- What factual information is contained in the quotes?
- What can you infer from the quotes?
- What is the tone of the speaker? What does this tone say about the issues surrounding the quotes

FROM THE STUDENT ACADEMIC NOTEBOOK

3. Analyze the two quotes, answering the questions that follow.

“If you don’t like us, don’t accept our invitations and don’t invite us to come to see you. Whether you like it or not, history is on our side. We will bury you.”

Nikita Khrushchev, November 18, 1956

“America has been in existence for 150 years and this is the level she has reached. We have existed not quite 42 years and in another seven years we will be on the same level as America. When we catch you up, in passing you by, we will wave to you.”

Nikita Khrushchev, July 24, 1959

(You can read more about Nikita Khrushchev at this URL: <http://www.historyinanehour.com/2011/10/31/khrushchev-and-destalinization-summary/>.)

- A. What factual information is contained in the quotes?
- B. What can you infer from the quotes?
- C. What is the tone of the speaker? What does this tone say about the relationship between America and Russia?

(space provided)

When students are finished with this task, ask them to explain their analysis. Encourage them to notice the difference in tone and message between the first and second quotes (“We will bury you,” versus, “We will wave to you”). Between the time of these two quotes, the Soviet Union had been the first in space.

Assessments:

Outcome 1:

Students will analyze a political cartoon, a photograph and two quotes from Nikita Khrushchev in order to better understand the context of the Cold War and the Cuban Missile Crisis.

| | No | Some | Yes |
|---|----|------|-----|
| Responses are thoughtful. | | | |
| Observations and inferences reflect important information drawn from the documents. | | | |
| Inferences are made about the source and context of the photo. | | | |
| Inferences are made about the source and context of the cartoon. | | | |
| Inferences are made about the source and context of the quotes. | | | |

Activity Three

Returning to the Theme of Liberty (Approx. 10 minutes)

Ask students to think about what the historical sources—photograph, political cartoon and the quotes—say together about the Cold War and about liberty. They should write their thoughts in their academic notebook. Assure students they are just speculating at this time because they are relying on very little data. What else would help them be able to make a more informed hypothesis?

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Returning to the Theme of Liberty

1. Taken together, what do these documents say about liberty during the 1960s?
(space provided)

Activity Four

Considering Vocabulary (Approx. 10 minutes)

Ask students to review the following vocabulary words and, in pairs, explain their meanings, as well as how they used them in this lesson.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Considering Vocabulary

These words were introduced in the last lesson. Can you still remember their meanings? How did you use these in the lessons today?

Sourcing:

Contextualization:

Primary sources:

Assessments:

Outcome 2:

Students will speculate about the concept of liberty during the Cuban Missile Crisis.

- Grade the responses in students' academic notebooks.

You may use the following criteria:

| | No | Some | Yes |
|--|----|------|-----|
| Responses are thoughtful. | | | |
| Responses use the documents as evidence. | | | |

1. Introduced the lesson topic— the Cuban Missile Crisis.
2. Asked students about their prior knowledge and provided needed background on the Cold War.
3. Discussed with the students how historians could find out about the Cold War if they knew nothing about it.
4. Had students use the National Archives procedure to analyze the provided photograph.
5. Had students use the Political Cartoon Analysis Guide to analyze the cartoon (and provided modeling and practice if this is the first time they have used the guide).
6. Had students analyze the two quotes, paying attention to the dates and the changes in the tone of the quotes.
7. Had students consider the theme of “liberty” in light of the documents they analyzed.
8. Had students review vocabulary (sourcing, contextualization, primary sources and chronology) and explain how they used these tools in the lesson.

Lesson 3

Taking Notes from a Lecture

Overview and Rationale:

In college, students have to learn large amounts of information from lecture. Students must then integrate what they learned from lecture with the information they learn from textbooks and other sources. This integration is an important skill often not taught. In this lesson, students are taught to take notes from lecture and to make sense of those notes. In subsequent lessons, they will learn information from a textbook and some primary documents, and they will integrate this information in order to have a fuller understanding of the Cuban Missile Crisis.

This lecture provides background on the Cold War. This background information will help students contextualize the Cuban Missile Crisis. The lecture will also include information on the Cuban Missile Crisis and other points discussed in the textbook chapter. When students read the textbook, they may find information is totally overlapping (providing corroboration), complementary (providing new information, but still in keeping with the previous interpretation), or contradictory (providing new information that contradicts old information). It is important for students to recognize what kind of information is being presented. If the information completely overlaps, students should have more confidence in the interpretation of history, but if it contradicts, students need to contemplate why this is so, immediately returning to the source of information and looking for evidence of bias.

Tasks/Expected Outcomes:

1. Students will demonstrate understanding of the lecture through their lecture notes.
2. Students will show understanding of vocabulary words through the definitions they write in their academic notebooks and their talk-throughs.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint Lecture
- Academic Notebook

Vocabulary:

Discipline Specific Vocabulary

Events

- Cold War
- Yalta Conference
- Potsdam Conference
- Bay of Pigs Invasion
- Berlin Wall
- Cuban Missile Crisis
- Iron Curtain Speech
- U.S. aid to Greece and Turkey
- Berlin Airlift and the “Easter Parade”
- Korean War
- Sputnik

Places

- United States
- Soviet Union – USSR
- Berlin
- Czechoslovakia
- Postwar Germany
- Poland
- China

Timeframe:

Approx. 100 minutes

People

- Churchill
- Truman
- Clement Atlee
- Stalin
- Che Guevara
- George Kennan
- Fidel Castro
- Leonid Brezhnev
- Francis Gary Powers

Policies/Doctrines

- The Truman Doctrine
- Policy of Containment
- The Marshall Plan
- Sino-Soviet Pact
- The Domino Theory

Organizations

- Communism
- NATO
- NASA

Other Academic Vocabulary:

- domestically
- abroad
- tribunals
- reparations
- superpowers
- appeasement
- embarked
- command economy
- capitalist economy

Words that Help You Discuss the Discipline:

- Cornell note-taking

Activity One

The Modified Cornell Method of Note-taking (Approx. 10 minutes)

Explain to students the dynamics of a professor’s lecture. Students will be listening to a lecture and will need to practice taking notes. As they take notes on the lecture, students should be thinking about the questions in the academic notebook:

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 The Modified Cornell Method of Note-taking

As you listen to the lecture, you will be thinking of answers to the following questions:

- a. What were the sources of tension between the U.S. and the U.S.S.R. prior to the Cuban Missile Crisis?
- b. Was the policy towards the USSR prior to the Cuban Missile Crisis a reasonable reaction to Soviet threat or an overreaction?
- c. What was the impact of the early Cold War on “liberty” domestically and abroad?

(space provided)

If students participated in the first history unit, they learned how to take notes using a modified Cornell method. In this method, they took notes on one side of the paper, and then put analogous information from the textbook chapter on the other side. You can remind them of what they already practiced. If students are new to this unit, you will need to model this kind of note-taking and allow them to practice with feedback before turning them loose on the lecture. For example, lecture using one or two of the PowerPoint pages and show what you would take notes on. Then have students take notes on the next couple of pages and debrief.

Have students turn to their academic notebook to see how the note page looks.

FROM THE STUDENT ACADEMIC NOTEBOOK

You will also be taking notes using a Modified Cornell Method with the format shown on the next page. Line your paper ahead of time so that you will not have to waste time as you are listening to the lecture.

Directions:

- Write on one side of the page only. Later, you will fill in the other side with notes from reading.
- Do not copy word-for-word—paraphrase.
- Shorten what you write by using abbreviations.

| | | |
|----------|-------|--------|
| Name: | Date: | Topic: |
| | | |
| Summary: | | |

Tell students to read the instructions for this kind of note-taking. **Emphasize they will be taking notes on one side of the page only, because later, they will be adding in information from their chapter reading.** Also remind students they should not try to copy down every word from the lecture, but use phrases or “paraphrase” using abbreviations whenever possible. Ask students to think about developing a short way to write certain words that re-occur, such as “&” for “and,” “w/” for “with,” “b/c” for because and so on. (This is where their texting skills might come in handy!)

Finally, discuss the kinds of information that matter in history. Students should pay attention when the following comes up in the lecture:

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Taking Notes on a PowerPoint

- Relationships among events—chronology, causation, etc.
- Frameworks of interpretation—political, geographical, religious, social, economic, etc. (G-Sprite).
- Actors—what individuals or groups are engaging in actions aimed at meeting goals?
- Actions—what are the actors doing? What tactics or methods are they using?
- Characteristics—of actions, actors, policies, movements, events.
- Motivations—the goals that lead the actors towards action.
- Comparison and Contrasts of interpretations of cause/effect, motivations, characteristics, etc.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts, and words that signal relationships among events.
- Claims made by the lecturer and evidence to back up claims.

Students should especially pay attention when a lecturer interrupts a chronological narrative and says something like, “and the reason this is important,” “there were three causes,” or provides some other clearly interpretive comment. The lecturer is doing what historians do—interpreting the facts—making claims about significance, relationships, motivations and tactics. These comments help students determine the perspective of the instructor, and that information has a good chance of being on a test.

Activity Two

Taking Notes on a PowerPoint (Approx. 60 minutes)

Use the PowerPoint provided for this lesson. This PowerPoint presents a great deal of material from World War II to the Cuban Missile Crisis. It will be important to get through the Bay of Pigs and Cuban Missile Crisis so that they can add chapter content that students will read in the next lesson. When you are showing PowerPoint pages, discourage students from copying down exact words.

When you have come to a stopping point, ask students to work with a partner, comparing notes.

After students have shared their notes, ask them how they would now answer the questions from the beginning of the lecture.

FROM THE STUDENT ACADEMIC NOTEBOOK

- a. What were the sources of tension between the U.S. and the U.S.S.R. prior to the Cuban Missile Crisis?
- b. Was the policy towards the USSR prior to the Cuban Missile Crisis a reasonable reaction to Soviet threat or an overreaction?
- c. What was the impact of the early Cold War on “Liberty” domestically and abroad?

Ask students these additional questions, if the points were not raised during discussion. Make sure students provide answers based on the lecture information.

Also, determine answers to the following questions. Make sure that you have reasons from the lecture for your answers.

1. Do you think there were political reasons why the Yalta and Potsdam Conferences were where they were? What had happened in the time between the two conferences?
2. What do you think the effect of Churchill’s “Iron Curtain” speech had on the world? Would things have been different if he had not made the speech?
3. Choose the most important word in the following quote from the Truman Doctrine. Explain to a partner why you thought this word was most important.

The U.S. should support free peoples throughout the world who were resisting takeovers by armed minorities or outside pressures... We must assist free peoples to work out their own destinies in their own way.

Put that word on a chart in the room. After everyone has finished, look at the words on the chart and pick the two most important words that go together. Explain to your partner why you picked both of these words.

4. How did the policy of containment influence our foreign policy in the next years?

Assessment:

Outcome 1:

Students will demonstrate that they have understood the lecture through their lecture notes.

Use the following rubric.

Note-taking Rubric

| | No | Some | Yes |
|---|----|------|-----|
| Notes capture significant information (people, events, motivations/goals, tactics, etc.). | | | |
| Notes paraphrase rather than copy. | | | |
| Notes use symbols and/or abbreviations. | | | |
| Notes are accurate. | | | |

Activity Three Vocabulary (Approx. 30 minutes)

Ask students which words were difficult. The following is a list of words and their context. These may be some of the words students identify. Work with students to resolve the meanings of words they still do not understand.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Vocabulary

Did you have difficulty with any of the following words (unsure of their meanings even after working with your partner)? If so, use available resources to find out their meanings in the context of the lecture. Complete the activity provided after the list of words for each word you do not know.

| Word | Context |
|---------------------------------------|---|
| domestically abroad | What was the impact of the early Cold War on Liberty domestically and abroad ? |
| tribunals reparations | Agreements—to govern Germany jointly, Zones of Occupation, War Crimes Tribunals, Reparations |
| superpowers | How would these issues continue to be sources of tension between the superpowers ? |
| appeasement | Was Yalta an example of appeasement of a dictator, or was it the best deal FDR believed he could get? |
| embarked | It does not mean that they should be considered as embarked upon a do-or-die program to overthrow our society |
| command economy capitalist economy | Ideological competition for the minds and hearts of Third World peoples (Communist govt. & command economy vs. democratic govt. & capitalist economy) |
| bi-polarization | Bi-Polarization of Europe (NATO vs. Warsaw Pact) |

Students can work in groups to find definitions to the words they do not know, using the following format for each word.

| | |
|--|-------------------------------------|
| Word: | Rate my understanding + or - |
| Context (write the phrase or sentence where you found this word, including page number): | |
| | |
| Dictionary definition (pay attention to context and choose the one best definition): | |
| | |
| What does that mean? (Put the definition in your own words.) | |

Write a synonym:

Write an antonym:

If the word is an adjective or adverb, put the word on a continuum (put an x along the line where you think it lies between each of the opposites compared to its synonym then compared to its antonym):

Slow _____ Fast

Negative _____ Positive

Weak _____ Strong

Show students how to use the discipline specific vocabulary to talk-through the concepts (explain their meaning within the context of the lecture). Students can work in pairs and take turns talking through the words.

Remind students that a Talk-Through involves working with a partner. The student explains what he has learned about each term to a partner, without looking at notes. The partner does have notes, and listens for accuracy and thoroughness, asking for clarifications and correcting errors. If the student doing the Talk-Through gets stuck, he or she can refer to notes, then put them down before proceeding. If students have not done Talk-Throughs prior to this lesson, model the process with one of the terms.

FROM THE STUDENT ACADEMIC NOTEBOOK

Discipline Specific Vocabulary

Events

- Cold War
- Yalta Conference
- Potsdam Conference
- Bay of Pigs Invasion
- Berlin Wall
- Cuban Missile Crisis
- Iron Curtain Speech
- U.S. aid to Greece and Turkey
- Berlin Airlift and the “Easter Parade”
- Korean War
- Sputnik

People

- Churchill
- Truman
- Clement Atlee
- Stalin
- Che Guevara
- George Kennan
- Fidel Castro
- Leonid Brezhnev
- Francis Gary Powers

Places

- United States
- Soviet Union – USSR
- Berlin
- Czechoslovakia
- Postwar Germany
- Poland
- China

Other Academic Vocabulary:

- domestically
- abroad
- tribunals
- reparations
- superpowers
- appeasement
- embarked
- command economy
- capitalist economy

Policies/Doctrines

- The Truman Doctrine
- Policy of Containment
- The Marshall Plan
- Sino-Soviet Pact
- The Domino Theory

Organizations

- Communism
- NATO
- NASA

Assessment:

Outcome 2:

Students will show understanding of the targeted vocabulary words through the definitions they write in their academic notebooks.

Use the following criteria:

| | No | Some | Yes |
|---|----|------|-----|
| Notes include key vocabulary words. | | | |
| Vocabulary words students have studied have accurate definitions. | | | |
| Student conveys accurate information in Talk-Through. | | | |
| Student conveys thorough information in Talk-Through. | | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Introduced students to the Cornell Note-taking method and the guiding questions.
- 2. Modeled note-taking as needed.
- 3. Explained to students what they should look for when taking notes.
- 4. Showed the PowerPoint and gave a lecture while students took notes.
- 5. Had students get into pairs or small groups and compare notes.
- 6. Asked students for their answers to the guiding questions.
- 7. Asked students subsequent questions.
- 8. Had students determine meanings of unknown vocabulary words.
- 9. Had students participate in talking through discipline-specific vocabulary.

Lesson 4

Annotating a Chapter— Cuban Missile Crisis

Overview and Rationale:

Students will need to read various kinds of sources in order to gain a deep understanding of history. One of these, in college, is a history textbook. Textbooks in history provide students with an overview of a particular topic. They can be somewhat deceiving, however. Readers assume that what they are reading is absolutely true because the chapters are written in narrative form, not in argument form. Yet, the narratives are the creation of historians' analysis of other historians' writings and their interpretation of documents and other artifacts in relation to their own conjectures about how the past unfolded. Statements that specify that causes were political, legal or social, or that some events are more significant than others, for example, are not statements of fact but reasonable interpretations of historical information. Thus, historians know that history textbook chapters contain implicit arguments or claims and the source (author) and context in which a textbook is written is important. Interpretation is complicated by the fact that textbooks can be considered *tertiary* sources. That is, textbook authors are often relying on secondary sources of information (written by historians) rather than their own assessments of primary documents. Nevertheless, what they choose to emphasize and what they leave out, the claims they make, and the details they provide are *decisions* the authors make. Thus, two textbooks may treat the same topic differently.

What textbooks do allow, however, is an overview of a period or a series of events that readers would not get if they only read primary sources. Students can use this kind of summary information as background that can provide context when they dig deeper into a particular topic. As long as students understand that textbook information should be questioned, the textbook information can be valuable.

The sections of the textbook chapter in this unit present a somewhat chronological treatment of the Cold War up to and including Cuban Missile Crisis. In addition, the chapter includes several features: guiding questions, headings and subheadings that specify different topics; photographs from the time period with captions, maps, political cartoons, etc. Students need to consider all of these elements if they are going to understand what this source has to say.

Annotation is a way for students to mark the text while they are reading. Annotations can be used in *any* field, because *what* is annotated can be tailored to the specific requirements of the discipline. In history, annotations should focus on the elements of the text that are important to historians: events, people, places, policies and documents; statements of cause and effect, chronology, significance; comparisons and contrasts; geographical, political, social, legal, other categorizations of events, and so on. Paying attention to these elements will help students to understand

important historical information. At the same time, students need to pay attention to the source of this information and question the claims of the author.

This lesson focuses on understanding the information in the chapter sections, synthesizing the lecture and the textbook and thinking about causes and effects using a pattern organizer. Students also engage in vocabulary study and, using the pattern organizer, make a timeline of the Cuban Missile Crisis.

*If students did not participate in Unit One, this lesson will take longer. You will need to make some decisions about what you have time to teach. Most important is that students dig into the text to do some interpretation. You could assign certain pieces for homework—the reading of the Tindall and Shi text or the graphic organizer.

Tasks/Expected Outcomes:

1. Students will demonstrate through their annotations and discussions their ability to engage in close reading.
2. Students will show through their annotations their ability to identify historically important information about the Cuban Missile Crisis from reading.
3. Students will increase their understanding of vocabulary.
4. Students will combine information from lecture and text and use a pattern organizer to show their understanding of the events, causes and effects of the Cuban Missile Crisis.
5. Students will reflect on the relationship between what they are reading and the theme/essential questions.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- Chapter from Tindall and Shi, *The Americans*: Sections titled: Early Setbacks; The Cuban Missile Crisis
- G-SPRITE
- Academic notebook
 - Annotation Evaluation
 - Pattern Organizer

Timeframe:

100 minutes

Vocabulary:

Discipline Specific Vocabulary

Organizations

- Central Intelligence Agency (CIA)
- Joint Chiefs of Staff
- National Security Council

Documents

- Test Ban Treaty

Events

- Blockade or quarantine
- Hotline
- Bay of Pigs Debacle

General Academic Vocabulary

- timidity
- sarcastic
- volatile
- intractable
- ratified
- Imminent
- redress
- strategic
- relished
- substantive

Words that help you discuss the discipline

- annotation
- cause/effect
- close reading

People

- Nikita Khrushchev
- President Kennedy
- Fidel Castro
- Robert Kennedy

Places

- Bay of Pigs
- Berlin
- Turkey

- hedgehog
- acquiescence
- deterrent
- demoralize
- détente
- blockade
- quarantine
- blustered
- obsolete

Activity One

Orientation to the Task (Approx. 10 minutes)

Explain to students a textbook chapter can be a good source of information because it provides an *overview* of events and their interpretation. Students will begin reading a portion of the chapter from *The Americans* called “New Frontiers: Politics and Social Change in the 1960s” to get an overview of the Cuban Missile Crisis.

The chapter is written by George Tindall and David Emory Shi. Tindall died in 2006. He was an American author, historian and a professor at the University of North Carolina, Chapel Hill. He was a graduate of Furman University. In World War II, he served in the army in the South Pacific. He grew up in the South, and many of his books were about the South. Shi was the president of Furman University from 1994–2010. In addition to his interest in American history, he is also knowledgeable about such topics as sustainability and leadership. Ask students what this author’s information tells them about the text information they are about to read. For example, is it important that they are both Southerners? Can we expect these authors to be objective or biased? What else would we have to know to make that decision?

Preview the chapter with students. Ask students to look at headings and subheadings and the extra features this chapter includes; remind them that these features will aid their understanding of what Tindall and Shi say. Then discuss this preview with students, asking questions such as, “Are there topics you know about that happened during this time period that Tindall and Shi are leaving out? What do you think Tindall and Shi would like you to understand about the JFK’s years as president?” (If students participated in the first history unit, you can ask them how this text compares to the Faragher text read previously.) There are fewer features, so this chapter covers a greater period of time but in less depth. However, there is a timeline, a chapter summary, maps, photographs and political cartoons. It is written in narrative style. Within topics, the text proceeds chronologically, but the topics overlap in time. For example, JFK’s involvement in the Civil Rights Movement and his involvement in the Cuban Missile Crisis and Vietnam happened within a similar time period, but they are covered as separate topics.

Activity Two

Analyzing History Texts (Close Reading) (Approx. 30 minutes)

If students completed History Unit 1: Civil Rights, remind them of the strategy they used called G-Sprite. If not, introduce them to G-Sprite by having them read about it in their academic notebooks. Historians often think of societal systems and their categories, as expressed by G-Sprite, when they analyze past events. For example, it helps to understand the Cold War from a political, technological, social and economic standpoint.

To help students understand these categories, if they have not completed Unit One, consider using a familiar example of an event and have them talk about categories of causes or influences and effects. For example, have students think about a significant time in their lives (getting their driver’s license, turning 16, or being chosen for a team).

Or you can think of a historical event that everyone knows about or is in the news and discuss the categories (e.g., the crisis in Syria or the 9/11 attack). Students can then decide among the following categories the ones that apply.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Analyzing History Texts

G-SPRITE

Geography: (*human interactions with the environment*) includes the physical location of civilizations, how geographical features influence people, how people adapted to the geographical features, demography and disease, migration, patterns of settlement.

Social: includes living conditions, gender roles and relations, leisure time, family and kinship, morals, racial & ethnic constructions, social & economic classes - and ways these are changing or being challenged.

Political: includes political structures and forms of governance, laws, tax policies, revolts and revolutions, military issues, nationalism.

Religious: includes belief systems, religious scriptures, the church/religious body, religious leaders, the role of religion in this society, impact of any religious divisions/sects within the society.

Intellectual: includes thinkers, philosophies and ideologies, scientific concepts, education, literature, music, art & architecture, drama/plays, clothing styles, - and how these products reflect the surrounding events.

Technological: (*anything that makes life easier*) includes inventions, machines, tools, weapons, communication tools, infrastructure (e.g., roads, irrigation systems) and how these advances changed the social and economic patterns.

Economic: includes agricultural and pastoral production, money, taxes, trade and commerce, labor systems, guilds, capitalism, industrialization and how the economic decisions of leaders affected the society.

Remind students, as they read, to annotate with those historical frameworks in mind. That is, if students read about something that can be classified as *economic*, *religious*, *political*, etc., they should make a notation in the margin about that information. Also, have them read the following list. If students participated in Unit One, simply remind them that they should be reading for the following:

FROM THE STUDENT ACADEMIC NOTEBOOK

When you annotate, also pay attention to:

- Relationships among events—chronology, causation.
- Actors—who (individuals or groups) is engaging in actions aimed at meeting goals.
- Actions—what the actors (are) doing, the tactics or methods they are using.
- Characteristics—of actions, actors, policies, movements, events.

- Motivations—the goals that lead the actors towards action.
- Comparison and Contrast—of interpretations of cause/effect, motivations, characteristics, etc.
- Claims of the authors and evidence to support claims.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts and words that signal relationships among events.

Also, remind students that in narrative history writing, authors write about *actors* who engage in activities to meet their *goals* within a particular *time period* and *place*, in a particular way and with particular *consequences* or *effects*. Sometimes authors contend that these tactics or actions have *political*, *social*, *cultural* or other kinds of implications.

If students did not participate in Unit One, you will need to model annotating by reading a paragraph or two of the chapter, stopping occasionally to discuss your thought processes and annotating in the margins of the chapter. Then, have students do a paragraph or two and discuss what they annotated before having students work in groups or independently.

Explain many of these important aspects of history, such as the relations among events and an actor’s motivations or how successful an individual is at meeting his or her goals, are not necessarily known—they are the *interpretations* of historians who have read a number of texts and artifacts. Illustrate these points by studying the following sentences taken from Tindall and Shi’s chapter. Prior to the discussion, you should locate these quotes in the text.

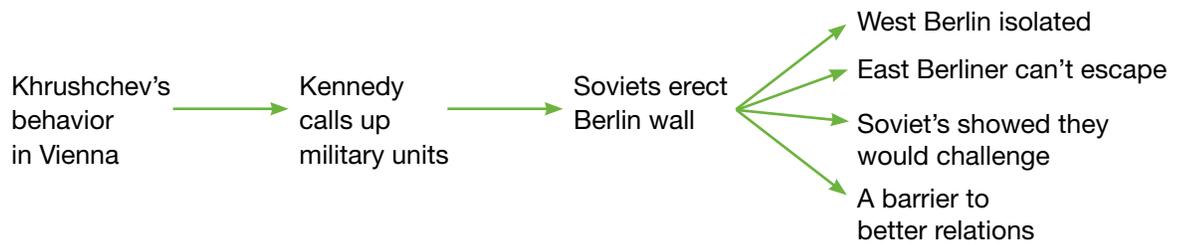
John Kennedy’s record in foreign relations, like that in domestic affairs, was mixed, but more spectacularly so.

This sentence is a claim by the historians. The rest of the section about JFK’s foreign relations (including the section on the Cuban Missile Crisis) is support for this claim, in that it includes Kennedy’s failures and successes. So, even though the chapter is written in narrative form, the authors are making arguments.

Model the interpretation of this paragraph that begins with Kennedy meeting Khrushchev in Vienna.

Khrushchev bullied and browbeat Kennedy and threatened to limit Western access to Berlin, the divided city located 100 miles within Communist East Germany... Kennedy, in turn, was stunned by the Soviet leader’s aggressive demeanor. Upon his return home, he demonstrated his resolve by calling up Army Reserve and National Guard units. The Soviet’s responded by erecting the Berlin Wall, isolating West Berlin and preventing all movement between the two parts of the city. The Berlin Wall plugged the most accessible escape hatch for East Germans, demonstrated the Soviets’ willingness to challenge American resolve in Europe, and became another intractable barrier to improved relations between East and West.

Here, the authors are making a cause/effect chain of events (one event causes another event that causes another event, so that each event is both an effect and a cause). The chain looks something like this:



Help students understand that the events are chronological in nature, and the historians are *inferring*, based upon evidence, the cause/effect relationships. Although in this case, the cause/effect nature might seem self-evident, it is not always clear. Did Kennedy state publicly his motivations for calling up the National Guard? If not, could there be other reasons why he might do so?

Also, help students to notice that the historians attributed four effects of the erection of Berlin Wall, signaling the event’s significance. Another historian, however, might have listed fewer or more effects.

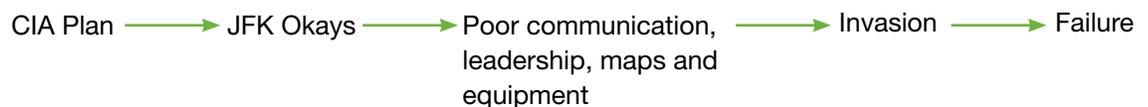
Finally, ask students to use G-Sprite to interpret the paragraph. The events leading to the Berlin Wall, as depicted by Tindall and Shi, were political in nature, but the effects were geographical and perhaps social as well as political. Another historian might have mentioned the economic effect it had on West Berlin.

Let students work in pairs or small groups to analyze the following text:

Upon taking office, he (Kennedy) learned that a secret CIA operation was training 1,500 anti-Castro Cubans for an invasion of the homeland. The Joint Chiefs of Staff assured the inexperienced Kennedy that the plan was feasible in theory; CIA analysts predicted that the invasion would inspire Cubans to rebel against Castro and his Communist Regime.

But the scheme, poorly planned and poorly executed, had little chance of succeeding. When the ragtag invasion force landed at the Bay of Pigs in Cuba on April 17, 1961, it was brutally subdued in two days; more than 1,100 men were captured. Kennedy called the bungled invasion a ‘colossal mistake.’ The planners had underestimated Castro’s popularity and his ability to react to the surprise attack. The invasion also suffered from poor communication, inaccurate maps, faulty equipment, and ineffective leadership.

When students are finished, ask for their interpretations. Note that this text has cause (a plan) and effect (a failure), but there are also reasons for the failure. Is there a way students could depict this text graphically? Possibly students could do something like the following, but other depictions would also work.



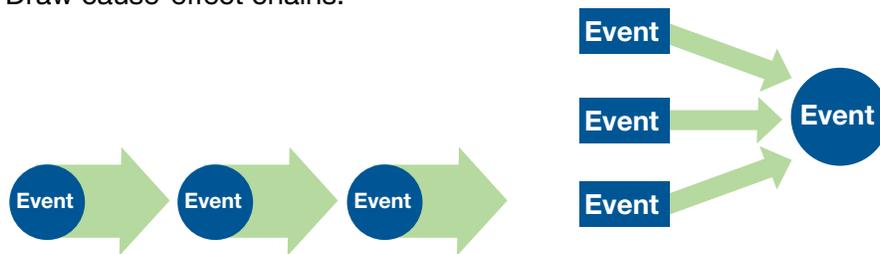
If students were using G-Sprite, what would their analysis be?

Informal Assessment: Listen to each group’s conversations to see if they understand the text at the targeted level. See pages 61-64; use the close reading checklist to note appropriate close reading behaviors.

Activity Three Annotating the Text (Approx. 20 minutes)

Explain to students that the exercise they just completed will help them to engage in *close reading* of important parts of the chapter sections they are about to read, but they cannot possibly talk over every sentence in every section that they read. What students can do to help themselves pay attention to meaning, however, is to annotate, or to take notes right on the textbook pages. If they have not annotated before, tell students they can do a number of things to the words on the page, such as:

- Circle key vocabulary words (discipline-specific, general words with discipline specific meanings, general academic vocabulary; words that signal bias or judgment, words that signal relationships).
- Underline or highlight key ideas (actors, actions, relationships among events, characteristics, comparison/contrast, etc.).
- Write key words or summarizing phrases in the margins.
- Define vocabulary words in the margins.
- Write your reactions to the text in the margins.
- Make connections and inferences in the margins (this is like....aha!!).
- Draw cause-effect chains.



- Make Comparison-Contrast graphs or Venn diagrams.

| Event 1 | Event 2 |
|---------|---------|
| | |

- Make or add to a timeline.
- Make any other annotation that helps you understand and think about the information.

Show students a model of an annotated page and talk through the different kinds of annotations and their purpose.

Provide 15-20 minutes for students to read and annotate the assigned section of the chapter. You may have them work in pairs or small groups and compare their annotations.

When finished reading and annotating, have students fill out the Annotation Evaluation for history in their academic notebooks.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Annotating the Text

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source
- 2. Information that signaled
 - a. Cause/effect
 - b. Comparison contrast
 - c. chronology (words signaling time)
 - d. Bias or judgment
 - e. discipline-specific information and vocabulary
 - Other _____
- 3. Unknown general academic vocabulary
- 4. Key actors, actions, goals, and tactics, etc.
- 5. Political, social, economic, legal, or other characterizations of information
- 6. Marginal notations that show
 - a. summarizing
 - b. inferencing
 - c. reacting
 - d. connecting to other information
 - e. graphic or pictorial representations of information (e.g. cause-effect chains, time lines)

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

Activity Four

After-reading Discussion and Vocabulary (Approx. 20 minutes)

Questions for close reading:

Begin a discussion of the chapter with open-ended questions and, as students provide answers, follow up with more specific questions as needed.

1. What did Tindall and Shi have to say about the Cuban Missile Crisis?
2. What claims were they making?
3. What evidence did they use to back up those claims?
4. Did they make cause-effect claims? Did they make claims about effectiveness (or lack thereof)? Provide examples of these claims.
5. What language did they use to signal their position about the Bay of Pigs and the Cuban Missile Crisis? (“President Kennedy wisely opted for a blockade.” The Joint Chiefs of Staff assured the *inexperienced* Kennedy that the plan was feasible in theory.” About the Bay of Pigs: it was a *fiasco*, a *colossal mistake*, *bungled*, a *clumsy invasion*.)
6. In the paragraph following the one about the Bay of Pigs, Tindall and Shi discuss the meeting between Khrushchev and Kennedy in Vienna. In putting these two events together, are the authors signaling a cause/effect relationship? Why or why not?
7. How do Tindall and Shi portray the motivations of the Soviets in placing missiles in Cuba? What about the motivations of Kennedy in deciding to stand up to the Russians?
8. Do Tindall and Shi have sufficient evidence to back up their interpretations of the past? What kind of evidence are they using? If it is not sufficient, what kind of evidence would you need?
9. What categories of historical information did you identify in this section of the text? Refer to G-Sprite. (Students might identify ideological, political, geographical or technological.)

Vocabulary:

Ask students to talk through the following discipline-specific strategy and put this vocabulary on a chart placed in the room.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 After-reading Discussion and Vocabulary

Using the following discipline specific terms, talk-through what you have learned through your reading.

Organizations

- CIA
- Joint Chiefs of Staff
- National Security Council

Events

- blockade
- quarantine
- hotline
- Bay of Pigs
- Cuban Missile Crisis

People

- Nikita Khrushchev
- President Kennedy
- Fidel Castro

Places

- Bay of Pigs
- Berlin
- Turkey

Documents

- Test Ban Treaty

Have students interpret the following sentences, paying attention to the meaning of the underlined words. If students have difficulty with the words, help them to use context, analyze word parts and use resources such as glossaries/dictionaries. Model vocabulary annotation by putting a synonym for each of the underlined words in the margins (with a connecting line).

Also, help students get the sense of a word's connotation. For example, "timidity" is a negative term, with an opposite word being "bravery" or "bravado." One thinks of a timid person as being perhaps mouse-like, wincing and pleading, "Please don't hurt me." Why did Eisenhower portray Kennedy that way?

Former President Eisenhower characterized Kennedy's role in the clumsy invasion as a "profile in **timidity** and indecision," a **sarcastic** reference to Kennedy's book *Profiles in Courage* (1956).

The **volatile** Khrushchev bullied and browbeat Kennedy...

The Berlin Wall... became another **intractable** barrier to improved relations between East and West.

Their motives were to protect Cuba from another American-backed invasion, which Castro believed to be **imminent** and to **redress** the **strategic** imbalance caused by the presence of U.S. missiles in Turkey aimed at the Soviet Union.

Khrushchev **relished** the idea of throwing "a hedgehog at Uncle Sam's pants."

Kennedy also worried that **acquiescence** to a Soviet military presence would weaken the credibility of the American nuclear **deterrent** among Europeans and **demoralize** anti-Castro elements in Latin America.

Kennedy wisely opted for a naval **blockade**, which was carefully disguised by the **euphemism quarantine** since a blockade was technically an act of war.

Tensions grew as Khrushchev **blustered** that Kennedy had pushed humankind "toward the **abyss** of a world nuclear-missile war."

...and the removal of **obsolete** American missiles from Turkey, Italy, and Britain.

The treaty, **ratified** in September 1963, was an important symbolic and **substantive** move toward **détente**.

Assessments:

Outcome 1:

Students will demonstrate through their annotations and discussions their ability to engage in close reading.

Outcome 2:

Students will show through their annotations that they are identifying historically important information about the Cuban Missile Crisis from reading.

- Annotations, annotation evaluation and partner discussions.

Use the same annotation checklist that students use for self-evaluation. Also consider using the close reading checklist (at the end of this lesson). For discussion, you may want to use the following rubric.

| | No | Some | Yes |
|---|----|------|-----|
| Student participates in discussion. | | | |
| Student references text in answers. | | | |
| Student's answers are thoughtful/reasonable. | | | |
| Student is able to identify claims and evidence, including cause/effect claims. | | | |
| Student can explain the motivations of Khrushchev and of President Kennedy. | | | |
| Student can identify G-Sprite elements in text. | | | |

Outcome 3:

Students will increase their understanding of vocabulary.

If desired, have students produce an exit slip, giving an explanation of two discipline and two general academic vocabulary words. Or, if not using an exit slip, a short quiz can be administered using a few (but not all) of the words. A certain number of points can be awarded per word.

Activity Five

Combining Lecture and Text (Approx. 15 minutes)

Have students return to their lecture notes from the previous lesson and ask them to add notes at appropriate places so that their Cornell Notes will be a combination of lecture and text reading. Students should add these notes in the empty column. If there is information that is discussed in both the lecture and the text, students should determine if the information is completely overlapping (lecture and text say the same

thing), if the information is complementary (different information, but the text adds similar kinds of information to the lecture) or contradictory (the text contradicts the lecture). If it is completely overlapping, they already have the information in the lecture notes and don't need to add anything. If it is new information that complements, they should add it. If it is contradictory, they need to add it and mark it in some way, so that they can come back to it later in order to resolve the contradiction (or to at least find out why there is a contradiction; for example, that the sources represent different perspectives.) Give them time to do this, working in pairs or small groups, if you desire, then share out in a whole group discussion the kinds of information they added. In this particular assignment, most of the text information will come at the end of their notes, with the Bay of Pigs and Cuban Missile slides.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Combining Lecture and Text

Take out the Cornell notes you took on the Cold War lecture. Add in what you learned from reading the text. Then, write a summary of the information at the bottom of each page. (Your summary should include major points only.)

That activity asks students to integrate information from different sources—a critical part of doing well in college courses. In the next activity, students are *making sense of* what they learned from the lecture and what they learned from reading. Historians look for patterns. This organizer shows multiple elements working together in cause-effect relationships. Have them look at the Pattern Organizer in their academic notebooks and talk through the instructions with them. Also, have them refer to both their notes and annotations. First, model the activity by taking one important piece of information from the Cornell notes page and placing it in the Pattern Organizer. For example, one cause of the Cuban Missile Crisis may have been the erection of the Berlin Wall by the USSR. The Berlin Wall would be put into a “cause” bubble and in also in the sequence of activities. However, because the sequence should be chronological, tell students that they should first determine what events they will put into the chronology, and then place them in time-order. An effect of the Cuban Missile Crisis might be the installation of a “hot “line. Those directly involved would be Robert Kennedy, Castro, Khrushchev and President Kennedy.

Let students know that the can add bubbles and event lines. Consider giving students larger pieces of paper and letting them draw their own pattern organizer to accommodate more or fewer items, or, they could use technology to create one.

Also, let students know there is no one “perfect” pattern organizer with “right answers.” Just as historians organize events in different ways to show cause and effect, students will as well.

Consider letting students work together on this activity, or at least talk through their work with a partner. When finished, ask several students to share their work with the whole class as time allows.

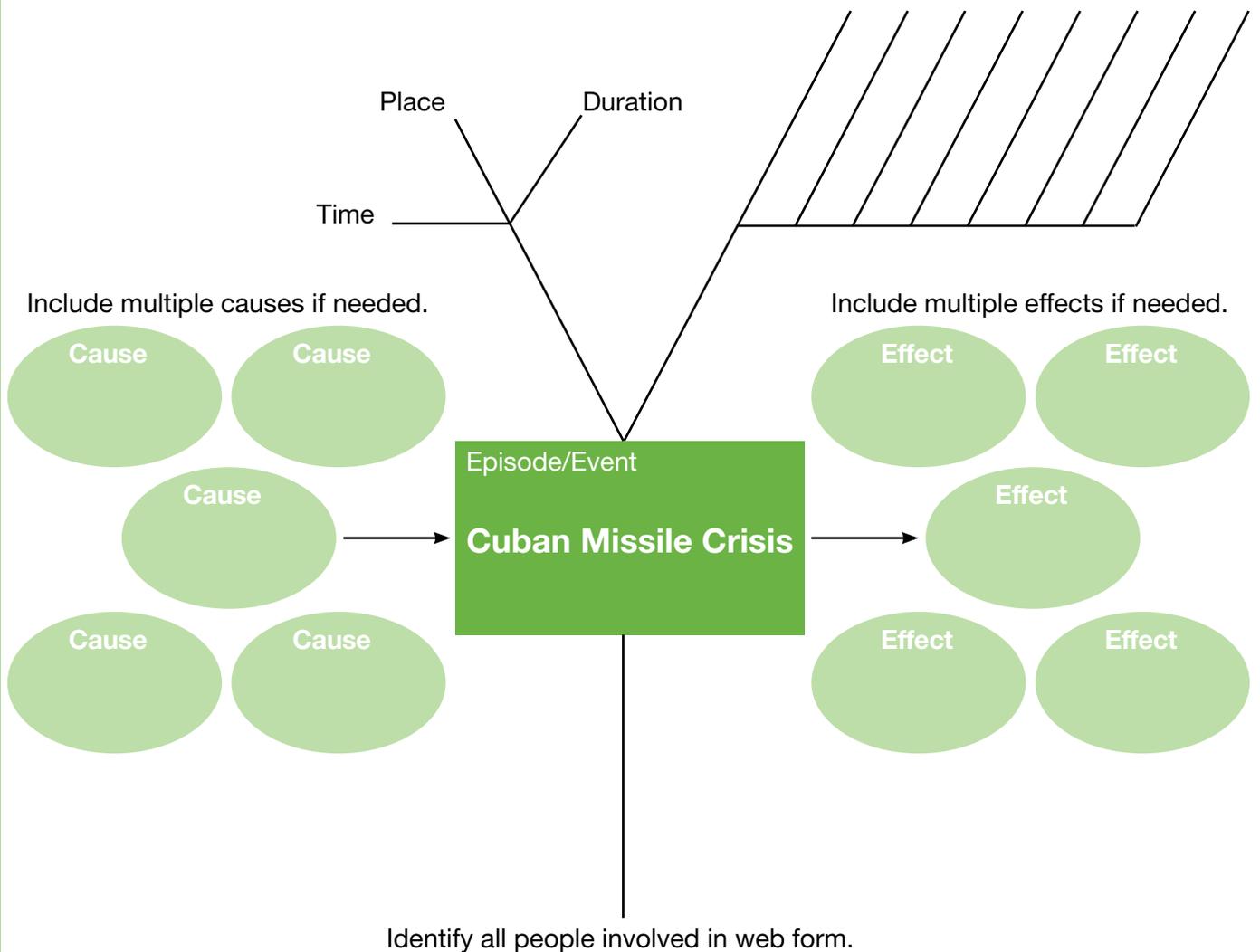
FROM THE STUDENT ACADEMIC NOTEBOOK

Use your notes to complete the following Pattern Organizer.

Name _____

Episode Pattern Organizer for the Cuban Missile Crisis

Identify the sequence of events – in order related to the episode and the cause/effect.



Assessment:

Outcome 4:

Students will combine information from lecture and text and use a Pattern Organizer to show their understanding of the events, causes and effects of the Cuban Missile Crisis.

The following criteria can be used to evaluate the pattern organizer:

| | No | Some | Yes |
|---|----|------|-----|
| Student identified multiple causes. | | | |
| Student identified multiple effects. | | | |
| Student put events in chronological order. | | | |
| Student identifies people shows their relationship. | | | |
| Student’s entries are corroborated by text information. | | | |

Activity Six

Thinking about the Theme (Approx. 5 minutes)

Have students complete a paragraph addressing the following questions:

What U.S. conceptions about liberty could you infer from reading about the Cuban Missile Crisis? What Soviet conceptions about liberty could you infer? What was the impact of the Cuban Missile Crisis on “liberty” domestically and abroad?

Assessment:

Outcome 5:

Students will reflect on the relationship between what they are reading and the theme/ essential question.

- Paragraph

| | No | Some | Yes |
|---|----|------|-----|
| Paragraph draws connections between text and theme. | | | |
| Paragraph addresses both U.S. and Soviet conceptions. | | | |

Close Reading in History

(From History Intervention Team Project READI)

What is close reading in history?

Zeroing in on and carefully reading a portion of text with particular questions in mind that reflect historical inquiry and using self-regulation to engage in problem solving strategies to interpret text.

What skills or strategies does close reading serve?

1. Knowing when to back off and when to dig in to understanding a particular portion of text (depending on whether it helps understanding or helps answer historical inquiry questions).
2. Entertaining conjectures and hypotheses regarding historical inquiry questions while reading text and reading for answers to historical inquiry questions using historical knowledge frameworks.
3. Carefully considering an author's use of language and word choice.
4. Noticing differences in language with other subject matter discourses or informal discourse. Interpreting words and sentences in light of knowledge of historical discourse (e.g., dated terms and sentence structures, metaphorical meanings of words).
5. Synthesizing information in and across portions of texts to create a mental model about historical events and issues.
6. Using knowledge of historical thinking to interpret text: engaging in sourcing (looking for date, author, type of publication, intended audience, etc.), contextualizing the text to determine author/actor perspective and purpose and using that information to inform interpretation and evaluation of historical text.
7. Relating what is read in one part of the text to other parts of the text, to other texts, to what one already knows (corroboration).
8. Identifying an author's claims and the evidence for those claims and evaluating whether that evidence is complete and coherent.
9. Identifying evidence that will answer historical inquiry questions and evaluating evidence based upon author/actor's perspective.

What do teachers need to do to encourage close reading?

1. Create participation structures and classroom norms that encourage students to grapple with text meaning alone and with others (this will take explanation, modeling, practice and feedback), and assess the participation of all students in reading and intellectual work.
2. Provide significant amounts of time for close reading.
3. Refrain from explaining text or meaning to students. Rather, allow students to determine meaning on their own and with other students.
4. Engage in formative assessment and re-teaching. Circulate to provide timely support to students who are having difficulty (such as encouraging students to think of strategies they have at their disposal and guiding them through the use of those strategies). Use prompts such as the following to scaffold student's problem solving:

What do you know/understand so far? How does this relate to the questions guiding the reading?

What have you tried so far? What else could you do?

Did you look at this part of the text? How does reading that help?

Did anyone else have that question or confusion? What did they do?

Let's look at our reading strategies list to see what you might try.

When you've tried this out, let's talk about how that helped and what you figured out.

5. Use what you've learned from students' reading to frame instruction. For example, if students are interpreting events in light of today's norms and are unable to understand the context in which the events took place, provide more instruction that helps them understand the context (that is, use historical empathy).
6. Teach students skills and strategies that are served by close reading (see Skills and Strategies list) using modeling and explanation, guided practice and independent practice feedback.
7. Provide instructional supports such as comparison contrast charts, annotation guides, note-taking formats, etc., for students to use while engaging in close reading, and explain, model and provide guided practice, independent practice and feedback in using the support.

What does it look like when students are engaged in close reading (observable behaviors)?

1. Students are talking to each other about their interpretations of the text, entertaining hypotheses about what the text means and resolving problems and confusions in at the word level and beyond.
2. Students are referencing and cross-referencing the text in these discussions, pointing to particular places in the text, reading particular words and sentences from the text, etc.
3. When students are reading alone or with others, they are annotating the text, taking notes in other forms, circling words, marking points of confusion and using instructional supports. These annotations, notes and instructional supports should indicate significant reader text interaction and attention to elements of historical reading (from the Skills and Strategies section).
4. Students develop their own text-based questions and discuss the textual evidence that answers those questions (in addition to grappling with the questions that are meant to guide the reading).
5. Students' notes and discussions include evidence of sourcing, contextualization, corroboration, author's use of language and other elements in the Skills and Strategies section.
6. In whole-class discussions, students participate actively and make comments referencing the texts and their notes. When others make interesting comments, students write notes about these comments and respond to them.

Close Reading Behaviors Checklist

- 1. Students are talking to each other about their interpretations of the text, entertaining hypotheses about what the text means and resolving problems and confusions in at the word level and beyond.
- 2. Students are referencing and cross-referencing the text in these discussions, pointing to particular places in the text, reading particular words and sentences from the text, etc.
- 3. When students are reading alone or with others, they are annotating the text, taking notes in other forms, circling words, marking points of confusion using instructional supports. These annotations, notes, and instructional supports should indicate significant reader text interaction and attention to elements of historical reading (from the Skills and Strategies section).
- 4. Students develop their own text-based questions and discuss the textual evidence that answers those questions (in addition to grappling with the questions that are meant to guide the reading).
- 5. Students’ notes and discussions include evidence of sourcing, contextualization, corroboration, author’s use of language and other elements in the Skills and Strategies section.
- 6. In whole-class discussions, students participate actively and make comments that reference the texts and their notes. When others make interesting comments, students write notes about these comments and respond to them.

Score each on a scale from one to four, with:

0 = not evident; 1 = beginning; 2 = developing; 3 = proficient

| Student Name | Talk | References to Text | Use of supports | Questioning | Work products | Active participation |
|--------------|------|--------------------|-----------------|-------------|---------------|----------------------|
| | | | | | | |
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**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Discussed the textbook chapter authors and have students preview the text.
2. Discussed G-Sprite.
3. Helped students interpret important historical information, using selections from Tindall and Shi text.
4. Had students annotate the text excerpt and discuss in pairs or small groups.
5. Had students self-evaluate their annotations.
6. Engaged students in open-ended discussion, and then ask appropriate follow-up questions.
7. Had students talk through discipline-specific vocabulary.
8. Discussed with students their interpretations of targeted academic vocabulary.
9. Modeled to students how to integrate text and lecture notes and give them time to do it.
10. Worked with students to complete the Pattern Organizer on the Cuban Missile Crisis.
11. Had students return to the theme and engage in a five-minute free-write.

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NEW FRONTIERS: POLITICS AND SOCIAL CHANGE IN THE 1960s

FOCUS QUESTIONS

- What were the goals of Kennedy's New Frontier and Johnson's Great Society programs?
- What were the achievements of the civil rights movement and the ensuing splinter movements?
- Why did the United States increasingly involve itself in Vietnam, and why was there rising opposition to the war?
- How did Kennedy try to combat communism in Cuba?

To answer these questions and access additional review material, please visit www.wwnorton.com/studyspace.

For those pundits who considered the social and political climate of the 1950s dull, the following decade would provide a striking contrast. The 1960s were years of extraordinary social turbulence and innovation in public affairs—as well as sudden tragedy and prolonged trauma. Many social ills that had been festering for decades suddenly forced their way onto the national agenda. At the same time the deeply entrenched assumptions of cold war ideology led the country into the longest, most controversial, and least successful war in the nation's history.

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THE NEW FRONTIER

KENNEDY VERSUS NIXON In 1960 there was little awareness of such dramatic change on the horizon. The presidential election of that year pitted two candidates—Richard M. Nixon and John F. Kennedy—who symbolized the bland politics of the 1950s. Though better known than Kennedy because of his eight years as Eisenhower’s vice president, Nixon had also developed the reputation of a cunning chameleon, the Tricky Dick who concealed his duplicity behind a series of masks. “Nixon doesn’t know who he is,” Kennedy told an aide, “and so each time he makes a speech he has to decide which Nixon he is, and that will be very exhausting.”

But Nixon could not be so easily dismissed. He possessed a shrewd intelligence and a compulsive love for politics, the more combative the better. Born in suburban Los Angeles in 1913, he grew up in a working-class Quaker family struggling to make ends meet. In 1946, having completed law school and a wartime stint in the navy, Nixon jumped into the political arena as a Republican and won election to Congress. Four years later he became a senator.

Nixon arrived in Washington eager to reverse the tide of New Deal liberalism. As a campaigner he unleashed scurrilous personal attacks on his opponents, employing half-truths, lies, and rumors, and he shrewdly manipulated and fed the growing anti-Communist hysteria. Yet Nixon became both a respected and an effective member of Congress, and by 1950 he was the most requested Republican speaker in the country. The reward for his rapid rise to political stardom was the vice-presidential nomination in 1952, which led to successive terms as the partner of the popular Eisenhower.

In comparison to his Republican opponent, John F. Kennedy was inexperienced. He boasted an abundance of assets, including a record of heroism in World War II, a glamorous young wife, a bright, agile mind and Harvard education, a rich, powerful family, a handsome face, movie-star charisma, and a robust outlook. Yet the forty-three-year-old candidate had not distinguished himself in the House or the Senate. His political rise owed not so much to his abilities or his accomplishments as to the effective public relations campaign engineered by his ambitious father, Joseph Kennedy, a self-made tycoon.

During his campaign for the Democratic nomination, Kennedy had shown that he had the energy and wit to match his grace and ambition, even though he suffered from serious spinal problems, Addison’s disease (a debilitating disorder of the adrenal glands), recurrent blood disorders, venereal disease, and fierce fevers. He took medicine daily, sometimes hourly. Like

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Franklin Roosevelt, he and his aides and family members successfully masked his physical ailments from the public.

By the time of the Democratic Convention in 1960, Kennedy had traveled over 65,000 miles, visited twenty-five states, and made over 350 speeches. In his acceptance speech he found the stirring, muscular rhetoric that would stamp the rest of his campaign and his presidency: “We stand today on the edge of a New Frontier—the frontier of unknown opportunities and perils—a frontier of unfulfilled hopes and threats.” Kennedy and his staff fastened upon the frontier metaphor as the label for their domestic program because Americans had always been adventurers, eager to conquer and exploit new frontiers. Kennedy promised to use his administration to get the country “moving again.”

Three events shaped the presidential campaign that fall. First, as the only Catholic to run for the presidency since Al Smith in 1928, Kennedy strove to dispel the impression that his religion was a major political liability. In a speech before the Greater Houston Ministerial Association in 1960, he stressed that “the separation of church and state is absolute,” and “no Catholic prelate would tell the President—should he be a Catholic—how to act and no Protestant minister should tell his parishioners for whom to vote.” The religious question thereafter drew little public attention; Kennedy’s candor had neutralized it.

Second, Richard Nixon violated one of the cardinal rules of politics when he agreed to debate his less prominent opponent on television. During the first of four debates, few significant policy differences surfaced, allowing viewers to shape their opinions more on matters of style. Some 70 million people watched this first-ever televised debate. They saw an obviously uncomfortable Nixon, still weak from a recent illness, perspiring heavily and looking haggard, uneasy, and even sinister before the camera. Kennedy, on the other hand, projected a cool poise and offered crisp answers that made him seem equal, if not superior, in his fitness for the office. Kennedy’s popularity immediately shot up in the polls. In the words of a bemused southern senator, Kennedy combined “the best qualities of Elvis Presley and Franklin D. Roosevelt.”

Still, the momentum created by the first debate was not enough to ensure a Kennedy victory. The third key event in the campaign involved the civil rights issue. Democratic strategists knew that in order to offset the loss of southern conservatives suspicious of Kennedy’s Catholicism and strong civil rights positions, they had to increase the registration of minority voters and generate a high turnout among African Americans.

Perhaps the most crucial incident of the campaign occurred when Martin Luther King Jr. and some fifty demonstrators were arrested in Atlanta for

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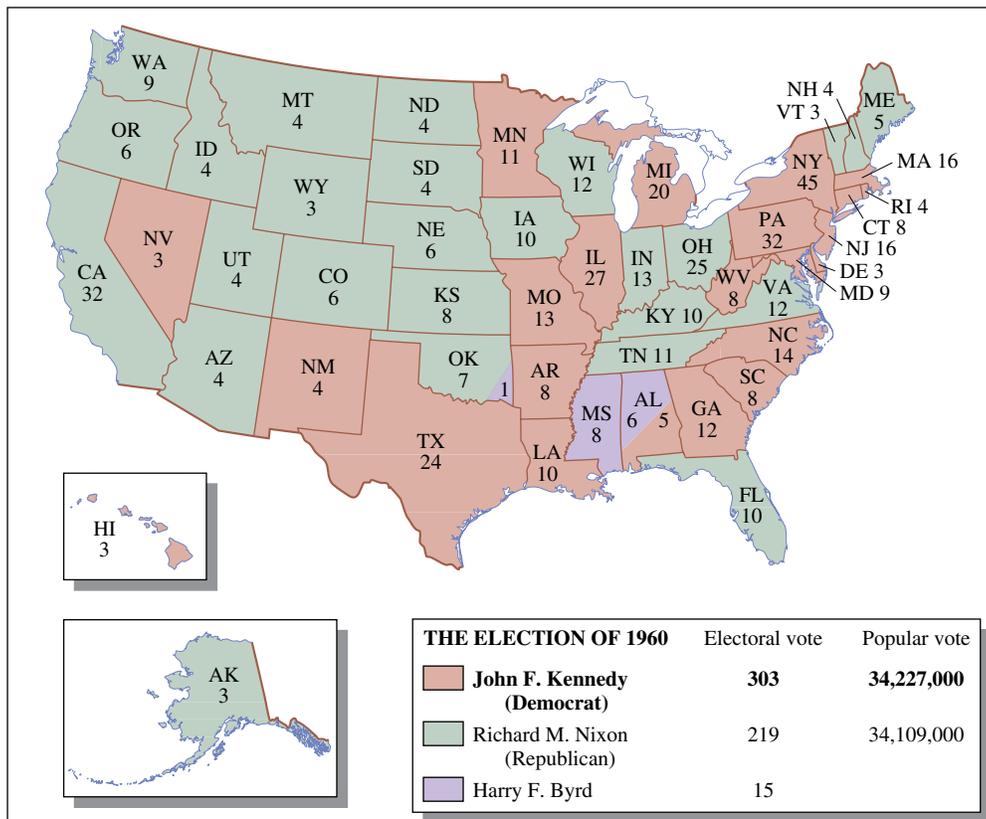
Kennedy versus Nixon

John Kennedy's poise and precision in the debates with Richard Nixon impressed viewers and voters.

“trespassing” in an all-white restaurant. Although the other demonstrators were soon released, King was sentenced to four months in prison, ostensibly because of an earlier traffic violation. Robert Kennedy, the candidate's younger brother and campaign manager, phoned the judge handling King's case, imploring him with the argument “that if he was a decent American, he would let King out of jail by sundown.” King was soon released on bail, and the Kennedy campaign seized full advantage of the outcome, distributing some 2 million pamphlets in African-American neighborhoods extolling Kennedy's efforts on behalf of Dr. King.

When the votes were counted, Kennedy and his running mate, Lyndon B. Johnson of Texas, had won the closest presidential election since 1888. The winning margin was only 118,574 votes out of 68 million cast. Kennedy's wide lead in the electoral vote, 303 to 219, belied the paper-thin margin in several key states. Nixon had in fact carried more states than Kennedy, sweeping most of the West and holding four of the six southern states that Eisenhower had carried in 1956. Kennedy's majority was built on victories in southern New England, the populous middle Atlantic states, and key states in the South where African-American voters provided the critical margin of

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How did the election of 1960 represent a sea change in American presidential politics? What three events shaped the campaign? How did Kennedy win the election in spite of winning fewer states than Nixon?

victory. Yet ominous rumblings of discontent appeared in the once-solid Democratic South, as all eight of Mississippi’s electors and six of Alabama’s eleven (as well as one elector from Oklahoma) defied the national ticket and voted for Virginia senator Harry Byrd, the arch segregationist.

THE NEW ADMINISTRATION John F. Kennedy was the youngest person ever elected president, and his cabinet appointments put an accent on youth. He was determined to attract the “best and the brightest” minds available, individuals who would provide new ideas and fresh thinking—and inject a tough, pragmatic, and vigorous outlook into government affairs. Adlai Stevenson was favored by liberal Democrats for the post of

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secretary of state, but Kennedy chose Dean Rusk, a career diplomat. Stevenson received the post of ambassador to the United Nations. Robert McNamara, one of the whiz kids who had reorganized the Ford Motor Company, was asked to bring his managerial magic to bear on the Department of Defense. C. Douglas Dillon, a Republican banker, was made secretary of the Treasury in an effort to reassure conservative business executives. When critics attacked the appointment of Kennedy's thirty-five-year-old brother Robert as attorney general, the president quipped, "I don't see what's wrong with giving Bobby a little experience before he goes into law practice." McGeorge Bundy, whom Kennedy called "the second smartest man I know," was made special assistant for national security affairs, lending additional credence to the impression that foreign policy would remain under tight White House control.

The inaugural ceremonies set the tone of elegance and youthful vigor that would come to be called the Kennedy style. Kennedy dazzled listeners with uplifting rhetoric. "Let the word go forth from this time and place," he proclaimed. "Let every nation know, whether it wishes us well or ill, that we shall pay any price, bear any burden, meet any hardship, support any friend, oppose any foe, to assure the survival and success of liberty. And so, my fellow Americans: ask not what your country can do for you—ask what you can do for your country." Spines tingled at the time; the glittering atmosphere and inspiring language of the inauguration seemed to herald an era of fresh promise and youthful energy.

THE KENNEDY RECORD Despite his idealistic rhetoric, however, Kennedy called himself a realist or "an idealist without illusions," and he had a difficult time launching his New Frontier domestic program. Elected by a razor-thin margin, he did not enjoy a popular mandate. "Great innovations," Kennedy said, quoting Thomas Jefferson, "should not be forced on slender majorities." The new president did not show much skill in shepherding legislation through a Congress controlled by a conservative southern coalition that blocked his efforts to increase federal aid to education, provide health insurance for the aged, and create a Department of Urban Affairs. The Senate killed his initiatives on behalf of unemployed youths, migrant workers, and mass transit. When Kennedy finally followed the advice of his advisers in 1963 and submitted a drastic tax cut, Congress blocked that as well.

Administration proposals did nevertheless win some notable victories in Congress. Legislators readily approved broad Alliance for Progress programs to help Latin America and the celebrated Peace Corps, created in 1961 to supply volunteers who would provide educational and technical services

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abroad. Kennedy's greatest legislative accomplishment, however, may have been the Trade Expansion Act of 1962, which eventually led to tariff cuts averaging 35 percent on goods traded between the United States and the European Economic Community (the Common Market).

In the field of domestic social legislation, the Kennedy administration scored a few more victories. They included a Housing Act that earmarked nearly \$5 billion for urban renewal over four years; an increase in the minimum wage and its application to more than 3 million additional workers; the Area Redevelopment Act of 1961, which provided nearly \$400 million in loans and grants to "distressed areas"; an increase in Social Security benefits; and additional funds for sewage-treatment plants. Kennedy also won support for an accelerated space program with the goal of landing on the moon before the end of the decade.

THE WARREN COURT Under Chief Justice Earl Warren the Supreme Court continued to be a decisive influence on domestic life. In 1962 the Court ruled that a school prayer adopted by the New York State Board of Regents violated the constitutional prohibition against an established religion. In *Gideon v. Wainwright* (1963), the Court required that every felony defendant be provided a lawyer regardless of the defendant's ability to pay. In 1964 the Court ruled in *Escobedo v. Illinois* that a person accused of a crime must also be allowed to consult a lawyer before being interrogated by police. Two years later, in *Miranda v. Arizona*, the Court issued perhaps its most bitterly criticized ruling when it ordered that an accused person in police custody must be informed of certain basic rights: the right to remain silent; the right to know that anything said can be used against the individual in court; and the right to have a defense attorney present during interrogation. In addition, the Court established rules for police to follow in informing suspects of their legal rights before questioning could begin.

EXPANSION OF THE CIVIL RIGHTS MOVEMENT

The most important development in domestic life during the 1960s occurred in civil rights. John F. Kennedy entered the White House reluctant to challenge conservative southern Democrats on the race issue. He was never as personally committed to the cause of civil rights as his brother Robert, the attorney general. Despite a few dramatic gestures of support toward African-American leaders, President Kennedy only belatedly grasped the moral and emotional significance of the most widespread reform movement

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of the decade. Like Franklin Roosevelt, he celebrated equality but did little to promote it. Eventually, however, his conscience was pricked by the grass-roots civil rights movement led by Martin Luther King Jr.

SIT-INS AND FREEDOM RIDES After the Montgomery bus boycott of 1955–1956, King’s philosophy of “militant nonviolence” inspired others to challenge the deeply entrenched patterns of racial segregation in the South. At the same time, lawsuits to desegregate the public schools got thousands of parents and young people involved. The momentum generated the first genuine mass movement in African-American history when four black college students sat down and demanded service at a “whites-only” Woolworth’s lunch counter in Greensboro, North Carolina, on February 1, 1960. Within a week, the “sit-in” movement had spread to six more towns in the state, and within two months demonstrations had occurred in fifty-four cities in nine states.

In 1960 student activists, black and white, formed the Student Nonviolent Coordinating Committee (SNCC), which worked with King’s Southern

Sit-in at Woolworth’s Lunch Counter, Greensboro, North Carolina

Four of the protesters, students at North Carolina A&T College, were (from left) Joseph McNeil, Franklin McCain, Billy Smith, and Clarence Henderson.



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Christian Leadership Conference to broaden the civil rights movement. The sit-ins became “kneel-ins” at churches and “wade-ins” at segregated public swimming pools.

Most of the activists practiced King’s concept of nonviolent protest. They refused to retaliate, even when struck with clubs or poked with cattle prods. The conservative white editor of the *Richmond News Leader* conceded his admiration for their courage:

Here were the colored students, in coats, white shirts, ties, and one of them was reading Goethe, and one was taking notes from a biology text. And here, on the sidewalk, was a gang of white boys come to heckle, a ragtail rabble, slack-jawed, black-jacketed, grinning fit to kill, and some of them, God save the mark, were waving the proud and honored flag of the Southern States in the last war fought by gentlemen.

During the year after the Greensboro sit-ins, over 3,600 black and white activists spent time in jail. In many communities they were pelted with rocks, burned with cigarettes, and subjected to unending verbal abuse.

In May 1961 the Congress of Racial Equality sent a group of black and white “freedom riders” on buses to test a federal court ruling that had banned segregation on buses and trains and in terminals. In Alabama, mobs attacked the travelers with fists and pipes, burned one of the buses, and assaulted Justice Department observers, but the demonstrators persisted and drew national attention, generating new respect and support for their cause. Yet President Kennedy was not inspired by the courageous freedom riders. Preoccupied with the Berlin crisis, he ordered an aide to tell them to “call it off.” Former president Harry Truman called the bus activists northern “busybodies.” It fell to Attorney General Robert Kennedy to use federal marshals to protect the freedom riders during the summer of 1961.

FEDERAL INTERVENTION In 1962 Governor Ross Barnett of Mississippi, who believed that God made “the Negro different to punish him,” defied a court order and refused to allow James Meredith, an African-American student whose grandfather had been a slave, to enroll at the University of Mississippi. Attorney General Robert Kennedy intervened again dispatching federal marshals to enforce the law. When the marshals were assaulted by a white mob, federal troops had to intervene, but only after two deaths and many injuries. Meredith was registered at Ole Miss a few days later.

In 1963 Martin Luther King launched a series of demonstrations in Birmingham, Alabama, where Police Commissioner Eugene “Bull” Connor served

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Birmingham, Alabama, May 1963

Eugene “Bull” Connor’s police unleash dogs on civil rights demonstrators.

as the perfect foil for King’s tactic of nonviolent civil disobedience. Connor used dogs, tear gas, electric cattle prods, and fire hoses on the protesters while millions of outraged Americans watched the confrontations on television.

King, who was arrested and jailed during the demonstrations, wrote his now-famous Letter from Birmingham City Jail, a stirring defense of the nonviolent strategy that became a classic document of the civil rights movement. “One who breaks an unjust law,” he stressed, “must do so openly, lovingly, and with a willingness to accept the penalty.” In his letter, King signaled a shift in his strategy for social change. Heretofore he had emphasized the need to educate southern whites about the injustice of segregation and other patterns of discrimination. Now he focused more on gaining federal enforcement of the law and new legislation by provoking racists to display their violent hatred in public. As King admitted in his letter, he sought through organized nonviolent protest to “create such a crisis and foster such a tension that a community which has constantly refused to negotiate is forced to confront the issue.” This concept of confrontational civil disobedience outraged

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J. Edgar Hoover, the powerful head of the FBI, who labeled King “the most dangerous Negro of the future in this nation.” He ordered agents to follow King, bugged his telephones and motel rooms, and circulated scandalous rumors to discredit him.

The sublime courage that King and many other protesters displayed helped mobilize national support for their integrationist objectives. (In 1964 King would be awarded the Nobel Peace Prize.) Nudged by his brother Robert, a man of greater conviction, compassion, and vision, President Kennedy finally decided that enforcement of existing statutes was not enough; new legislation was needed to deal with the race question. In 1963 he told the nation that racial discrimination “has no place in American life or law.” He then endorsed an ambitious civil rights bill intended to end discrimination in public facilities, desegregate public schools, and protect African-American voters. But the bill was quickly blocked in Congress by southern conservatives who had become increasingly resistant to social change since mobilizing to thwart Roosevelt’s New Deal in the late 1930s. As Kennedy told Martin Luther King: “This is a very serious fight. We’re in this up to the neck. The worst trouble would be to lose the fight in Congress. . . . A good many programs I care about may go down the drain as a result of this [bill]—We may all go down the drain . . . so we are putting a lot on the line.”

Throughout the Deep South, traditionalists defied efforts at racial integration. In the fall of 1963, the cocky and confrontational governor George Wallace dramatically stood in the doorway of a building at the University of Alabama to block the enrollment of African-American students, but he stepped aside in the face of insistent federal marshals. That night, President Kennedy for the first time highlighted the *moral* issue facing the nation: “If an American, because his skin is black, cannot enjoy the full and free life which all of us want, then who among us would be content to have the color of his skin changed and stand in his place? Who among us would be content with the counsels of patience and delay?” Later the same night, NAACP official Medgar Evers was shot to death as he returned to his home in Jackson, Mississippi.

The high point of the integrationist phase of the civil rights movement occurred on August 28, 1963, when over 200,000 blacks and whites marched down the Mall in Washington, D.C., toward the Lincoln Memorial, singing “We Shall Overcome.” The March on Washington for Jobs and Freedom was the largest civil rights demonstration in history. Standing in front of Lincoln’s statue, Martin Luther King Jr. delivered one of the century’s most memorable speeches:

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“I Have a Dream,” August 28, 1963

Protesters in the March on Washington make their way to the Lincoln Memorial, where Martin Luther King Jr. delivered his now-famous speech.

I say to you today, my friends, that in spite of the difficulties and frustrations of the moment I still have a dream. It is a dream deeply rooted in the American dream.

I have a dream that one day this nation will rise up and live out the true meaning of its creed: “We hold these truths to be self-evident; that all men are created equal.”

I have a dream that one day . . . the sons of former slaves and the sons of former slaveowners will be able to sit together at the table of brotherhood.

Such racial harmony had not yet arrived, however. Two weeks later a bomb exploded in a Birmingham church, killing four black girls. Yet King’s dream—shared and promoted by thousands of other activists—survived. The intransigence and violence that civil rights workers encountered won converts to their cause all across the country. Moreover, corporate and civic leaders in large southern cities promoted civil rights advances in large part because the continuing protests threatened economic development. Atlanta, for example, described itself as “the city too busy to hate.”

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FOREIGN FRONTIERS

EARLY SETBACKS John Kennedy's record in foreign relations, like that in domestic affairs, was mixed, but more spectacularly so. Although he had made the existence of a missile gap between the United States and the Soviet Union a major part of his 1960 election campaign, he learned upon taking office that there was no missile gap: the United States remained far ahead of the Soviets in nuclear weaponry. Kennedy also discovered that there was in the works a secret CIA operation training 1,500 anti-Castro Cubans for an invasion of their homeland. The Joint Chiefs of Staff assured the inexperienced Kennedy that the plan was feasible in theory; CIA analysts predicted that the invasion would inspire Cubans to rebel against Castro.

In retrospect the scheme, poorly planned and poorly executed, had little chance of succeeding. When the ragtag invasion force landed at the Bay of Pigs in Cuba on April 17, 1961, it was brutally subdued in two days; more than 1,100 men were captured. A *New York Times* columnist lamented that the United States “looked like fools to our friends, rascals to our enemies, and incompetents to the rest.” It was hardly an auspicious way for the new president to demonstrate his mastery of foreign policy. Kennedy called the bungled Bay of Pigs invasion a “colossal mistake.” The planners had underestimated Castro's popularity and his ability to react to the surprise attack. The invasion also suffered from poor communication, inaccurate maps, faulty equipment, and ineffective leadership. The Cuban rebels had been told they would receive American air cover, but the invaders had been left defenseless on the beach. As one of them told a comrade on the beach, “Eddie, don't you realize we have been abandoned?” Former President Eisenhower characterized Kennedy's role in the clumsy invasion as a “Profile in Timidity and Indecision,” a sarcastic reference to Kennedy's book *Profiles in Courage* (1956). Kennedy responded to the Bay of Pigs fiasco by firing the CIA director and the CIA officer who coordinated the invasion.

Two months after the Bay of Pigs debacle, Kennedy met Soviet premier Nikita Khrushchev in Vienna. The volatile Khrushchev bullied and browbeat the inexperienced Kennedy and threatened to limit Western access to Berlin, the divided city located 100 miles within Communist East Germany. Khrushchev decided that Kennedy was “a youngster who had a great deal to learn and not much to offer.” Kennedy was stunned by the aggressive Soviet stand. Upon his return home, he demonstrated his resolve by calling up army reserve and national guard units. The Soviets responded by erecting the Berlin Wall, cutting off movement between East and West Berlin. The Berlin Wall plugged the most accessible escape hatch for East Germans,

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The Berlin Wall

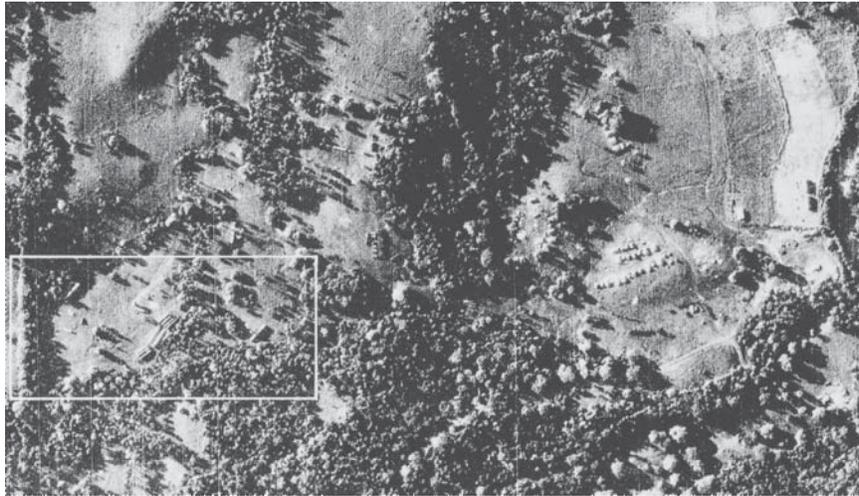
Two West Berliners communicate with family members (visible in the open window on the upper right side of the apartment building) on the East Berlin side of the newly constructed Berlin wall. The wall physically divided the city and served as a wedge between the United States and the Soviet Union.

showed Soviet willingness to challenge American resolve in Europe, and became another intractable barrier to improved relations between East and West.

THE CUBAN MISSILE CRISIS A year later, in the fall of 1962, Khrushchev and the Soviets posed another challenge, this time ninety miles off the coast of Florida. Kennedy's unwillingness to commit the forces necessary to overthrow Fidel Castro at the Bay of Pigs seemed to signify a failure of will, and the Soviets reasoned that they could install their ballistic missiles in Cuba without U.S. opposition. Their motives were to protect Cuba from another American-backed invasion, which Castro believed to be imminent, and to redress the strategic imbalance caused by the presence of U.S. missiles in Turkey aimed at the Soviet Union. Khrushchev relished the idea of throwing "a hedgehog at Uncle Sam's pants."

U.S. officials feared that Soviet missiles in Cuba represented a real threat to American security. Kennedy also worried that acquiescence to a Soviet military presence in Cuba would weaken the credibility of the American

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The Cuban Missile Crisis

Photographs taken from a U.S. surveillance plane on October 14, 1962, revealed both missile launchers and missile shelters in San Cristóbal, Cuba.

nuclear deterrent among Europeans and demoralize anti-Castro elements in Latin America. At the same time the installation of Soviet missiles served Khrushchev's purpose of demonstrating his toughness to both Chinese and Soviet critics of his earlier advocacy of peaceful coexistence. But he misjudged the American response.

On October 14, 1962, U.S. intelligence analysts discovered Soviet missile sites under construction in Cuba. From the beginning, even though the Soviet actions violated no law or treaty, the administration decided that the weapons had to be removed; the only question was how. As the air force chief of staff told Kennedy, "you're in a pretty bad fix, Mr. President." In a grueling series of secret meetings, the Executive Committee of the National Security Council narrowed the options to a choice between a "surgical" air strike and a naval blockade of Cuba. President Kennedy wisely opted for a blockade, which was carefully disguised by the euphemism *quarantine*, since a blockade was technically an act of war. A blockade offered the advantage of forcing the Soviets to shoot first, if it came to that, and left open the options of stronger action. Monday, October 22, began the most perilous week in world history. On that day the president announced the discovery of the missile sites in Cuba and the naval quarantine of the island nation. The United States and the Soviet Union now headed toward their closest encounter with nuclear war.

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Tensions grew as Khrushchev blustered that Kennedy had pushed humankind “to the abyss of a world missile-nuclear war.” Soviet ships, he declared, would ignore the quarantine. But on Wednesday, October 24, five Soviet ships, presumably with missiles aboard, stopped short of the quarantine line. Two days later the Soviets offered to withdraw the missiles in return for a public pledge by the United States not to invade Cuba. Secretary of State Dean Rusk replied that the administration was interested but stressed to a newscaster, “Remember, when you report this, that eyeball to eyeball, they [the Soviets] blinked first.”

That same evening, Kennedy received two messages from Khrushchev, the first repeating the original offer and the second demanding the removal of American missiles from Turkey. The two messages probably reflected divided counsels in the Kremlin. Ironically, Kennedy had already ordered removal of the outmoded missiles from Turkey, but he refused now to act under the gun. Instead, he followed Robert Kennedy’s suggestion that he respond favorably to the first letter and ignore the second. On Sunday, October 28, Khrushchev agreed to remove the Soviet missiles from Cuba.

In the aftermath of the crisis, tensions between the United States and the Soviet Union quickly subsided, relaxed in part by several symbolic steps: an agreement to sell the Soviet Union surplus American wheat, the installation of a “hot-line” telephone between Washington and Moscow to provide instant contact between the heads of government, and the removal of obsolete American missiles from Turkey, Italy, and Britain. On June 10, 1963, President Kennedy revealed that direct discussions with the Soviets would soon begin, and he called upon the nation to reexamine its attitude toward peace, the Soviet Union, and the cold war. Those discussions resulted in a treaty with the Soviet Union and Britain to end nuclear testing in the atmosphere, oceans, and outer space. The treaty, ratified in September 1963, was an important symbolic and substantive move toward détente. As Kennedy put it, “A journey of a thousand miles begins with one step.”

KENNEDY AND VIETNAM As tensions with the Soviet Union were easing, a crisis was growing in Southeast Asia. Events there were moving toward what would become the greatest American foreign-policy calamity of the century. During John Kennedy’s “thousand days” in office, the turmoil of Indochina never preoccupied public attention for any extended period, but it dominated international diplomatic debates from the time the administration entered office.

The landlocked kingdom of Laos, along with neighboring Cambodia to the south, had been declared neutral in the Geneva Accords of 1954, but

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thereafter Laos had fallen into a complex struggle for power between the Communist Pathet Lao insurgents and the inept Royal Laotian Army. The matters stood when Eisenhower left office and told Kennedy, “You might have to go in there and fight it out.” The chairman of the Joint Chiefs of Staff favored combat against the Pathet Lao. After a lengthy consideration of alternatives, Kennedy and his advisers decided to promote a neutral coalition government that would include Pathet Lao representatives yet prevent a Pathet Lao victory and would avoid U.S. military involvement. The Soviets, who were extending aid to the Pathet Lao, indicated a readiness to negotiate, and in 1961 talks began in Geneva. After more than a year of tangled negotiations, all parties agreed to a neutral coalition. American and Soviet aid to the opposing parties was supposed to end, but both countries in fact continued covert operations while North Vietnam kept open the Ho Chi Minh Trail through eastern Laos, which it used to supply its Viet Cong allies in South Vietnam.

The situation in South Vietnam worsened thereafter under the leadership of Premier Ngo Dinh Diem. At the time the problem was less the scattered Communist guerrilla attacks than Diem’s failure to deliver promised social and economic reforms and his inability to rally popular support. His repressive tactics, directed not only against Communists but also against the Buddhist majority and other critics, played into the hands of his enemies. In 1961 White House assistant Walt Rostow and General Maxwell Taylor, the first in a long train of presidential emissaries to South Vietnam’s capital,

Ngo Dinh Diem

The Vietnamese premier in 1962, celebrating the anniversary of Vietnam’s independence from colonial rule.



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proposed a major increase in the U.S. military presence. Kennedy refused but continued to dispatch more military “advisers” in the hope of stabilizing the situation: when he took office, there had been 2,000 U.S. troops in Vietnam; by the end of 1963, there were 16,000, none of whom had been officially committed to battle.

By 1963 Kennedy was receiving sharply divergent reports from the South Vietnamese countryside. American military advisers expressed confidence in the Army of the Republic of Vietnam. On-site political reporters, however, watching the reactions of the Vietnamese people, predicted civil turmoil as long as Diem remained in power. By midyear, growing Buddhist demonstrations ignited the discontent in the south. The spectacle of Buddhist monks setting themselves on fire in protest against government tyranny stunned Americans. By the fall of 1963, the Kennedy administration had decided that the autocratic Diem was a lost cause. When dissident generals proposed a coup d’état, the U.S. ambassador assured them that America would not stand in the way. On November 1 they seized the South Vietnamese government and murdered Diem. But the rebel generals provided no more stability than had earlier regimes, and successive coups set the fragile country spinning from one military leader to another.

KENNEDY’S ASSASSINATION By the fall of 1963, President Kennedy seemed to acknowledge the intractability of the situation in Vietnam. In September 1963 he declared of the South Vietnamese: “In the final analysis it’s their war. They’re the ones who have to win it or lose it. We can help them as advisers but they have to win it.” The following month he announced the administration’s intention to withdraw U.S. forces from South Vietnam by the end of 1965. What Kennedy would have done thereafter has remained a matter of endless controversy, endless because it is unanswerable, and it is unanswerable because on November 22, 1963, while visiting Dallas, Texas, Kennedy was shot in the neck and head by Lee Harvey Oswald.

Oswald’s motives remain unknown. Although a blue-ribbon federal commission appointed by President Johnson and headed by Chief Justice Earl Warren concluded that Oswald acted alone, debate still swirls around various conspiracy theories. Kennedy’s death and then the murder of Oswald by Jack Ruby, a Dallas nightclub owner, were shown over and over again on television, the medium that had so helped Kennedy’s rise to the presidency and now captured his death and the moving funeral at Arlington National Cemetery. Kennedy’s assassination enshrined him in the public imagination as a martyred leader cut down in the prime of his life.

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LYNDON JOHNSON AND THE GREAT SOCIETY

Lyndon Johnson took the presidential oath of office on board the plane that brought John Kennedy's body back to Washington from Dallas. Fifty-five years old, he had spent twenty-six years on the Washington scene and had served nearly a decade as Democratic leader in the Senate, where he had displayed the greatest gift for compromise since Henry Clay.

Johnson brought to the White House a marked change of style from Kennedy. A self-made and self-centered man who had worked his way out of a hardscrabble rural Texas environment to become one of Washington's most powerful figures, Johnson had none of the Kennedy elegance. He was a bundle of conflicting elements: earthy, idealistic, domineering, insecure, gregarious, suspicious, affectionate, manipulative, ruthless, and compassionate. Johnson's ego was as huge as his ambition. He had to be at the center of things, directing and dominating. He craved both political power and public affection. Like another southern president, Andrew Johnson, he harbored a sense of being the perpetual outsider despite his long experience with legislative power. And indeed he was so regarded by Kennedy "insiders." He, in turn, had "detested" the way Kennedy and his aides ignored him as vice president.

Presidential Assassination

John F. Kennedy's vice president, Lyndon B. Johnson, takes the presidential oath in Air Force One before its return from Dallas with Jacqueline Kennedy (right), the presidential party, and the body of the assassinated president.



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Those who viewed Johnson as a stereotypical southern conservative failed to appreciate his long-standing admiration for Franklin Roosevelt, the depth of his concern for the poor, and his commitment to the cause of civil rights. “I’m going to be the best friend the Negro ever had,” he told a member of the White House staff. In foreign affairs, however, he was, like Woodrow Wilson, a novice. Johnson wanted to be the greatest American president, the one who did the most good for the most people. And he would let nothing stand in his way. In the end, however, the grandiose Johnson ended up promising far more than he could accomplish, raising false hopes and stoking fiery resentments.



The Johnson Treatment

Lyndon Johnson used powerful body language to intimidate and manipulate anyone who dared disagree with him.

POLITICS AND POVERTY Domestic policy was Johnson’s first priority. Amid the national grief after the assassination, he declared that Kennedy’s legislative program, stymied in congressional committees, would be passed. Johnson loved the kind of political infighting and legislative detail that Kennedy had loathed. The logjam in the Congress that had blocked Kennedy’s legislative efforts broke under Johnson’s forceful leadership, and a torrent of legislation poured through.

Before 1963 was out, Congress had approved a pending foreign-aid bill and a plan to sell wheat to the Soviet Union. But America’s commitment to foreign aid drew attention to its own people’s needs. In 1964 the Council of Economic Advisers reported that 9.3 million American families, about 20 percent of the population, were living below the “poverty line.” “Unfortunately, many Americans live on the outskirts of hope,” Johnson told Congress in his first State of the Union message, “some because of their poverty and some because of their color, and all too many because of both.” At the top of his agenda, he put Kennedy’s stalled measures for tax reductions and

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civil rights. In 1962 Kennedy had announced an unusual plan to jump-start the sluggish economy: a tax cut designed to stimulate consumer spending. Congressional Republicans opposed the idea because it would increase the federal budget deficit. And polls showed that public opinion was also skeptical. So Kennedy postponed the proposed tax cut a year. It was still bogged down in Congress when the president was assassinated, but Lyndon Johnson was able to break the logjam. The Revenue Act of 1964 did provide a needed boost to the economy.

Likewise, the Civil Rights Act that Kennedy had presented to Congress in 1963 was brought to fruition in 1964 by Johnson's forceful leadership. It prohibited racial segregation in public facilities such as bus terminals, restaurants, theaters, and hotels. And it outlawed long-standing racial discrimination in the registration of voters and the hiring of employees. The civil rights bill passed the House in February 1964. In the Senate, however, southern legislators launched a filibuster that lasted two months. Johnson finally prevailed and the bill became law on July 2. But the new president knew it had come at a political price. On the night after signing the bill, Johnson told an aide that "we have just delivered the South to the Republican Party for a long time to come."

In addition to fulfilling Kennedy's major promises, Johnson launched an ambitious legislative program of his own. In his 1964 State of the Union address, he added to his must-do list a bold new idea that bore the Johnson brand: "This Administration today, here and now, declares unconditional war on poverty in America." The particulars of this "war on poverty" were to come later, the product of a task force that was at work before Johnson took office.

Americans had rediscovered poverty when the social critic Michael Harrington published a powerful exposé titled *The Other America* (1962). Harrington argued that more than 40 million people were mired in a "culture of poverty." Unlike the upwardly mobile immigrant poor at the turn of the century, the modern poor lacked hope. "To be impoverished," he asserted, "is to be an internal alien, to grow up in a culture that is radically different from the one that dominates the society." President Kennedy asked his advisers to investigate the poverty problem and suggest solutions. Upon taking office as president, Lyndon Johnson announced that he wanted an anti-poverty package that was "big and bold, that would hit the nation with real impact." Money for the program would come from the tax revenues generated by corporate profits made possible by the tax reduction of 1964, which had led to one of the longest sustained economic booms in history.

The administration's war on poverty was embodied in an economic-opportunity bill that incorporated a wide range of programs: a Job Corps

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for inner-city youths aged sixteen to twenty-one, a Head Start program for disadvantaged preschoolers, work-study programs for college students, grants to farmers and rural businesses, loans to employers willing to hire the chronically unemployed, the Volunteers in Service to America (a domestic Peace Corps), and the Community Action Program, which would provide “maximum feasible participation” of the poor in directing neighborhood programs designed for their benefit. Speaking at Ann Arbor, Michigan, in 1964, Johnson called for a “Great Society” resting on “abundance and liberty for all. The Great Society demands an end to poverty and racial injustice, to which we are fully committed in our time.”

THE ELECTION OF 1964 Johnson’s well-intentioned but hastily conceived “war on poverty” and Great Society social program provoked a Republican counterattack. For years, conservatives had come to fear that the Republican party had fallen into the hands of an “eastern establishment” that had given in to the same internationalism and big-government policies as liberal Democrats. Ever since 1940, so the theory went, the party had nominated “me-too” candidates who merely promised to run more efficiently the programs that Democrats designed. Offer the Republican voters “a choice, not an echo,” they reasoned, and a true conservative majority would assert itself.

By 1960 Arizona senator Barry Goldwater, a millionaire department-store magnate, had emerged as the leader of the Republican right. In his book *The Conscience of a Conservative* (1960), Goldwater proposed the abolition of the income tax, sale of the Tennessee Valley Authority, and a drastic overhaul of Social Security. Almost from the time of Kennedy’s victory in 1960, a movement to draft Goldwater had begun, mobilizing right-wing activists to capture party caucuses and contest primaries. In 1964 they took an early lead, and they swept the all-important California primary. Thus Goldwater’s forces controlled the Republican Convention when it gathered in San Francisco. “I would remind you,” Goldwater told the delegates, “that extremism in the defense of liberty is no vice.”

During the 1964 campaign, Goldwater displayed a gift for frightening voters. He urged wholesale bombing of North Vietnam and left the impression of being trigger-happy. He savaged Johnson’s war on poverty and the entire New Deal tradition. At times he was foolishly candid. In Tennessee he proposed the sale of the Tennessee Valley Authority; in St. Petersburg, Florida, a major retirement community, he questioned the value of Social Security. He also opposed the nuclear test ban and the 1964 Civil Rights Act. To Republican campaign buttons that claimed, “In your heart, you know he’s right,” Democrats responded, “In your guts, you know he’s nuts.”

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Barry Goldwater

Many voters feared that the Republican presidential candidate in 1964, senator Barry Goldwater, was trigger-happy. In this cartoon, Goldwater wields in one hand his book *The Conscience of a Conservative* and in the other a hydrogen bomb.

Johnson, on the other hand, portrayed himself as a responsible centrist. He chose as his running mate Hubert Humphrey from Minnesota, a prominent liberal senator who had long promoted the cause of civil rights. In contrast to Goldwater's bellicose rhetoric on Vietnam, Johnson pledged, "We are not about to send American boys nine or ten thousand miles from home to do what Asian boys ought to be doing for themselves."

The result was a landslide. Johnson polled 61 percent of the total votes; Goldwater carried only Arizona and five states in the Deep South, where race remained the salient issue. Vermont went Democratic for the first time ever in a presidential election. Johnson won the electoral vote by a whopping 486 to 52. In the Senate the Democrats increased their majority by two (68 to 32) and in the House by thirty-seven (295 to 140). Johnson knew, however, that such a mandate could quickly erode. He shrewdly told his aides, "Every day I'm in office, I'm going to lose votes. I'm going to alienate somebody. . . . We've got to get this legislation fast. You've got to get it during my honeymoon." Goldwater's success in the Deep South also continued that traditionally Democratic region's shift to the Republican party.

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LANDMARK LEGISLATION In 1965 Johnson flooded the new Congress with Great Society legislation that, he promised, would end poverty, revitalize the decaying central cities, provide every young American with the chance to attend college, protect the health of the elderly, enhance cultural life, clean up the air and water, and make the highways safer and prettier. The scope of Johnson's legislative program was unparalleled since Franklin Roosevelt's Hundred Days.

Priority went to federal health insurance and aid to education, proposals that had languished since President Truman had proposed them in 1945. For twenty years a comprehensive medical-insurance program had been stalled by the steadfast opposition of the American Medical Association. But now that Johnson had the votes, the AMA joined Republicans in supporting a bill serving those over age sixty-five. The AMA proposed, in addition to hospital insurance, a program for the payment of doctors' bills and drug costs, with the government footing half the premium. The act that finally emerged went well beyond the original program. It not only incorporated the new proposal into the Medicare program for the aged but also added another program, dubbed Medicaid, for federal grants to states to help cover medical payments for the indigent. President Johnson signed the bill on July 30, 1965, in Independence, Missouri, with eighty-one-year-old Harry Truman looking on.

Five days after he submitted his Medicare program, Johnson sent to Congress a massive program of federal aid to elementary and secondary education. Such proposals had been ignored since the 1940s, blocked alternately by issues of segregation and separation of church and state. The first issue had been laid to rest, legally at least, by the Civil Rights Act of 1964. Now Congress devised a means of extending aid to "poverty-impacted" school districts regardless of their public or parochial character.

The momentum generated by these measures had already begun to carry others along, and it continued through the following year. Before the Eighty-ninth Congress adjourned, it had established a record in the passage of landmark legislation unequaled since the time of the New Deal. Altogether the tide of Great Society legislation had carried 435 bills through the Congress. Among them was the Appalachian Regional Development Act of 1966, which provided \$1 billion for programs in remote mountain areas that had long been pockets of desperate poverty. The Housing and Urban Development Act of 1965 provided for construction of 240,000 public housing units and \$3 billion for urban renewal. Funds for rent supplements for low-income families followed in 1966, and in that year a new Department of

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Housing and Urban Development appeared, headed by Robert C. Weaver, the first African-American cabinet member. Lyndon Johnson had, in the words of one Washington reporter, “brought to harvest a generation’s backlog of ideas and social legislation.”

THE IMMIGRATION ACT Little noticed in the stream of legislation flowing from Congress was a major new immigration bill that had originated in the Kennedy White House. President Johnson signed the Immigration and Nationality Services Act of 1965 in a ceremony held on Liberty Island in New York Harbor. In his speech he stressed that the new law would redress the wrong done to those “from southern and eastern Europe” and the “developing continents” of Asia, Africa, and Latin America. It would do so by abolishing the discriminatory quotas based on national origin that had governed immigration policy since the 1920s. The new law treated all nationalities and races equally. In place of national quotas, it created hemispheric ceilings on visas issued: 170,000 for persons from outside the Western Hemisphere, 120,000 for persons from within. It also stipulated that no more than 20,000 people could come from any one country each year. The new act allowed the entry of immediate family members of American residents without limit. Most of the annual visas were to be given on a first-come, first-served basis to “other relatives” of American residents, and only a small proportion (about 10 percent) were allocated to those with special talents or job skills. During the 1960s Asians and Latin Americans became the largest contingent of new Americans.

ASSESSING THE GREAT SOCIETY The Great Society programs included several successes. The Highway Safety Act and the Traffic Safety Act (1966) established safety standards for automobile manufacturers and highway design, and the scholarships provided for college students under the Higher Education Act (1965) were quite popular. Many Great Society initiatives aimed at improving the health, nutrition, and education of poor Americans, young and old, made some headway. So, too, did federal efforts to clean up air and water pollution. Several of Johnson’s most ambitious programs, however, were ill conceived, others were vastly underfunded, and many were mismanaged. Medicare, for example, removed incentives for hospitals to control costs, and medical bills skyrocketed. The Great Society helped reduce the number of people living in poverty, but it did so largely by providing federal welfare payments, not by finding them

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productive jobs. The war on poverty ended up being as disappointing as the war in Vietnam. Often funds appropriated for various programs never made it through the tangled bureaucracy to the needy. Widely publicized cases of welfare fraud became a powerful weapon in the hands of those who were opposed to liberal social programs. By 1966 middle-class resentment over the cost and waste of the Great Society programs helped to generate a conservative backlash that fueled a Republican resurgence at the polls.

FROM CIVIL RIGHTS TO BLACK POWER

CIVIL RIGHTS LEGISLATION Early in 1965, Martin Luther King Jr. announced a drive to enroll the 3 million African Americans in the South who had not registered to vote. In Selma, Alabama, civil rights protesters began a march to Montgomery, about forty miles away, only to be violently dispersed by state troopers and a mounted posse. A federal judge agreed to allow the march, and President Johnson provided troops for protection. By March 25, when the demonstrators reached Montgomery, some 35,000 people were with them, and King delivered a rousing address from the steps of the state capitol.

Several days before the march, President Johnson went before Congress with a moving plea that reached its climax when he slowly intoned the words of the movement's hymn: "And we shall overcome." The resulting Voting Rights Act of 1965 ensured all citizens the right to vote. It authorized the attorney general to dispatch federal examiners to register voters. In states or counties where fewer than half the adults had voted in 1964, the act suspended literacy tests and other devices commonly used to defraud citizens of the vote. By the end of the year, some 250,000 African Americans were newly registered.

BLACK POWER Amid this success, however, the civil rights movement began to fragment. On August 11, 1965, less than a week after the passage of the Voting Rights Act, Watts, a predominantly black and poor community in Los Angeles, exploded in a frenzy of riots and looting. When the uprising ended, thirty-four were dead, almost 4,000 rioters were in jail, and property damage exceeded \$35 million. Chicago and Cleveland, along with forty other American cities, experienced similar race riots in the summer of 1966. The following summer, Newark and Detroit burst into flames.

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In retrospect, it was predictable that the civil rights movement would shift its focus to the plight of urban blacks. By the middle 1960s, about 70 percent of the black population lived in metropolitan areas, most of them in central-city ghettos that had been bypassed by the postwar prosperity. And again it seemed clear, in retrospect, that the nonviolent tactics that had worked in the rural South would not work as readily in northern cities. “It may be,” wrote a contributor to *Esquire*, “that looting, rioting and burning . . . are really nothing more than radical forms of urban renewal, a response not only to the frustrations of the ghetto but the collapse of all ordinary modes of change, as if a body despairing of the indifference of doctors sought to rip a cancer out of itself.” A special Commission on Civil Disorders noted that, unlike earlier race riots, the urban upheavals of the middle 1960s were initiated by blacks themselves; earlier riots had been started by whites, which had then prompted black counterattacks. Now blacks visited violence and destruction on themselves in an effort to destroy what they could not stomach and what civil rights legislation seemed unable to change.

By 1966 “black power” had become the new rallying cry. When Stokely Carmichael, a twenty-five-year-old graduate of Howard University, became head of the Student Nonviolent Coordinating Committee (SNCC) in 1966, he made the separatist philosophy of black power the official objective of the organization and ousted whites from the organization. H. Rap Brown, who succeeded Carmichael as head of SNCC in 1967, urged blacks to “get you some guns” and “kill the honkies.” Carmichael, meanwhile, had moved on to the Black Panther party, a self-professed group of urban revolutionaries founded in Oakland, California, in 1966. Headed by Huey P. Newton and Eldridge Cleaver, the provocative, armed Black Panthers terrified the public, but eventually fragmented in spasms of violence.

The most articulate spokesman for black power was Malcolm X (formerly Malcolm Little, with the X denoting his lost African surname). Malcolm had risen from a ghetto childhood of narcotics and crime to become the chief disciple of Elijah Muhammad, the Black Muslim leader in the United States. “Yes, I’m an extremist,” Malcolm acknowledged in 1964. “The black race in the United States is in extremely bad shape. You show me a black man who isn’t an extremist and I’ll show you one who needs psychiatric attention.” By 1964 Malcolm had broken with Elijah Muhammad and founded an organization committed to the establishment of alliances between African Americans and the nonwhite peoples of the world. But shortly after the publication of his *Autobiography* in 1964, Malcolm was gunned down in Harlem by assassins representing a rival faction of Black Muslims. With him went the most effective

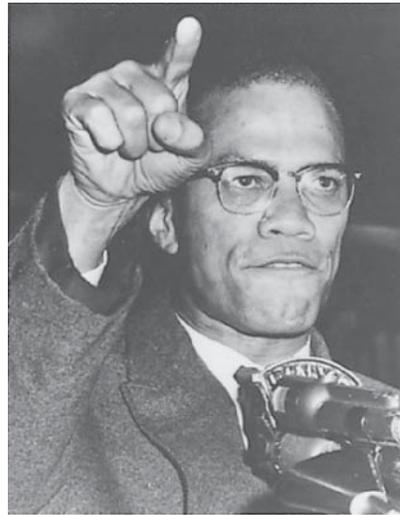
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voice for urban black militancy since Marcus Garvey in the 1920s. What made the assassination of Malcolm X especially tragic was that he had just months before begun to abandon his strident anti-white rhetoric and to preach a biracial message of social change.

Although widely publicized and highly visible, the black power movement never attracted more than a small minority of African Americans. Only about 15 percent of blacks labeled themselves separatists. The preponderant majority continued to identify with the philosophy of nonviolent integration promoted by Martin Luther King Jr. and with organizations such as the NAACP. King dismissed black separatism and the promotion of violent social change. He reminded his followers that “we can’t win violently.”

The black power philosophy, despite its hyperbole, violence, and small number of adherents, had two positive effects upon the civil rights movement. First, it helped African Americans take greater pride in their racial heritage. As Malcolm X often pointed out, prolonged slavery and institutionalized racism had eroded the self-esteem of many blacks in the United States. “The worst crime the white man has committed,” he declared, “has been to teach us to hate ourselves.” He and others helped blacks appreciate their African roots and their American accomplishments. In fact, it was Malcolm X who insisted that blacks call themselves African Americans as a symbol of pride in their roots and as a spur to learn more about their history as a people. As the popular singer James Brown urged, “Say it loud—I’m black and I’m proud.”

Second, the black power phenomenon forced King and other mainstream black leaders and organizations to launch a new stage in the civil rights movement to focus attention on the plight of poor inner-city blacks. Legal access to restaurants, schools, and other public accommodations, King pointed out, meant little to people mired in a culture of urban poverty. They needed jobs and decent housing as much as they needed legal rights. To this end, King began to emphasize the economic plight of the black urban



Malcolm X

Malcolm X was the black power movement’s most influential spokesman.

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underclass. The time had come for radical measures “to provide jobs and income for the poor.” Yet as King and others sought to heighten the war on poverty at home, the escalating war in Vietnam was consuming more and more of America’s resources and energies.

THE TRAGEDY OF VIETNAM

As racial violence erupted in America’s cities, the war in Vietnam reached new levels of intensity and destruction. In November 1963, when John Kennedy was assassinated, there were 16,000 American military “advisers” in South Vietnam. Lyndon Johnson inherited a commitment to prevent a Communist takeover in Indochina as well as a reluctance on the part of American presidents to assume primary responsibility for fighting the Viet Cong (Communist-led guerrillas in South Vietnam) and their North Vietnamese allies. Beginning with Harry Truman, one president after another had done just enough to avoid being charged with having “lost” Vietnam to communism. Johnson initially sought to do the same, fearing that any other course of action would undermine his political influence and jeopardize his Great Society programs in



“How Deep Do You Figure We’ll Get Involved, Sir?”

Although U.S. soldiers were first sent to Vietnam as noncombatant advisers, they soon found themselves involved in a quagmire of fighting.

Congress. But this path took him and the United States deeper into an expanding military commitment in Southeast Asia. Early on Johnson doubted that Vietnam was worth military involvement. In May 1964 he told national security adviser, McGeorge Bundy, that he had spent a sleepless night worrying about Vietnam: “It looks to me like we are getting into another Korea. . . . I don’t think we can fight them 10,000 miles away from home. . . . I don’t think it’s worth fighting for. And I don’t think we can get out. It’s just the biggest damned mess that I ever saw.”

Yet Johnson’s fear of appearing weak abroad was stronger than his misgivings and forebodings. By the end of 1965,

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there were 184,000 U.S. troops in Vietnam; in 1966 there were 385,000; and by 1969, the height of the American presence, 542,000. By the time the last troops left, in March 1973, some 58,000 Americans had died and another 300,000 had been wounded. The war had cost the taxpayers \$150 billion, siphoned away funding from many Great Society programs, produced 570,000 draft offenders and 563,000 less-than-honorable military discharges, toppled Johnson's administration, and divided the country as no event in history had since the Civil War.

ESCALATION The official sanction for military “escalation” in Southeast Asia—a Defense Department term favored in the Vietnam era—was the Tonkin Gulf resolution, voted by Congress on August 7, 1964. On that day, Johnson told a national television audience that two destroyers, the U.S.S. *Maddox* and the *C. Turner Joy*, had been attacked by North Vietnamese vessels on August 2 and 4 in the Gulf of Tonkin, off the coast of North Vietnam. Although Johnson described the attack as unprovoked, in truth the destroyers had been monitoring South Vietnamese attacks against two North Vietnamese islands—attacks planned by American advisers. Even though there was no tangible evidence of an attack on the U.S. ships, the Tonkin Gulf resolution authorized the president to “take all necessary measures to repel any armed attack against the forces of the United States and to prevent further aggression.” Only Senator Wayne Morse of Oregon and Senator Ernest Gruening of Alaska voted against the resolution, which Johnson thereafter interpreted as equivalent to a congressional declaration of war.

Soon after his landslide victory over Goldwater in 1964, Johnson, while still plagued with private doubts, made the crucial decisions that shaped policy in Vietnam for the next four years. On February 5, 1965, Viet Cong guerrillas killed 8 and wounded 126 Americans at Pleiku, in South Vietnam. Further attacks later that week led Johnson to order Operation Rolling Thunder, the first sustained bombing of North Vietnam, which was intended to stop the flow of soldiers and supplies into the south. Six months later an extensive study concluded that the bombing had not slowed the supplies pouring down the Ho Chi Minh Trail from North Vietnam through Laos and into South Vietnam.

In March 1965 the new U.S. commander in Vietnam, General William C. Westmoreland, greeted the first installment of combat troops. By the summer, American forces were engaged in “search-and-destroy” operations throughout South Vietnam. As combat operations increased, so did casualties, announced each week on the nightly news, along with the “body count” of alleged Viet Cong dead. “Westy’s war,” although fought with helicopter

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Why was there an American military presence in Vietnam?
What was the Ho Chi Minh Trail (see page 1255)? What was
the Tet offensive?

gunships, chemical defoliants, and napalm, became like the trench warfare of World War I—a war of attrition.

THE CONTEXT FOR POLICY Lyndon Johnson’s decision to “Americanize” the Vietnam War, so ill-starred in retrospect, was consistent with the

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foreign-policy principles pursued by all presidents after World War II. The version of the containment theory articulated in the Truman Doctrine, endorsed by Eisenhower throughout the 1950s, and reaffirmed by Kennedy, pledged U.S. opposition to the advance of communism anywhere in the world. “Why are we in Vietnam?” Johnson asked rhetorically at Johns Hopkins University in 1965. “We are there because we have a promise to keep. . . . To leave Vietnam to its fate would shake the confidence of all these people in the value of American commitment.” Secretary of State Dean Rusk frequently repeated this rationale, warning that Thailand, Burma, and the rest of Southeast Asia would fall “like dominoes” to communism if American forces withdrew from Vietnam. Military intervention was thus a logical culmination of the assumptions that were widely shared by the foreign-policy establishment and the leaders of both political parties since the early days of the cold war.

At the same time, Johnson and his advisers presumed that military involvement in Vietnam must not reach levels that would cause the Chinese or Soviets to intervene directly. And that meant, in effect, that a complete military victory was never possible. The goal of the United States was not to win the war in any traditional sense but to prevent the North Vietnamese and the Viet Cong from winning and, eventually, to force a negotiated settlement with the North Vietnamese. This meant that the United States would have to maintain a military presence as long as the enemy retained the will to fight.

As it turned out, public support for the war eroded faster than the will of the North Vietnamese leaders to tolerate devastating casualties and destruction. Systematic opposition to the war on college campuses began in 1965 with “teach-ins” at the University of Michigan. The following year, Senator J. William Fulbright of Arkansas, chairman of the Senate Foreign Relations Committee, began congressional investigations into American policy in Vietnam. George Kennan, the author of the containment doctrine, told Senator Fulbright’s committee that the doctrine was appropriate for Europe but not for Southeast Asia. And a respected general testified that General Westmoreland’s military strategy had no chance of achieving victory. By 1967 anti-war demonstrations attracted massive support. Nightly television accounts of the fighting—Vietnam was the first war to receive extended television coverage and hence was dubbed the living-room war—called into question the official optimism. By May 1967 even Secretary of Defense Robert McNamara was wavering: “The picture of the world’s greatest superpower killing or injuring 1,000 noncombatants a week, while trying to pound a tiny backward nation into submission on an issue whose merits are hotly disputed, is not a pretty one.”

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In a war of political will, North Vietnam had the advantage. Johnson and his advisers grievously underestimated the tenacity of the North Vietnamese commitment to unify Vietnam and expel American forces. While the United States fought a limited war for limited objectives, the Vietnamese Communists fought an all-out war for their very survival. Just as General Westmoreland was assuring Johnson and the public that the war effort in early 1968 was on the verge of gaining the upper hand, the Communists again displayed their cunning and tenacity.

THE TURNING POINT On January 31, 1968, the first day of the Vietnamese New Year (Tet), the Viet Cong defied a holiday truce to launch ferocious assaults on American and South Vietnamese forces throughout South Vietnam. The old capital city of Hue fell to the Communists, and Viet Cong units temporarily occupied the grounds of the U.S. embassy in Saigon, the capital of South Vietnam. General Westmoreland proclaimed the Tet offensive a major defeat for the Viet Cong, and most students of military

The Tet Offensive

Many Vietnamese were driven from their homes during the bloody street battles of the 1968 Tet offensive. Here, following a lull in the fighting, civilians carrying a white flag approach U.S. Marines.



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strategy later agreed with him. While Viet Cong casualties were enormous, however, the impact of the surprise attacks on the American public was more telling. The scope and intensity of the offensive contradicted upbeat claims by U.S. commanders that the war was going well. *Time* and *Newsweek* magazines soon ran anti-war editorials urging withdrawal. Polls showed that Lyndon Johnson's popularity had declined to 35 percent, lower than that of any president in polling history since Truman's darkest days. Civil rights leaders and social activists felt betrayed as they saw federal funds earmarked for the war on poverty gobbled up by the expanding war. In 1968 the United States was spending \$322,000 on every Communist killed in Vietnam; the poverty programs at home received only \$53 per person.

During 1968 Lyndon Johnson grew increasingly embittered and isolated. He suffered from depression and bouts of paranoia. It had become painfully evident that the Vietnam War was a never-ending stalemate that was fragmenting the nation and undermining the Great Society programs. Clark Clifford, Johnson's new secretary of defense, reported to the president that a task force of prominent soldiers and civilians saw no prospect for a military victory. Robert Kennedy, now a senator from New York, was considering a run for the presidency in order to challenge Johnson's Vietnam policy. Senator Eugene McCarthy of Minnesota had already decided to oppose Johnson in the Democratic primaries. With anti-war students rallying to his candidacy, McCarthy polled 42 percent of the vote to Johnson's 48 percent in New Hampshire's March primary. It was a remarkable showing for a little-known senator. Each presidential primary now promised to become a referendum on Johnson's Vietnam policy. The war in Vietnam had become Lyndon Johnson's war; as more and more voters soured on the fighting, he saw his public support evaporate. In Wisconsin, scene of the next Democratic primary, the president's political advisers forecast a humiliating defeat.



Johnson and Vietnam

The Vietnam War sapped the spirit of Lyndon Johnson, who decided not to run for reelection in 1968.

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On March 31 Johnson made a dramatic decision. He appeared on national television to announce a limited halt to the bombing of North Vietnam and fresh initiatives for a negotiated cease-fire. Then he added a stunning post-script: “I shall not seek, and I will not accept the nomination of my party for another term as your President.” Although U.S. troops would remain in Vietnam for five more years and the casualties would continue, the quest for military victory had ended. Now the question was how the most powerful nation in the world could extricate itself from Vietnam with a minimum of damage to its prestige.

SIXTIES CRESCENDO

A TRAUMATIC YEAR Change moved at a fearful pace throughout the 1960s, but 1968 was the most turbulent and traumatic year of all. On April 4, only four days after Johnson’s withdrawal from the presidential race, Martin Luther King Jr. was gunned down in Memphis, Tennessee. The assassin, James Earl Ray, had expressed hostility toward blacks, but debate still continues over whether he was a pawn in an organized conspiracy. King’s death set off an outpouring of grief among whites and blacks. It also ignited riots in over sixty cities.

Two months later, on June 5, Robert Kennedy was shot in the head by a young Palestinian, Sirhan Sirhan, who resented Kennedy’s strong support of Israel. Kennedy’s death occurred at the end of the day on which he had convincingly defeated Eugene McCarthy in the California Democratic primary, thereby assuming leadership of the anti-war forces in the race for the presidential nomination. Political reporter David Halberstam of the *New York Times* thought back to the assassinations of John Kennedy and Malcolm X, then the violent end of King, the most influential African-American leader of the twentieth century, and then Robert Kennedy, the heir to leadership of the Kennedy clan. “We could make a calendar of the decade,” Halberstam wrote, “by marking where we were at the hours of those violent deaths.”

CHICAGO AND MIAMI In August 1968 Democratic delegates gathered inside a Chicago convention hall to nominate for president Johnson’s faithful vice president, Hubert Humphrey, while almost 20,000 police officers and national guardsmen and a small army of television reporters stood watch over a gathering of eclectic protesters herded together miles away in a public park. Chicago mayor Richard J. Daley, who had given “shoot-to-kill”

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orders to police during the April riots protesting the King assassination, warned that he would not tolerate disruptions. Nonetheless, riots broke out and were televised nationwide. As police tear gas and billy clubs struck demonstrators, others chanted, “The whole world is watching.”

The Democratic party’s liberal tradition was clearly in disarray, a fact that gave heart to the Republicans, who gathered in Miami Beach to nominate Richard Nixon. Only six years earlier, after he had lost the California gubernatorial race, Nixon had vowed never again to run for public office. But by 1968 he had changed his mind and had become a spokesman for the values of “Middle America.” Nixon and the Republicans offered a vision of stability and order that appealed to a majority of Americans—soon to be called the silent majority.

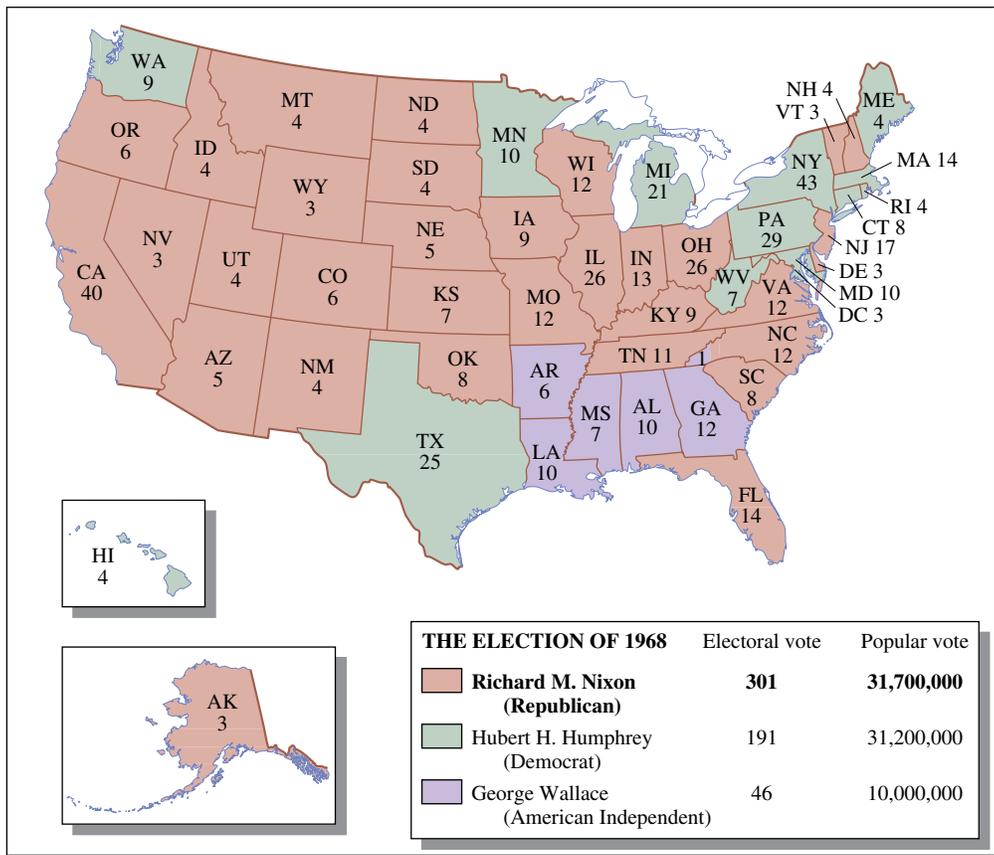
George Wallace, the Democratic governor of Alabama who had made his reputation as an outspoken defender of segregation, ran as a third candidate in the campaign, on the American Independent party ticket. Wallace moderated his position on the race issue but appealed even more candidly than Nixon to voters’ concerns about rioting anti-war protesters, the welfare

The 1968 Election

Richard Nixon (left) and running mate Spiro Agnew (right).



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How did the riots at the Chicago Democratic Convention affect the 1968 presidential campaign? How did Nixon engineer his political comeback? What was Wallace's appeal to over 10 million voters?

system, and the growth of the federal government. Wallace's reactionary candidacy generated considerable appeal outside his native South, especially among white working-class communities, where resentment flourished against Lyndon Johnson's Great Society liberalism. Although never a possible winner, Wallace did pose the possibility of denying Humphrey or Nixon an electoral majority and thereby throwing the choice into the House of Representatives, which would have provided an appropriate climax to a chaotic year.

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NIXON AGAIN It did not happen that way. Nixon enjoyed an enormous lead in the polls, which narrowed as the 1968 election approached. Wallace’s campaign was hurt by his outspoken running mate, retired air force general Curtis LeMay, who favored expanding the war in Vietnam and using nuclear weapons. In October 1968 Hubert Humphrey infuriated Johnson when he announced that, if elected, he would stop bombing North Vietnam “as an acceptable risk for peace.”

Nixon and Governor Spiro Agnew of Maryland, his running mate, eked out a narrow victory of about 500,000 votes, a margin of about 1 percentage point. The electoral vote was more decisive, 301 to 191. George Wallace received 10 million votes, 13.5 percent of the total. It was the best showing by a third-party candidate since Robert La Follette ran on the Progressive ticket in 1924. All but one of Wallace’s 46 electoral votes were from the Deep South. Nixon swept all but four of the states west of the Mississippi. Humphrey’s support came almost exclusively from the Northeast.

So at the end of a turbulent year near the end of a traumatic decade, a nation on the verge of violent chaos looked to Richard Nixon to provide what he had promised in the campaign: “peace with honor” in Vietnam and a middle ground on which a majority of Americans, silent or otherwise, could come together.

MAKING CONNECTIONS

- The reform movements of the 1960s galvanized the baby-boom generation into a new youth movement, described in the next chapter, that continued through the early 1970s.
- The conflict in Vietnam, America’s longest war, would come to a bitter end for U.S. forces, but the divisions it spawned still echo today.
- The Immigration and Nationality Act of 1965 would have profound and unexpected consequences on American society, described in Chapter 37.
- The success of the civil rights movement in the 1960s led to similar movements by women, gays, Native Americans, and Latinos, as we will see in the next chapter.

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FURTHER READING

A dispassionate analysis of John Kennedy's life is Thomas C. Reeves's *A Question of Character: A Life of John F. Kennedy* (1991). The best study of the Kennedy administration's domestic policies is Irving Bernstein's *Promises Kept: John F. Kennedy's New Frontier* (1991). For details on the still swirling conspiracy theories about the assassination, see David W. Belin's *Final Disclosure: The Full Truth about the Assassination of President Kennedy* (1988).

The most comprehensive biography of Johnson is Robert Dallek's two-volume work, *Lone Star Rising: Lyndon Johnson and His Times, 1908–1960* (1991) and *Flawed Giant: Lyndon B. Johnson and His Times, 1960–1973* (1998). On the Johnson administration, see Vaughn Davis Bornet's *The Presidency of Lyndon B. Johnson* (1984).

Among the works that interpret liberal social policy during the 1960s, John Schwarz's *America's Hidden Success: A Reassessment of Twenty Years of Public Policy* (1983) offers a glowing endorsement of Democratic programs. For a contrasting perspective, see Charles Murray's *Losing Ground: American Social Policy, 1950–1980*, rev. ed. (1994).

On foreign policy, see *Kennedy's Quest for Victory: American Foreign Policy, 1961–1963* (1989), edited by Thomas G. Paterson. To learn more about Kennedy's problems in Cuba, see Mark White's *Missiles in Cuba: Kennedy, Khrushchev, Castro and the 1962 Crisis* (1997). See also Aleksandr Fursenko and Timothy Naftali's "One Hell of a Gamble": *Khrushchev, Castro and Kennedy, 1958–1964* (1997).

American involvement in Vietnam has received voluminous treatment from all political perspectives. For an excellent overview, see Larry Berman's *Planning a Tragedy: The Americanization of the War in Vietnam* (1982) and *Lyndon Johnson's War: The Road to Stalemate in Vietnam* (1989), as well as Stanley Karnow's *Vietnam: A History*, rev. ed. (1991). An analysis of policy making concerning the Vietnam War is David M. Barrett's *Uncertain Warriors: Lyndon Johnson and His Vietnam Advisors* (1993). A fine account of the military involvement is Robert D. Schulzinger's *A Time for War: The United States and Vietnam, 1941–1975* (1997). On the legacy of the Vietnam War, see Arnold R. Isaacs's *Vietnam Shadows: The War, Its Ghosts, and Its Legacy* (1997).

Many scholars have dealt with various aspects of the civil rights movement and race relations of the 1960s. See especially Carl M. Brauer's *John F. Kennedy and the Second Reconstruction* (1977), David Garrow's *Bearing the Cross: Martin Luther King, Jr., and the Southern Christian Leadership Conference* (1986), Adam Fairclough's *To Redeem the Soul of America: The Southern*

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Christian Leadership Conference and Martin Luther King, Jr. (1987). William H. Chafe's *Civilities and Civil Rights: Greensboro, North Carolina, and the Black Struggle for Freedom* (1980) details the original sit-ins. An award-winning study of racial and economic inequality in a representative American city is Thomas J. Sugrue's *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (1996).

Lesson 5

Reading Primary Documents

Overview and Rationale:

The primary documents used in this unit explore the communications among the various Russian and U.S. individuals key to the Cuban Missile Crisis. As with other primary source documents, historians are careful to interpret these after considering the perspective of the speaker, the audience, the time period and the context in which they were made. Historians treat these kinds of communications as acts by speakers with particular views and even biases, to particular audiences, for particular purposes that are grounded in the salient events that surround the speeches. These purposes are played out in the words the individuals use.

In order for students to understand these points, history educators often use an acronym: SOAPStone. This acronym stands for: **S**ource, **O**ccasion, **A**udience, **P**erspective, **S**ubject, and **T**one. Students can recall this acronym when they are confronted with the task of interpreting documents. Of course, students should also rely on what they have learned about history reading (e.g., annotation guides, G-SPRITE, Pattern Organizer).

Skilled readers of history know that a true understanding of a time period or event doesn't come from reading just one text, but comes from comparison and contrast of multiple documents from varied sources. Historians reconstruct the past using information from primary sources (accounts from the time period), secondary sources (retrospective accounts created from primary sources), and sometimes even tertiary sources (accounts that are created from secondary sources, such as textbooks). Historians know not to trust a single source. Rather, they look for corroboration across sources and for converging evidence in support of an interpretation of history. In this lesson, students will compare and contrast the documents to practice the kind of reading in which historians engage.

Tasks/Expected Outcomes:

1. Students will use SOAPStone to help them analyze each document.
2. Students will demonstrate their ability to engage in close reading of primary documents through annotations.
3. Students will compare and contrast the documents.
4. Students will understand meanings of vocabulary found in the documents.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:

- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact,

speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).

3. Evaluate sources from multiple perspectives.
4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
5. Read narrative texts critically.
6. Read research data critically.

C. Critical listening

1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- Library of Congress documents
- Academic notebook
- Comparison Contrast chart

Vocabulary:

Discipline Specific Vocabulary

Organizations

- Organization of American States (OAS)

Places

- Soviet Union
- U.S.
- Cuba
- Turkey

General Academic Vocabulary:

- ultimatum
- gauntlet
- intimidate
- sovereign
- abyss
- reconnaissance
- unilateral
- proclaiming
- quid pro quo

Words that Help You Discuss the Discipline:

- SOAPSTone
- primary sources

Timeframe:

Approx. 100 minutes

People

- Attorney General Robert Kennedy
- Secretary of State Dean Rusk
- President Kennedy
- Soviet Ambassador Dobrynin

Events

- Quarantine

Activity One

Orientation to the Task (Approx. 10 minutes)

Students will be comparing and contrasting several documents in this lesson.

Explain to students these are **primary source documents**, and in order to provide the best interpretation, they will need to be thinking about the source and context of the speeches. If they have completed the first history unit, they will be familiar with the acronym SOAPStone. **If not, introduce this term to them, explaining to them that they can use this acronym to remind them of the kinds of questions they should be asking of each text, starting before they even begin reading.**

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

SOAPStone Document Analysis Method

SOAPStone was developed by College Board (the Advanced Placement folks) and is a method for examining and interpreting a document. Often documents contain complex language or symbolism, which makes determining the meaning and significance of the document more difficult. Utilization of this method will help in unwrapping the meaning of the document.

Speaker – who is the author (speaker) of this piece? Do you know anything about the person’s background? For example, is the person a public figure with a known agenda or title? A speech from a president would have different implications than that of a minister or on looker.

Occasion – what is the time and place of the document? What was going on at the time that prompted the person to write this piece?

Audience – to whom is this piece directed? What kind of document is this – newspaper article, speech, diary entry, letter, etc.? Was it an editorial piece in a local newspaper? Can any assumptions be made about the audience? Do you know why the document was created? What kind of language does the document contain?

Purpose – what was the purpose or meaning behind the text? Is the speaker trying to provoke some reaction from the audience? How does s/he try to accomplish this?

Subject – what is the subject of the document? What is the general topic or idea of the piece?

Tone – what is the attitude of the speaker based on the content of the piece? Does s/he use humor, sarcasm, irony, fear or an objective tone? Is there any bias to what s/he is saying?

Make sure to include enough information in your analysis of the document, not just two or three word descriptions. For example, if the speaker has a title or is an official or has a known profession, be sure to include that as part of the ‘speaker’ description.

Activity Two

Using SOAPStone to Source and Contextualize Documents (Approx. 10 minutes)

If students are unfamiliar with this technique have them turn to the first document and together, without reading the entire document, go through the SOAPStone process. Students will not be able to analyze the entire purpose or tone until they actually read the document, but you may choose a paragraph or a sentence from the document and discuss what tone is being conveyed. **Have students analyze the second document as practice (except for tone) individually, in pairs or small groups. Have them talk through their analysis with the whole group. Then they can do the third document independently.** If they are already familiar with SOAPStone, they can use the first document for review. The possible answers below are for your benefit and are not in the Academic Notebook.

First document:

Speaker: Nikita Khrushchev

Occasion: October 24, 1962—on learning of the quarantine of Cuba

Audience: President Kennedy

Purpose: Need to read some of the document; from the first paragraph, the purpose is to castigate Kennedy about his choice of quarantine. As students get into the document, they will find that it is also to announce that Russia will not abide by the quarantine.

Subject: The U.S. quarantine of Cuba

Tone: (From the first paragraph: angry, accusatory, disrespectful, as if he were talking to a child.)

Imagine, Mr. President, what if we were to present to you such an ultimatum as you have presented to us by your actions. How would you react to it? I think you would be outraged at such a move on our part. And this we would understand.

Let students know as they read the rest of the document, they will have other insights into the purpose and the tone.

Ask students, “Given what you have found out already about the document you are going to read, what do you expect it to say? Why? What do you think Khrushchev’s motivations are for writing this to Kennedy?” (The point is not to just source and contextualize as an empty exercise. The exercise should lead students to make some early inferences. Make sure that students understand that point.)

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Using SOAPStone to Source and Contextualize Documents

The teacher may lead an exercise using SOAPStone on a portion of the first document with your entire class. Either record the information from the class in the first chart below or use SOAPStone on your own with the first document.

Before reading the full documents that follow, use SOAPStone to analyze the source and context of the second and third document. Fill out the second and third chart below.

| | |
|---|--|
| Title of Document: | |
| S peaker (Who) | |
| O ccasion (time, place, events) | |
| A udience (To whom is this piece directed?) | |
| P urpose (What is the author trying to achieve?) | |
| S ubject (What is the document about?) | |
| T one (What is the attitude of the speaker) | |

(Chart provided for all three documents.)

Second document:

Speaker: Dobrynin (Soviet Ambassador to the U.S.)

Occasion: October 27, 1962 – the day that the situation was resolved between Russia and the United States

Audience: The Soviet Foreign Ministry

Purpose: To provide an account of the conversation between he and Robert Kennedy. (Students will find out more about the purpose as they read.)

Subject: At this point, students will know from the chapter they are talking about removing the missiles from Cuba. While students are reading, they will also find out that there is talk about having the U.S. missiles in Turkey removed.

Tone: Factual (other answers are also acceptable with evidence).

Ask students, “Given what you have found out already about the document you are going to read, what do you expect it to say? Why? What do you think Dobrynin’s motivations are for writing this to the office of Foreign Affairs?”

Third document:

Speaker: Robert Kennedy (Attorney General and JFK's younger brother)

Occasion: October 28, 1962 – the day after the telegram accepting Khrushchev's first offer.

Audience: Secretary of State Dean Rusk

Purpose: To provide an account of the conversation between him and Dobrynin. (Students will find out more about the purpose as they read.)

Subject: At this point, students will know from the chapter they are talking about removing the missiles from Cuba. While students are reading, they will also find out that there is talk having the U.S. missiles in Turkey removed.

Tone: Accept reasonable answers with evidence).

Assessment:

Outcome 1:

Students will use SOAPStone to help them analyze each document.

To assess students' ability to use SOAPStone to source and contextualize, informally assess the discussion (whole-class and partner/small group work) and check students' academic notebooks. Reasonable information should be filled into the graphic organizers, similar to the answers provided above.

Activity Three

Reading the Documents (Approx. 50 minutes)

Explain to students a major reason they will be reading the documents is to better understand and compare/contrast the perceptions in Russia and the U.S. about the Cuban Missile Crisis.

Direct students to read and annotate the full documents. Remind students before they begin of the various kinds of information they have been taught to annotate in their previous lesson; students should annotate that kind of information and also the SOAPStone information. Let students know attention will be paid to the evidence they have annotated in each of the elements of SOAPStone. For "tone," this will mean students should underline or mark words that signal tone and state the tone somewhere in the margins. For "purpose," students should underline parts of the text that signal purpose and write this purpose (or those purposes) in the margins.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Reading the Documents

Document 1:

Read and annotate the documents to better understand and compare/contrast the perceptions in Russia and the U.S. about the Cuban Missile Crisis.

Also, remember what you have learned about annotation from previous lessons. After you read, complete the comparison/contrast chart that follows.

Retrieved from Library of Congress at: <http://www.loc.gov/exhibits/archives/x2jfk.html>.

Dear Mr. President,

Imagine, Mr. President, what if we were to present to you such an ultimatum as you have presented to us by your actions. How would you react to it? I think you would be outraged at such a move on our part. And this we would understand.

Having presented these conditions to us, Mr. President, you have thrown down the gauntlet. Who asked you to do this? By what right have you done this? Our ties with the Republic of Cuba, as well as our relations with other nations, regardless of their political system, concern only the two countries between which these relations exist. And, if it were a matter of quarantine as mentioned in your letter, then, as is customary in international practice, it can be established only by states agreeing between themselves, and not by some third party. Quarantines exist, for example, on agricultural goods and products. However, in this case we are not talking about quarantines, but rather about much more serious matters, and you yourself understand this.

You, Mr. President, are not declaring quarantine, but rather issuing an ultimatum, and you are threatening that if we do not obey your orders, you will then use force. Think about what you are saying! And you want to persuade me to agree to this! What does it mean to agree to these demands? It would mean for us to conduct our relations with other countries not by reason, but by yielding to tyranny. You are not appealing to reason; you want to intimidate us. No, Mr. President, I cannot agree to this, and I think that deep inside, you will admit that I am right. I am convinced that if you were in my place you would do the same.

.... This Organization [of American States] has no authority or grounds whatsoever to pass resolutions like those of which you speak in your letter. Therefore, we do not accept these resolutions. International law exists; generally accepted standards of conduct exist. We firmly adhere to the principles of international law and strictly observe the standards regulating navigation on the open sea, in international waters. We observe these standards and enjoy the rights recognized by all nations.

You want to force us to renounce the rights enjoyed by every sovereign state; you are attempting to legislate questions of international law; you are violating the generally accepted standards of this law.

All this is due not only to hatred for the Cuban people and their government, but also for reasons having to do with the election campaign in the USA. What morals, what laws can justify such an approach by the American government to international affairs? Such morals and laws are not to be found, because the actions of the USA in relation to Cuba are outright piracy.

This, if you will, is the madness of a degenerating imperialism. Unfortunately, people of all nations, and not least the American people themselves, could suffer heavily from madness such as this, since with the appearance of modern types of weapons, the USA has completely lost its former inaccessibility.

Therefore, Mr. President, if you weigh the present situation with a cool head without giving way to passion, you will understand that the Soviet Union cannot afford not to decline the despotic demands of the USA. When you lay conditions such as these before us, try to put yourself in our situation and consider how the USA would react to such conditions. I have no doubt that if anyone attempted to dictate similar conditions to you—the USA, you would reject such an attempt. And we likewise say— no.

The Soviet government considers the violation of the freedom of navigation in international waters and air space to constitute an act of aggression propelling humankind into the abyss of a world nuclear-missile war. Therefore, the Soviet government cannot instruct captains of Soviet ships bound for Cuba to observe orders of American naval forces blockading this island. Our instructions to Soviet sailors are to observe strictly the generally accepted standards of navigation in international waters and not retreat one step from them. And, if the American side violates these rights, it must be aware of the responsibility it will bear for this act. To be sure, we will not remain mere observers of pirate actions by American ships in the open sea. We will then be forced on our part to take those measures we deem necessary and sufficient to defend our rights. To this end we have all that is necessary.

Respectfully,

/s/ N. Khrushchev
N. KHRUSHCHEV

Document 2:

Moscow 24 October 1962

This letter and the one that follows come from the Library of Congress, “Revelations from the Russian Archives,” found at: <http://www.loc.gov/exhibits/archives/colc.html>.

Transcription:

TOP SECRET

Making Copies Prohibited

Copy No. 1

CIPHERED TELEGRAM

Late tonight R. Kennedy invited me to come see him. We talked alone.

The Cuban crisis, R. Kennedy began, continues to quickly worsen. We have just received a report that an unarmed American plane was shot down while carrying out a reconnaissance flight over Cuba. The military is demanding that the President arm such planes and respond to fire with fire. The USA government will have to do this.

I interrupted R. Kennedy and asked him what right American planes had to fly over Cuba at all, crudely violating its sovereignty and accepted international norms? How would the USA have reacted if foreign planes appeared over its territory?

“We have a resolution of the Organization of American states that gives us the right to such overflights,” R. Kennedy quickly replied.

I told him that the Soviet Union, like all peace-loving countries, resolutely rejects such a “right” or, to be more exact, this kind of true lawlessness, when people who don’t like the social-political situation in a country try to impose their will on it—a small state where the people themselves established and maintained (their system). “The OAS resolution is a direct violation of the UN Charter,” I added, “and you, as the Attorney General of the USA, the highest American legal entity, should certainly know that.”

R. Kennedy said that he realized that we had different approaches to these problems and it was not likely that we could convince each other. But now the matter is not in these differences, since time is of the essence. “I want,” R. Kennedy stressed, “to lay out the current alarming situation the way the president sees it. He wants N. S. Khrushchev to know this. This is the thrust of the situation now.”

“Because of the plane that was shot down, there is now strong pressure on the president to give an order to respond with fire if fired upon when American reconnaissance planes are flying over Cuba. The USA can’t stop these flights, because this is the only way we can quickly get information about the state of construction of the missile bases in Cuba, which we believe pose a very serious threat to our national security. But as we start to fire in response—a chain reaction will quickly start that will be very

hard to stop. The same thing in regard to the essence of the issue of the missile bases in Cuba. The USA government is determined to get rid of those bases—up to, in the extreme case, bombing them, since, I repeat, they pose a great threat to the security of the USA. But in response to the bombing of these bases, in the course of which Soviet specialists might suffer, the Soviet government will undoubtedly respond with the same against us, somewhere in Europe. A real war will begin, in which millions of Americans and Russians will die. We want to avoid that any way we can; I'm sure that the government of the USSR has the same wish. However, taking time to find a way out [of the situation] is very risky (here R. Kennedy mentioned as if in passing that there are many unreasonable heads among the generals, and not only among the generals, who are "itching for a fight"). The situation might get out of control, with irreversible consequences."

"In this regard," R. Kennedy said, "the president considers that a suitable basis for regulating the entire Cuban conflict might be the letter N. S. Khrushchev sent on October 26 and the letter in response from the President, which was sent off today to N. S. Khrushchev through the US Embassy in Moscow. The most important thing for us," R. Kennedy stressed, "is to get as soon as possible the agreement of the Soviet government to halt further work on the construction of the missile bases in Cuba and take measures under international control that would make it impossible to use these weapons. In exchange the government of the USA is ready, in addition to repealing all measures on the 'quarantine' to give the assurances that there will not be any invasion of Cuba and that other countries of the Western Hemisphere are ready to give the same assurances—the US government is certain of this."

"And what about Turkey?" I asked R. Kennedy.

"If that is the only obstacle to achieving the regulation I mentioned earlier, then the president doesn't see any insurmountable difficulties in resolving this issue," replied R. Kennedy. "The greatest difficulty for the president is the public discussion of the issue of Turkey. Formally the deployment of missile bases in Turkey was done by a special decision of the NATO Council. To announce now a unilateral decision by the president of the USA to withdraw missile bases from Turkey—this would damage the entire structure of NATO and the US position as the leader of NATO, where, as the Soviet government knows very well, there are many arguments. In short, if such a decision were announced now it would seriously tear apart NATO."

"However, President Kennedy is ready to come to agreement on that question with N. S. Khrushchev, too. I think that in order to withdraw these bases from Turkey," R. Kennedy said, "we need 4-5 months. This is the minimum amount of time necessary for the US government to do this, taking into account the procedures that exist within the NATO framework. On the whole Turkey issue," R. Kennedy added, "If Premier N.s. Khrushchev agrees with what I've said, we can continue to exchange opinions between him and the president, using him, R. Kennedy and the Soviet ambassador. However, the president can't say anything public in this regard about Turkey," R. Kennedy said again. R. Kennedy then warned that his comments about Turkey are extremely confidential; besides him and his brother, only 2-3 people know about it in Washington.

“That’s all that he asked me to pass on the N. S. Khrushchev,” R. Kennedy said in conclusion. “The president also asked N. S. Khrushchev to give him an answer (through the Soviet ambassador and R. Kennedy) if possible within the next day (Sunday) on these thoughts in order to have a business-like, clear answer in principle. [He asked him] not to get into a wordy discussion, which might drag things out. The current serious situation, unfortunately, is such that there is very little time to resolve this whole issue. Unfortunately, events are developing too quickly. The request for a reply tomorrow,” stressed R. Kennedy, “is just that—a request, and not an ultimatum. The president hopes that the head of the Soviet government will understand him correctly.”

I noted that it went without saying that the Soviet government would not accept any ultimatums and it was good that the American government realized that. I also reminded him of N.S. Khrushchev’s appeal in his last letter to the president to demonstrate state wisdom in resolving this question. Then I told R. Kennedy that the president’s thoughts would be brought to the attention of the head of the Soviet government. I also said that I would contact him as soon as there was a reply. In this regard, R. Kennedy gave me the number of a direct telephone line to the White House.

In the course of the conversation, R. Kennedy noted that he knew about the conversation that television commentator Scali had yesterday with an Embassy advisor on possible ways to regulate the Cuban conflict [one-and-a-half lines whited out].

I should say that during our meeting R. Kennedy was very upset; in any case, I’ve never seen him like this before. True, about twice he tried to return to the topic of “deception,” (that he talked about so persistently during our previous meeting), but he did so in passing and without any edge to it. He didn’t even try to get into fights on various subjects, as he usually does, and only persistently returned to one topic: time is of the essence and we shouldn’t miss the chance.

After meeting with me he immediately went to see the president, with whom, as R. Kennedy said, he spends almost all his time now.

27/X-62 A. DOBRYNIN

[Source: Russian Foreign Ministry archives, translation from copy provided by NHK, in Richard Ned Lebow and Janice Gross Stein, We All Lost the Cold War (Princeton, NJ: Princeton University Press, 1994). Appendix, pp. 523-526; also printed in the Cold War International History Project Bulletin No. 5 with minor revisions.]

Document 3:

Transcript of letter from Kennedy to Secretary of State recounting same conversation as above.

Office of the Attorney General
Washington, D. C.
October 30, 1962

MEMORANDUM FOR THE SECRETARY OF STATE FROM THE ATTORNEY GENERAL

At the request of Secretary Rusk, I telephoned Ambassador Dobrynin at approximately 7:15 p.m. on Saturday, October 27th. I asked him if he would come to the justice Department at a quarter of eight.

We met in my office. I told him first that we understood that the work was continuing on the Soviet missile bases in Cuba. Further, I explained to him that in the last two hours we had found that our planes flying over Cuba had been fired upon and that one of our U-2's had been shot down and the pilot killed. I said these men were flying unarmed planes.

I told him that this was an extremely serious turn in events. We would have to make certain decisions within the next 12 or possibly 24 hours. There was a very little time left. If the Cubans were shooting at our planes, then we were going to shoot back. This could not help but bring on further incidents and that he had better understand the full implications of this matter.

He raised the point that the argument the Cubans were making was that we were violating Cuban air space. I replied that if we had not been violating Cuban air space then we would still be believing what he and Khrushchev had said (word crossed out)—that there were no long-range missiles in Cuba. In any case I said that this matter was far more serious than the air space over Cuba and involved peoples all over the world.

I said that he had better understand the situation and he had better communicate that understanding to Mr. Khrushchev. Mr. Khrushchev and he had misled us. The Soviet Union had secretly established missile bases in Cuba while at the same time proclaiming, privately and publicly, that this would never be done. I said those missile bases had to go and they had to go right away. We had to have a commitment by at least tomorrow that those bases would be removed. This was not an ultimatum, I said, but just a statement of fact. He should understand that if they did not remove those bases then we would remove them. His country might take retaliatory action but he should understand that before this was over, while there might be dead Americans there would also be dead Russians.

He asked me then what offer we were making. I said a letter had just been transmitted to the Soviet Embassy, which stated in substance that the missile bases should be dismantled and all offensive weapons should be removed from Cuba. In return, if Cuba and Castro and the Communists ended their subversive activities in other Central and Latin-American countries, we would agree to keep peace in the Caribbean and not permit an invasion from American soil.

He then asked me about Khrushchev's other proposal dealing with the removal of the missiles from Turkey. I replied that there could be no quid pro quo—no deal of this kind could be made. This was a matter that had to be considered by NATO and that it was up to NATO to make the decision. I said it was completely impossible for NATO to take such a step under the present threatening position of the Soviet Union. If some time elapsed—and per your instructions, I mentioned four or five months—I said I was sure that these matters could be resolved satisfactorily.

Per your instructions I repeated that there could be no deal of any kind and that any steps toward easing tensions in other parts of the world largely depended on the Soviet Union and Mr. Khrushchev taking action in Cuba and taking it immediately.

I repeated to him that this matter could not wait and that he had better contact Mr. Khrushchev and have a commitment from him by the next day to withdraw the missile bases under United Nations supervision or otherwise, I said, there would be drastic consequences.

RFK: amn

After students have read and annotated the full documents, have them talk through their annotations to a partner or in a small group, then fill out the comparison/contrast chart in their academic notebook. Students can do this together.

Bring students together to discuss the comparison/contrast charts. Tell students to bring in other sources they have read at this point, too. For example, ask:

1. Did anything surprise you?
2. What perceptions do you have about the Cuban Missile Crisis as a result of reading these documents? Why do you say that?
3. What did these documents say about U.S. conceptions of liberty for Americans?
4. What arguments about liberty were being made by the Soviets?
5. Did the documents disagree at any point? If so, in what way?
6. Did the documents disagree with Tindall and Shi at any point?
7. Did the documents corroborate each other at any point? If so, in what way?
8. What did you notice about the occasion (including the time) these communications were written? What can you infer from that information?

For *tone* and *purpose*, have students use the graphic organizers in their academic notebook, and consider placing two large charts on the walls—one for tone and one for purpose. Divide each chart into three columns, one for each text. Have students put a phrase or sentence that signified purpose from each of the readings on the purpose chart and one or two words or phrases that signified tone for each of the readings on the tone chart.

These charts can then be used to discuss students’ perceptions of purpose and tone, using the words on the chart as their evidence. It may be interesting to see if there are disagreements about purpose or tone and if these can be resolved through class discussion.

FROM THE STUDENT ACADEMIC NOTEBOOK

What was the tone of the three documents?

| | What words signaled tone? | How would you describe the tone? |
|------------|---------------------------|----------------------------------|
| Document 1 | | |
| Document 2 | | |
| Document 3 | | |

What was the purpose of the three documents?

| | What parts of the text signaled purpose? | How would you describe the purpose? |
|------------|--|-------------------------------------|
| Document 1 | | |
| Document 2 | | |
| Document 3 | | |

If students did not find any points of disagreement, direct them to the following sections:

From Dobrynin’s account

“If that is the only obstacle to achieving the regulation I mentioned earlier, then the president doesn’t see any insurmountable difficulties in resolving this issue,” replied R. Kennedy. “The greatest difficulty for the president is the public discussion of the issue of Turkey.

...However, the president can’t say anything public in this regard about Turkey,” R. Kennedy said again. R. Kennedy then warned that his comments about Turkey are extremely confidential; besides him and his brother, only two to three people know about it in Washington.

From R. Kennedy’s account

I replied that there could be no quid pro quo—no deal of this kind could be made. This was a matter that had to be considered by NATO and that it was up to NATO to make the decision. I said it was completely impossible for NATO to take such a step under the present threatening position of the Soviet Union.

Ask students to think about the differences in these two accounts and what might have motivated these two to have different versions of the conversation. Help them to see that historians have to make those same sorts of inferences as they read conflicting documents.

Direct students to the section in their academic notebook that directs students to discuss the trustworthiness of the documents in groups and give them a few minutes to write their thoughts in the spaces. Discuss as a whole class.

FROM THE STUDENT ACADEMIC NOTEBOOK

Based upon your reading of the three documents, how trustworthy are they? In other words, can you take these documents at their word? Why or why not?

Document 1: *(Space provided)*

Document 2: *(Space provided)*

Document 3: *(Space provided)*

Assessment:

Outcome 2:

Students will demonstrate their ability to engage in close reading of primary documents through annotations.

Outcome 3:

Students will compare and contrast the documents.

Use the annotation checklist to assess students’ annotations, if desired:

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source
- 2. Information that signaled
 - a. Cause/effect
 - b. Comparison contrast
 - c. chronology (words signaling time)
 - d. Bias or judgment
 - e. discipline-specific information and vocabulary
 - Other _____
- 3. Unknown general academic vocabulary
- 4. Key actors, actions, goals, and tactics, etc.
- 5. Political, social, economic, legal, or other characterizations of information
- 6. Marginal notations that show
 - a. summarizing
 - b. inferencing
 - c. reacting
 - d. connecting to other information
 - e. graphic or pictorial representations of information (e.g. cause-effect chains, time lines)

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

Another grading option is to assess the graphic organizers in their academic notebooks, using the following guidelines:

| | Never | Somewhat | Always |
|--|-------|----------|--------|
| Student’s answers included text evidence. | | | |
| Student’s answers were reasonable, given text evidence. | | | |
| Student’s answers were complete. | | | |
| Student’s answers showed understanding of the documents. | | | |

FROM THE STUDENT ACADEMIC NOTEBOOK

| | Khrushchev to Kennedy | | Dobrynin to Foreign Ministry | | R. Kennedy to Rusk | |
|--|-----------------------|------------------------|------------------------------|------------------------|--------------------|------------------------|
| | Answer | Evidence from the text | Answer | Evidence from the text | Answer | Evidence from the text |
| What argument was made about U.S. interference in Cuba (quarantine/ reconnaissance flights)? | | | | | | |
| How willing was the USSR and the US to engage in battle (first and last document)? | | | | | | |
| What did R. Kennedy offer regarding Turkey (last two documents)? | | | | | | |
| What do these documents say about U.S. conceptions of liberty? | | | | | | |

Activity Four

Vocabulary (Approx. 30 minutes)

Ask students if there are vocabulary words they still do not understand. **Resolve the meanings of any remaining unknown vocabulary words with the class. Here are some possibilities:**

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Vocabulary

How did you resolve the meaning of vocabulary you did not know? Are there words that you still do not understand? Here is a list of words. Do you know their meanings? If not, discuss these in class.

| | |
|----------------|--|
| ultimatum | What if we were to present to you such an <i>ultimatum</i> . |
| gauntlet | You have thrown down the <i>gauntlet</i> . |
| intimidate | You are not appealing to reason; you want to <i>intimidate</i> us. |
| sovereign | You want to force us to renounce the rights enjoyed by every <i>sovereign</i> state. |
| abyss | The <i>abyss</i> of a world nuclear-war. |
| reconnaissance | Carrying out a <i>reconnaissance</i> flight over Cuba. |
| unilateral | To announce a <i>unilateral</i> decision by the President of the USA. |
| proclaiming | While at the same time <i>proclaiming</i> , privately and publicly, that this would never be done. |
| quid pro quo | I replied that there could be no <i>quid pro quo</i> —no deal of this kind could be made. |

Regarding the word “proclaiming,” discuss the difference between it and some reasonable synonyms. For example, what is the difference between proclaim and “say?”

Add the discipline specific words below to a word list in the room and have students explain to each other in partners what these words mean and what their significance with regard to the Cuban Missile Crisis.

FROM THE STUDENT ACADEMIC NOTEBOOK

“Talk-through” the following discipline specific words with a partner.

Organizations

- Organization of American States (OAS)

Places

- Soviet Union
- U.S.
- Cuba
- Turkey

People

- Attorney General Robert Kennedy
- Secretary of State Dean Rusk
- President Kennedy
- Soviet Ambassador Dobrynin

Assessment:

Outcome 4:

Students will understand meanings of vocabulary found in the documents.

Choose two general academic words and two discipline specific words to have students explain the meanings and their significance, given the context. For example, *quid pro quo* could mean a *trade-off*, and it is significant in this context because Kennedy said he told Dobrynin that he should not be expecting the U.S. to pull out of Turkey just because the USSR was pulling out of Cuba (but Dobrynin had a different version of the talk). For each word, points can be given for a definition and/or an explanation of significance.

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Had students review SOAPStone.
- 2. Had Students use SOAPStone on the documents and discussed the implications of the information.
- 3. Had students read and annotate the documents.
- 4. Directed students to fill out the comparison/contrast chart and bring them together for a discussion.
- 5. Had students answer tone and purpose questions in the academic notebook.
- 6. Discussed differences in the two documents about the talk between R. Kennedy and Dobrynin.
- 7. Reviewed vocabulary with students.

Lesson 6

Comparing Two Presidential Speeches

Overview and Rationale:

Speeches represent a genre often studied by historians. As with other primary source documents, historians are careful to interpret these after considering the perspective of the speaker (and speech-writer), the audience, the time period in which the speech was given and the context of the time period. They treat speeches as acts by speakers with particular views and even biases, for particular audiences and for particular purposes or motives that are grounded in the salient events that surround the speeches. These purposes are played out in the words the speakers' use.

Historians also write précis. These are like summaries; they can stand in for the document but they consist of the major ideas in a document. In this lesson, students will learn how to write précis for each of the two speeches.

In this lesson, students will compare and contrast the two speeches to practice the kind of reading in which historians engage.

Tasks/Expected Outcomes:

1. Students will demonstrate their ability to engage in close reading of two presidential speeches.
2. Students will compare and contrast the two speeches, and be able to explain the differences using the other information about the Cold War they have learned.
3. Students will be able to summarize the important information in a document through a précis.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.

- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Throughout this course, only grade 12 standards are used.

Materials:

- Transcript of Dwight D. Eisenhower’s Farewell Address (1961)
- JFK’s Commencement Address at American University, June 1, 1963
- Academic notebook
- Comparison contrast chart
- Précis writing

Timeframe:

Approx. 35 minutes

Vocabulary:

Discipline Specific Vocabulary

Organizations

- Peace Corps
- National Service Corps

People

- Prime Minister MacMillan
- Chairman Khrushchev

Places

- Soviet Union
- U.S.

Events

- Test-Ban Treaty
- Disarmament

(Possible) General Academic Vocabulary:

- vested
- provocation
- attainable
- successor
- compelled
- evolution
- engulfing
- acquisition
- allegation
- hostile
- unwarranted
- imperialist
- ideology
- insolvent
- accommodation
- atheistic
- phantom
- allied
- ruthless
- Pax Americana
- tempered
- insidious
- rational
- transitory
- defeatist

Words that Help You Discuss the Discipline:

- Précis
- SOAPStone
- Primary sources

Activity One

Orientation to the Task (Approx. 10 minutes)

Students will compare two presidential speeches in this lesson—one is Dwight Eisenhower’s farewell address in 1961 and one by JFK at a commencement at American University in 1963. Explain to students that these are **primary source documents**, and in order to provide the best interpretation, they will need to be thinking about the source and context of the speeches. **Students can use the acronym SOAPStone to remind them about how to do this.**

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

Review SOAPStone.

SOAPStone Document Analysis Method

SOAPStone was developed by College Board (the Advanced Placement folks) and is a method for examining and interpreting a document. Often documents contain complex language or symbolism, which makes determining the meaning and significance of the document more difficult. Utilization of this method will help in unwrapping the meaning of the document.

Speaker – who is the author (speaker) of this piece? Do you know anything about the person’s background? For example, is the person a public figure with a known agenda or title? A speech from a president would have different implications than that of a minister or on looker.

Occasion – what is the time and place of the document? What was going on at the time that prompted the person to write this piece?

Audience – to whom is this piece directed? What kind of document is this – newspaper article, speech, diary entry, letter, etc.? Was it an editorial piece in a local newspaper? Can any assumptions be made about the audience? Do you know why the document was created? What kind of language does the document contain?

Purpose – what was the purpose or meaning behind the text? Is the speaker trying to provoke some reaction from the audience? How does s/he try to accomplish this?

Subject – what is the subject of the document? What is the general topic or idea of the piece?

Tone – what is the attitude of the speaker based on the content of the piece? Does s/he use humor, sarcasm, irony, fear or an objective tone? Is there any bias to what s/he is saying?

Make sure to include enough information in your analysis of the document, not just two or three word descriptions. For example, if the speaker has a title or is an official or has a known profession, be sure to include that as part of the ‘speaker’ description.

Activity Two

Sourcing and Contextualizing Documents (Approx. 10 minutes)

Have students use SOAPStone to source and contextualize the two documents, working in pairs or small groups. Next, have several students share out their work to the class. Important to note is the time frame—1960 versus 1963. This is of course, during the Cold War, and the Bay of Pigs fiasco and Cuban Missile Crisis took place in the time between these two speeches. Throughout the intervening time, Kennedy had been sending “advisers” to South Vietnam, so that by the time he was assassinated, there were 16,000 of them. Martin Luther King, Jr. had written “a letter from a Birmingham Jail” in April 1963, and Kennedy was assassinated in November 1963, not long after his speech. Ask the students, “What had happened in the intervening time? Are these events important to consider? Why or why not?”

There are two SOAPStone charts in the notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Sourcing and Contextualizing Documents

Before reading the two presidential speeches that follow, use SOAPStone to analyze their source and context.

Title of Document:

Speaker (Who)

Occasion (time, place, events)

Audience (To whom is this piece directed?)

Purpose (What is the author trying to achieve?)

Subject (What is the document about?)

Tone (What is the attitude of the speaker)

Assessment:

Outcome 1:

Students will demonstrate their ability to engage in close reading of two presidential speeches.

The SOAPStone Chart can be used as an assessment of close reading. Reasonable answers should be added to the chart. Assessment of students’ discussion of this information can also be used.

Activity Three

Reading the Speeches (Approx. 50 minutes)

Explain to students a major reason they will be reading the documents is to better understand Eisenhower’s and Kennedy’s ideas about liberty, and when reading, students should keep the following essential question in mind:

What were the concepts of liberty in the U.S. in relation to Foreign Affairs?

Another reason students are reading the two speeches is to help them understand changing concepts of and responses to the Cold War. Students should look for differences in tone, suggested actions, etc., that might provide evidence for a claim (or at least a hypothesis) about the way the Cold War evolved over time. This is a good time to discuss again how tone can help one determine an author’s purpose.

A third reason to read the speeches is to determine the arguments Eisenhower and Kennedy made and the evidence used to back up their arguments. What was the line of reasoning? One important thing to keep in mind is the determination of what kinds of things the two presidents talked about—were they geographical, social, political, religious, technological and/or intellectual? Thinking about the topics in these terms is one way to look at changes in emphases.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Reading the Speeches

Read the speeches for at least three purposes:

- To better understand Eisenhower’s and Kennedy’s ideas about liberty, as evidence to help you craft an answer to the essential question: What were the concepts of liberty in the U.S. in relation to its foreign affairs?
- To better understand the changing concepts of and responses to the Cold War.
- To determine the arguments Eisenhower and Kennedy made and the evidence used to back up the arguments. What was the line of reasoning?

Also, remember what you learned about annotation from previous lessons. Annotate with the above three purposes in mind. After reading, complete the comparison/contrast chart that follows.

Direct students to read and annotate the two speeches. Remind students before they begin of the various kinds of information they have been taught to annotate in the previous lesson. Annotations can be made for that kind of information in addition to the information that will help them answer the questions just posed.

For a full transcript available from Our Documents, at:

http://ourdocuments.gov/print_friendly.php?page=transcript&doc=90&title=Transcript+of+President+Dwight+D.+Eisenhower%27s+Farewell+Address+%281961%29.

FROM THE STUDENT ACADEMIC NOTEBOOK

Transcript of President Dwight D. Eisenhower's Televised Farewell Address (January 17, 1961)

Edited

My Fellow Americans:

Three days from now, after half a century in the service of our country, I shall lay down the responsibilities of office as, in traditional and solemn ceremony, the authority of the Presidency is vested in my successor.

This evening I come to you with a message of leave-taking and farewell, and to share a few final thoughts with you, my countrymen.

Like every other citizen, I wish the new President, and all who will labor with him, Godspeed. I pray that the coming years will be blessed with peace and prosperity for all . . .

Throughout America's adventure in free government, our basic purposes have been to keep the peace; to foster progress in human achievement, and to enhance liberty, dignity and integrity among people and among nations. To strive for less would be unworthy of a free and religious people. Any failure traceable to arrogance, or our lack of comprehension or readiness to sacrifice would inflict upon us grievous hurt both at home and abroad.

Progress toward these noble goals is persistently threatened by the conflict now engulfing the world. It commands our whole attention, absorbs our very beings. We face a hostile ideology—global in scope, atheistic in character, ruthless in purpose, and insidious in method. Unhappily the danger it poses promises to be of indefinite duration. To meet it successfully, there is called for, not so much the emotional and transitory sacrifices of crisis, but rather those which enable us to carry forward steadily, surely, and without complaint the burdens of a prolonged and complex struggle—with liberty at stake. Only thus shall we remain, despite every provocation, on our charted course toward permanent peace and human betterment . . .

A vital element in keeping the peace is our military establishment. Our arms must be mighty, ready for instant action, so that no potential aggressor may be tempted to risk his own destruction.

Our military organization today bears little relation to that known by any of my predecessors in peace time, or indeed by the fighting men of World War II or Korea.

Until the latest of our world conflicts, the United States had no armaments industry. American makers of plowshares could, with time and as required, make swords as well. But now we can no longer risk emergency improvisation of national defense; we have been compelled to create a permanent armaments industry of vast proportions. Added to this, three and a half million men and women are directly engaged in the defense establishment. We annually spend on military security more than the net income of all United State corporations.

This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence—economic, political, even spiritual—is felt in every city, every state house, every office of the Federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.

We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted; only an alert and knowledgeable citizenry can compel the proper meshing of huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades.

In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers.

The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present and is gravely to be regarded.

Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.

It is the task of statesmanship to mold, to balance, and to integrate these and other forces, new and old, within the principles of our democratic system—ever aiming toward the supreme goals of our free society.

Another factor in maintaining balance involves the element of time. As we peer into society's future, we-you and I, and our government—must avoid the impulse to live only for today, plundering, for our own ease and convenience, the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.

Down the long lane of the history yet to be written America knows that this world of ours, ever growing smaller, must avoid becoming a community of dreadful fear and hate, and be, instead, a proud confederation of mutual trust and respect.

Such a confederation must be one of equals. The weakest must come to the conference table with the same confidence as do we, protected as we are by our moral, economic, and military strength. That table, though scarred by many past frustrations, cannot be abandoned for the certain agony of the battlefield.

Disarmament, with mutual honor and confidence, is a continuing imperative. Together we must learn how to compose difference, not with arms, but with intellect and decent purpose. Because this need is so sharp and apparent I confess that I lay down my official responsibilities in this field with a definite sense of disappointment. As one who has witnessed the horror and the lingering sadness of war—as one who knows that another war could utterly destroy this civilization which has been so slowly and painfully built over thousands of years—I wish I could say tonight that a lasting peace is in sight.

Happily, I can say that war has been avoided. Steady progress toward our ultimate goal has been made. But, so much remains to be done. As a private citizen, I shall never cease to do what little I can to help the world advance along that road . . .

Transcription courtesy of <http://www.ourdocuments.gov/doc.php?doc=90&page=transcript>

Commencement Address at American University, June 10, 1963—Edited

President John F. Kennedy
Washington, D.C.
June 10, 1963

. . . I have, therefore, chosen this time and this place to discuss a topic on which ignorance too often abounds and the truth is too rarely perceived—yet it is the most important topic on earth: world peace.

What kind of peace do I mean? What kind of peace do we seek? Not a Pax Americana enforced on the world by American weapons of war. Not the peace of the grave or the security of the slave. I am talking about genuine peace, the kind of peace that makes life on earth worth living, the kind that enables men and nations to grow and to hope and to build a better life for their children—not merely peace for Americans but peace for all men and women—not merely peace in our time but peace for all time . . .

. . . Today the expenditure of billions of dollars every year on weapons acquired for the purpose of making sure we never need to use them is essential to keeping the peace. But surely the acquisition of such idle stockpiles—which can only destroy and never create—is not the only, much less the most efficient, means of assuring peace.

I speak of peace, therefore, as the necessary rational end of rational men. I realize that the pursuit of peace is not as dramatic as the pursuit of war—and frequently the words of the pursuer fall on deaf ears. But we have no more urgent task . . .

Some say that it is useless to speak of world peace or world law or world disarmament—and that it will be useless until the leaders of the Soviet Union adopt a more enlightened attitude. I hope they do. I believe we can help them do it. But I also believe that we must reexamine our own attitude . . . First: Let us examine our attitude toward peace itself. Too many of us think it is impossible. Too many think it unreal. But that is a dangerous, defeatist belief. It leads to the conclusion that war is inevitable—that mankind is doomed—that we are gripped by forces we cannot control.

We need not accept that view. Our problems are manmade—therefore, they can be solved by man. And man can be as big as he wants. No problem of human destiny is beyond human beings . . .

Let us focus instead on a more practical, more attainable peace—based not on a sudden revolution in human nature but on a gradual evolution in human institutions—on a series of concrete actions and effective agreements, which are in the interest of all concerned. There is no single, simple key to this peace—no grand or magic formula to be adopted by one or two powers. Genuine peace must be the product of many nations, the sum of many acts . . .

Second: Let us reexamine our attitude toward the Soviet Union. It is discouraging to think that their leaders may actually believe what their propagandists write. It is discouraging to read a recent

authoritative Soviet text on Military Strategy and find, on page after page, wholly baseless and incredible claims—such as the allegation that “American imperialist circles are preparing to unleash different types of wars . . . that there is a very real threat of a preventive war being unleashed by American imperialists against the Soviet Union . . . [and that] the political aims of the American imperialists are to enslave economically and politically the European and other capitalist countries . . . [and] to achieve world domination . . . by means of aggressive wars.”

Truly, as it was written long ago: “The wicked flee when no man pursueth.” Yet it is sad to read these Soviet statements—to realize the extent of the gulf between us. But it is also a warning—a warning to the American people not to fall into the same trap as the Soviets, not to see only a distorted and desperate view of the other side, not to see conflict as inevitable, accommodation as impossible, and communication as nothing more than an exchange of threats.

Let us not be blind to our differences—but let us also direct attention to our common interests and to the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity. For, in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children’s future. And we are all mortal.

Third: Let us reexamine our attitude toward the cold war, remembering that we are not engaged in a debate, seeking to pile up debating points. We are not here distributing blame or pointing the finger of judgment. We must deal with the world as it is, and not as it might have been had the history of the last 18 years been different . . .

. . . It is our hope—and the purpose of allied policies—to convince the Soviet Union that she, too, should let each nation choose its own future, so long as that choice does not interfere with the choices of others. The Communist drive to impose their political and economic system on others is the primary cause of world tension today. For there can be no doubt that, if all nations could refrain from interfering in the self-determination of others, the peace would be much more assured.

This will require a new effort to achieve world law—a new context for world discussions. It will require increased understanding between the Soviets and ourselves. And increased understanding will require increased contact and communication. One step in this direction is the proposed arrangement for a direct line between Moscow and Washington, to avoid on each side the dangerous delays, misunderstandings, and misreadings of the other’s actions which might occur at a time of crisis . . .

I am taking this opportunity, therefore, to announce two important decisions in this regard.

First: Chairman Khrushchev, Prime Minister Macmillan, and I have agreed that high-level discussions will shortly begin in Moscow looking toward early agreement on a comprehensive test ban treaty. Our hopes must be tempered with the caution of history—but with our hopes go the hopes of all mankind. . .

Second: To make clear our good faith and solemn convictions on the matter, I now declare that the United States does not propose to conduct nuclear tests in the atmosphere so long as other states do not do so. We will not be the first to resume. Such a declaration is no substitute for a formal binding treaty, but I hope it will help us achieve one. Nor would such a treaty be a substitute for disarmament, but I hope it will help us achieve it.

Finally, my fellow Americans, let us examine our attitude toward peace and freedom here at home. The quality and spirit of our own society must justify and support our efforts abroad. We must show it in the dedication of our own lives—as many of you who are graduating today will have a unique opportunity to do, by serving without pay in the Peace Corps abroad or in the proposed National Service Corps here at home.

But wherever we are, we must all, in our daily lives, live up to the age-old faith that peace and freedom walk together. In too many of our cities today, the peace is not secure because the freedom is incomplete.

It is the responsibility of the executive branch at all levels of government—local, State, and National—to provide and protect that freedom for all of our citizens by all means within their authority. It is the responsibility of the legislative branch at all levels, wherever that authority is not now adequate, to make it adequate. And it is the responsibility of all citizens in all sections of this country to respect the rights of all others and to respect the law of the land.

All this is not unrelated to world peace. “When a man’s ways please the Lord,” the Scriptures tell us, “he maketh even his enemies to be at peace with him.” And is not peace, in the last analysis, basically a matter of human rights—the right to live out our lives without fear of devastation—the right to breathe air as nature provided it—the right of future generations to a healthy existence?

The United States, as the world knows, will never start a war. We do not want a war. We do not now expect a war. This generation of Americans has already had enough—more than enough—of war and hate and oppression. We shall be prepared if others wish it. We shall be alert to try to stop it. But we shall also do our part to build a world of peace where the weak are safe and the strong are just. We are not helpless before that task or hopeless of its success. Confident and unafraid, we labor on—not toward a strategy of annihilation but toward a strategy of peace.

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After reading and annotating, have students talk through their annotations to a partner or in a small group.

Vocabulary:

Ask students to identify vocabulary words for which they were not able to find meanings. Students should share these words with the class. Independently or in small groups, students can work through the vocabulary meanings. Remind students that it is okay, in fact necessary, to struggle with meaning in order to truly understand what they read. Determine how well students are tackling vocabulary by having them interpret the following phrases and sentences from the two speeches. You could break the assignment up by assigning different sentences to three or four groups.

- ...the authority of the Presidency is vested in my successor.
- Progress toward these noble goals is persistently threatened by the conflict now engulfing the world.
- We face a hostile ideology—global in scope, atheistic in character, ruthless in purpose and insidious in method.
- Not so much the emotional and transitory sacrifices of crisis.
- Only thus shall we remain, despite every provocation, on our chartered course toward permanent peace and human betterment.
- We have been compelled to create a permanent armaments industry of vast proportions.
- We must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex.
- We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.
- Not a Pax Americana enforced on the world by American weapons of war.
- I speak of peace, therefore, as the necessary rational end of rational men.
- But that is a dangerous, defeatist belief.
- Let us focus instead on a more practical more attainable peace—based not on a sudden revolution in human nature but on a gradual evolution in human institutions.
- Such as the allegation that, “American imperialist circles are preparing to unleash different types of wars.”
- Not to see only a distorted and desperate view of the other side, not to see conflict as inevitable, accommodation as impossible.
- It is our hope—and the purpose of allied policies—to convince the Soviet Union that she, too, should let each nation choose its own future, so long as that choice does not interfere with the choices of others.
- Our hopes must be tempered with the caution of history.

Another option is to place new disciplinary vocabulary on a word chart in the room, and words that describe ways of talking about the discipline on another chart.

Assessment:

Outcome 2:

Students will demonstrate their ability to engage in close reading of primary documents.

Use the annotation checklist used in previous lessons as an assessment (and a self-assessment). Alternately, the following shorter grading rubric can be used.

| | No | Some | Yes |
|--|----|------|-----|
| Elements of SOAPStone were annotated. | | | |
| G-SPRITE was annotated, as appropriate. | | | |
| Information reflecting attitudes toward freedom was annotated. | | | |
| Claims and evidence were annotated. | | | |
| Student marked unknown vocabulary and provided synonyms for words. | | | |
| Students could explain meanings of targeted vocabulary. | | | |

Activity Four

Compare and Contrast the Two Speeches (Approx. 15 minutes)

Students can work in pairs or small groups to complete the comparison/contrast chart in their academic notebook. When they are done, bring students together in a whole class discussion to talk about the charts. Ask students what the differences were in the two speeches and how they can explain them. Encourage them to use what they know about the context from their other readings. Monitor this discussion to determine how well students can bring in evidence from what they have read to support their claims about the differences and the reasons for those differences. **Then, in the academic notebooks, have students write: (1) a claim about the differences in the two speeches, (2) the evidence explaining the differences, and (3) the evidence for the claim itself.**

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Compare and Contrast the Two Speeches

| | Eisenhower | | Kennedy | |
|---|------------|------------------------|---------|------------------------|
| | Answer | Evidence from the text | Answer | Evidence from the text |
| How was the U.S. responding to the Cold War? | | | | |
| How was the USSR responding to the Cold War? | | | | |
| What were the concepts of liberty in the U.S. in relation to Foreign Affairs? | | | | |
| What argument was being made? What evidence did they use to back up the argument? | | | | |

Write a claim that states the main difference in the two speeches and explains why there is a difference (e.g., one sister is more mature than the other one [the difference] because she is older [the reason for the difference]).

Provide evidence for the claim and for the reason (e.g., the oldest sister has a part-time job and saves her money while the youngest doesn't try to earn money and blows her allowance on junk [evidence for the claim]; the older sister was born three years before the youngest sister, so she has had time to mature [evidence for the reason]).

When students have completed the assignment, show the following example, and have them evaluate their own work.

Example:

Claim: Because Kennedy realized that he came very close to nuclear war during the Cuban Missile Crisis (explanation of the difference), his speech was more focused on concrete actions towards peace than was Eisenhower's speech, which was more focused on the regrettable necessity for a military/industrial complex (difference).

Evidence: Eisenhower said: "A vital element in keeping the peace is our military establishment," and he spoke extensively of the "prolonged complex struggle" we have against Communism. His main argument was that we should not let the military-industrial complex control us as a nation or keep us afraid and unwilling to still work toward peace.

Kennedy began his speech with a call for world peace. Unlike Eisenhower, he believed that keeping a large stockpile of weapons was not the best way to ensure peace. "But surely the acquisition of such idle stockpiles—which can only destroy and never

create—is not the only, much less the most efficient, means of assuring peace.” In addition, he explained these steps he had taken towards peace: (1) discussions about a “hotline;” (2) beginning talks about a test ban treaty; and (3) stopping nuclear tests even without the treaty.

I believe the Cuban Missile Crisis explains his change of heart. The Soviet Union and the U.S. came dangerously close to a nuclear war. Khrushchev said, in his letter to Kennedy, “The Soviet government considers the violation of the freedom of navigation in international waters and air space to constitute an act of aggression propelling humankind into the abyss of a world nuclear-missile war.” And Robert Kennedy acknowledged that, if the U.S. used force against Cuba, “The Soviet government will undoubtedly respond with the same against us, somewhere in Europe. A real war will begin, in which millions of Americans and Russians will die.” Because both nations had nuclear weapons, the idea that it would be a nuclear war was a real possibility. It was right after the Cuban Missile Crisis that Kennedy began his efforts towards peace, and I think that the crisis scared him.

Assessment:

Outcome 3:

Students will compare and contrast the two speeches and be able to explain the differences using the other information about the Cold War they have learned.

Use the following criteria to assess this outcome.

| | No | Some | Yes |
|---|----|------|-----|
| The student cited a reasonable difference between the two speeches, given the evidence. | | | |
| The student provided an explanation for the difference. | | | |
| The student provided evidence that there was a difference. | | | |
| The student provided evidence for the explanation. | | | |

Activity Five

Writing a Précis (Approx. 60 minutes)

Explain to students that writing a précis can be invaluable when you want to capture the essence of an argument in a historical text. A précis is a type of summarizing that requires one to reproduce the author’s argument: the logic, organization and emphasis of the original text in a much shorter form and in one’s own words. In this assignment, students will learn how to write a précis using the Eisenhower speech and will write a précis of the Kennedy speech on their own.

Have students read the following example of a précis from a World History Class, retrieved from <http://home.comcast.net/~mruland/Skills/precis.htm>.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Writing a Précis

Original

For a hundred years and more the monarchy in France had been absolute and popular. It was beginning now to lose both power and prestige. A sinister symptom of what was to follow appeared when the higher ranks of society began to lose their respect for the sovereign. It started when Louis XV selected as his principal mistress a member of the middle class, it continued when he chose her successor from the streets. When the feud between Madame Du Barry and the Duke de Choiseul ended in the dismissal of the Minister, the road to Chanteloup, his country house, was crowded with carriages, while familiar faces were absent from the court at Versailles. For the first time in French history the followers of fashion flocked to do honor to a fallen favorite. People wondered at the time, but hardly understood the profound significance of the event. The king was no longer the leader of society. Kings and presidents, prime ministers and dictators, provide at all times a target for the criticism of philosophers, satirists, and reformers. Such criticism they can usually afford to neglect, but when the time-servers, the sycophants, and the courtiers begin to disregard them, then should the strongest of them tremble on their thrones. (208 words)

Duff Cooper, *Talleyrand*

Précis

From Duff Cooper, *Talleyrand*

For more than a hundred years the monarchy in France had been absolute and popular. But Louis XV lost the respect of the upper ranks of society by choosing his mistresses from lower classes. When the feud of the Duke de Choiseul with Madame Du Barry resulted in the Minister's dismissal, the court turned its attention to him, away from the king. The king, no longer the leader of society, could well tremble for his throne. (76 words)

Instruct students to read the example and discuss what they notice about the précis. Then, have students read the “Do’s and Don’ts of Précis Writing.” Emphasize that a précis is not a description, but an organized essay that follows and explains the authors’ arguments and the reasoning behind them.

FROM THE STUDENT ACADEMIC NOTEBOOK

*Précis is a type of summarizing that requires you to reproduce the author’s argument; the logic, organization and emphasis of the original text in a much shorter form and **in one’s own** words.*

Do’s and Don’ts of Précis Writing

Always state the name of the article/document, the author and the source (is it from a magazine, book, encyclopedia, etc.).

Start your précis by creating context and stating the claim of the piece. Then you should begin presenting the method or evidence that the author used to defend this claim.

Do not use the words “in this article.”

When writing about history, use the past tense.

Do not use abbreviations or contractions.

Avoid words like big, good, bad, little, and a lot. Also, do not use clichés, such as “throughout history.”

Titles of texts should be put in italics OR underlined.

Check for grammar and spelling errors.

Make your précis approximately one-third the length of the text or less. Eisenhower’s speech is 1,160 words, so the précis should be approximately 380 words or less.

Kennedy’s speech is 1,562 words, so the précis should be approximately 500 words or less.

Construct a précis (or at least an outline for a précis) with your students, using the Eisenhower text. Next, have students write a précis for the Kennedy text on their own (this may be assigned as homework).

When finished, ask students to share their précis with a partner and share several examples in class. Have students complete the evaluation checklist in their academic notebooks.

Example précis for Eisenhower speech:

Dwight D. Eisenhower, Farewell Address, Televised on January 17, 1961

We must not let arrogance, lack of understanding, or unwillingness keep America from striving for the goals of peace, progress, and liberty. However, Americans are threatened by an atheistic, brutal, and crafty global ideology and they should stay alert. Peace is preserved through the military, and the U.S. has had to maintain arms even in times of peace, creating a huge industrial military establishment with economic, political, and spiritual consequences. Even though it was necessary, the U.S. must guard against its undue influence. Technology is largely responsible for military advances in America, with research leading to these advances directed by the Federal government. This governmental influence might lead to the loss of intellectual freedom and we must caution against that, while, at the same time, Americans need to be wary of the undue influence of a scientific-technological elite. We should be concerned that the U.S. might use up its resources, causing offspring to suffer and risking its democratic heritage. In addition, I do not wish to see a world ruled by fear and hate. We must call upon nations to communicate as equals, with mutual respect, in order to avoid war. I am disappointed that the goal of disarmament has not progressed further, especially since another war could destroy civilization. Even though the U.S. has avoided war, much more should be done. I will continue to work for peace as a private citizen. (243 words)

FROM THE STUDENT ACADEMIC NOTEBOOK

- | | | |
|--|------------------------------|-----------------------------|
| 1. I stated the name of the document, the author and source. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. I stated the context or setting. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. I stated the speaker's argument (claims and evidence). | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. I avoided using phrases such as "in this article." | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. I used past tense. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 6. I did not use abbreviations or contractions. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7. I avoided clichés and words like good and bad. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8. I checked for grammar and spelling errors. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 9. The précis was an appropriate length. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 10. The précis made sense. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

If desired, share the Kennedy speech précis example below:

Commencement Address of John F. Kennedy at American University, Washington, D.C.,
June 10, 1963

I am choosing this time to talk about a genuine world peace for all. Keeping a stockpile of weapons is not the best way to ensure peace. Even though some would say that nothing would change until the Soviet Union changed, I believe the U.S. could help them change. We must not adopt the belief that war was inevitable—man's problems can be solved by man. We can do this by a gradual pursuit of peace beginning with a series of concrete actions and agreements. Americans need to change their attitudes toward the Soviet Union, even though they have painted Americans as aggressive imperialists who would seek war with the Soviets and who seek world domination. Americans should look beyond Soviet talk to think about common interests and a common humanity between the two nations. We need increased communication with the Soviets, and a step in that direction is a proposed direct line between Moscow and Washington. There are two important decisions that will help the cause of peace: the beginning of talks between Kennedy, Khrushchev, and Macmillan (English) to agree on a test ban treaty; and the decision to stop nuclear testing as long as other states stopped too. Americans need to change their attitudes toward peace and freedom at home—to rededicate their lives through service in the Peace Corps or National Service Corps. Whereas it is the job of the executive branch to protect America's freedom and the job of the legislative branch to ensure that the executive branch had the authority to do that, it is the job of all citizens to respect the others' rights and to respect the law. The U.S. promises that it will never start a war; but will remain ready if others do, and it is dedicated to the pursuit of peace. (301 words)

Assessment:

Outcome 4:

If desired, use the same assessment instrument students used for their self-assessment, assigning points to each of the numbered items, with more points given for items one through three and 10 and 11 than for the other items. See the following suggestion:

| | | | Points |
|--|------------------------------|-----------------------------|---------------|
| 1. Name of document, author and source included. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /5 |
| 2. Context or setting included. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /5 |
| 3. Speaker's argument summarized accurately and in sufficient depth (claims and evidence). | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /5 |
| 4. Phrases such as "in this article" avoided. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /1 |
| 5. Past tense used, as appropriate. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /1 |
| 6. No abbreviations or contractions used. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /1 |
| 7. Clichés and words like "good" and "bad" avoided. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /1 |
| 8. No grammar or spelling errors. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /1 |
| 9. The précis was an appropriate length. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /2 |
| 10. The précis made sense. | <input type="checkbox"/> Yes | <input type="checkbox"/> No | /5 |
| | Total | | /27 |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Had students review SOAPStone and use it on the two speeches.
- 2. Had students read and annotate the two speeches.
- 3. Engaged students in discussion about vocabulary.
- 4. Had students complete the comparison/contrast chart.
- 5. Had students write claims and evidence about the difference between the two speeches.
- 6. Had students read about a précis.
- 7. Worked together to construct a précis on the Eisenhower speech.
- 8. Had students construct a précis for the Kennedy speech.

Lesson 7

Participating in a Socratic Seminar

Overview and Rationale:

This lesson uses a Socratic Seminar to help students think about the essential questions that guide the unit:

Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What differences existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis (later the Vietnam Conflict)?

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

A Socratic Seminar is a discussion technique where students sit in a circle, facing each other, to reflect on a genuine question that has no “right” answer. The dialogue that ensues, while initially prompted by the teacher, is between students. The teacher acts as an infrequent facilitator: he or she can pose questions when the discussion lulls or moves off-topic and can sometimes provide clarification when asked by a student, but does not comment on what the students say and remains invisible and silent when a discussion is taking place. The students’ responsibilities are to study the text(s) in advance, listen actively (with pen in hand) and share ideas using **evidence from the text(s) for support**.

To keep the discussion going and to have everyone participate, some teachers have used the following tools:

- “Chips” that are dispensed equally to participants at the start of the discussion that they turn in when they talk. All chips and no more can be used.
- Checklist to monitor contributions.
- Fishbowl: students outside the inner circle observe students in the seminar to evaluate their participation.

Please note a Socratic Seminar is not a debate. Rather, it is an open discussion of ideas for the purpose of enlightenment rather than persuasion. You will need to explain to students it is not their task to convince others to share their opinions, nor is it their task to attack others’ arguments. They should be interested in helping other students explain and support their views.

Tasks/Expected Outcomes:

1. Students will demonstrate their ability to use evidence from the texts they have read to create and support a preliminary claim in answer to the essential question(s).
2. Students will organize the claim and evidence in graphic form.
3. Students will participate meaningfully in a Socratic Seminar.
4. Students will use vocabulary that they have read in their previous lessons.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
 - 1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 - 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
 - 1. Participate actively and effectively in one-on-one oral communication situations.
 - 2. Participate actively and effectively in group discussions.
 - 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used

Materials:

- Transcript of Dwight D. Eisenhower's Farewell Address (1961)
- Transcript of JFK's Commencement Address at American University, June 1, 1963
- Tindall and Shi's Textbook chapter sections
- Notes from Cold War lecture
- Photograph, political cartoon and quote analyses
- Notes and graphic organizers
- Transcripts of Khrushchev's note to Kennedy; Dobrynin's report to Foreign Ministry; Robert Kennedy's report to Secretary of State.

Timeframe:

Approx. 110 minutes

Vocabulary:

Rather than introduce new vocabulary, instructors should note what vocabulary is being used by students in their discussion.

Activity One

Orientation to the Task (Approx. 5 minutes)

Remind students they have been reading to understand concepts of liberty, and, in this lesson, they will get a chance to discuss their answers to three questions about liberty. These are variations of the essential questions that guide the entire unit. Have them read these in their academic notebook, and place them on the smart board, overhead, bulletin board or other place in the classroom where they can be seen.

Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What differences or disagreements existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis?

Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?

Have students read these prompts. **To make the task more focused, let the entire class pick one prompt in which they are most interested.** Alternately, you can divide the class into three groups, each focusing on one question, and use the fishbowl technique, with one group participating in a discussion in the inner circle and students in the outer circle listening, taking notes, and evaluating the discussion, then switching out so that group two can be in the fishbowl, then group three.

If students are unfamiliar with the Socratic Seminar, you should spend some time orienting them to the process. You can use the information in the section above. Also, if you have Internet access, you can provide students with a look at a history classroom participating in a Socratic Seminar. One such site on the web is <http://vimeo.com/19134099>, but you can find others on YouTube and from other sources. Emphasize to students the discussion is not a debate, but an open exchange of ideas, which includes evidence from the sources they have read, and requires everyone's participation.

Activity Two

Preparing for the Socratic Seminar (Approx. 20 minutes)

Let students know, in order to prepare for the discussion, they will get a chance to review their texts and notes, and organize these using a graphic organizer in their academic notebook.

Review with students the graphic organizer. If you are dividing the questions into three groups, each group would only develop their ideas for one of the arguments. Give students time to prepare for the seminar.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Preparing for the Socratic Seminar

Graphic Organizer – Essential Questions

| Text | <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>What differences existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis?</i> | <i>Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |
|---|---|---|--|
| Political Cartoon | Author's Claim | | |
| | Evidence | | |
| Photograph | Author's Claim | | |
| | Evidence | | |
| Quotes from Khrushchev | Author's Claim | | |
| | Evidence | | |
| Lecture | Author's Claim | | |
| | Evidence | | |
| Tindall and Shi text | Author's Claim | | |
| | Evidence | | |
| Khrushchev's message to Kennedy | Author's Claim | | |
| | Evidence | | |
| Dobrynin's report to Foreign Affairs Ministry | Author's Claim | | |
| | Evidence | | |
| Robert Kennedy's report to Secretary of State | Author's Claim | | |
| | Evidence | | |
| Eisenhower speech | Author's Claim | | |
| | Evidence | | |
| Kennedy speech | Author's Claim | | |
| | Evidence | | |

After reviewing your evidence, what claim can you make about the answer to the question?
What evidence best supports your claim?

My claim (Question 1): My claim (Question 2): My claim (Question 3):
My evidence (Question 1): My evidence (Question 2): My evidence (Question 3):

(space provided)

Before students begin the discussion, have them read the self-evaluation rubric and discuss what should be demonstrated during the activity.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Participating in the Socratic Seminar

Review the rubric by which you will evaluate your performance before this Socratic Seminar begins. Assemble your notes and have your ideas ready. When finished, use the rubric and following questions as an evaluation tool.

Socratic Seminar Self-Evaluation Rubric

Check the boxes that reflect your participation.

| Socratic Seminar Rubric | Understands the texts | Participates in discussion | Supports ideas with evidence | Demonstrates critical mindedness | Demonstrates tolerance for uncertainty | Listens and respects others |
|-------------------------|---|--|---|--|---|---|
| Above Target | Uses parts of the texts in the discussion and shows understanding of the texts. Shows command of vocabulary. | Demonstrates active participation throughout circle time. | Makes specific references to texts and regularly defends ideas with evidence. | Questions others during discussion in a way that makes sense and adds to the group's discussion. | Is able to listen to and accept others' opinions different from his/her own. | Makes comments reflecting active listening and respect of others. |
| Target | Uses texts during the discussion but does not show understanding of them. Uses some text vocabulary. | Demonstrates active participation in at least half of the circle time. | Makes references to texts and at times defends ideas with evidence when | Questions and comments to others make sense but do not add to the group's discussion. | Is able to listen to others' opinions different from his/her own but does not use them in remaining discussion. | Generally listens, but is not attentive to details. |
| Below Target | Does not use any of the texts in the discussion. Does not use text vocabulary. | Demonstrates some participation, but off-task most of the circle time. | Makes no references to texts or does not defend ideas. | Does not question others or questions don't make sense. | Does not accept others' opinions and is unwilling to hear them. | Is consistently inattentive. |

What I did do well _____

What I didn't do well _____

What I will do next time _____

Assessment:

Outcome 1:

Students will demonstrate their ability to use evidence from the texts they have read to create and support a preliminary claim in answer to the essential question(s).

Outcome 2:

Students will organize the claim and evidence in graphic form.

Check students' graphic organizer on the following criteria.

| | No | Some | Yes |
|--|----|------|-----|
| Graphic organizer is complete. | | | |
| Graphic organizer shows reasonable claims. | | | |
| Relevant evidence from texts is used. | | | |
| All texts are used as evidence for at least one point. | | | |
| Student's final claim is reasonable, given evidence. | | | |
| Student can explain evidence. | | | |

Activity Three

Participating in the Socratic Seminar (Approx. 40 minutes)

Have students sit in a circle so they are facing each other.

Remind students they are to engage in open discussion for the purpose of understanding and that during the discussion you will be monitoring, *in the background*, their ability to take turns, to actively listen (and take notes on what others say), to provide evidence from the texts to support their ideas and be respectful. Also, tell students they will do a self-assessment after the discussion. Have them turn to their academic notebooks again to remind them of the assessment rubric.

Restate the essential question. Decide (or have students decide) how turns will be taken, and choose an individual to begin the discussion. Turns can be taken by, (a) the next person just speaking up without hand raising, or (b) the person who has just finished choosing the next person to speak from the group of people with their hands raised. As mentioned in the overview, you might want to consider ways to encourage everyone to participate. Refrain, however, from taking over the discussion. One option is to provide students with discussion tickets or chips, or you can require a participation rule such as, "everyone must join the conversation at least twice."

While the discussion is taking place, use this monitoring form or something similar to note who is participating thoughtfully. This form can also be used to evaluate whether or not students are using targeted, discipline-specific vocabulary.

Activity Five

Revising Claims and Evidence (Possible homework assignment) (Approx. 30 minutes)

After the discussion and after students have had a chance to listen and take notes on others' ideas and evidence, ask students to revise their claim in relation to one of the questions, then list support for the claim from the texts they have read.

Students should make sure the support is trustworthy and it is clearly related to the claim. Thus, an explanation will be needed of why they chose the evidence they did. Explain to students they will return to this question as they continue to study U.S. involvement in foreign relations and this outline will ultimately prepare them for the final essay at the end of the unit.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Revising Claims and Evidence

Use the following form to list your revised claims and evidence. Also, explain why the evidence you chose supports the claim (e.g., this claim shows that Kennedy did not agree with Russia's building of the Berlin Wall, and that he equated the wall with a lack of freedom).

Claim:

Evidence 1:

Explanation of Evidence:

Evidence 2:

Explanation of Evidence:

Evidence 3:

Explanation of Evidence:

Evidence 4:

Explanation of Evidence

Evidence 5:

Explanation of Evidence

Evidence 6:

Explanation of Evidence:

(space provided)

Assessment:

Score the last assignment in the academic notebook using the following criteria:

| | No | Some | Yes |
|--|----|------|-----|
| Claim is reasonable, given evidence in the text. | | | |
| Evidence that is cited is relevant and supports the claim. | | | |
| Explanation of evidence discusses why the evidence supports the claim. | | | |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Oriented students to the purpose and procedures of a Socratic Seminar.
- 2. Explained the task of reviewing their notes and using the graphic organizer to prepare for the seminar.
- 3. Discussed the way in which the seminar would be evaluated.
- 4. Determined the structure of the seminar (fishbowl or not, how students take turns).
- 5. Evaluated performance as students participated in the seminar.
- 6. Had students conduct evaluations of performance.
- 7. Gave students an opportunity to revise their claim and the evidence that supported it and to explain the relationship of the evidence to the claim.

Lesson 8

Overview: U.S. and Vietnam

Overview and Rationale:

Most students have heard of the Vietnam War (technically, the Vietnam *Conflict*) but may know little about it. This overview presents students with some key historical concepts about our involvement in Vietnam during the 1960s and will end with a focus on Lyndon Johnson and his role in the conflict. The overview provides *contextual* information that will help students learn from the other texts about Vietnam in this unit, and thus, could be considered an anchor text.

With guidance from the instructor, students will be introduced to American involvement in Vietnam through a PowerPoint presentation. This general introduction will focus on the challenges posed by political instability in Vietnam and President Johnson's attempts to overcome those challenges.

Tasks/Expected Outcomes:

1. Students will identify claims and discuss needed evidence after viewing a PowerPoint on Vietnam.
2. Students will demonstrate a growing understanding of vocabulary after viewing the PowerPoint.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
 - (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.
- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 - 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 5. Read narrative texts critically.
 6. Read research data critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint Presentation - Vietnam
- Academic notebook

Timeframe:

Approx. 50 minutes

Vocabulary:

Discipline Specific Vocabulary

People

- Lyndon Johnson
- Viet Cong
- Vietminh

Places

- Saigon
- Gulf of Tonkin

Documents/Agreements

- Geneva Accords

Events

- Tet Offensive
- Gulf of Tonkin Incident

Discipline Specific Vocabulary with General Meanings

- escalation

Activity One

Orientation to the Task (Approx. 10 minutes)

Ask students to write down a list of words, phrases, images, etc. that they associate with the Vietnam War in their academic notebook. Acknowledge that students may already know something about Vietnam, but that they will be considering information about Vietnam that is still controversial today, and will have to act as historians to determine what they will ultimately believe in relation to those controversies. Explain to them that the PowerPoint you are about to show them helps set the stage for the rest of their reading and will help them contextualize the other documents and texts they read.

Show the list of vocabulary words for this lesson (above). Ask students to write down what they know about each of the terms. Students should be able to tell more about the terms when the lesson is over.

Activity Two

Viewing the PowerPoint and Taking Notes (Approx. 15 minutes)

Remind students to use the strategies they have already learned to take notes, and to refer to the sections on Cornell notes and annotation if they need a reminder. Ask students to pay attention to the claims made on the PowerPoint about the role that President Johnson played in creating the U.S. Vietnam policy, and to think about claims concerning Johnson's *motivations*, *goals*, and *tactics* in dealing with Vietnam.

Most people agree about their interpretation of the end of this story (that we eventually pulled out without a victory and that Johnson's decision not to run for a second term was largely because of Vietnam), but historians still disagree when they discuss the decisions that were made along the way. So, the students should be thinking about this as they encounter the PowerPoint and other materials.

Have students take notes while viewing the PowerPoint.

When the PowerPoint has been completed, ask students what they learned from it and what insights they now have about the Vietnam Conflict that they may not have had before. Help them to see that the PowerPoint is an overview and that they will learn more throughout the next weeks.

(Space provided in academic notebook.)

Activity Three Thinking about Evidence for Claims (Approx. 15 minutes)

Have students sit in a circle so they are facing each other.

Return to the last page of the PowerPoint and have students look at these claims then speculate what kind of evidence might support the claim, writing their speculations in the chart in their academic notebook. Explain to them that in their subsequent readings, they should be looking for evidence that supports or contradicts the claims. They can first pair with another student, then share what they wrote with the class.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Thinking about Evidence for Claims

The last slide of the PowerPoint included some of the interpretations of historians of the Vietnam Conflict. These are CLAIMS, which need evidence to back them up. What kind of evidence do you think would be convincing?

Next to each claim, write down what kind of evidence would be convincing to you that the claim is true.

| Claim | What evidence would be convincing? | Why |
|--|------------------------------------|-----|
| LBJ escalated the Vietnam Conflict because he thought his reputation would be hurt if he lost Vietnam to the Communists. | | |
| LBJ felt he had to follow the lead of his advisors about Vietnam, because they were "Harvards." | | |
| Because of the problems in Vietnam, LBJ had no choice but to get more heavily involved. | | |
| LBJ did not want to get involved in Vietnam. | | |
| LBJ and his advisors set up the Gulf of Tonkin incident so they could get more heavily involved. | | |
| LBJ hid from Americans the cost of escalation. | | |

Also, have students look at the graphic organizer in their academic notebook.

Tell students this also represents a way to engage in the kind of thinking that historians use. They should already understand that, although there may be irrefutable evidence that events took place, the goals, motivations of, and tactics used by historical actors are harder to determine. As they read the other documents in this unit, students should be thinking about these three aspects to Johnson’s actions in the Vietnam War. **If Johnson wanted to win the war, why was he so motivated to do it? What tactics did he use? Why did he fail to achieve his goal?** There are several possible answers for each of these questions and the answers need to have evidence to back them up.

FROM THE STUDENT ACADEMIC NOTEBOOK

| Graphic Organizer – PowerPoint Overview | | |
|---|---------------------------|--------------------------|
| Johnson’s motivations for involvement and escalation | Johnson’s goal | Johnson’s tactics |
| | To win the war in Vietnam | |

Also, the Vietnam War brings in more evidence that students can use to answer the essential questions:

| Johnson’s motivations for involvement and escalation | Johnson’s goal | Johnson’s tactics |
|---|---|--|
| <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? (later: The Vietnam Conflict and the Six-Day War)</i> | <i>Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |

Assessment:

Outcome 1: Students will demonstrate an understanding of claim and evidence in history. Use the chart from Activity Three that has students determine what kind of evidence would be convincing to assess their understanding of the relationship between claim and evidence.

| | No | Some | Yes |
|--|----|------|-----|
| Did their suggested evidence have a clear link to the claim? | | | |
| Did they list several kinds of evidence that could corroborate the same claim? | | | |
| Did they produce valid reasons for listing each piece of evidence? | | | |

Activity Four

Vocabulary (Approx. 10 minutes) Using the Rubric to Evaluate Performance

Place the discipline specific vocabulary on the appropriate chart in the room. Have students revise their previous explanations of these terms in their academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Vocabulary

Revise your definitions based upon information you learned in the PowerPoint.

Lyndon Johnson-

Geneva Accords-

Viet Cong-

Saigon-

Tet Offensive-

Gulf of Tonkin-

Gulf of Tonkin Incident-

(space provided)

Assessment:

Outcome 2: Students will demonstrate a growing understanding of vocabulary after viewing the PowerPoint.

Their second attempt at explaining the terms listed in the academic notebook should be more accurate and reasonable than their first attempt.

| | No | Some | Yes |
|--|----|------|-----|
| Student's definitions were accurate. | | | |
| Student's definitions were thorough. | | | |
| Student's definitions used information gained from PowerPoint. | | | |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Had students write down a list of what they already knew about Vietnam.
- 2. Had students write explanations of vocabulary.
- 3. Reminded students of what to do when taking notes.
- 4. Had students take notes while I discussed PowerPoint slides, then discussed what they learned.
- 5. Had students think about what kind of evidence could be used to back up claims that historians have made.
- 6. Discussed with students that they should be looking for as they continue to study Vietnam—goals, motivations and tactics and answers to the essential question.
- 7. Had students re-explain vocabulary.

Lesson 9

Types of Texts

Overview and Rationale:

Students will explore the variety of texts that historians use to interpret events in the past. It is important for students and historians to be familiar with the type of texts they are reading because this helps them to determine the value and application of historical texts. Understanding the advantages and disadvantages of a particular type of text can help students and historians construct better historical arguments.

You will introduce students to broad categories of historical texts using a PowerPoint Presentation. This general introduction will conclude with the identification of several examples of historical texts associated with US involvement in the Vietnam War. Lastly students will be asked to classify a variety of texts during an activity found in their academic notebook.

Tasks/Expected Outcomes:

1. Students will be able to classify a variety of historical texts and identify challenges to credibility posed by them.
2. Students will learn text-type vocabulary.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
- (A) summarize a text in a manner that captures the author’s viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
- (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.
- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;

- (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
- (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
- 3. Identify explicit and implicit textual information including main ideas and author's purpose.
- 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
- 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
- 8. Compare and analyze how generic features are used across texts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
- 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
- 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
- 5. Read narrative texts critically.
- 6. Read research data critically.

Throughout this course, only grade 12 standards are used.

Materials:

- PowerPoint about types of texts

Timeframe:

Approx. 50 minutes

Vocabulary:

Words that Help You Talk about the Discipline

- Narrative
- Expository
- Genre
- Media
- Memoir
- Primary Source
- Secondary Source
- Tertiary Source

Activity One

Orientation to the Task (Approx. 15 minutes)

Ask students to think of the kinds of texts they have read so far in their study of history and write these on a white board, overhead, chalk board, chart, etc.

Explain to them that historians use a number of text types, including texts that may not be prose, such as photographs, artwork, political cartoons, and so on.

Show students the PowerPoint and ask for questions. Display the targeted vocabulary somewhere visibly in the room after they have completed that task.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

List some types of texts you associate with historical study.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Activity Two

Classifying and Reasoning about Texts (Approx. 35 minutes)

Explain that there are different challenges with the credibility of each of these types of texts. Ask students to think about primary sources such as photographs, newspaper articles from the time period, political cartoons, artwork and interviews of people at the scene. **What challenges to credibility are characteristic of these kinds of sources?** Elicit student responses, after students have discussed their ideas with a partner. An important concern about these kinds of sources is the potential for bias. It doesn't follow that someone who takes a picture is showing an accurate depiction of the entire scene or that someone who participated in an event is presenting an accurate representation of everyone's viewpoint (especially if the participant has something to gain by omitting certain parts of the story). There is evidence from eyewitness testimony studies that people's observations can be wrong. Elizabeth Loftus (e.g., 1974, 1979, 1989), for example, showed participants in an event a picture of the event immediately afterwards that had a new item placed in the scene. Later, participants remembered the original scene as if the new item had been there from the beginning. Historians find primary sources credible only if there is corroboration. For example, if several people witnessed an event and those people all said the same thing, even though they had different political beliefs, they would find that evidence more likely to be accurate.

Have students return to their academic notebooks and identify the type of texts represented in the examples, then note the challenges they face in determining if they are credible.

When students are finished, debrief by providing feedback about their observations and giving students a chance to revise what they wrote. Note that the Vietnam Conflict lasted until 1975, when Saigon fell to the Communists (but the U.S. troops pulled out in 1973, as a result of the Paris Peace Accords).

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Classifying and Reasoning about Texts

Using the information you received in class, classify the following examples of texts by noting if they are primary, secondary or tertiary texts and assigning a genre to each one in the space provided. Then, identify the challenges to credibility that might be a characteristic of the genre.

| Text | Primary, Secondary or Tertiary? (Circle One) | Genre | Challenges to credibility |
|---|--|-------|---------------------------|
| Constitution of the United States | Primary Secondary Tertiary | | |
| Goodwin, Doris Kearns, <i>Lyndon Johnson & The American Dream</i> (1991) | Primary Secondary Tertiary | | |
| Article from the <i>New York Times</i> describing U.S. troop deployment (1968) | Primary Secondary Tertiary | | |
| Image of a Vietnamese village on fire after a U.S. attack (1969) | Primary Secondary Tertiary | | |
| Caputo, Philip, <i>A Rumor of War</i> (1977) | Primary Secondary Tertiary | | |
| A cartoon depicting Lyndon Johnson's gradual escalation of U.S. troops in Vietnam(1965) | Primary Secondary Tertiary | | |
| The Gulf of Tonkin Resolution (1964) | Primary Secondary Tertiary | | |
| Transcript of questions and answers exchanged between a reporter and a U.S. Army officer (1968) | Primary Secondary Tertiary | | |
| <i>Vietnam: A Television History</i> (1983) | Primary Secondary Tertiary | | |

Also, have students classify the following text excerpts as a description, explanation or argument/justification.

FROM THE STUDENT ACADEMIC NOTEBOOK

Can you tell the structure of a text excerpt? Determine if the following excerpts are *description*, *explanation*, or *argumentation/justification*. Write your answers on the line below each excerpt.

1. The Johnson Administration essentially found itself in a predicament—a “political war trap” that was a product of the nuclear era, the Cold War, and domestic politics in the United States. The “trap” involved a wavering ally whose regime was threatened. The option of not using military force was discounted for fear of a “communist success” if the ally fell and the domestic repercussions this would trigger (Dennis M. Simon, August 2002; retrieved from: <http://www.srvhs.srvusd.k12.ca.us/Staff/teachers/abgardner/Vietnam/The%20Vietnam%20War>).

2. Johnson brought to the White House a marked change of style from Kennedy. A self-made and self-centered man who had worked his way out of a hardscrabble rural Texas environment to become one of Washington’s most powerful figures, Johnson had none of the Kennedy elegance. He was a bundle of conflicting elements: earthy, idealistic, domineering, insecure, gregarious, suspicious, affectionate, manipulative, ruthless, and compassionate. Johnson’s ego was as huge as his ambition (Tindall and Shi, page 1318).

3. In the end, the United States failed either to avert a communist takeover of South Vietnam, or to avoid humiliation, loss of prestige, and domestic recrimination. To be sure, the North Vietnamese Army (NVA) and southern National Liberation Front (NLF) did not directly evict US forces from Vietnam, nor even inflict upon them a major set-piece battlefield defeat like the Viet Minh did on the French at Dien Bien Phu in 1954... But if US forces were not defeated, neither did they inflict a strategically decisive defeat on the communist side (6)... Years of bombing North Vietnam and “attriting” communist forces in South Vietnam neither broke Hanoi’s will nor crippled its capacity to fight. The absence of US military defeat did not guarantee political success. The appearance of Saigon as Ho Chi Minh City for the past 20 years on maps of Southeast Asia is testimony to the defeat of the American cause in Vietnam (Record, Jeffries, [Winter, 1996-96], Vietnam in retrospect: Could we have won? Parameters, 51-65).

4. On several occasions before March 9, the Vietminh League urged the French to ally themselves with it against the Japanese. Instead of agreeing to this proposal, the French colonialists so intensified their terrorist activities against the Vietminh members that before fleeing they massacred a great number of our political prisoners detained at Yen Bay and Cao Bang (taken from The Declaration of Independence, Democratic Republic of Vietnam, written by Ho Chi Minh in 1945).

Circle any words or phrases that helped you decide what type of text each excerpt was. Discuss your choices.

Answers:

1. Explanation
2. Description
3. Argument
4. Description

Discuss with students their choices and have them explain to you what words or phrases helped them decide what type of text each excerpt was. Students could also be assigned to explain several vocabulary words in an exit slip.

Assessments:

Outcome 1: Students will be able to classify a variety of historical texts and identify challenges to credibility posed by them.

Outcome 2: Students will learn text-type vocabulary.

The activities they completed in their academic notebook will help you determine if these objectives were met. Assign points to these activities if desired.

Look for these criteria:

| | No | Some | Yes |
|---|----|------|-----|
| Student identified text types accurately. | | | |
| Student could discuss reasonable challenges to credibility of text genres. | | | |
| Student circled words and phrases in text excerpts that reflected the type of text. | | | |

Teacher Checklist

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Had students write down the kinds of text that historians use and discussed this list.
2. Showed students the PowerPoint on text types and discussed the challenges that each genre might represent.
3. Had students identify the genre of texts given the titles and list challenges with interpretation of those genres; discussed student choices.
4. Had students identify description, explanation and argumentation, given text excerpts, then circle words and phrases that helped them decide; discussed student choices.

Lesson 10

Timeline of Vietnam

Overview and Rationale:

Students will explore the evolution of U.S. involvement with Vietnam during the second half of the twentieth century. Students will use a timeline to help them place a variety of events in chronological order. This will enable them to better understand how important events are connected, and to see the trajectory of the Vietnam Conflict. They will be asked to make inferences and ask questions about the timeline. These questions and inferences, along with the essential questions for the unit, will serve to guide their subsequent reading of a textbook excerpt about Vietnam. Furthermore, these questions will help students identify and become more familiar with common historical arguments associated with the debate regarding U.S. involvement in Vietnam.

Tasks/Expected Outcomes:

1. Students will infer historical trends and relationships regarding the Vietnam Conflict using a timeline.
2. Students will ask questions about the Vietnam Conflict after studying a timeline.
3. Students will determine vocabulary meanings by using available resources.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
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Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Speaking and Listening

- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 5. Read narrative texts critically.
 - 6. Read research data critically.

Throughout this course, only grade 12 standards are used.

Materials:

- Essential Questions
- Timeline

Vocabulary:

Discipline specific vocabulary

People

- Ho Chi Minh
- Eisenhower
- Johnson
- Ngo Dinh Diem
- Nixon

Places

- Saigon
- My Lai
- Ho Chi Minh Trail

General Academic Vocabulary with disciplinary meanings

- insurgency
- referendum
- provisional
- allegedly
- fraudulent
- covert

Timeframe:

Approx. 50 minutes

Events

- Geneva Accords
- Tet Offensive
- My Lai Massacre
- Pentagon Papers
- Paris Peace Treaty
- Geneva Accords

Policies

- Pentagon Papers
- domino theory

- cessation
- garrison
- infiltrating
- guerrillas
- tacit
- legacy

Activity One

Orientation to the Task (Approx. 10 minutes)

Explain to students that one of the ways that historians make sense of events is to place them in a chronology. Sometimes, events that are close in sequence have a relationship that is more than chronological. They could have a cause/effect relationship—one event could be part of a whole series of events that exist in a causal chain, or there could be multiple causes or effects of a single event. It is not always true, however, that there is more than a chronological relationship in events that exist in close sequence. Events could exist chronologically just by coincidence. Looking at chronology, however, is a first step to making inferences about the relationships among events. Inferences are made stronger with evidence from reliable sources. If these ideas seem difficult for students to grasp, present them with this activity, found in their academic notebooks:

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

What can you infer about these events, put in chronological order?

- a. A student gets caught smoking in the bathroom.
- b. His parents ground him for one week.

What about these events?

- a. There is potato salad at a picnic.
- b. A number of people get sick to their stomachs immediately after eating picnic food.

In timelines, events are in chronological order, but historians infer the relationships among the events, based upon the best evidence. Events are not necessarily in causal relationships if they are listed chronologically.

Activity Two

Making Inferences from a Timeline (Approx. 40 minutes)

Have students study the timeline in pairs or small groups and come up with three inferences about the relationships among events and three questions they would like answered. Also, have students speculate about the kind of evidence they would need to support their inferences.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Making Inferences from a Timeline

Study the following timeline and come up with: (a) three inferences, and (b) three questions. Specify what kind of evidence you would need to be surer of your inference and what kind of evidence you would need to answer your questions. A map is provided so that you can locate the sites that are referenced in the timeline.

(space provided)

Vocabulary:

There are a number of words that students may have difficulty with. Remind them it is okay to struggle with meaning, and they should use their resources to help them understand words they do not know. To review, these include:

1. Context: Students can read the surrounding sentence and determine what meaning would make sense, given the overall meaning of the sentence and the clues the other words provide.
2. Breaking words into their meaningful parts: Multi-syllabic words are often made up of several different parts that students know the meaning of. In this lesson, students may know *fraud*, which will help them understand *fraudulent*.
3. Asking other students: If students are reading with partners or small groups, they can help each other with word meaning.
4. Glossary or dictionary: Students can consult a glossary or dictionary to find the best word meaning, given the context.
5. Class discussion: When all else fails, students can note these words and bring them up later in whole-group discussion.

In addition to the timeline, this lesson includes a map, so that students can reference the places referred to in the timeline. The map is shown on the next page and can be accessed online at: <http://history.howstuffworks.com/asian-history/history-of-vietnam6.htm>.



Timeline of American Involvement in Vietnam

1945

Ho Chi Minh Creates Provisional Government.

Following the surrender of Japan to Allied forces, Ho Chi Minh and his People's Congress create the National Liberation Committee of Vietnam to form a provisional government. Japan transfers all power to Ho's Vietminh.

Ho Declares Independence of Vietnam.

British Forces Land in Saigon, Return Authority to French.

1946

Indochina War begins.

The Democratic Republic of Vietnam launches its first concerted attack against the French.

1950

Chinese, Soviets Offer Weapons to Vietminh.

U.S. Pledges \$15M to aid French.

The United States sends \$15 million dollars in military aid to the French for the war in Indochina. Included in the aid package are military advisors.

1954

Battle of Dienbienphu begins.

A force of 40,000 heavily armed Vietminh lay siege to the French garrison at Dienbienphu. Using Chinese artillery to shell the airstrip, the Vietminh make it impossible for French supplies to arrive by air. It soon becomes clear that the French have met their match.

Eisenhower cites "Domino Theory" regarding Southeast Asia.

Responding to the defeat of the French by the Vietminh at Dienbienphu, President Eisenhower outlines the Domino Theory: "You have a row of dominoes set up. You knock over the first one, and what will happen to the last one is the certainty that it will go over very quickly."

Geneva Agreements announced.

Vietminh and French generals sign the Agreement on the Cessation of Hostilities in Vietnam. As part of the agreement, a provisional demarcation line is drawn at the 17th parallel, which will divide Vietnam until nationwide elections are held in 1956. The United States does not accept the agreement, and neither does the government.

1955

Prime Minister of Vietnam Ngo Dinh Diem holds fraudulent referendum. Diem becomes President of Republic of Vietnam.

1956

French Leave Vietnam.

U.S. Training South Vietnamese:

The U.S. Military Assistance Advisor Group (M.A.A.G.) assumes responsibility from the French for training South Vietnamese forces.

1957

Communist Insurgency in South Vietnam.

Communist insurgent activity in South Vietnam begins. Communist Guerrillas assassinate more than 400 South Vietnamese officials. Thirty-seven armed companies are organized along the Mekong Delta.

1959

Weapons Moving Along Ho Chi Minh Trail.

North Vietnam begin infiltrating cadres and weapons into South Vietnam via the Ho Chi Minh Trail. The Trail will become a strategic target for future military attacks.

1961

Vice President Johnson Tours Saigon.

During a tour of Asian countries, Vice President Lyndon Johnson visits Diem in Saigon. Johnson assures Diem that he is crucial to U.S. objectives in Vietnam and calls him “the Churchill of Asia.”

1963

Buddhists Protest Against Diem.

Tensions between Buddhists and the Diem government are further strained as Diem, a Catholic, removes Buddhists from several key government positions and replaces them with Catholics. Buddhist monks protest Diem’s intolerance for other religions and the measures he takes to silence them. In a show of protest, Buddhist monks start setting themselves on fire in public places.

Diem Overthrown, Murdered.

With the tacit approval of the United States, operatives within the South Vietnamese military overthrow Diem. He and his brother Ngo Dinh Nhu are shot and killed.

1964

Gulf of Tonkin Incident.

On August 2, three North Vietnamese PT boats allegedly fire torpedoes at the U.S.S. Maddox, a destroyer located in the international waters of the Tonkin Gulf, some thirty miles off the coast of North Vietnam. The attack comes after six months of covert U.S. and South Vietnamese naval operations. A second, even more highly disputed attack, is alleged to have taken place on August 4.

Debate on Gulf of Tonkin Resolution.

The Gulf of Tonkin Resolution is approved by Congress on August 7 and authorizes President Lyndon Johnson to “take all necessary measures to repel any armed attack against forces of the United States and to prevent further aggression.” The resolution passes unanimously in the House, and by a margin of 82-2 in the Senate. The Resolution allows Johnson to wage all out war against North Vietnam without ever securing a formal Declaration of War from Congress.

1966

LBJ Meets With South Vietnamese Leaders.

President Lyndon Johnson meets with South Vietnamese premier Nguyen Cao Ky and his military advisors in Honolulu. Johnson promises to continue to help South Vietnam fend off aggression from the North, but adds that the U.S. will be monitoring South Vietnam's efforts to expand democracy and improve economic conditions for its citizens.

1967

Martin Luther King, Jr. Speaks Out Against War.

Calling the U.S. "the greatest purveyor of violence in the world," Martin Luther King publicly speaks out against U.S. policy in Vietnam. King later encourages draft evasion and suggests a merger between antiwar and civil rights groups.

1968

North Vietnamese Launch Tet Offensive.

In a show of military might that catches the U.S. military off guard, North Vietnamese and Vietcong forces sweep down upon several key cities and provinces in South Vietnam, including its capital, Saigon. Within days, American forces turn back the onslaught and recapture most areas. From a military point of view, Tet is a huge defeat for the Communists, but turns out to be a political and psychological victory. The U.S. military's assessment of the war is questioned and the "end of the tunnel" seems very far off.

My Lai Massacre:

On March 16, the angry and frustrated men of Charlie Company, 11th Brigade, America Division enter the village of My Lai. "This is what you've been waiting for -- search and destroy -- and you've got it," say their superior officers. A short time later the killing begins. When news of the atrocities surfaces, it will send shockwaves through the U.S. political establishment, the military's chain of command, and an already divided American public.

Paris Peace talks begin.

Following a lengthy period of debate and discussion, North Vietnamese and American negotiators agree on a location and start date of peace talks. Talks are slated to begin in Paris on May 10 with W. Averell Harriman representing the United States, and former Foreign Minister Xuan Thuy heading the North Vietnamese delegation.

1969

Ho Chi Minh Dies at age 79.

News of My Lai Massacre Reaches U.S.

Through the reporting of journalist Seymour Hersh, Americans read for the first time of the atrocities committed by Lt. William Calley and his troops in the village of My Lai. At the time the reports are made public, the Army has already charged Calley with the crime of murder.

1971

Pentagon Papers published.

The New York Times publishes the Pentagon Papers, revealing a legacy of deception concerning U.S. policy in Vietnam on the part of the military and the executive branch.

The Nixon administration, eager to stop leaks of what it considers sensitive information, appeals to the Supreme Court to halt the publication. The Court decides in favor of the Times and the First Amendment right to free speech.

1973

Cease-fire Signed in Paris.

A cease-fire agreement that, in the words of Richard Nixon, “brings peace with honor in Vietnam and Southeast Asia,” is signed in Paris by Henry Kissinger and Le Duc Tho. The agreement is to go into effect on January 28.

End of Military Draft Announced.

Last American Troops Leave Vietnam.

Adapted from: <http://www.pbs.org/wgbh/amex/vietnam/timeline/tl3.html#a>.

| FROM THE STUDENT ACADEMIC NOTEBOOK | |
|------------------------------------|--|
| Inference | What evidence would you need to give you confidence in this inference? |
| 1. | |
| 2. | |
| 3. | |
| Question | What evidence would you need to answer this question? |
| 1. | |
| 2. | |
| 3. | |

Ask students to share some of their inferences and questions in the whole group. Mention to them that their own questions can be used to guide their reading, and that they should be thinking about these things as later they read the textbook chapter on Vietnam. However, they should also be thinking about the essential question and sub-questions for the whole foreign affairs unit.

Questions for Close-Reading:

If students have difficulty making inferences about the relationship among events, ask the following questions. Tell students they can use the timeline and any other information they have learned in this unit to answer them.

1. What was President Eisenhower saying about Communism when he described the Domino Theory? What inferences, then, can you make about Eisenhower's motivation to help the French when they were fighting Ho Chi Minh? Are there any other explanations for his motivation? (For example, the French had been allies in World War II and he may have wanted to continue that relationship). What evidence do you have for your inference?
2. What role do you think Ngo Dinh Diem played in the difficulty the U.S. had in winning the war? What evidence points to that inference?
3. Read again the description of The Tonkin Gulf incident in the timeline. What opinion do you think the author of this timeline has about the reports of North Vietnamese attacks on U.S. ships? Does the author believe these reports are credible? What words can you identify that provide evidence for your answer?
4. What effect did the Tonkin Gulf incident have on the Vietnam War, as portrayed in this timeline? Is this portrayal corroborated by other information you have read?
4. Why do you think the Tet Offensive was considered a political and psychological victory for the Communists? What words can you identify in the description of the Tet Offensive that led to that conclusion?
5. What was Martin Luther King, Jr.'s motivation to call the U.S. "the greatest purveyor of violence in the world?" What leads you to that inference? Does his pronouncement have any bearing on the outcome of the war? Why do you say so?
6. What were the significant factors leading to the eventual outcome of the Vietnam War, given the information in this timeline? Are there other factors not identified here that could or should be added?

Vocabulary:

Ask students if there were words for which they could not determine meanings as they read the timeline. Enlist the entire class in using available resources to resolve these meanings. If students consult a glossary or dictionary, help them to determine the best meaning of multiple meaning words, given the context of the words. Some possibilities for vocabulary work are:

- | | |
|--------------------|--|
| cessation | Viet Minh and French generals sign the Agreement on the <i>Cessation of Hostilities</i> in Vietnam. |
| provisional | Ho Chi Minh and his People's Congress create the National Liberation Committee of Vietnam to form a <i>provisional</i> government. |
| fraudulent | Prime Minister of Vietnam Ngo Dinh Diem holds a <i>fraudulent</i> referendum referendum. |
| insurgency | Communist <i>insurgency</i> in South Vietnam. |
| guerrillas | Communist <i>Guerrillas</i> assassinate more than 400 South Vietnamese officials. |

| | |
|---------------------|---|
| infiltrating | North Vietnam begin infiltrating cadres and weapons into South Vietnam via the Ho Chi Minh Trail. |
| tacit | With the tacit approval of the United States, operatives within the South Vietnamese military overthrow Diem. |
| garrison | A force of 40,000 heavily armed Vietminh lay siege to the French garrison at Dienbienphu. |
| allegedly | PT boats allegedly fire torpedoes at the U.S.S. Maddox. |
| covert | The attack comes after six months of covert U.S. and South Vietnamese naval operations. |
| legacy | The New York Times publishes the Pentagon Papers, revealing a legacy of deception. |

As always, put discipline specific words on the chart in the room, and have students explain these terms to each other. If desired, also have students explain some of the previously listed words.

Assessments:

Outcome 1: Students will infer historical trends and relationships regarding the Vietnam Conflict using a timeline.

Outcome 2: Students will ask questions about the Vietnam Conflict after studying a timeline.

- List of inferences, questions and potential evidence.

You can use the activity in students' academic notebooks to assess students' ability to infer and question using a timeline.

What to look for:

| | No | Some | Yes |
|---|----|------|-----|
| Student makes reasonable inferences, given information in the timeline. | | | |
| In discussion, student can provide a reason for the inference. | | | |
| Student asks reasonable questions, given information in the timeline. | | | |
| In discussion, student can point to information in the timeline that prompted the question. | | | |
| Student can identify potential evidence that would verify that the inferences made are valid. | | | |

Outcome 3: Students will determine vocabulary meanings by using available resources.

Have students identify two or three words they have just learned as a result of the lesson, and write explanations of these words on an exit slip. Also, consider adding a word or two from previous lessons.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

- 1. Discussed the relationship between chronology and cause-effect.
- 2. Asked students to read and annotate the timeline.
- 3. Asked students to make inferences and ask questions about the timeline, then specify the kind of evidence needed to support these inferences and questions.
- 4. Had students share inferences and questions in whole group discussion.
- 5. Asked students questions, as needed.
- 6. Discussed difficult vocabulary words.

Lesson 11

Reading and Annotating a Chapter about the Vietnam Conflict

Overview and Rationale:

Practicing historians believe that everything should be read with a critical eye—even textbook chapters. Students often assume that what they are reading is absolutely true because the chapters are written in descriptive and explanatory form, not in argument form. Yet, the narratives are historians' analyses of other historians' writings, their interpretation of documents and other artifacts and their own conjectures about how the past unfolded. Statements that specify causes were political, legal, or social, or that some events are more significant than others, for example, are not statements of fact but reasonable interpretations of historical information. Thus, historians know that history textbook chapters contain implicit *arguments*, or *claims* and that the source (author) and context in which a textbook is written are important. Interpretation is complicated by the fact that textbooks can be considered *tertiary* sources. That is, textbook authors are often relying on secondary sources of information (written by historians) rather than their own assessments of primary documents. Nevertheless, what they choose to emphasize and what they leave out, the claims they make, and the details they provide are *decisions* that they make. Thus, two texts may treat the same topic differently.

There are four sections of a textbook in Chapter 30 of *The Americans* about the Vietnam Conflict that tell an account of Vietnam beginning in 1945, when Vietnam was under the control of the French until the end of the war during Nixon's presidency. The chapter presents a loose chronology; however, within sections there is explanation (*why* did this happen, *what* were the effects), so the structure is not strictly descriptive or chronological. This chapter includes several features: headings and subheadings that specify different topics within the overarching chronological timeframe; photographs from the time period with captions; special topics inserts—often these are memoir or interview excerpts from people who were there at the time; explanations of key terms; maps; and excerpts from primary sources. Students need to consider all of these elements if they are going to understand what this source has to say. Occasionally, this textbook chapter even cites what other historians have said about the war—unusual for textbooks. So, in this chapter, there are sources within sources—the personal stories and the citations of others. As students preview, point these out.

In addition, this is the first full-length chapter students will need to read in this unit; it is 31 pages long. As explained in the lesson, a decision will need to be made on how to proceed, given the reading stamina of students. There are a couple of ways to break up the reading into more manageable sections. One way is to break it up

by major topic, into four sections. A list of questions for each section is suggested for debriefing. Another way is to have students read the first two sections, then proceed with the following two lessons, come back to the chapter to read the last two sections, and follow up with the lesson after that. These decisions could be made with students weighing in. By bringing students into the decision making process, the point can be made that, in college, they may have multiple chapters to read each week and that it will be up to them to decide how they will manage their time.

In this lesson, students are asked to annotate the text. Students should have already had some practice in annotating history texts and should be reminded of this practice. Also, students are asked to think about the overarching theme (liberty) and essential questions as they read and should be thinking about the questions they have already asked themselves as they studied the timeline.

Finally, students should be reminded of other strategies used to make sense of history—specifically SOAPStone, G-SPRITE and the Episode Pattern Organizer. These strategies will help them organize the information they have learned about Vietnam.

Tasks/Expected Outcomes:

1. Students will show through their annotations that they are identifying historically important information about Vietnam from reading.
2. Students will show through discussion and graphic organizers that they can think critically about the information in the chapter.
3. Students will show through annotations and discussion their understanding or discipline-specific and general academic vocabulary.
4. Students will show their understanding of chronology and significance by adding to the Vietnam timeline.
5. Students will collect textual evidence that addresses the essential questions.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (11) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text; and
 - (B) evaluate the structures of text (e.g., format, headers) for their clarity and organizational coherence and for the effectiveness of their graphic representations.
- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

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- (24) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:
- (A) listen responsively to a speaker by framing inquiries that reflect an understanding of the content and by identifying the positions taken and the evidence in support of those positions; and
 - (B) assess the persuasiveness of a presentation based on content, diction, rhetorical strategies, and delivery.

- (25) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to formulate sound arguments by using elements of classical speeches (e.g., introduction, first and second transitions, body, and conclusion), the art of persuasion, rhetorical devices, eye contact, speaking rate (e.g., pauses for effect), volume, enunciation, purposeful gestures, and conventions of language to communicate ideas effectively.
- (26) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate productively in teams, offering ideas or judgments that are purposeful in moving the team towards goals, asking relevant and insightful questions, tolerating a range of positions and ambiguity in decision-making, and evaluating the work of the group based on agreed-upon criteria.

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- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
1. Use effective reading strategies to determine a written work's purpose and intended audience.
 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 7. Evaluate the use of both literal and figurative language to inform and shape the perceptions of readers.
 8. Compare and analyze how generic features are used across texts.
 9. Identify and analyze the audience, purpose, and message of an informational or persuasive text.
 10. Identify and analyze how an author's use of language appeals to the senses, creates imagery, and suggests mood.
 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: III. Speaking

- A. Understand the elements of communication both in informal group discussions and formal presentations (e.g., accuracy, relevance, rhetorical features, organization of information).
 - 1. Understand how style and content of spoken language varies in different contexts and influences the listener's understanding.
 - 2. Adjust presentation (delivery, vocabulary, length) to particular audiences and purposes.
- B. Develop effective speaking styles for both group and one-on-one situations.
 - 1. Participate actively and effectively in one-on-one oral communication situations.
 - 2. Participate actively and effectively in group discussions.
 - 3. Plan and deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning.

Texas College and Career Readiness English/Language Arts Standards: IV. Listening

- A. Apply listening skills as an individual and as a member of a group in a variety of settings (e.g., lectures, discussions, conversations, team projects, presentations, interviews).
 - 1. Analyze and evaluate the effectiveness of a public presentation.
 - 2. Interpret a speaker's message; identify the position taken and the evidence in support of that position.
 - 3. Use a variety of strategies to enhance listening comprehension (e.g., focus attention on message, monitor message for clarity and understanding, provide verbal and nonverbal feedback, note cues such as change of pace or particular words that indicate a new point is about to be made, select and organize key information).
- B. Listen effectively in informal and formal situations.
 - 1. Listen critically and respond appropriately to presentations.
 - 2. Listen actively and effectively in one-on-one communication situations.
 - 3. Listen actively and effectively in group discussions.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- C. Critical listening
 - 1. Understand and interpret presentations (e.g., speeches, lectures, informal presentations) critically.

Throughout this course, only grade 12 standards are used.

Materials:

- *The Americans*, Chapter 30
- Academic notebook
- Annotation Evaluation
- Timeline

Vocabulary:

Discipline Specific Vocabulary

Organizations

- Vietminh/National Liberation Front
- Vietcong
- ARVN
- Green Berets
- SDS
- FSM

Documents

- Geneva Accords
- Tonkin Gulf Resolution

Events

- Tet Offensive
- Cold War

Other Terms

- Communism
- fragging
- Domino theory
- USS Maddox
- USS Turner Joy
- War of Attrition
- Napalm
- Agent Orange
- search and destroy mission
- Doves and Hawks

General Academic Vocabulary

- | | |
|-----------------------|----------------|
| • plummeted | • reverberated |
| • laced | • impale |
| • terrain | • repressive |
| • elusiveness/elusive | • appeaser |
| • attrition | • resilient |
| • flamboyant | • stalemate |
| • deferments | • evolved |
| • disproportionate | • deployment |
| • tumultuous | |

Timeframe:

Approx. 300 minutes

People

- Ho Chi Minh
- Ngo Dinh Diem
- Barry Goldwater
- Robert McNamara
- Walter Cronkite
- Dean Rusk
- General William Westmoreland
- Senator William J. Fulbright
- Robert Kennedy
- Eugene McCarthy
- Hubert Humphrey
- Richard Nixon
- George Wallace

Places

- French Indochina
- Ho Chi Minh Trail
- Cambodia
- Gulf of Tonkin
- Laos
- Dien Bien Phu

Policies

- containment
- escalation

Words that Help You Discuss the Discipline:

- annotation
- cause/effect
- close reading

Activity One

Orientation to the Task (Approx. 15 minutes)

Tell students about the textbook *The Americans*. Gerald Danzer, the principal author of this textbook, is a Professor Emeritus at the University of Illinois at Chicago and former director of the Chicago Neighborhood History Project. He has had a long interest in history education and American Law, and has authored a number of history textbooks. His first coauthor, J. Jorge Klor de Alva is president of a global education company and has a law degree. Not much more can be found out about them. Given that, ask students what they think about the trustworthiness of this text. Then, explain that sometimes you do not have enough information to decide if a text is trustworthy. What else would they need to know?

Preview Chapter 30 with students. Ask them to look at headings, subheadings and the extra features this chapter includes, and remind them that these features will aid their understanding of what Danzer has to say. If time allows, have students summarize what they found with a partner. **Discuss this preview with students, asking questions such as:**

Are there events that happened during this time period that Danzer is leaving out? Judging from your preview, what do you think Danzer would like you to understand about the Vietnam? What do you think of the personal stories? What is the purpose of these stories? Are these sources of information trustworthy? Why or why not?" Students are likely to say they are trustworthy because the people were there at the time. Question this—what could make them untrustworthy? What about the maps and pictures? The newspaper headings? What purpose do they serve? How are these sections related to the main text? Do they corroborate the information in the text? Do they add new information? If so, what kind?

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

Preview the Chapter 30 of *The Americans*. What features does this chapter provide?

Given your preview and what you know about the textbook authors, how trustworthy is the information in this text?

(space provided)

Activity Two

Analyzing History Textbook Chapters (Approx. 5 minutes)

Remind students they have looked at a timeline and asked some questions about it and should keep these events in mind when reading the chapter. Have students read the instructions in the academic notebook.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Analyzing History Textbook Chapters

Review G-SPRITE: Geographical, Social, Religious, Intellectual, Technological, and Economic. Review Annotation Guidelines.

Annotate....

- Relationships among events—chronology, causation.
- Actors—who (individuals or groups) is engaging in actions aimed at meeting goals.
- Actions—what the actors (are) doing, the tactics or methods they are using.
- Characteristics—of actions, actors, policies, movements, events.
- Motivations—the goals that lead the actors towards action.
- Categorizations of actions into political, social, economic, religious, cultural, etc.
- Comparison and Contrast—of interpretations of cause/effect, motivations, characteristics, etc.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts, and words that signal relationships among events.

Read to verify your inferences and answer your questions. Read to find evidence to answer the essential questions.

The essential questions are:

| | | |
|---|---|--|
| <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>What conflicts existed in conceptions of liberty and freedom by those participating in The Vietnam Conflict?</i> | <i>Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |
|---|---|--|

It may be hard for students to keep all of these things in mind as they read. It would be useful to make a list and display it prominently in the room.

Activity Three

Annotating the Text (Each section annotation and discussion is approximately 50 minutes – 200 minutes total)

Provide the rest of the period for students to read and annotate the first assigned section of the chapter—*Moving Toward Conflict*. When students are finished, have them address their questions in their academic notebooks. Also, have them complete the **G-SPRITE organizer**. Students should complete the **Annotation Evaluation for History** in their academic notebooks. You can also use both to assess your students' performances.

- Circle key vocabulary words (discipline-specific, general words with discipline specific meanings, general academic vocabulary; words that signal bias or judgment, words that signal relationships).
- Underline or highlight key ideas (actors, actions, relationships among events, characteristics, comparison/contrast, etc).
- Write key words or summarizing phrases in the margins.
- Define vocabulary words in the margins.
- Write your reactions to the text in the margins.
- Make connections and inferences in the margins (this is like... aha!!).
- Draw cause-effect chains.



- Make Comparison-Contrast graphs or Venn diagrams:

| Event 1 | Event 2 |
|---------|---------|
| | |

- Make or add to a timeline.
- Make any other annotation that helps you understand and think about the information.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Annotating the Text

Annotate the text. After you are finished, evaluate your annotations using the form below.

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source
- 2. Information that signaled
 - a. Cause/effect
 - b. Comparison contrast
 - d. Chronology (words signaling time)
 - c. Bias or judgment
 - e. Discipline-specific information and vocabulary
 - f. Other
- 3. Unknown general academic vocabulary
- 4. Key actors, actions, goals, and tactics, etc.
- 5. Political, social, economic, legal, or other characterizations of information
- 6. Marginal notations that show
 - a. summarizing
 - b. inferencing
 - c. reacting
 - d. connecting to other information,
 - e graphic or pictorial representations of information (e.g., cause-effect chains, time lines).

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

This is students’ first full-length chapter to read in this unit—31 pages of text. Break-up the text reading and debriefing on individual sections.

- Moving Toward Conflict, pages one to six.
- U.S. Involvement and Escalation, pages seven to 12.
- A Nation Divided, pages 13-17.
- 1968: A Tumultuous Year, pages 18- 31.

Another possibility is for students to read the first two sections, move to Lessons 12 and 13, come back to read the next two sections and finally move to Lessons 14. Make these decisions with knowledge of your students persistence in reading, keeping in mind that in college, they may be expected to read multiple chapters in any given week, and it will be up to them to divide the reading into workable chunks. **It might be a good idea to involve your students in the decision-making.** That is, after they have previewed the chapter, share with students the number of days or class hours they will have to complete Lessons 11-14. Discuss with students the autonomy they will have in college to decide how to structure their study and let them determine the best way to structure the text reading.

FROM THE STUDENT ACADEMIC NOTEBOOK

Complete G-Sprite using the chart below on this and every section in this chapter as you read. What factors were important in each of the phases of the Vietnam Conflict? Write the information and page number in the spaces to help you analyze the reasons for why the Vietnam War proceeded the way it did.

| | Moving Toward Conflict | U.S. Involvement and Escalation | A Nation Divided | 1968: A Tumultuous Year |
|---------------|------------------------|---------------------------------|------------------|-------------------------|
| Geographical | | | | |
| Social | | | | |
| Political | | | | |
| Religious | | | | |
| Intellectual | | | | |
| Technological | | | | |
| Economic | | | | |

(space provided)

Assessment:

Outcome 1: Students will show through their annotations that they are identifying historically important information about Vietnam from reading.

Use the Annotation checklist to assess and provide feedback to students about their annotations.

Activity Four

Debriefing (Approx. 40 minutes)

Section One: Moving Toward Conflict

Begin discussions of the information in this section in an open-ended way, asking questions such as, “What did you notice? What caught your eye? What information did you find corroborated other information you have read? Are there disagreements between what you’ve already read and information in this chapter? Were you surprised by anything you read?”

If the following topics are not brought up during this open-ended discussion, use these close-reading questions. The questions that are most important, as they present new information, are numbers four and five in the academic notebook.

If a fishbowl was used, the students in the outer circle could evaluate the fishbowl group’s performance, as well.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Debriefing

Section One: Moving Toward Conflict

Discuss what you paid attention to with your class in this section.

Think about the questions that are raised in this discussion, including the following:

Danzer (textbook): “On November 1, 1963, a U.S.-supported military coup toppled Diem’s regime. Against Kennedy’s wishes, Diem was executed.”

Timeline: “With the tacit approval of the United States, operatives within the South Vietnamese military overthrow Diem. He and his brother Ngo Dinh Nhu are shot and killed.”

How do these statements differ? How would you determine the most supported interpretation?

Read the document on the next page and decide which interpretation it supports. Write your thoughts here:

(space provided)

1. Danzer makes the claim, “Seeking to strengthen its ties with France and help fight the spread of communism, the United States provided the French with massive amounts of economic and military support.” What have you already read that discusses U.S. motivations for helping the French? Is this statement corroboration? (Partly: the timeline mentions Communism but not US/French relations.) Does Danzer provide evidence for this claim? (Provides a fact: \$2.6 billion in aid over the next four years.)
2. How does Danzer explain the relationship of the Domino Theory to Vietnam? How does his explanation match the explanation in the last lesson?
3. Danzer says, “The United States also sensed that a countrywide election might spell victory for Ho Chi Minh and therefore supported the cancellation of elections.” In the timeline, you read, “The United States does not accept the agreement (Geneva Accord), and neither does the government.” The timeline was silent on U.S. support for cancellation. What would you have to do to find evidence that corroborated or disagreed with Danzer?
4. Danzer says, “On November 1, 1963, a U.S.-supported military coup toppled Diem’s regime. Against Kennedy’s wishes, Diem was executed.” In the timeline, you read, “With the tacit approval of the United States, operatives within the South Vietnamese military overthrow Diem. He and his brother Ngo Dinh Nhu are shot and killed.” Compare and contrast these two statements. (Remind students to pay attention to the meaning of the word “tacit” if they do not. The timeline statement implies that Kennedy did not disagree with either the coup or the murder of Diem. Danzer says that Kennedy actually helped with the coup but did not agree to the murder.) How would we determine the more supported interpretation? What evidence would we need? Ask students to read the document on the next page to decide what interpretation it supports.
5. The question left unanswered by the text below is whether President Kennedy supported Diem’s assassination. Read the following account offered by historian Richard Reeves in his book, *President Nixon: Alone in the White House*, page 371. (Retrieved from History Commons at: http://www.historycommons.org/context.jsp?item=vietnam_637&scale=2#vietnam_637.)

President Nixon’s aides have diligently tried to find evidence linking former President John F. Kennedy to the 1963 assassinations of South Vietnamese President Ngo Dinh Diem and his brother, Ngo Dinh Nhu (see June 17, 1971), but have been unsuccessful. “Plumber” E. Howard Hunt (see July 7, 1971) has collected 240 diplomatic cables between Washington, DC, and Saigon from the time period surrounding the assassinations, none of which hint at any US involvement in them. White House aide Charles Colson, therefore, decides to fabricate his own evidence. Using a razor blade, glue, and a photocopier, Colson creates a fake “cable” dated October 29, 1963, sent to the US embassy in Saigon from the Kennedy White House. It reads in part, “At highest level meeting today, decision reluctantly made that neither you nor Harkin [apparently a reference to General Paul Harkin, the commander of US forces in Vietnam at the time] should intervene on behalf of Diem or Nhu in event they seek asylum.” [REEVES, 2001, PP. 371]

What implications for interpreters of history are there for fabricated or made-up evidence?

Do you know yet whether or not the President approved or did not approve the assassination of Diem? If not, what kind of evidence would you look for?

(space provided)

~~TOP SECRET~~

October 25, 1963

Check-List of Possible U.S. actions
in Case of Coup

1. Evacuation of American dependents.
2. Movement of U.S. forces into positions outside Viet-Nam from which they can be readily dispatched to Viet-Nam, if the occasion arises, for:
 - a. Protecting Americans in Viet-Nam.
 - b. Removal of U.S. equipment from Viet-Nam.
 - c. Intervention into political struggle.
 - d. Stabilization of military situation vis-a-vis the Viet-Cong.
3. Inducement (financial, political or otherwise) to opportunists or recalcitrants to join in coup.
4. Cessation of all U.S. aid to Diem Government and announcement thereof.
5. Use U.S. facilities in Viet-Nam (military advisors, transport, communications, etc.) in support of coup group.
6. Political actions to point coup toward civilian government.
 - a. Discussions with military officers.
 - b. Protection of potential civilian heads of state and discussions with them.
7. Once coup group has seized power, rally promptly to its support with statements and assistance.

~~TOP SECRET~~

DECLASSIFIED
E.O. 12958, Sec. 3.5(b)
Department of State Guidelines
By mmk NARA, Date 5/21/97

FE:AMendenhall:aws

Section Two: U.S. Involvement and Escalation

Again, ask open-ended questions to begin the debriefing.

Follow up with the questions below, if not already discussed.

1. At the beginning of escalation of the Vietnam Conflict, what were the opposing opinions about escalation? Can you find statements in the text that describe these opinions?

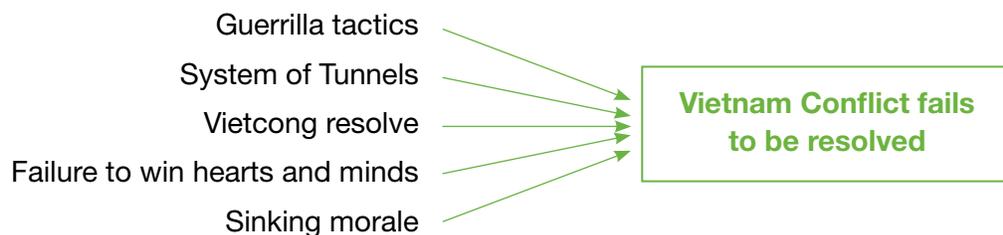
(Two examples: Ernest Gruening of Alaska, “All Vietnam is not worth the life of a single American boy.” Ross Adair of Indiana, “The American flag has been fired upon. We will not and cannot tolerate such things.”)

2. Why, according to Danzer, does the Vietnam Conflict last so long? What parts of the text provide answers to the question?

(Possible answers: guerrilla tactics, a system of tunnels, Vietcong resolve and persistence, failure of U.S. to win the hearts and minds of the South Vietnamese rural population, sinking morale among U.S. troops.)

3. How could you illustrate this with a cause-effect graphic?

Possible answer:



4. Danzer claims, “Not only may the United States have underestimated the Vietcong’s ingenuity, but it also miscalculated the enemies resolve.” What evidence does Danzer use to support this claim? Is his evidence persuasive? Why or why not? What other evidence might he have used?

(Ho Chi Minh’s statement from 1940s; McNamara’s statement to a reporter in 1966; Statement from Stanley Karnow, author of *Vietnam: A History*.)

5. Read the following paragraph:

Much of the nation supported Lyndon Johnson’s determination to contain communism in Vietnam. Therefore, President Johnson began sending large numbers of American troops to fight alongside the South Vietnamese Army against the forces of the Vietcong and the North Vietnamese Army.

What structure does this paragraph have? Is it a description, an explanation or an argument? (Explanation.)

What is the relationship between the first and second sentence? (Cause-effect.)

What word or words provide the clue to this relationship? (Therefore.)

(Explain to students that there are words that signal relationships of one thing has to another, and that looking for these words can be helpful to determine the author’s meaning. Words such as “thus,” “because,” “so,” “on account of,” signal cause-effect, whereas words such as “following that,” “then,” “next,” “after that” and “later” signal a chronological relationship that may or may not be cause-effect.)

Section Three: A Nation Divided

If students' open-ended discussion does not bring up the following points, consider these activities:

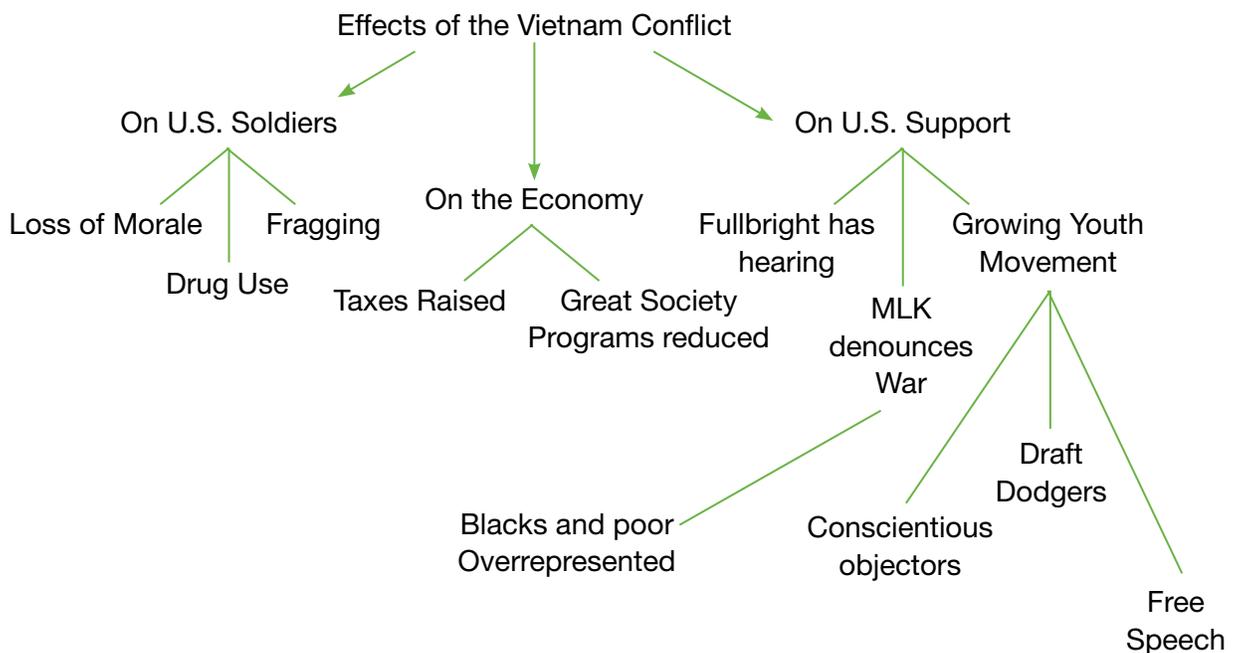
In this section, Danzer discusses the *effects* of the war on the U.S. With a partner, list the effects that Danzer discusses.

Possible answers:

- Loss of morale of soldiers, fragging, drug use.
- Nation's economy suffers → Unraveling of Johnson's domestic program → Johnson had to raise taxes and great society programs were reduced by \$6 billion.
- Beginning of dissent:
 - Hearing by William Fulbright 1966.
 - Conscientious objectors.
 - Draft-dodgers.
 - MLK's denouncement of war
 - Eighty percent coming from lower socioeconomic classes.
 - Larger proportion of African-Americans than in the population.
 - Growing youth movement – the New Left, SDS, Free Speech Movement.
 - Division of U.S. population into Doves and Hawks, with numbers of Doves increasing.

At this point, you might ask students to make a concept map that includes the ideas above and shows their relationship. Allow students to work together and to be creative. Or you could create a concept map together as a group, especially if students are not familiar with concept maps. (Space is provided in academic notebook.)

Possible concept map: Hierarchical



Section Four: 1968: A Tumultuous Year

Again, begin with open-ended questions then add the following if necessary:

1. Why was the Tet Offensive such a turning point in the war, according to Danzer? What effects of the Tet Offensive does he discuss?
2. Do you think that President Johnson should have stayed in the race for the Presidency? Why or Why not? What evidence are you basing your answer on?
3. Read Danzer's description of the 1968 Chicago Democratic Convention again. Do you think Danzer agrees with the way the Chicago police handled the protesters? What in the text makes you answer that way? Based upon your reading, what is your opinion? Do you believe that the Chicago police overstepped their bounds, or were they justified? What in the text makes you answer that way?
4. When Nixon became president, he said he wanted "Peace with honor?" What did that mean to him? Did he achieve his goal? Why or why not?

For questions two, three and four, consider putting on the whiteboard, overhead, SmartBoard or chart, two columns: one for "Yes" and one for "No." As students provide evidence for their answers, write the evidence down in the correct column. (They should be answering, "Yes, because..." or "No, because...") When students have run out of reasons, discuss the weight of evidence.

Another possibility is to have students fill out the chart on their own first, then build a class chart once they have had time to look for evidence. In either case, students will need time to go back into the text to look for the evidence. Give students this time to read and think. One suggestion is to do number two together by providing some modeling for the class, then have students do number three in pairs or small groups and number four independently.

FROM THE STUDENT ACADEMIC NOTEBOOK

Three Questions for you to ponder:

- Do you think that President Johnson should have stayed in the race for the Presidency? Why or Why not? What evidence are you basing your answer on?
- Read again Danzer's description of the 1968 Chicago Democratic Convention. Do you think Danzer agrees with the way the Chicago police handled the protesters? What in the text makes you answer that way? Based upon your reading, what is your opinion? Do you believe that the Chicago police overstepped their bounds, or were they justified? What in the text makes you answer that way?
- When Nixon became president, he said he wanted "Peace with honor?" What did that mean to him? Did he achieve his goal? Why or why not?

Consider using a T-Chart, writing down evidence for both "Yes" and "No" to each question, then deciding. (Room provided for T-Charts.)

FROM THE STUDENT ACADEMIC NOTEBOOK

5. After reading about the My Lai Massacre, what claim or claims can you make (about the Vietnam War in general, about its effect on soldiers, about its effect on public opinion)? What evidence in the text could support your claim? Is that evidence sufficient?
6. What claims can you make from reading about the Pentagon Papers (about the Vietnam War in general, about its effect on public opinion)? What evidence in the text could support your claim? Is that evidence sufficient?

Assessment:

Outcome 2: Students will show through discussion and graphic organizers that they can think critically about the information in the chapter.

There are numerous opportunities to assess students' ability to think about information in this chapter as students answer the questions. For each section's debriefing, there is at least one product that can be assessed with a grade.

Moving Towards Conflict: After reading this section, students will answer in their academic notebook these questions, "Whose interpretation does this document support? What evidence is there in the document?"

U.S. Involvement and Escalation: In this section, students make a graphic representation the reasons why the Vietnam War continued for such a long time.

Nation Divided: Students make a graphic organizer about the effects of the war.

1968: A Tumultuous Year: Students make a T-chart for question two, three, and/or four.

| | No | Some | Yes |
|--|----|------|-----|
| Student uses evidence from text(s) in answer or graphic representation. | | | |
| Student's answer or graphic representation makes sense, given text information. | | | |
| Student's answer or graphic representation is thorough; major pieces of information are not ignored. | | | |
| Student shows evidence in answer or graphic representation that claim-evidence relationships are understood. | | | |
| Student shows evidence of critical thinking. | | | |

Activity Five

Vocabulary (Approx. 20 minutes)

If you are opting to move to Lesson 13 before reading *A Nation Divided* and *1968: A Tumultuous Year*, come back to this activity after lesson 13.

Add the discipline-specific words to the chart in the room and have students use three or four of these words in a talk-through with a partner. (One student reviews and without looking, explains the term while another student listens and provides feedback. Then students switch roles.)

Discuss any general academic words that have not already been discussed in debriefings and remain troublesome for students. Remember to have students use context clues, break words into meaningful parts and consult a glossary or dictionary, as necessary. As these are discussed, have students find those words in the text, circle or otherwise mark them and write a synonym or definition in the margin.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Vocabulary

With what words are you still struggling? Write these below:

(space provided)

Possibilities:

| | |
|------------------|---|
| plummeted | Meanwhile, Diem's popularity <i>plummeted</i> because of ongoing corruption and lack of land reform. |
| laced | In addition, the enemy <i>laced</i> the <i>terrain</i> with countless booby traps terrain and land mines. |
| elusiveness | Adding to the enemy's <i>elusiveness</i> was a network of elaborate tunnels that allowed the Vietcong to launch surprise attacks on American soldiers and then disappear quickly. |
| elusive | President Nixon won the election but the promised peace proved to be <i>elusive</i> . |
| attrition | Westmoreland's strategy for defeating the Vietcong was to destroy their morale through a war of <i>attrition</i> , or gradual wearing down of the enemy by continuous harassment. |
| flamboyant | Nguyen Cao Ky, a <i>flamboyant</i> air force general, led the government from 1965 to 1967... Ky, who wore bright military uniforms and a thin mustache... |
| deferments | In a sign of America's growing doubts about the Vietnam War, many young men sought <i>deferments</i> from the draft. |
| disproportionate | African Americans served in highly <i>disproportionate</i> numbers in Vietnam. |

| | |
|--------------|--|
| tumultuous | As it happened, McNamara’s resignation came on the threshold of the most <i>tumultuous</i> year of the sixties. |
| reverberated | The aftershock of the Tet Offensive <i>reverberated</i> throughout the United States. |
| impale | If ever the tiger pauses, the elephant will <i>impale</i> him on his mighty tusks. |
| repressive | Although he directed a brutal and <i>repressive</i> regime, Ho Chi Minh won regime popular support in the North... |
| appeaser | If I let the Communists take over South Vietnam,” Johnson said, “then... my nation would be seen as an <i>appeaser</i> ... |
| resilient | Deadly traps were just some of the obstacles that U.S. troops faced in Vietnam as their attempt to defeat a <i>resilient</i> guerrilla army <i>evolved</i> |
| stalemate | into a bloody <i>stalemate</i> . |
| evolved | |
| deployment | The only possible response is the aggressive <i>deployment</i> of U.S. troops. |

FROM THE STUDENT ACADEMIC NOTEBOOK

Discipline specific vocabulary: Talk through the following discipline specific terms. What can you say about them now that you have read the chapter?

Organizations

- Vietminh/National Liberation Front
- Vietcong
- ARVN
- Green Berets
- SDS
- FSM

Documents

- Geneva Accords
- Tonkin Gulf Resolution

Events

- Tet Offensive
- Cold War

Other Terms

- Communism
- fragging
- Domino theory
- USS Maddox
- USS Turner Joy
- War of Attrition
- Napalm
- Agent Orange
- search and destroy mission
- Doves and Hawks

People

- Ho Chi Minh
- Ngo Dinh Diem
- Barry Goldwater
- Robert McNamara
- Walter Cronkite
- Dean Rusk
- General William Westmoreland
- Senator William J. Fulbright
- Robert Kennedy
- Eugene McCarthy
- Hubert Humphrey
- Richard Nixon
- George Wallace

Places

- French Indochina
- Ho Chi Minh Trail
- Cambodia
- Gulf of Tonkin
- Laos
- Dien Bien Phu

Policies

- containment
- escalation

Assessment:

Outcome 3: Students will be able to explain discipline-specific concepts and the meanings of general academic words found in the chapter.

Students will show through their talk-throughs understanding of the discipline-specific vocabulary. Choose one or two of these words for students to explain on an exit slip.

Students will show their understanding of general academic vocabulary by their explanations of these words in their annotations, by the words they bring to the attention of the class as troublesome and by their discussion of words in class. Have students write the meanings of one or two of these words on an exit slip.

Activity Six

Returning to the Timeline (Approx. 10 minutes)

Ask students to return to the timeline in Lesson 10. Ask, is there anything you read in the text that is not mentioned here? If there is, is it significant enough to add? Is there anything already on the time that you would like to change or remove?

Make a point about significance. Remind students of previous discussions of significance. What makes something significant? How do historians determine what to leave in and what to leave out? Entertain students' answers and give them time to add information to the time line.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

6 Returning to the Timeline

Go back to the timeline that you studied in Lesson 10.

Is there anything you read in the text that is not mentioned here? If there is, is it significant enough to add? Is there anything already on the time that you would like to change, remove, or add? Write these in their appropriate year.

Assessment:

Outcome 4: Students will show their understanding of chronology and significance as they return to the timeline in Lesson 10.

Assess students' understanding by their discussions of what is missing, and what should be added, changed, or deleted. Also, give them points for altering the timeline to reflect what they read in the Vietnam Chapter. Score one point for each valid entry a student added.

Activity Seven Returning to the Timeline (Approx. 10 minutes)

Have students return to the essential questions in the academic notebook. Ask students if there is anything they have found in this chapter or in other texts that addresses the essential questions. Give them time to return to Chapter 30 to identify at least one part of the chapter that addresses the question. Ask several students to read the parts to the class and explain why they provide evidence for an answer to the questions.

Ask students to refer to their annotations and to use the graphic organizer to record what they found in this chapter that addresses answers to the question (then engage in a five minute free-write).

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

7 Returning to the Essential Questions

What did you learn that addresses the essential questions?

Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What conflicts existed in conceptions of liberty and freedom by those participating in The Vietnam Conflict?

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

(space provided)

Assessment:

Outcome 5: Students will collect textual evidence that addresses the essential questions.

Review each student’s graphic organizer and reflection, looking for the following:

| | No | Some | Yes |
|---|----|------|-----|
| Student addresses each question. | | | |
| Student finds reasonable evidence from the text to address each question. | | | |
| Student’s reflection shows evidence of deep thinking. | | | |

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Discussed the author(s) of the textbook.
2. Previewed Chapter 30 with students.
3. Reminded students of what they need to consider as they read and annotate the texts.
4. Assigned reading of the chapter sections.
5. Debriefed each section of the text, focusing on open-ended questions first.
6. Discussed troublesome general vocabulary words.
7. Had students talk through discipline-specific vocabulary.
8. Had students discuss what could be added, changed or removed in the timeline.
9. Had students consider the essential questions.

1 Moving Toward Conflict

LEARN ABOUT the early measures the United States took to stop the spread of communism in Vietnam

TO UNDERSTAND how America slowly became involved in a war in Vietnam.

TERMS & NAMES

- Ho Chi Minh
- Vietminh
- domino theory
- Dien Bien Phu
- Geneva Accords
- Ngo Dinh Diem
- Vietcong
- Ho Chi Minh Trail
- Tonkin Gulf Resolution

ONE AMERICAN'S STORY

On the morning of September 26, 1945, Lieutenant Colonel A. Peter Dewey, the son of an Illinois congressman, was on his way to the Saigon airport in the Southeast Asian country of Vietnam. Only 28, Dewey served in the Office of Strategic Services, the chief intelligence-gathering body of the U.S. military and forerunner of the Central Intelligence Agency. Dewey had gone to Vietnam, which had recently been freed from Japanese rule during World War II, to assess what was becoming an explosive situation.

The Vietnamese, who had resisted Japanese occupation, now were preparing to fight the French. France, which until World War II had ruled Vietnam and its surrounding countries, sought—with British aid—to regain control of the region. Dewey saw nothing but disaster in this plan. “Cochinchina [southern Vietnam] is burning,” he reported, “the French and British are finished here, and we [the United States] ought to clear out of Southeast Asia.”

On his way to the airport, Dewey encountered a roadblock manned by several Vietnamese soldiers and made the fatal mistake of shouting at them in French. Presumably mistaking him for a French soldier, the Vietnamese guards shot him in the head. A. Peter Dewey, whose body was never recovered, was thus the first American to die in Vietnam.

Unfortunately, Dewey would not be the last. As Vietnam's independence effort came under Communist influence, the United States grew increasingly concerned about the small country's future. Eventually, America would fight a war to halt the spread of communism in Vietnam. The war would claim the lives of almost 60,000 Americans and more than 1.5 million Vietnamese. It also would divide the American nation as no other event since the Civil War.



Lieutenant
A. Peter Dewey

The Roots of American Involvement

America's involvement in Vietnam began in 1950, during the French Indochina War, the name given to France's attempt to reestablish its rule in Vietnam after World War II. Seeking to strengthen its ties with France and help fight the spread of communism, the United States provided the French with massive amounts of economic and military support.

FRENCH RULE IN VIETNAM From the late 1800s until World War II—when the Japanese took over the area—France ruled Indochina, which consisted of Vietnam and neighboring Laos and Cambodia. French colonists took much of the land from the peasants and built large plantations, from which they extracted a large portion of the country's rice and rubber for their own profit. This situation sparked growing unrest among Vietnamese peasants, which in turn prompted a harsh French response. French rulers restricted freedom of speech and assembly and jailed many Vietnamese nationalists. These measures, however, failed to curb all dissent, as the Vietnamese staged several revolts and strikes during the 1930s.

The Indochinese Communist Party, founded in 1930, organized most of the uprisings. The party's leader was **Ho Chi Minh**, a thin, middle-aged man who sported a trademark goatee. Ho Chi Minh, whom the French had condemned to

death in 1930 for his rebellious activity, fled Vietnam that year. However, throughout the 1930s, Ho Chi Minh orchestrated Vietnam's growing independence movement from exile in the Soviet Union and later from China.

In 1941, a year after the Japanese took control of Vietnam, Ho Chi Minh returned home. That year, the Vietnamese Communists combined with other nationalist groups to form an organization called the **Vietminh**. The group sought Vietnam's independence from foreign rule. When the Allied defeat of Japan in August of 1945 forced the Japanese to leave Vietnam, that goal suddenly seemed a reality. On September 2, 1945, Ho Chi Minh stood in the middle of a huge crowd in the northern city of Hanoi and declared Vietnam an independent nation.

FRANCE BATTLES THE VIETMINH France, however, had no intention of relinquishing its former colony. French troops moved back into Vietnam in 1946, eventually driving the Vietminh out of the cities and regaining control of the country's southern half. Ho Chi Minh vowed to fight from the North to liberate the South from French control. "If ever the tiger pauses," Ho had said, referring to the Vietminh, "the elephant [France] will impale him on his mighty tusks. But the tiger will not pause, and the elephant will die of exhaustion and loss of blood."

In 1950, the United States entered the Vietnam struggle. That year, President Truman sent nearly \$15 million in economic aid to France. Over the next four years the United States paid for much of France's war, pumping nearly \$2.6 billion into the effort to defeat a man America had once supported. Ironically, during World War II, the United States had forged an alliance with Ho Chi Minh, supplying him with aid to resist the Japanese.

By 1950, however, Cold War fever had gripped much of the world. China and Eastern Europe had fallen to the Communists, and Korea appeared to be next. America saw a dual benefit in supporting France: maintaining an ally against the growing Soviet presence in Europe, and helping to stop another Asian country from turning Communist. While Ho Chi Minh promoted his cause as one of independence, the United States now saw their one-time ally as a Communist aggressor.

THE VIETMINH DRIVE OUT THE FRENCH Upon entering the White House in 1953, President Eisenhower continued the policy of supplying aid to the French war effort. By this time, the United States had settled for a stalemate with the Communists in Korea, which only stiffened America's resolve to halt the spread of communism. During a news conference in 1954, Eisenhower explained the **domino theory**, in which he likened the countries on the brink of communism to a row of dominoes, waiting to fall one after the other. "You have a row of dominoes set up," the president said. "You knock over the first one, and what will happen to the last one is the certainty that it will go over very quickly."

Despite massive U.S. aid, however, the French could not retake Vietnam. The final blow came in May of 1954, when the Vietminh overran the French outpost at **Dien Bien Phu**, in northwestern Vietnam. Led by General Vo Nguyen Giap, the Vietminh surrounded the fort and pounded it with heavy artillery for nearly two months. Major Paul Grauwin of the French Army described the outpost's morgue on the first night of heavy bombardment.

A PERSONAL VOICE

The square hole was full [of dead]; outside, between the hole and the barbed wire, there were a hundred corpses, pell-mell, thrown on stretchers or onto the ground, stiffened in grotesque or tragic positions. Some were wrapped and tied in their tent cloth; others were dressed in their combat uniforms, motionless in the pose where death had surprised them.

MAJOR PAUL GRAUWIN, quoted in *Dien Bien Phu*

KEY PLAYER

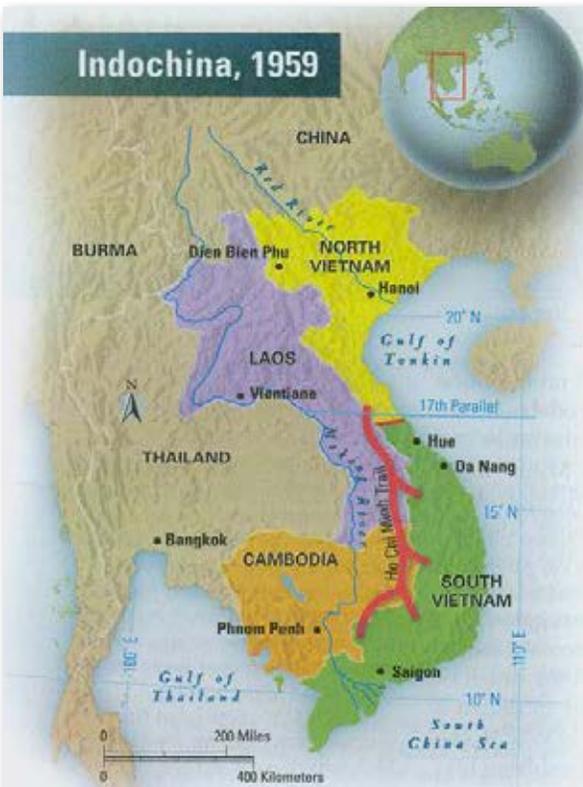


HO CHI MINH
1890–1969

Born Nguyen Tat Thanh to a poor family, Ho Chi Minh (which means "He Who Enlightens") found early work as a cook on a French steamship, which allowed him to visit such cities as Boston and New York. During World War I, Ho Chi Minh moved to France, where he worked as a gardener, waiter, photo retoucher, and oven stoker.

Ho Chi Minh, who ruled North Vietnam from 1954 until his death in 1969, was revered by his countrymen as the benevolent "Uncle Ho." During his reign, however, he advocated one-party rule and repressed all opposition.

The Communist ruler's name lived on after his death. In 1975, the North Vietnamese Army conquered South Vietnam and changed the name of the South's capital from Saigon to Ho Chi Minh City.



GEOGRAPHY SKILLBUILDER

MOVEMENT Through which countries did the Ho Chi Minh Trail pass? **LOCATION** How might North Vietnam's location better enable it to get aid from its ally, China?

The Vietcong saw the United States and South Vietnam as oppressors. This Vietcong propaganda poster reads, "Better death than slavery."



After the fall of Dien Bien Phu, the French surrendered and began to pull out of Vietnam. From May through July 1954, the countries of France, Great Britain, the Soviet Union, the United States, China, Laos, and Cambodia met in Geneva, Switzerland, with the Vietminh and with the South Vietnam's anti-Communist nationalists to hammer out a peace agreement. The **Geneva Accords** temporarily divided Vietnam along the 17th parallel. The Communists and their leader, Ho Chi Minh, controlled North Vietnam from the capital of Hanoi. The anti-Communist nationalists controlled South Vietnam from the port city of Saigon. An election to unify the country was called for in 1956.

The United States Steps In

In the wake of France's retreat, the United States took a more active role in halting the spread of communism in Vietnam. Wading deeper into the country's affairs, the administrations of President Eisenhower and then President John F. Kennedy provided economic and military aid to South Vietnam's non-Communist regime.

DIEM CANCELS ELECTIONS Although he directed a brutal and repressive regime, Ho Chi Minh won popular support in the North by breaking up large estates and redistributing land to peasants. Moreover, his years of fighting the Japanese and French had made him a national hero. Recognizing Ho Chi Minh's widespread popularity, South Vietnam's president, **Ngo Dinh Diem**, a strong anti-Communist, refused to take part in the nationwide election of 1956. The United States also sensed that a nationwide election might spell victory for Ho Chi Minh and therefore supported the cancellation of elections. The Eisenhower administration promised military aid and training to Diem in return for a stable reform government in the South.

Diem, however, failed to hold up his end of the bargain. He ushered in a corrupt government that suppressed opposition of any kind and offered little or no land distribution to peasants. In addition, Diem, a devout Catholic, angered the country's large Buddhist population by restricting Buddhist practices.

By 1957, a Communist group in the South, known as the **Vietcong**, had begun attacks on the Diem government, assassinating thousands of South Vietnamese government officials. While the group would later be called the National Liberation Front (NLF), the United States continued to refer to the guerrilla fighters as the Vietcong.

Ho Chi Minh expressed his support for the group, which had strong Communist ties. In 1959, Ho Chi Minh began supplying military arms to the Vietcong from North Vietnam via a network of paths along the border of Vietnam, Laos, and Cambodia that became known as the **Ho Chi Minh Trail**. (See map above.) As the guerrilla attacks increased, South Vietnam grew more unstable. The Eisenhower administration took little action, however, deciding to "sink or swim with Ngo Dinh Diem."

KENNEDY AND VIETNAM The Kennedy administration, which entered the White House in 1961, also chose initially to "swim" with Diem. However, Kennedy was wary of accusations that Democrats were "soft" on

Skillbuilder Answer:
Movement: Laos and Cambodia
Location: Possible response: The trail could more easily deliver military and other supplies to North Vietnam.

Text Reference:
B. Analyzing Causes: Why did the United States support the cancellation of Vietnam's 1956 elections?

B. Answer: Because it appeared that Ho Chi Minh would win the election and possibly unify Vietnam with communism.

communism. Therefore, he increased financial aid to Diem's teetering regime and sent thousands of military advisers to help train South Vietnamese troops in their battle against the NLF. By the end of 1963, almost 16,000 U.S. military personnel were in South Vietnam.

Meanwhile, Diem's popularity plummeted because of ongoing corruption and lack of land reform. To combat the growing Vietcong presence in the South's countryside, the Diem administration initiated the strategic hamlet program, which meant moving all villagers to protected areas. Many Vietnamese deeply resented being moved from their home villages where they had lived for generations and where ancestors were buried.

Diem also intensified his attack on Buddhism. Fed up with continuing Buddhist demonstrations, the South Vietnamese ruler imprisoned hundreds of Buddhist clerics and destroyed their temples. To protest, several Buddhist monks and nuns publicly burned themselves to death. Horrified, American officials urged Diem to stop the persecutions, but Diem refused.

It had become clear that for South Vietnam to remain stable, Diem would have to go. On November 1, 1963, a U.S.-supported military coup toppled Diem's regime. Against Kennedy's wishes, Diem was executed. A few weeks later, Kennedy too fell to an assassin's bullet. The presidency—along with the growing crisis in Vietnam—now belonged to Lyndon B. Johnson.



A Buddhist monk sets himself on fire in a busy Saigon intersection in 1963 as a protest against the Diem regime.

WHY HISTORY
Remembering
Why was the
regime so
popular?
Answer
Corruption,
repressive
policies, and
execution of
Buddhists.

President Johnson Expands the Conflict

Shortly before his death, Kennedy had announced his intent to withdraw U.S. forces from South Vietnam. "In the final analysis, it's their war," he declared. Whether Kennedy would have in fact withdrawn from Vietnam remains a matter of debate. However, Lyndon Johnson escalated—or increased—the nation's role in Vietnam and eventually began what would become America's longest war.

THE SOUTH GROWS MORE UNSTABLE Diem's death brought more chaos to South Vietnam. A string of military leaders attempted to lead the country, but each regime was more unstable and inefficient than Diem's had been. Meanwhile, the Vietcong's influence in the countryside steadily grew.

To President Johnson, a Communist takeover of South Vietnam would be disastrous. As a Democratic president, Lyndon Johnson was particularly sensitive to being perceived as "soft" on communism. A Democrat, Harry Truman, had been president when China fell to the Communist Party in 1948, unleashing charges by some Republicans that the Democrats had "lost" China. In addition, many of Senator Joseph McCarthy's charges during the 1950s of Communist infiltrators in America had been directed against Democrats. For these political reasons, Johnson wanted to avoid being accused of "losing" Vietnam. "If I . . . let the Communists take over South Vietnam," Johnson said, "then . . . my nation would be seen as an appeaser, and we would find it impossible to accomplish anything . . . anywhere on the entire globe."

"All the News That's Fit to Print"

The New York Times.

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TEN CENTS

U.S. PLANES ATTACK NORTH VIETNAM BASES; PRESIDENT ORDERS 'LIMITED' RETALIATION AFTER COMMUNISTS' PT BOATS RENEW RAIDS



THE TONKIN GULF RESOLUTION

On August 4, 1964, President Johnson announced that North Vietnamese torpedo boats had attacked an American destroyer, the U.S.S. *Maddox*, which was patrolling in the Gulf of Tonkin off the North Vietnamese coast. The North Vietnamese charged that the U.S. ship was conducting a naval raid. Nonetheless, the North Vietnamese denied attacking the U.S. ship.

Despite a great deal of confusion surrounding the details, this incident, along with a second alleged attack, against the *Maddox* and another destroyer, the U.S.S. *C. Turner Joy*, prompted Johnson to launch bombing attacks on North Vietnam. He also asked Congress for powers to take "all necessary measures to repel any armed attack against the forces of the United States and to prevent further aggression." Congress overwhelmingly approved Johnson's request. With the House voting 414-0 and the Senate voting 88-2, Congress adopted on August 7 the **Tonkin Gulf Resolution**. While not a declaration of war, it granted Johnson broad military powers in Vietnam.

As one of only two senators to vote against the resolution, Senator Ernest Gruening of Alaska warned that "all Vietnam is not worth the life of a single American boy." However, Representative Ross Adair of Indiana spoke for the overwhelming majority of Congress when he declared, "The American flag has been fired upon. We will not and cannot tolerate such things."

In February of 1965, President Johnson used his newly granted powers. In response to a Vietcong attack that killed eight Americans, Johnson unleashed Operation Rolling Thunder, the first sustained bombing of North Vietnam. In March of that year the first American combat troops began arriving in South Vietnam. By June, more than 50,000 U.S. soldiers were battling the Vietcong. The Vietnam War had become Americanized.

A newspaper headline announces the U.S. military's reaction to the Gulf of Tonkin incident. During Operation Rolling Thunder, which followed, U.S. planes called Thunderchiefs dropped 750-pound bombs on Vietnamese targets.

U.S. Involvement and Escalation

LEARN ABOUT the reasons for U.S. escalation and the difficulty the United States encountered in fighting the Vietcong

TO UNDERSTAND why the war lasted longer than expected and began to lose support at home.

TERMS & NAMES

- Robert McNamara
- Dean Rusk
- William Westmoreland
- napalm
- Agent Orange
- search-and-destroy mission
- credibility gap

ONE AMERICAN'S STORY

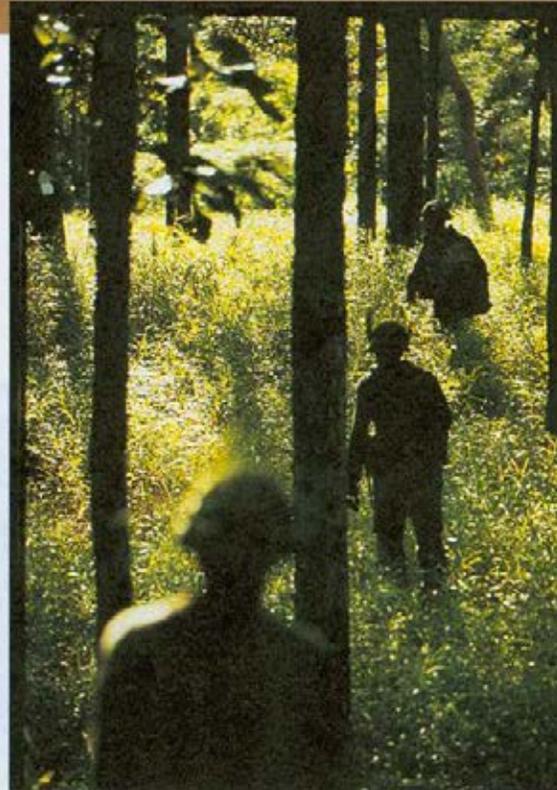
Tim O'Brien, born in Austin, Minnesota, is a novelist who has written several books about his experience in Vietnam. O'Brien was drafted and sent to Vietnam in August of 1968, when he was 22. He spent the first seven months of his nearly two-year duty patrolling the fields outside of Chu Lai, a sea-coast city in South Vietnam. O'Brien described one of the more nerve-racking experiences of the war: walking through the fields and jungles, many of which were filled with land mines and booby traps.

A PERSONAL VOICE

You do some thinking. You hallucinate. You look ahead a few paces and wonder what your legs will resemble if there is more to the earth in that spot than silicates and nitrogen. Will the pain be unbearable? Will you scream and fall silent? Will you be afraid to look at your own body, afraid of the sight of your own red flesh and white bone? . . .

It is not easy to fight this sort of self-defeating fear, but you try. You decide to be ultra-careful—the hard-nosed realistic approach. You try to second-guess the mine. Should you put your foot to that flat rock or the clump of weeds to its rear? Paddy dike or water? You wish you were Tarzan, able to swing on the vines. You trace the footprints of the men to your front. You give up when he curses you for following too closely; better one man dead than two.

TIM O'BRIEN, quoted in *A Life in a Year: The American Infantryman in Vietnam*



U.S. soldiers on patrol in Vietnam, November 1965.

Deadly traps were just some of the obstacles that U.S. troops faced in Vietnam as their attempt to defeat a resilient guerrilla army evolved into a bloody stalemate. As the influx of American ground troops into Vietnam failed to score a quick victory over the Communists, a mostly supportive U.S. population began to question its government's war policy.

The Decision to Escalate

Much of the nation supported Lyndon Johnson's determination to contain communism in Vietnam. Therefore, President Johnson began sending large numbers of American troops to fight alongside the South Vietnamese Army against the forces of the Vietcong and the North Vietnamese Army.

STRONG SUPPORT FOR CONTAINMENT In the 1964 presidential election, Lyndon Johnson soundly defeated his Republican opponent, Barry Goldwater. Johnson's victory was due in part to charges that Goldwater was an extreme anti-Communist who might push the United States into war with the Soviet Union. In contrast to Goldwater's heated, warlike language, Johnson's speeches were more moderate, yet he spoke determinedly about containing communism.

Even after Congress had approved the Tonkin Gulf Resolution, President Johnson voiced his opposition to sending U.S. ground troops to Vietnam. He

declared in 1964 that he was “not about to send American boys 9 or 10,000 miles away from home to do what Asian boys ought to be doing for themselves.”

However, in March of 1965, that is precisely what the president did. Working closely with his foreign-policy advisers, particularly Secretary of Defense **Robert McNamara** and Secretary of State **Dean Rusk**, President Johnson began dispatching tens of thousands of U.S. soldiers to fight in Vietnam. While some Americans viewed Johnson’s decision as contradictory to his position during the presidential campaign, most saw the president as following an established and popular policy of confronting communism anywhere in the world. That same year, for example, the Johnson administration also dispatched U.S. troops to the

Dominican Republic, a small country in the Caribbean, to put down a rebellion the administration feared was Communist-inspired.

So, as American soldiers stepped onto the planes that would take them to fight in the thick jungles of Southeast Asia, Congress, as well as many Americans, strongly supported Johnson’s strategy. A 1965 poll showed that 61 percent of Americans supported the U.S. policy in Vietnam, while only 24 percent opposed it.

To be sure, there were dissenters in the Johnson administration. In October of 1964, Undersecretary of State George Ball had argued against escalation, warning that “once on the tiger’s back, we cannot be sure of picking the place to dismount.” However, the president’s closest advisers strongly urged escalation, believing the defeat of communism in Vietnam to be of vital importance to the future of America and the world. Dean Rusk stressed this view in a 1965 memo to President Johnson.

A PERSONAL VOICE

The integrity of the U.S. commitment is the principal pillar of peace throughout the world. If that commitment becomes unreliable, the communist world would draw conclusions that would lead to our ruin and almost certainly to a catastrophic war. So long as the South Vietnamese are prepared to fight for themselves, we cannot abandon them without disaster to peace and to our interests throughout the world.

DEAN RUSK, quoted in *In Retrospect*

THE TROOP BUILDUP ACCELERATES By the end of 1965, the U.S. government had sent more than 180,000 Americans to Vietnam. The American commander in South Vietnam, General **William Westmoreland**, continued to request more troops. Westmoreland, a tall and lean West Point graduate who served in World War II and Korea, was less than impressed with the fighting ability of the South Vietnamese Army, or the Army of the Republic of Vietnam (ARVN). The ARVN “cannot stand up to this pressure without substantial U.S. combat support on the ground,” the general reported. “The only possible response is the aggressive deployment of U.S. troops.” Throughout the early years of the war, the Johnson administration complied with Westmoreland’s requests, and by 1967, the number of U.S. troops in Vietnam had climbed to about 500,000.

A War in the Jungle

The United States entered the war in Vietnam believing that its superior weaponry would lead it to victory over the Vietcong. However, the jungle terrain and the enemy’s guerrilla tactics soon turned the war into a frustrating stalemate.

AN ELUSIVE ENEMY Because the Vietcong lacked the high-powered weaponry of the American forces, they used hit-and-run and ambush tactics, as well as a keen knowledge of the jungle terrain, to their advantage. Moving

HISTORICAL SPOTLIGHT

GENERAL WILLIAM WESTMORELAND

General Westmoreland retired from the military in 1972, but even in retirement, he could not escape the Vietnam War.

In 1982, almost seven years after the conflict had ended, CBS-TV aired a documentary entitled *The Uncounted Enemy: A Vietnam Deception*. The report, viewed by millions, asserted that General Westmoreland and the Pentagon had deceived the U.S. government about the enemy’s size and strength during 1967 and 1968 to make it appear that U.S. forces were winning the war.

Westmoreland, claiming he was the victim of “distorted, false, and specious information . . . derived by sinister deception,” filed a \$120 million libel suit against CBS. The widely publicized suit was

eventually settled, with both parties issuing statements pledging mutual respect. CBS, however, stood by its story.



THE WAR
A. Gene
Warlike
opposed
Johnson
how did
Vietnam
A. Amer
argued
escalate
Vietnam
it was
strategic
spreads
control
with the
Self-act
against
escalate
balance
be stron
only in
War tra
out.

secretly in and out of the general population, the Vietcong destroyed the notion of a frontline by attacking U.S. troops in both the cities and the countryside. Because some of the enemy lived amidst the civilian population, it became increasingly difficult for U.S. troops to discern friend from foe. A woman selling soft drinks to U.S. soldiers might be a Vietcong spy. A boy standing on the corner might be ready to throw a grenade.

In addition, the enemy laced the terrain with countless booby traps and land mines. American soldiers marching through South Vietnam's jungles and rice paddies dealt not only with sweltering heat and leeches but also with deadly traps. The enemy even turned U.S. weapons against the Americans. In a 1969 letter to his sister, Specialist Fourth Class Salvador Gonzalez described the tragic result from an unexploded U.S. bomb that the North Vietnamese Army had rigged.

A PERSONAL VOICE

Two days ago 4 guys got killed and about 15 wounded from the first platoon. Our platoon was 200 yards away on top of a hill. One guy was from Floral Park [in New York City]. He had five days left to go [before being sent home]. He was standing on a 250-lb. bomb that a plane had dropped and didn't explode. So the NVA [North Vietnamese Army] wired it up. Well, all they found was a piece of his wallet.

SALVADOR GONZALEZ, quoted in *Dear America: Letters Home from Vietnam*

Adding to the enemy's elusiveness was a network of elaborate tunnels that allowed the Vietcong to launch surprise attacks on American soldiers and then disappear quickly. The Vietnamese, who began building the tunnels during their war with the French, constructed even more in response to the massive U.S. bombings. The tunnels, which connected villages throughout the countryside, became home to many guerrilla fighters. Inside their underground world, the Vietcong ate and slept, stored munitions, built land mines, and treated their wounded. "The more the Americans tried to drive us

NOW & THEN

LAND MINES

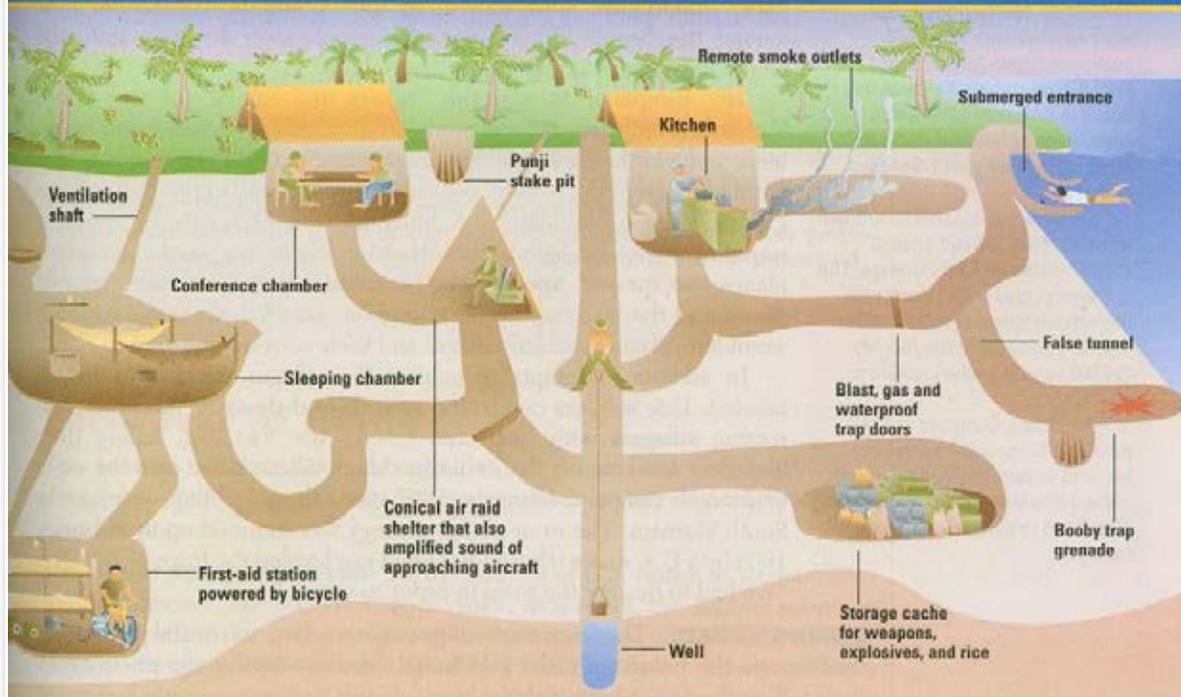
The destructiveness of land mines still plagues much of the world today. As a result of past and present wars, roughly 110 million mines were still scattered throughout 64 countries in 1996. That year, nearly 2,000 victims lost either a limb or their life to a land mine each month. In Vietnam and Cambodia, more than 10 million mines remained in the ground.

Various relief, religious, and veterans organizations have urged the international community to ban the use of mines. The Vietnam Veterans of America Foundation, a group formed to examine the causes and consequences of the Vietnam War, has taken additional measures. Since 1991, it has supplied prosthetic limbs for Vietnamese and Cambodian mine victims.

**SKILLBUILDER
 INTERPRETING CHARTS**

How were the Vietcong able to sustain themselves underground for such long periods of time?

Tunnels of the Vietcong



away from our land, the more we burrowed into it," recalled Major Nguyen Quot of the Vietcong Army.

A FRUSTRATING WAR OF ATTRITION Not only may the United States have underestimated the Vietcong's ingenuity, but it also miscalculated the enemy's resolve. Westmoreland's strategy for defeating the Vietcong was to destroy their morale through a war of attrition, or the gradual wearing down of the enemy by continuous harassment. Introducing the concept of the body count, or the tracking of Vietcong killed in battle, the general believed that as the number of Vietcong dead rose, the enemy's surrender would become inevitable.

However, the Vietcong had no intention of quitting their fight. What Ho Chi Minh had told the French in the 1940s applied also to the Americans, "You can kill ten of my men for every one I kill of yours," he warned, "but even at those odds, you will lose and I will win." Despite absorbing significant casualties and the relentless pounding from U.S. bombers, the Vietcong—who received supplies from China and the Soviet Union—remained defiant. Defense Secretary McNamara confessed his early frustration over the Vietcong's resilience to a reporter in 1966. "I didn't think these people had the capacity to fight this way," he said. "If I had thought they would take this punishment and fight this well, . . . I would have thought differently at the start."

General Westmoreland would say later that the United States never lost a battle in Vietnam. While the general's words may have been true, they underscored the degree to which America misunderstood the Vietcong. While the United States viewed the war strictly as a military struggle, the Vietcong saw it as a battle for their very existence, and they were ready to pay any price for victory. "The Communists were prepared to go on and on," explained Stanley Karnow, author of *Vietnam: A History*, "and they had factored their human costs into the equation."



NOW & THEN

AGENT ORANGE

The 13 million gallons of Agent Orange dumped on the jungles of Vietnam to destroy the foliage ended up harming some U.S. soldiers as well. After the war ended, researchers believed that toxins in the weed killer led to a wide range of health defects in humans, including skin diseases and cancer.

U.S. veterans eventually brought a class-action lawsuit against seven makers of Agent Orange. The suit was settled out of court with the establishment of a \$180 million fund to compensate the roughly 250,000 veterans who claimed to be affected.

In addition, Congress in 1991 passed a bill providing disability benefits to veterans suffering from certain illnesses that were said to be related to exposure to Agent Orange.

THE BATTLE FOR "HEARTS AND MINDS" Another key part of the American strategy was to keep the Vietcong from winning the support of South Vietnam's rural population. Edward G. Lansdale, who helped found the special fighting unit known as the Green Berets, stressed the plan's importance. "Just remember this. Communist guerrillas hide among the people. If you win the people over to your side, the Communist guerrillas have no place to hide."

The campaign to win the "hearts and minds" of the South Vietnamese villagers proved more difficult than the Americans imagined. Some of the tactics the Americans used to battle the Vietcong also harmed much of the rural population. For instance, in their attempt to expose Vietcong tunnels and hideouts, the U.S. planes dropped **napalm**, a gasoline-based bomb that set fire to the jungle. American planes also sprayed **Agent Orange**, a leaf-killing toxic chemical that devastated the landscape. The saturation use of these weapons often wounded villagers and left villages and their surrounding area in ruins.

In addition, attempts to control the villages could turn heavy-handed. U.S. soldiers conducted **search-and-destroy missions**, uprooting villagers with suspected ties to the Vietcong, killing their livestock, and burning their villages. Many villagers fled into the cities or refugee camps, creating by 1967 more than 3 million refugees in South Vietnam. The irony of the strategy was summed up in February 1968 by a U.S. major whose forces had just leveled the town of Ben Tre: "We had to destroy the town in order to save it."

SINKING MORALE The frustrations of guerrilla warfare, the brutal jungle conditions, and the failure to make substantial headway against the enemy took their toll on the U.S. troops' fighting spirit. Philip Caputo, a marine lieutenant

in Vietnam who later wrote several books about the war, summarized the soldiers' growing disillusionment, "When we marched into the rice paddies . . . we carried, along with our packs and rifles, the implicit convictions that the Vietcong could be quickly beaten. We kept the packs and rifles; the convictions, we lost."

Throughout the war, American morale dropped steadily, as many soldiers turned to alcohol, marijuana, and other drugs to deal with the futility of a war that seemed less and less winnable. Low morale led some soldiers even to murder their superior officers by "fragging" them, an action in which a soldier lobbed a fragmentation grenade (one that left no fingerprints) at an officer during battle. Morale would worsen during the later years of the war when soldiers realized they were fighting even as their government was negotiating for peace.

Also damaging to U.S. troop morale was the continuing corruption and instability of the South Vietnamese government. Nguyen Cao Ky, a flamboyant air force general, led the government from 1965 to 1967. Ignoring U.S. pleas to step down, Ky, who wore bright military uniforms and a thin mustache, refused to retire in favor of an elected civilian government. Mass demonstrations began, and by May of 1966, Buddhist monks were once again burning themselves in protest against the South Vietnamese government. South Vietnam was fighting a civil war within a civil war, leaving U.S. officials confused and angry. "What are we doing here?" demanded one official. "We're fighting to save these people, and they're fighting each other!"

Despite the low morale among some U.S. troops, many American soldiers fought courageously. Particularly heroic were the thousands of soldiers who endured years of torture and confinement as prisoners of war. In 1966, Navy pilot Gerald Coffee's plane was shot down during a bombing mission over North Vietnam. Coffee spent the next seven years—until he was released in 1973 as part of a cease-fire agreement—struggling to stay alive in an enemy prison camp.

A PERSONAL VOICE

My clothes were filthy and ragged. . . . With no boots, my socks—which I'd been able to salvage—were barely recognizable. . . . Only a few threads around my toes kept them spread over my feet; some protection, at least, as I shivered through the cold nights curled up tightly on my morguelike slab. . . . My conditions and predicament were so foreign to me, so stifling, so overwhelming. I'd never been so hungry, so grimy, and in such pain.

GERALD COFFEE, *Beyond Survival*



A soldier with the 61st Infantry Division wears symbols of both war and peace on his chest.

"We had to destroy the town in order to save it."

A U.S. MAJOR IN 1968

The Early War at Home

The Johnson administration thought the war would end quickly. When it dragged on, public support began to waver, and Johnson's domestic programs began to unravel.

THE GREAT SOCIETY SUFFERS As the number of U.S. troops in Vietnam continued to mount, the war grew more costly. As a result, the nation's economy began to suffer. The inflation rate, which had remained at 2 percent through most of the early 1960s, nearly tripled by 1969. President Johnson had been determined to pay for both the war and his Great Society programs.



Each night, Americans watched the images—which often were graphic and brutal—of the Vietnam War.

However, the cost of financing the Vietnam War became too great. In August of 1967, Johnson asked for a tax increase to help fund the war and to keep inflation in check. Congressional conservatives agreed, but only after demanding and receiving a \$6 billion reduction in funding for Great Society programs. Vietnam was slowly claiming an early casualty: Johnson's grand vision of domestic reform.

THE LIVING-ROOM WAR By 1967, a majority of Americans still supported the war. However, cracks were beginning to show. The media, mainly television, helped heighten the nation's growing concern about the war. Vietnam was America's first "living-room war," in which

footage of combat appeared nightly on the news in millions of homes. And what people saw on their television screens seemed to contradict the optimistic war scenario that the Johnson administration was painting.

Quoting body count statistics that showed large numbers of Communists dying in battle, General Westmoreland continually reported that a Vietcong surrender was imminent. Victory "lies within our grasp—the enemy's hopes are bankrupt," he declared. Defense Secretary McNamara backed up the general's rosy analyses, saying that he could see "the light at the end of the tunnel."

However, the repeated television images of Americans in body bags told a different story. Communists may have been dying, but so too were Americans—nearly 16,000 between 1965 and 1967. Critics charged that a **credibility gap** was growing between what the Johnson administration reported and what was really happening.

One such critic was Senator J. William Fulbright, chairman of the powerful Senate Foreign Relations Committee. Fulbright, a former Johnson ally, charged the president with a "lack of candor" in portraying the war effort. In early 1966, the senator conducted a series of televised committee hearings in which he called forth members of the Johnson administration to defend their Vietnam policies. The Fulbright hearings delivered few major revelations, but they did contribute to the growing doubts about the war. One housewife appeared to capture the mood of middle America when she told an interviewer, "I want to get out, but I don't want to give in."

By 1967, however, a small force outside of mainstream America, mainly from the ranks of the nation's youth, already had begun actively protesting the war. Their voices would grow louder and capture the attention of the entire nation.

A Nation Divided

TERMS & NAMES

- New Left
- Students for a Democratic Society
- Free Speech Movement
- dove
- hawk

LEARN ABOUT the growing antiwar movement in America
TO UNDERSTAND how the war sharply divided the American public.

ONE AMERICAN'S STORY

In 1969, Stephan Gubar was told to report to his local draft board. The young man from New Jersey was being called for possible military service in Vietnam. Gubar, 22, a veteran of the civil rights movement, filed as a conscientious objector (CO), or someone who opposed war on the basis of religious or moral beliefs. Gubar was granted 1-A-O status, which meant that while he would not be forced to carry a weapon, he still qualified for noncombatant military duty. In 1969, he was drafted. Gubar did his basic training at Fort Sam Houston, Texas. Along with other conscientious objectors, he received special training as a medic. Gubar described the memorable day when his training ended.



Stephan Gubar

A PERSONAL VOICE

The thing that stands out most was . . . being really scared, being in formation and listening to the names and assignments being called. The majority of COs I knew had orders cut for Vietnam. And even though I could hear that happening, even though I could hear that every time a CO's name came up, the orders were cut for Vietnam, I still thought there was a possibility I might not go. Then, when they called my name and said "Vietnam," . . . I went to a phone and I called my wife. It was a tremendous shock.

STEPHAN GUBAR, quoted in *Days of Decision*

Gubar was not alone in his anxiety. As American involvement in the Vietnam War escalated—and American casualties mounted—young men all over the country began to worry that they would be called on to fight and die in Vietnam. While many eligible young Americans proudly went off to war, some found ways to avoid serving, and still others simply refused to go. As the war progressed, it spurred a growing protest movement in America that sharply divided the country between supporters and opponents of the government's policy in Vietnam.

VIDEO **MATTERS OF CONSCIENCE:**
Stephan Gubar and the Vietnam War

A Working-Class War

The idea of fighting a war in a faraway place for what some believed was a questionable cause prompted a number of young Americans to avoid going to Vietnam. Because many middle-class and upper-class American youths were able—through college and other means—to avoid military service, most of the soldiers who fought in Vietnam were from the lower economic classes of American society.

A "MANIPULATABLE" DRAFT Most soldiers who fought in Vietnam were drafted into combat under the country's Selective Service System. Under this system, which had been established in the 1940s during World War II, all males had to register with their local draft boards when they turned 18. In the event of a war, the board called men between the ages of 18 and 26 into military service as they were needed. In a sign of America's growing doubts about the Vietnam War, many young men sought deferments from the draft.

Thousands of men attempted to find ways around the draft, which one man characterized as a "very manipulatable system." Because many medical excuses were honored, some men sought out sympathetic doctors to grant them medi-



A *Life* magazine cover shows new draft inductees arriving for training at Fort Knox, Kentucky.

cal deferments. Different draft boards had different qualifications, prompting some men to change residences in order to stand before more lenient boards. Some Americans even joined the National Guard or Coast Guard, which often secured a deferment from service in Vietnam.

One of the most common ways to avoid the draft was to receive a college deferment, by which a young man enrolled in a university could put off his military service. Because most university students during the 1960s were white and some were financially well-off, many of the men who fought in Vietnam were lower-class whites or minorities who were less privileged economically. To be sure, a number of Americans who were drafted proudly went to Vietnam. Others volunteered to fight, their reasons ranging from a sense of duty to a feeling of patriotism. Nonetheless, with almost 80 percent of American soldiers coming from lower economic levels, Vietnam was a working-class war.

AFRICAN AMERICANS AND WOMEN IN VIETNAM African Americans served in highly disproportionate numbers in Vietnam. During the first several years of the war, blacks accounted for more than 20 percent of American combat deaths despite representing only about 10 percent of the U.S. population. While the Defense Department would take steps to correct that imbalance by the end of the war, the large number of black casualties early in the war angered African-American leaders, including Martin Luther King, Jr. King had refrained from speaking out against the war for fear that it would divert attention away from the civil rights movement. However, he could no longer stay silent about the news he was hearing from Vietnam. In 1967 he lashed out against what he called the "cruel irony" of American blacks dying for a country that still regarded them as second-class citizens.

A PERSONAL VOICE

We were taking the young black men who had been crippled by our society and sending them eight thousand miles away to guarantee liberties in Southeast Asia which they had not found in Southwest Georgia and East Harlem. . . . We have been repeatedly faced with the cruel irony of watching Negro and white boys on TV screens as they kill and die together for a nation that has been unable to seat them together in the same schools.

DR. MARTIN LUTHER KING, JR., quoted in *America's Vietnam War: A Narrative History*

Many African Americans experienced the same racism in Vietnam that they endured at home. Throughout the war, racial tensions between white and black soldiers ran high in many platoons. In some cases, the hostility led to violence. In 1967, a race riot erupted at the U.S. Army

Skillbuilder Answer
 1965 through 1968

SKILLBUILDER
INTERPRETING GRAPHS
 What years signaled a rapid increase in the deployment of U.S. troops?



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stockade at Long Binh, Vietnam. Two years later, black and white marines returning from war clashed at Camp Lejeune, North Carolina. The racism that gripped many military units was yet another factor that led to low troop morale in Vietnam.

While the U.S. military in the 1960s did not allow females to serve in combat, nearly 7,500 women served in Vietnam as army and navy nurses. Thousands more women volunteered their services in Vietnam to the American Red Cross and the United Services Organization (USO), which delivered hospitality and entertainment to the troops.

As the men who marched off to Vietnam fought against Communist guerrillas, some of the men who stayed home, as well as many women, waged a battle of their own. Shortly after U.S. troops began arriving in Vietnam, college campuses across the country erupted in protest as many of the nation's youths began to voice their opposition to the war.



Two U.S. nurses rest at Cam Ranh Bay, the major entry point for American supplies and troops in South Vietnam.

Roots of Opposition

In the years prior to America's involvement in Vietnam, an atmosphere of protest already existed in many college campuses. In contrast to the general contentment that characterized the youths of the 1950s, students in the early 1960s had become more active socially and politically. Some had participated in the civil rights struggle, while others had answered President Kennedy's call to more actively pursue public service. By the mid-sixties, many youths believed the nation to be in need of fundamental change.

THE NEW LEFT The growing youth movement of the 1960s became known as the **New Left**, which encompassed many different activist groups and organizations. The movement was "new" in relation to the "old left" of the 1930s, which generally tried to move the nation toward socialism, and, in some cases, communism. While the New Left movement did not preach socialism, its followers demanded sweeping changes in American society.

Voicing these demands was one of the better-known New Left organizations, **Students for a Democratic Society (SDS)**. Tom Hayden and Al Haber, two University of Michigan students, founded the group in 1959. Three years later, they convened a meeting in Port Huron, Michigan, to draft the group's declaration. Known as the Port Huron Statement, it began: "We are the people of this generation, bred in at least moderate comfort, housed now in universities, looking uncomfortably to the world we inherit." The statement, which charged that corporations and large government institutions had taken over America, called for a restoration of "participatory democracy" and greater individual freedom.

In 1964, another New Left group gained prominence with its attacks on American society. At the University of California at Berkeley, the **Free Speech Movement (FSM)**, which stemmed from a clash between students and administrators over free speech on campus, soon focused its criticism on what it called the American "machine," the nation's faceless and powerful business and government institutions.

CAMPUS ACTIVISM The strategies and tactics of the FSM and SDS soon spread to colleges throughout the country. There, students addressed mostly campus issues, such as dress codes, curfews, dormitory regulations, and mandatory Reserved Officer Training Corps (ROTC) programs. At Fairleigh Dickinson University in New Jersey, students marched merely as "an expression of general student discontent."



With the onset of the Vietnam War, the students suddenly found a galvanizing issue. At campuses across the country, American youths joined together to protest the war.

The Protest Movement Emerges

Throughout the spring of 1965, a number of colleges began to host “teach-ins” to protest the war. At the University of Michigan, where only a year before, President Johnson had announced his sweeping Great Society program, teachers and students now assailed his war policy. “This is no longer a casual form of campus spring fever,” journalist James Reston noted about the growing demonstrations. As the war continued, the protests grew and divided the country between those Americans who supported their government’s policy in Vietnam and those who opposed it.

THE MOVEMENT GROWS In April of 1965, SDS helped organize a march on Washington, D.C., by some 20,000 protesters. By November of that year, a protest rally in Washington drew more than 30,000. Then, in January of 1966, the Johnson administration changed deferments for college students. Students now had to be in good academic standing to defer their military service. Campuses around the country erupted in protest. SDS called for civil disobedience at Selective Service Centers and openly counseled students to flee to Canada or Sweden. By the end of 1967, SDS had chapters on nearly 300 campuses.

The growing number of youths who opposed the war did so for different reasons. The most common reason for opposition was the belief that the conflict in Vietnam was basically a civil war and that the U.S. military had no business there. Others argued that the United States could not police the world and that the Vietnam War was draining American strength in important parts of the world such as Europe and the Middle East. Still others saw the war simply as morally unjust.

As the antiwar movement grew, it reached outside the college campuses and touched other groups in society. Small numbers of returning veterans also began to protest the war. Some antiwar veterans picketed the White House and tried to return their medals to President Johnson. In addition, many musicians took up the antiwar cause. Folk singers such as Peter, Paul and Mary and Joan Baez led the way as music became a popular protest vehicle. Soon protest songs even conquered the pop-music charts. Number one in September 1965 was “Eve of Destruction,” in which singer Barry McGuire stressed the ironic fact that in the 1960s an American male could be drafted at 18 but had to be 21 to vote:

*The Eastern world, it is exploding,
Violence flaring, bullets loading,
You're old enough to kill, but not for voting,
You don't believe in war, but what's that gun you're toting?*

FROM PROTEST TO RESISTANCE From 1965 to 1967, the antiwar movement intensified. “We were having *no* effect on U.S. policy,” recalled one protest leader. “So we thought we had to up the ante.” In the spring of 1967, nearly half a million protesters of all ages gathered in New York’s Central Park. Shouting “Burn cards, not people” and “Hell, no, we won’t go!” hundreds tossed their draft cards into a bonfire. Many in the park were protesting for the first time. A housewife from New Jersey told a reporter, “So many of us are frustrated. We want to criticize this war because we think it’s wrong, but we want to do it in the framework of loyalty.”

HISTORICAL SPOTLIGHT

“THE BALLAD OF THE GREEN BERETS”

Not every Vietnam-era pop song about war was an antiwar song. At the top of the charts for five weeks in 1966 was “The Ballad of the Green Berets” by Staff Sergeant Barry Sadler of the U.S. Army Special Forces, known as the Green Berets:

*Fighting soldiers from the sky,
Fearless men who jump and die,
Men who mean just what they say,
The brave men of the Green Beret.*

The recording sold over a million copies in its first two weeks of release and was *Billboard* magazine’s song of the year.

Others were more radical in their view. David Harris, who would spend 20 months in jail for refusing to serve in Vietnam, explained his motives.

A PERSONAL VOICE

Theoretically, I can accept the notion that there are circumstances in which you have to kill people. I could not accept the notion that Vietnam was one of those circumstances. And to me that left the option of either sitting by and watching what was an enormous injustice . . . or find some way to commit myself against it. And the position that I felt comfortable with in committing myself against it was total noncooperation—I was not going to be part of the machine.

DAVID HARRIS, quoted in *The War Within*



In a scene that grew more common as the Vietnam War dragged on, antiwar demonstrators in the United States confront military police.

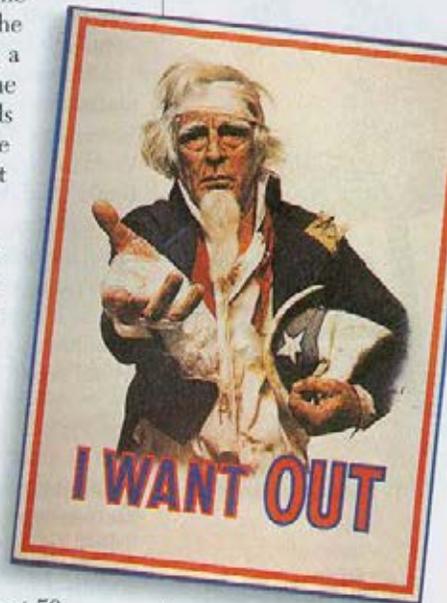
Draft resistance continued from 1967 until President Nixon phased out the draft in the early 1970s. During these years, the U.S. government accused more than 200,000 men of draft offenses and imprisoned nearly 4,000 draft resisters. (Most won parole after 6 to 12 months behind bars, while some served four or five years.) Throughout these years, about 10,000 Americans fled to Canada rather than serve in the military.

In October of 1967, a demonstration at Washington's Lincoln Memorial drew about 75,000 protesters, including well-known figures like the poet Robert Lowell and the novelist Norman Mailer. When the speeches ended, about 30,000 demonstrators locked arms for a march on the Pentagon in order "to disrupt the center of the American war machine," as one organizer explained. As hundreds of protesters broke past the military police and mounted the Pentagon steps, they were met by tear gas and truncheons. About 1,500 demonstrators were injured and at least 700 arrested.

WAR DIVIDES THE NATION By 1967, Americans increasingly found themselves divided into two camps regarding the war. Those who strongly opposed the war and believed the United States should withdraw were known as **doves**. Feeling just as strongly that America should unleash a greater show of military force to end the war were the **hawks**.

Despite the visibility of the antiwar protesters, a majority of American citizens in 1967 still remained committed to the war. In May of that year, a prowar march through the streets of Manhattan drew 20,000 people. During this time, a poll showed that two-thirds of Americans still felt that the war was justified. And while only 10 percent of Americans approved of the administration's present level of commitment in Vietnam, about 50 percent felt that "increased attacks" against North Vietnam would help win the war.

Others, while less certain about the U.S. role in Vietnam, were shocked to see protesters publicly criticize a war in which their fellow Americans were fighting and dying. A poll taken in December of 1967 showed that 70 percent of Americans believed the war protests were "acts of disloyalty." A firefighter



An American antiwar poster is a parody of the World War I Uncle Sam poster, "I Want You for the U.S. Army."

QUESTION
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who lost his son in Vietnam articulated the bitter feelings a number of Americans felt toward the antiwar movement.

A PERSONAL VOICE

I'm bitter. . . . It's people like us who give up our sons for the country. . . . The college types, the professors, they go to Washington and tell the government what to do. . . . But their sons, they don't end up in the swamps over there, in Vietnam. No sir. They're deferred, because they're in school. Or they get sent to safe places. . . . What bothers me about the peace crowd is that you can tell from their attitude, the way they look and what they say, that they don't really love this country.

A FIREFIGHTER, quoted in *Working Class War*

Responding to antiwar posters, Americans who supported the government's Vietnam policy developed their own slogans: "Support our men in Vietnam" and "America—love it or leave it."

JOHNSON REMAINS DETERMINED Throughout the turmoil and division that engulfed the country during the early years of the war, President Johnson remained firm. Attacked by doves for not withdrawing and by hawks for not increasing military power rapidly enough, Johnson continued his policy of slow escalation.

A PERSONAL VOICE

There has always been confusion, frustration, and difference of opinion in this country, when there is a war going on. . . . You know what President Roosevelt went through, and President Wilson in World War I. He had some senators from certain areas that gave him serious problems until victory was assured. . . . We are going to have these differences. No one likes war. All people love peace. But you can't have freedom without defending it.

LYNDON B. JOHNSON, quoted in *No Hail, No Farewell*

Johnson dismissed as "nervous nellies" members of Congress and other officials who questioned his war policies. As for the protesters who paraded outside his window, the president saw them as misguided and misinformed. They "wouldn't know a Communist if they tripped over one," he declared.

However, by the end of 1967, Johnson's policy—and the continuing stalemate—had begun to create turmoil within his own administration. In November, Defense Secretary McNamara, a key architect of U.S. escalation in Vietnam, quietly announced he was resigning to become head of the World Bank. "It didn't add up," McNamara recalled later. "What I was trying to find out was how . . . the war went on year after year when we stopped the infiltration [from North Vietnam] or shrunk it and when we had a very high body count and so on. It just didn't make sense."

As it happened, McNamara's resignation came on the threshold of the most tumultuous year of the sixties. In 1968 the war—and Johnson's presidency—would take a drastic turn for the worse.



This sign reflects the view of many Americans that the antiwar protests undermined the war effort in Vietnam.

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1968: A Tumultuous Year

TERMS & NAMES

- Tet offensive
- Clark Clifford
- Robert Kennedy
- Eugene McCarthy
- Hubert Humphrey
- George Wallace

LEARN ABOUT the Tet offensive, the assassination of two national leaders, and the rioting at the Democratic National Convention
TO UNDERSTAND why 1968 stands out as the most explosive year of the 1960s.

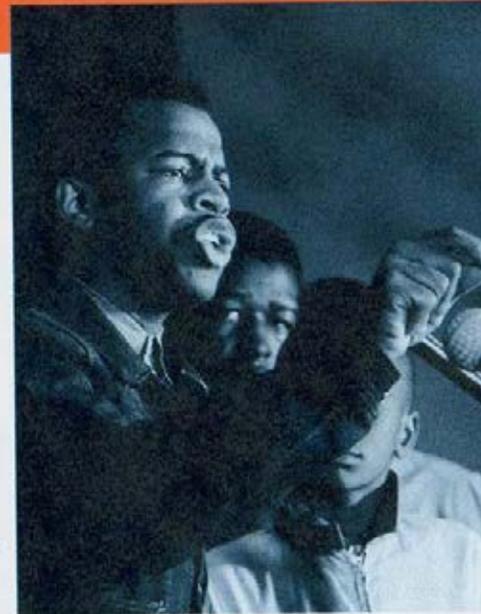
ONE AMERICAN'S STORY

Early in the morning of June 5, 1968, John Lewis, the first chairman of the Student Nonviolent Coordinating Committee, fell to the floor and wept. Robert F. Kennedy, a leading Democratic candidate for president, had just been fatally shot. Lewis had strongly supported Kennedy, feeling that the candidate was "serious in his commitment to civil rights—you felt it was coming out of his gut, really." Two months earlier, when Dr. Martin Luther King, Jr., had fallen victim to an assassin's bullet, Lewis had told himself he still had Kennedy. And now they both were gone. Lewis, who later became a congressman from Georgia, recalled the lasting impact of these traumatic events from 1968.

A PERSONAL VOICE

There are people today who are afraid, in a sense, to hope or to have hope again, because of what happened in . . . 1968. Something was taken from us. The type of leadership that we had in a sense invested in, that we had helped to make and to nourish, was taken from us. . . . Something died in all of us with those assassinations.

JOHN LEWIS, quoted in *From Camelot to Kent State*



John Lewis

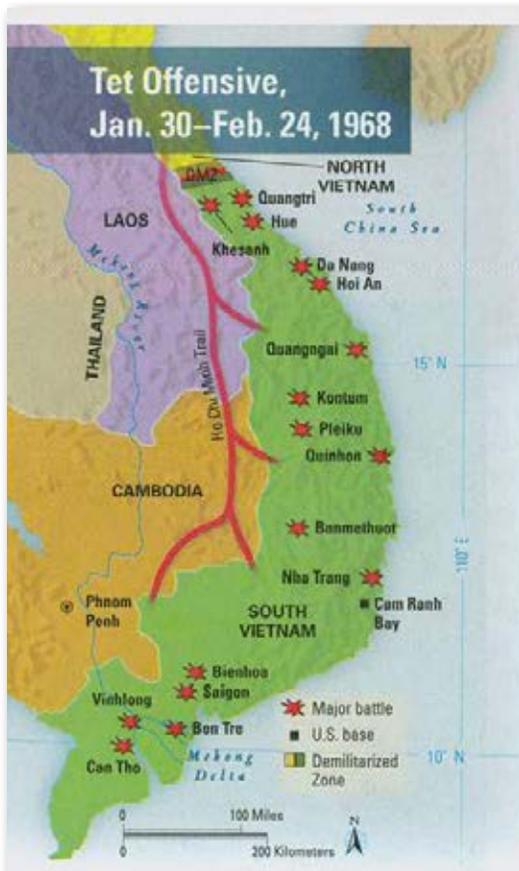
While the violent deaths of King and Kennedy left many Americans numb, the assassinations were but two of the traumatic events that rocked the nation in 1968. From a shocking setback in Vietnam to a chaotic Democratic National Convention in Chicago, the events of 1968 made it the most tumultuous year of a turbulent decade.

The Tet Offensive Turns the War

The year 1968 began with a daring surprise attack by the Vietcong on numerous cities in South Vietnam. The simultaneous strikes, while a military defeat for the Communist guerrillas, stunned the American public and caused many people with moderate views to begin turning against the war.

A SURPRISE ATTACK January 30 was the Vietnamese equivalent of New Year's Eve, the beginning of the lunar new year festivities known in Vietnam as Tet. Throughout that day in 1968, villagers—taking advantage of a week-long truce proclaimed for Tet—streamed into cities across South Vietnam to celebrate their New Year. At the time of the Tet celebration, many funerals were being held for victims of the war. Accompanying the funerals were the traditional firecrackers, flutes, and, of course, coffins.

As it turned out, the coffins contained weapons, and many of the villagers were Vietcong agents. That night the enemy launched an overwhelming attack on nearly 100 towns and cities in South Vietnam, as well as 12 U.S. air bases. The fighting was especially fierce in Saigon and in the former imperial capital of Hue. The Vietcong even attacked the U.S. embassy in Saigon, killing five Americans there. The **Tet offensive** continued for nearly a month before U.S. and South Vietnamese forces regained control of the cities.



GEOGRAPHY SKILLBUILDER
LOCATION What were the geographical destinations of the Tet offensive attacks?

Skillbuilder Answer
 They were scattered all across South Vietnam.



A Life magazine cover shows the capturing of a Vietcong guerrilla during the Tet offensive.

General Westmoreland declared the attacks an overwhelming defeat for the Vietcong. The Communists' "well-laid plans went afoul," the general announced. He later added that "the enemy exposed himself by virtue of his strategy, and he suffered heavy casualties." From a purely military standpoint, Westmoreland was right. The Vietcong lost about 32,000 soldiers during the month-long battle, while the American and ARVN forces lost little more than 3,000.

However, from a psychological—and political—standpoint, Westmoreland's claim could not have been more wrong. Despite its overall military failure, the Tet offensive greatly shook an American public that had come to believe that the enemy was close to defeat. The Johnson administration's credibility gap suddenly widened to a point from which it would never recover. Many Americans no longer believed the administration. The Pentagon's continued reports of favorable body counts, or massive Vietcong casualties, now rang hollow as Americans saw the shocking images of attacks on South Vietnam's major cities by an enemy that seemed to be everywhere.

TET CHANGES PUBLIC OPINION The aftershock from the Tet offensive reverberated throughout the United States, from its living rooms to its newsrooms to the White House. Despite the years of antiwar protest, a poll taken just before Tet showed that only 28 percent of Americans called themselves doves, while 56 percent claimed to be hawks. After Tet, both sides tallied 40 percent. The mainstream media, which had reported the war in a skeptical but generally balanced way, now openly criticized the war. One of the nation's most respected journalists, Walter

Cronkite, told his viewers that it now seemed "more certain than ever that the bloody experience of Vietnam is to end in a stalemate." In a matter of weeks, the Tet offensive had changed millions of minds about the war.

Minds were also changing at the White House. To fill the defense secretary position left vacant by Robert McNamara's resignation, Johnson picked **Clark Clifford**, a trusted friend and strong supporter of the president's Vietnam policy. However, after settling in and studying the situation, Clifford concluded that the war was unwinnable. "We seem to have a sinkhole," Clifford said. "We put in more—they match it. I see more and more fighting with more and more casualties on the U.S. side and no end in sight to the action."

A NATION TURNS ON JOHNSON In the weeks following the Tet offensive, Johnson's popularity plummeted. In public opinion polls taken at the end of February 1968, nearly 60 percent of the American public disapproved of the president's handling of the war. Nearly half of the country now felt it had been a mistake to send American troops to Vietnam.

Even Dean Rusk, Johnson's secretary of state and another principal architect of the war, acknowledged that the mood of America had changed significantly after Tet. "It was clear to me in the spring of '68 that support for Vietnam at the grassroots level had changed," Rusk recalled. "We had good support until that point, despite the campus demonstrations. War weariness eventually set in, and that was the watershed year." Johnson recognized the change, too. Upon learning of Cronkite's pessimistic analysis of the war, the president lamented, "If I've lost Walter, then it's over. I've lost Mr. Average Citizen."

THINK ABOUT IT
A. Analyze Issues How do you think Americans felt about the war after the Tet offensive?
A. Answer Because the enemy was so much stronger and more numerous, Americans thought...

Days of Loss and Rage

The growing division over Vietnam led to a shocking political development in the spring of 1968, a season in which Americans also endured two assassinations, a series of urban riots, and a surge in college campus protests.

JOHNSON WITHDRAWS Well before the Tet offensive, an antiwar coalition within the Democratic Party had taken steps to unseat President Johnson. The group sought a Democratic candidate to challenge Johnson in the 1968 presidential primary election. **Robert Kennedy**, a senator from New York, decided not to run, citing party loyalty. However, in December of 1967, Minnesota senator **Eugene McCarthy** answered the group's call. McCarthy, a strong critic of the war, declared he would run against Johnson on a platform to end the war in Vietnam. "In every other great war of the century," McCarthy declared, "we have had the support of what is generally accepted as the decent opinion of mankind. We do not have that today."

McCarthy's early campaign attracted little notice, but in the weeks following Tet, it picked up steam. In the New Hampshire Democratic primary in March 1968, the little-known senator shocked the nation by capturing 42 percent of the vote. While Johnson won the primary with 48 percent of the vote, the slim margin of victory was viewed as a defeat for the president. Influenced by Johnson's perceived weakness at the polls, Robert Kennedy declared his candidacy for president. The Democratic Party had become a house divided.

On March 31, 1968, President Johnson responded to the growing division within his party and the country. In a televised address to the nation, Johnson announced a dramatic change in his Vietnam policy. The president declared that the United States would seek negotiations to end the war. In the meantime, the policy of U.S. escalation would end. The bombing of North Vietnam would eventually cease, and steps would be taken to ensure that the South Vietnamese played a larger role in the war.

The president paused and then ended his speech with a statement that shocked the nation. Declaring that he did not want the presidency to become "involved in the partisan divisions that are developing in this political year," Lyndon Johnson announced, "Accordingly, I shall not seek, and I will not accept, the nomination of my party for another term of president." The president was stepping down from national politics, his grand plan for domestic reform done in by a costly and divisive war. "That . . . war," Johnson later admitted, "killed the lady I really loved—the Great Society."

VIOLENCE AND PROTEST GRIP THE NATION The Democrats—as well as the nation—were in for more shock in 1968. Johnson's startling announcement had barely sunk in when America was rocked by the assassination of Dr. Martin Luther King, Jr., on April 4. In the wake of the civil rights leader's death, violence ripped through more than 100 U.S. cities as enraged people burned buildings and destroyed neighborhoods.

Violence and rage engulfed the nation's capital for several days, as rioters set more than 700 fires. Federal army troops in full combat gear were called in to protect the Capitol and the White House. By the end of the week, 21,000 federal troops and 34,000 National Guardsmen had been called upon to subdue the rioting across the country. When it was all over, 46 persons were dead, more than 3,000 were injured and some 27,000 were arrested.

Just two months later, a bullet cut down yet another popular national figure. By June of 1968, Robert Kennedy had become a strong candidate in the

The Vietnam War and the divisiveness it caused within America took its toll on Lyndon Johnson.



*"If I've lost
Walter
[Cronkite],
then it's over.
I've lost Mr.
Average
Citizen."*

LYNDON B. JOHNSON

ASK HISTORY
Analyzing
Why did
Johnson
decide to run
again?
Answer He
knew that
a second
loss would
end his
chances
for the
White House.



Hotel busboy Juan Romero was the first person to reach Robert Kennedy after he was shot. Kennedy had just won the California primary.

Democratic primary, drawing support heavily from minorities and urban Democratic voters. On June 4, Kennedy won the crucial California primary. Just after midnight, he gave a victory speech at a Los Angeles hotel. On his way out of the hotel, he passed through the hotel's kitchen. A young Palestinian immigrant, Sirhan Sirhan, was hiding in the kitchen with a gun. Sirhan, who later said he was angered by Kennedy's support of Israel, fatally shot the senator.

Jack Newfield, a speechwriter for Kennedy, described the anguish he and many Americans felt over the loss of two of the nation's leaders.

A PERSONAL VOICE

Things were not really getting better . . . we shall *not* overcome. . . . We had already glimpsed the most compassionate leaders our nation could produce, and they had all been assassinated. And from this time forward, things would get worse. Our best political leaders were part of memory now, not hope.

JACK NEWFIELD, quoted in *Nineteen Sixty-Eight*

Meanwhile, the nation's college campuses continued to erupt in protest. During the first six months of 1968, almost 40,000 students on more than 100 campuses took part in 221 major demonstrations. While many of the demonstrations continued to target U.S. involvement in the Vietnam War—which reached a peak of 536,000 American military personnel—students also clashed with university officials over campus and social issues. A massive student protest at Columbia University in New York City held the nation's attention for a week in April. There, students protesting the university's community policies took over several buildings. Police eventually restored order and arrested nearly 900 protesters.

Recalling the violence and turmoil that seemed to plague the nation in 1968, the journalist and historian Garry Wills wrote, "There was a sense everywhere . . . that things were giving way. That [people] had not only lost control of [their] history, but might never regain it."

A Turbulent Race for President

The chaos and violence of 1968 climaxed in Chicago. Thousands of antiwar demonstrators converged on the city to protest at the Democratic National Convention in August of that year. The convention, which featured a bloody riot between protesters and police, fractured the Democratic Party and thus helped a nearly forgotten Republican win the White House.

TURMOIL IN CHICAGO With Lyndon Johnson stepping down and Robert Kennedy gone, the 1968 Democratic presidential primary race pitted Eugene McCarthy against Vice-President **Hubert Humphrey**. McCarthy, while still popular with the nation's antiwar segment, had little chance of defeating Humphrey, a loyal party man who had President Johnson's support. During the last week of August, the Democrats met at their convention in Chicago supposedly to choose a candidate. In reality, Humphrey's nomination had already been determined, a decision that upset many antiwar activists.

As the delegates arrived in Chicago, so too did nearly 10,000 protesters. Led by men such as SDS veteran Tom Hayden, many demonstrators sought to pressure the Democrats into adopting an antiwar platform. Others came to voice their displeasure with Humphrey's nomination. Still others, known as Yippies (members of the Youth International Party), had come hoping to provoke violence that might discredit the Democratic Party. Chicago's Mayor Richard J.



Chicago police attempt to disperse antiwar demonstrators at the 1968 Democratic convention. Protesters shouted, "The whole world is watching!"

Daley was determined to keep the protesters under control. With memories of the nationwide riots after King's death still fresh, Daley mobilized 12,000 Chicago police officers and 5,000 National Guardsmen. "As long as I am mayor," Daley vowed, "there will be law and order."

Order, however, soon collapsed. On August 28, as delegates cast votes for Humphrey, chaos engulfed the downtown park where the protesters had gathered to march on the convention. With television cameras focused on them, police moved into the crowd, sprayed the protesters with Mace and beat them with nightsticks. Many protesters tried to flee, while others retaliated, pelting the riot-helmeted police with rocks and bottles. "The whole world is watching!" protesters shouted, as police attacked demonstrators and bystanders alike.

The rioting soon spilled out of the park and into the downtown streets. One nearby hotel, observed a *New York Times* reporter, became a makeshift aid station.

A PERSONAL VOICE

Demonstrators, reporters, McCarthy workers, doctors, all began to stagger into the Hilton lobby, blood streaming from face and head wounds. The lobby smelled from tear gas, and stink bombs dropped by the Yippies. A few people began to direct the wounded to a makeshift hospital on the fifteenth floor, the McCarthy staff headquarters.

J. ANTHONY LUKAS, quoted in *Decade of Shocks*

Disorder of a different kind reigned inside the convention hall, where delegates bitterly debated an antiwar plank in the party platform. When word of the riot filtered into the hall, delegates angrily shouted at Daley, who returned their shouts with equal vigor. The whole world indeed was watching—on their televisions. The images of the Democrats—both inside and outside the convention hall—as a party of disorder became etched in the minds of millions of Americans.

NIXON TRIUMPHS A person who benefited from this turmoil was Republican presidential candidate Richard M. Nixon. By 1968, Nixon had achieved one of the greatest political comebacks in American politics. After his loss to Kennedy

Election of 1968

| ELECTORAL AND POPULAR VOTES | | | | |
|-----------------------------|----------------------|--------------------|---------------|------------|
| Party | Candidate | Electoral votes | Popular votes | |
| | Republican | Richard M. Nixon | 301 | 31,785,480 |
| | Democratic | Hubert H. Humphrey | 191 | 31,275,166 |
| | American Independent | George C. Wallace | 46 | 9,906,473 |

3 Alaska

4 Hawaii

3 Washington, D.C.

Richard Nixon flashes the 'V' sign to signal his victory in the 1968 presidential election. He had just been nominated as the Republican candidate for president to end the Vietnam War and to restore order to the country.

SKILLBUILDER
INTERPRETING TABLES By how many percentage points did Nixon defeat Humphrey in the popular vote? How large was Nixon's electoral vote victory?

Skillbuilder Answers
Percent: Less than one percent (0.7) **Electoral:** 110 votes

in the presidential race of 1960, Nixon tasted defeat again in 1962 when he ran for governor of California. His political career all but dead, Nixon joined a New York law firm. However, he never strayed far from politics. In 1966, Nixon campaigned vigorously for Republican candidates in congressional elections, helping Republicans win back 47 House seats and 3 Senate seats from Democrats. In 1968, Nixon announced his candidacy for president, and on the strength of his many Republican alliances, as well as his voter appeal, he won the party's nomination.

During the presidential race, Nixon campaigned on a promise to restore law and order, which appealed to many middle-class Americans fed up with years of riots and protests. He also promised, in vague but appealing terms, to end the war in Vietnam. Nixon's candidacy was helped by the entry of former Alabama governor **George Wallace** into the race. Wallace, a Democrat running as an independent, was a longtime champion of school segregation and states' rights. Labeled the "white backlash" candidate, Wallace captured five Southern states. In addition, he attracted a surprisingly high number of Northern white working-class voters disgusted with inner-city riots and antiwar protests.

In the end, Nixon defeated Humphrey by more than 100 electoral votes, despite capturing only 43 percent of the popular vote. By winning the presidency, Richard Nixon inherited the quagmire in Vietnam. He eventually would end America's involvement in Vietnam, but not before his war policies created even more protest and uproar within the country.

ONE AMERICAN'S STORY

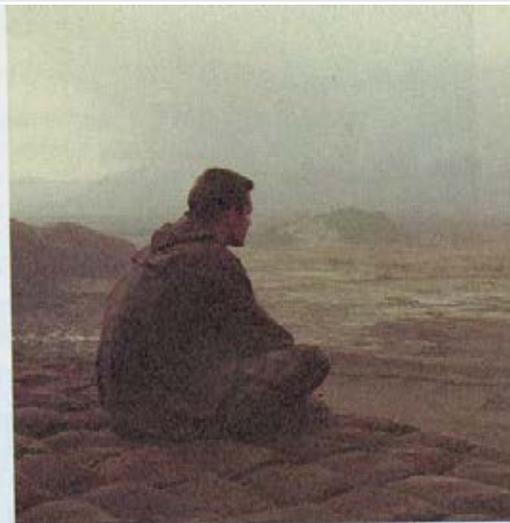
Alfred S. Bradford served in Vietnam from September 1968 to August 1969. A member of the 25th Infantry Division, he was awarded several medals, including the Purple Heart, given to soldiers wounded in battle. Bradford went on to teach history at the universities of Missouri and Oklahoma. One day, Bradford's eight-year-old daughter, Elizabeth, inquired about his experience in Vietnam. "Daddy, why did you do it?" she asked. Bradford recalled what he told himself.

A PERSONAL VOICE

Vietnam was my generation's adventure. I wanted to be part of that adventure and I believed that it was my duty as an American, both to serve my country and particularly not to stand by while someone else risked his life in my place. I do not regret my decision to go, but I learned in Vietnam not to confuse America with the politicians elected to administer America, even when they claim they are speaking for America, and I learned that I have a duty to myself and to my country to exercise my own judgment based upon my own conscience.

ALFRED S. BRADFORD, quoted in *Some Even Volunteered*

Bradford's mixed view of the war reflected the range of emotions many veterans felt about their service in Vietnam. The war left a deep and lasting impression on many Americans, from soldiers such as Bradford to citizens who did not serve. Richard Nixon had promised in 1968 to end the war, but it would take nearly five more years—and over 20,000 more American deaths—to end the nation's involvement in Vietnam. The legacy of the war was profound, as it dramatically affected the way Americans viewed their government and the world.



A U.S. soldier sits near Quang Tri, Vietnam, during a break in the fighting.

President Nixon and Vietnamization

In the summer of 1969, recently elected president Richard Nixon announced the first U.S. troop withdrawals from Vietnam. "We have to get rid of the nightmares we inherited," Nixon later told reporters. "One of the nightmares is war without end." However, as Nixon pulled out American troops, he continued the war against North Vietnam to achieve what he called "peace with honor"—a policy that some critics would charge prolonged the "war without end" for several more bloody years.

THE PULLOUT BEGINS As President Nixon settled into the White House in January of 1969, negotiations begun by the Johnson administration to end the war in Vietnam were going nowhere. During the peace talks in Paris, the warring factions argued over everything—including the shape of the negotiating table. The United States and South Vietnam insisted that all North Vietnamese forces withdraw from the South and that the government of Nguyen Van Thieu, then South Vietnam's ruler, remain in power. The North Vietnamese and Vietcong demanded that U.S. troops withdraw from South Vietnam and that the Thieu government step aside for a coalition government that would include the Vietcong.

In the midst of the stalled negotiations, Nixon announced his strategy to end America's involvement in Vietnam. Known as **Vietnamization**, the plan called for the gradual withdrawal of U.S. troops in order for the South Vietnamese to take on a more active combat role in the war. By August of 1969, the first 25,000 U.S. troops had returned home from Vietnam. Over the next three years, the number of American troops in Vietnam dropped from more than 500,000 to less than 25,000.



"PEACE WITH HONOR" However, part of Nixon's Vietnamization policy was aimed at establishing what he called a "peace with honor." Nixon intended to maintain U.S. dignity in the face of its withdrawal from war. A further goal was the preservation of U.S. clout at the negotiation table, as President Nixon still demanded that the South Vietnamese government remain intact. With this objective—and even as the pullout had begun—Nixon secretly ordered a massive bombing campaign

against supply routes and bases in North Vietnam. The president also ordered that bombs be dropped on the neighboring countries of Laos and Cambodia, which held a number of Vietcong sanctuaries. Nixon told aide H. R. Haldeman that he wanted the enemy to believe he was capable of anything.

SKILLBUILDER
INTERPRETING CHARTS
What does the chart show about the type of war the U.S. fought in Vietnam?

Skillbuilder Answer
Possible response: The chart shows that the United States relied heavily on air power to defeat the Vietcong; the U.S. may have figured that a massive and unrelenting bombing campaign would greatly help in its strategy to demoralize the enemy.

A PERSONAL VOICE

I call it the madman theory, Bob. I want the North Vietnamese to believe I've reached the point where I might do *anything* to stop the war. We'll just slip the word to them that "for God's sake, you know Nixon is obsessed about Communists. We can't restrain him when he's angry—and he has his hand on the nuclear button . . ."—and Ho Chi Minh himself will be in Paris in two days begging for peace.

RICHARD M. NIXON, quoted in *The Price of Power*

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Trouble Continues on the Home Front

Seeking to win support for his war policies, Richard Nixon appealed to what he called the **silent majority**—moderate, mainstream Americans who quietly supported the president's strategy. To be sure, many average Americans did support the president. However, the events of the war continued to divide the country.

THE MY LAI MASSACRE In November of 1969, Americans learned of a shocking event. That month, *New York Times* correspondent Seymour Hersh reported that on March 16, 1968, a U.S. platoon under the command of Lieutenant William Calley, Jr., entered the small village of My Lai in northern South Vietnam in search of Vietcong rebels. Finding no sign of the enemy, the troops rounded up the villagers and shot them. In all, the soldiers massacred more than 100 innocent Vietnamese—mostly women and children. "We huddled them up," recalled 22-year-old Private Paul Meadlo. "I poured about four clips into the group. . . . The mothers was hugging their children. . . . Well, we kept right on firing."

The troops insisted that they were following Lieutenant Calley's orders. When asked what his directive had been, one soldier answered, "Kill anything that breathed." Twenty-five army officers were charged with involve-

ment in the massacre and subsequent cover-up, but only Calley was convicted and imprisoned.

The My Lai massacre shook the nation. *Time* magazine called the incident "an American tragedy," and *Newsweek* appeared to capture the mood of the nation with its headline "A Single Incident in a Brutal War Shocks the American Conscience."

THE INVASION OF CAMBODIA Despite the shock over My Lai, however, the country's mood by 1970 seemed to be growing less explosive. American troops were on their way home, and it appeared that the war was finally winding down. Indeed, a *New York Times* survey of college campuses in 1969 had revealed that many students were shifting their attention from the antiwar movement to the environment.

Then on April 30, 1970, President Nixon announced that U.S. troops had invaded Cambodia. The "incursion" into Cambodia was launched, Nixon declared, to clear out North Vietnamese and Vietcong supply centers. Addressing potential critics, the president defended his action: "If when the chips are down, the world's most powerful nation . . . acts like a pitiful, helpless giant, the forces of totalitarianism and anarchy will threaten free nations . . . throughout the world."

Upon hearing of the invasion, college students across the country erupted in protest. In what became the first general student strike in the nation's history, more than 1.5 million students closed down some 1,200 campuses. The president of Columbia University called the month that followed the Cambodian invasion "the most disastrous month of May in the history of higher education."

KENT STATE Disaster struck hardest at Kent State University in Ohio, where a massive student protest led to the burning of the ROTC building. In response to the growing unrest, the local mayor called in the National Guard. On May 4, 1970, the guards fired into a crowd of campus protesters who were hurling rocks at them. The gunfire wounded nine people and killed four, including two who had not even participated in the rally.

Ten days later, similar violence rocked the mostly all-black college of Jackson State in Mississippi. National Guardsmen there confronted a group of antiwar demonstrators and fired on the crowd after several bottles were thrown. In the hail of bullets, 12 students were wounded and 2 were killed, both innocent bystanders.

In a sign that America still remained sharply divided about the war, the country hotly debated the campus shootings. Polls indicated that many Americans supported the National Guard; respondents claimed that the students "got what they were asking for." The weeks following the campus turmoil brought new attention to a group known as "hardhats," construction workers and other blue-collar Americans who supported the U.S. government's war policies. In May of 1970, nearly 100,000 members of the Building and Construction Trades Council of New York held a rally outside city hall to support the government.

THE PENTAGON PAPERS Nixon's Cambodia policy, however, cost him significant political support. By first bombing and then invading Cambodia without



Mary Ann Vecchio grieves over the body of Jeffrey Glenn Miller, a 20-year-old student shot by National Guard troops at Kent State.

even notifying Congress, the president stirred anger on Capitol Hill. On December 31, 1970, Congress repealed the Tonkin Gulf Resolution, which had given the president near independence in conducting policy in Vietnam.

Support for the war eroded even further when in June of 1971 former Defense Department worker Daniel Ellsberg leaked what became known as the **Pentagon Papers**. The 7,000-page document, written for Defense Secretary Robert McNamara, revealed among other things that the government drew up plans for entering the war even as President Lyndon Johnson promised that he would not send American troops to Vietnam. Furthermore, the papers showed that there was never any plan to end the war as long as the North Vietnamese persisted.

For many Americans, the Pentagon Papers confirmed their belief that the government had not been honest about its war intentions. The document, while not particularly damaging to the Nixon administration, supported what opponents of the war had been saying.

KEY PLAYER



HENRY KISSINGER
1923–

Henry Kissinger fled Germany with his family in 1938, to escape the Nazi persecution of the Jews. Kissinger, who helped negotiate America's withdrawal from Vietnam and who later would help forge historic new relations with China and the Soviet Union, held a deep interest in the concept of power. "You know," he once noted, "most of these world leaders, you wouldn't want to know socially. Mostly they are intellectual mediocrities. The thing that is interesting about them is . . . their power."

At first, Kissinger seemed an unlikely candidate to work for Richard Nixon. During the 1968 presidential campaign, Kissinger declared, "That man Nixon is not fit to be president." However, the two would become trusted colleagues. In August of 1974, two days before Nixon resigned as president amid the Watergate political scandal, he summoned Kissinger to the Lincoln Sitting Room upstairs in the White House. There, the two men reportedly knelt together, prayed, and then embraced.

America's Longest War Ends

In March of 1972, the North Vietnamese launched their largest attack on South Vietnam since the Tet offensive in 1968. President Nixon responded by ordering a massive bombing campaign against North Vietnamese cities, and the mining of Haiphong's harbor, into which Soviet and Chinese supply ships sailed. The Communists "have never been bombed like they are going to be bombed this time," Nixon vowed. The bombings halted the North Vietnamese attack, but the grueling stalemate continued. It was after this that the Nixon administration took steps to finally end America's involvement in Vietnam.

"PEACE IS AT HAND" By the middle of 1972, the country's growing social division and the looming presidential election prompted the Nixon administration to change its negotiating policy in Paris. Polls showed that more than 60 percent of Americans in 1971 felt that the United States should withdraw all troops from Vietnam by the end of the year.

Henry Kissinger, the president's adviser for national security affairs, served as Nixon's top negotiator in Vietnam. Kissinger, a German emigrant who had earned three degrees from Harvard, was an expert on international relations. Since 1969, Kissinger had been meeting privately with North Vietnam's chief negotiator, Le Duc Tho. Eventually, Kissinger dropped his insistence on the removal of all North Vietnamese troops from the South before the complete withdrawal of American troops. On October 26, 1972, one week before the presidential election, Kissinger announced, "Peace is at hand."

THE FINAL PUSH President Nixon won reelection, but the promised peace proved to be elusive. The Thieu regime, alarmed at the prospect of North Vietnamese troops stationed in South Vietnam, rejected Kissinger's plan. Talks broke off on December 16, and two days later, the president unleashed a ferocious bombing campaign against Hanoi and Haiphong, the two largest cities in North Vietnam. In what became known as the "Christmas bombings," U.S. planes dropped 100,000 bombs for 11 straight days, pausing only on Christmas Day.

At this point, calls to end the war resounded from the halls of Congress as well as from Beijing and Moscow. Everyone, it seemed, had finally grown weary of the war. The warring parties returned to the

peace table, and on January 27, 1973, the United States signed an "agreement on ending the war and restoring peace in Vietnam." Under the agreement, North Vietnamese troops would remain in South Vietnam, which had Nixon's promise to respond "with full force" to any violation of the peace agreement. On March 29, 1973, the last U.S. combat troops left for home. For America, the Vietnam War had ended.

THE FALL OF SAIGON The war itself, however, raged on. Within months of the United States' departure, the cease-fire agreement between North and South Vietnam collapsed. In March of 1975, after several years of fighting, the North Vietnamese launched a full-scale invasion against the South. Thieu appealed to the United States for help. America provided economic aid but refused to send troops.

President Gerald Ford, who entered the White House after the Watergate political scandal forced Richard Nixon out, captured the nation's mood during a speech in New Orleans: "America can regain its sense of pride that existed before Vietnam. But it cannot be achieved by re-fighting a war that is finished as far as America is concerned." On April 30, 1975, North Vietnamese tanks rolled into Saigon and captured the city. Soon after, South Vietnam surrendered to North Vietnam.

The War's Painful Legacy

The Vietnam War exacted a terrible price from its participants. In all, 58,000 Americans were killed and some 365,000 were wounded. North and South Vietnamese deaths topped 1.5 million. In addition, the war left Southeast Asia highly unstable, which led to further war in Cambodia. In America, a nation attempted to come to grips with an unsuccessful war. In the end, the conflict in Vietnam left many Americans with a more cautious outlook on foreign affairs and a more cynical attitude toward their government.

AMERICAN VETERANS COPE BACK HOME While families welcomed home their sons and daughters, the nation as a whole extended a cold hand to its

NOW & THEN

POWS/MIAS

An issue that remains alive for many Americans concerns the thousands of soldiers who did not return home from Vietnam. In 1995, the Pentagon reported that there were still 2,202 American soldiers missing in action (MIA) in Southeast Asia—1,618 in Vietnam.

While far more Americans are listed as missing from the Korean War (8,170) and World War II (78,750), locating missing soldiers in Vietnam has taken on a particular intensity. One reason is that despite the Vietnamese government's denial, a number of Americans believe that some U.S. soldiers may still be alive in Vietnam.

The United States has established an MIA office in Hanoi, whose staff members attempt to locate the remains of missing Americans and track down leads about the possibility of surviving soldiers.



Lieutenant Colonel Robert Stirm, a returning POW, receives a warm welcome from his family. The longest-held Vietnam POW was Lieutenant Everett Alvarez, Jr., of California. He was imprisoned for more than eight years.

America's Longest War, 1964–1973

1964

• Congress passes Tonkin Gulf Resolution, giving president broad military powers in Vietnam; President Johnson begins bombing North Vietnam.

1965

• First U.S. ground troops arrive in Vietnam to begin fighting the Vietcong and North Vietnamese Army.

1967

• Antiwar protests in the United States intensify.

1968

• Vietcong launch mass offensive on numerous Vietnamese cities.

returning Vietnam veterans. There were no brass bands, no victory parades, no cheering crowds. Instead, many veterans faced indifference or even hostility from an America still torn and bitter about the war. Lily Jean Lee Adams, who served as an army nurse in Vietnam, recalled arriving, while still in uniform, back at Oakland Army Base in 1970.

A PERSONAL VOICE

In the bus terminal, people were staring at me and giving me dirty looks. I expected the people to smile, like, "Wow, she was in Vietnam, doing something for her country—wonderful." I felt like I had walked into another country, not my country. So I went into the ladies' room and changed.

LILY JEAN LEE ADAMS, quoted in *A Piece of My Heart*



Many Vietnam veterans readjusted successfully to civilian life. However, about 15 percent of the 3.3 million soldiers who served developed delayed stress syndrome. These veterans had recurring nightmares about their war experience. Many suffered from severe headaches and memory lapses. Some veterans became highly apathetic, while others began abusing drugs or alcohol. Several thousand even committed suicide.

In 1982, the U.S. government, in an effort to honor the men and women who served in Vietnam, unveiled the Vietnam Veterans Memorial in Washington, D.C. The memorial consists of two black granite walls inscribed with the names of all the Americans who died in the war or who were then still listed as missing in action. Many Vietnam veterans, as well as their loved ones, have found visiting the memorial a deeply moving, even healing experience.

FURTHER TURMOIL IN SOUTHEAST ASIA The end of the Vietnam War ushered in a new period of violence and chaos in Southeast Asia. In unifying Vietnam, the Communists initially held out a conciliatory hand to the South Vietnamese. "You have nothing to fear," declared Colonel Bui Tin of the North Vietnamese Army.

However, the Communists soon imprisoned more than 400,000 South Vietnamese in harsh "reeducation," or labor, camps. As the Communists imposed their rule throughout the land, nearly 1.5 million people fled Vietnam. They included citizens who had supported the U.S. war effort, as well as business owners, whom the Communists expelled when they began nationalizing the country's business sector.

Also fleeing the country was a large group of poor Vietnamese, known as boat people because they left on anything from freighters to barges to rowboats. Their efforts to reach safety across the South China Sea often met with tragedy, as nearly 50,000 perished on the high seas due to exposure, drowning, illness, or piracy.

The people of Cambodia also suffered greatly after the war. The U.S. invasion of Cambodia had unleashed a brutal civil war, in which a Communist group known as the **Khmer Rouge** seized power in 1975. In an effort to transform the country into a peasant society, the Khmer Rouge

HISTORICAL SPOTLIGHT

VIETNAM VETERANS MEMORIAL: THE WALL

Shortly after 1980, a national competition was held to determine the Vietnam memorial's design. Maya Ying Lin, *above*, a 20-year-old architecture student of Chinese descent, submitted the winning design—a long, black granite wall on which are etched the names of the men and women who died or are missing in action, *below*.

"I didn't want a static object that people would just look at," Lin said, "but something they could relate to as on a journey, or passage, that would bring each to his own conclusions." Lin's design became known simply as the Wall.



1970 peace talks begin in Paris; President Nixon announces Vietnamization of war and gradual withdrawal of troops.

1970 President Nixon orders invasion of Cambodia to destroy enemy supply bases; American college campuses erupt in protest.

1972 Nixon unleashes "Christmas bombings" on North Vietnamese cities after peace talks break off.

1973 United States and North Vietnam sign a truce; the U.S. withdraws the last of its troops from Vietnam.

executed many government officials and academics. During its reign of terror, the Khmer Rouge is believed to have killed as many as 2 million Cambodians.

VIETNAM'S EFFECT ON AMERICA Even after it ended, the Vietnam War remained a subject of great controversy for Americans. Many hawks continued to insist that the war could have been won if the U.S. had employed more military power. They also blamed the antiwar movement at home for destroying American morale. Doves countered that the North Vietnamese had displayed incredible resiliency and that an increase in U.S. military force would have resulted only in a continuing stalemate. In addition, doves argued that an unrestrained war against North Vietnam might have prompted a military reaction from China or the Soviet Union.

The war resulted in several major U.S. policy changes. First, the government abolished the draft, which had stirred so much antiwar sentiment. The country also took steps to curb the president's war-making powers. In November 1973, Congress passed the **War Powers Act**, which stipulated that a president must inform Congress within 48 hours if U.S. forces are sent into a hostile area without a declaration of war. In addition, the troops may remain there no longer than 90 days unless Congress approves the president's actions or declares war.

In a broader sense, the Vietnam War significantly altered America's views on foreign policy. In what has been labeled the Vietnam syndrome, Americans now pause and consider possible risks to their own interests before deciding whether to intervene in the affairs of other nations.

Finally, the war contributed to an overall cynicism in Americans about their government and political leaders that persists today. Americans grew suspicious of a government that had provided so much misleading information—as the Johnson administration did—or concealed so many activities—as the Nixon administration did. Coupled with the Watergate scandal of the mid 1970s, the war diminished the optimism and faith in government that Americans felt during the Eisenhower and Kennedy years.

NOW & THEN

U.S. RECOGNITION OF VIETNAM

In July of 1995, more than 20 years after the Vietnam War ended, the United States extended full diplomatic relations to Vietnam. In announcing the resumption of ties with Vietnam, President Bill Clinton declared, "Let this moment . . . be a time to heal and a time to build." Demonstrating how the war still divides Americans, the president's decision drew both praise and criticism from members of Congress and veterans' groups.

In an ironic twist, Clinton nominated as ambassador to Vietnam a former prisoner of war from the Vietnam War, Douglas Peterson, a congress member from Florida. Peterson, a former air force pilot, was shot down over North Vietnam in 1966 and spent six and a half years in a Hanoi prison.

Many Americans view the Vietnam War as a failure. Many Americans feel more strongly about the war than previous generations. Some feel that the war was unnecessary and that it cost too many lives. Others feel that the war was a necessary part of the struggle for freedom in Southeast Asia. The war has also led to a more cynical view of government among Americans.

HIGH HISTORY Recognizing the impact of the Vietnam War on American attitudes?

Danzer, Gerald, et. al. *The Americans*. McDougal Little, 2002.

Lesson 12

Interpreting History and Writing an Argument

Overview and Rationale:

In this lesson, students get practice in interpreting history and writing arguments. They read primary and secondary sources, decide their position on a long-standing historical debate, and then explain that position using evidence from the documents. The lesson is different from a DBQ lesson because the texts are much longer, and there is a controversy in which students will weigh in. Students are also led to consider the way in which historians use evidence and embed quotes into their arguments.

Tasks/Expected Outcomes:

1. Students will demonstrate their ability to interpret primary and secondary source documents.
2. Students will show their understanding of the issues in the Gulf of Tonkin Incident through graphic organizers and discussion.
3. Students will demonstrate the ability to write a historical argument that takes a stand on a historical controversy and provides evidence to support the stand.

LDC Tasks:

Did the Johnson administration deliberately incite the Gulf of Tonkin Incident? What really happened on August 4, 1964? Did Johnson knowingly use a questionable report of an attack to push the incident with Congress and escalate the war? After reading the document set in this lesson, write an essay in which you argue an answer to one of the questions. Support your question with evidence from the text.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (C) an organizing structure appropriate to the purpose, audience, and context;
 - (G) an awareness and anticipation of audience response that is reflected in different levels of formality, style, and tone.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;

- (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- “The Tonkin Gulf Crisis,” Gareth Porter
- “Fact or Fiction,” Douglas Pike
- “Secrets of the Vietnam War,” Philip B. Davidson
- “The Tonkin Gulf Resolution” from “LBJ and the Vietnam Conflict”
- “As I Saw It,” Dean Rusk
- “The Fog of War” Video
- Johnson’s Midnight Address Video
- “Senator Wayne Morris says No to Vietnam” Video
- McNamara phone call

Timeframe:

Approx. 225 minutes

Activity One

Orientation to the Task (Approx. 15 minutes)

Students will be reading documents to decide whether or not the Johnson Administration was responsible for inciting the Gulf of Tonkin Incident, determining what happened on August 4, 1964 and deciding whether or not Johnson knowingly used a questionable report of an attack to push the incident with Congress and escalate the war. Students will be reading, viewing and listening to primary and secondary documents about the incident to make these decisions.

Let students read about the task in their notebooks. Ask them to turn to a partner and talk through the task together, and then have them talk through what they will have to do as they read the documents and answer the question. While they are talking to each other, monitor their conversations.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

After reading the documents in this lesson, decide the answer to three questions:

1. Did the Johnson administration deliberately incite the Gulf of Tonkin Incident?
2. What really happened on August 4, 1964?
3. Did Johnson knowingly use a questionable report of an attack to push the incident with Congress and escalate the war?

After reading the document set in this lesson, write an essay in which you argue an answer to one of the questions. Support your answer with evidence from the text.

(space provided)

Have students describe what kinds of information they should be looking for while reading the documents so they will be prepared to answer the questions.

Instruct students to use two different kinds of notes organizers to help them decide their answers to the three questions. One will have students deciding the credibility of each of the documents. The other will provide a place to keep track of evidence for both “yes” and “no” answers so that they can determine the weight of evidence. Show students examples of these two documents in their academic notebooks and discuss the processes they will use with them. In the second organizer, students work together in pairs and *come to a consensus* about the answer to each question and the evidence that was convincing. Have students return to the excerpt in the Danzer text that describes the Gulf of Tonkin Incident and remind students of this resource.

Activity Two

Reading the Documents (Approx. 100 minutes)

Have students read the documents and fill out the graphic organizers in pairs.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Reading the Documents

After reading the documents in this lesson, decide the answer to three questions:

1. Did the Johnson administration deliberately incite the Gulf of Tonkin Incident?
2. What really happened on August 4, 1964?
3. Did Johnson knowingly use a questionable report of an attack to push the incident with Congress and escalate the war?

After deciding answers to these questions, write an argument providing evidence for your answer (the claim) to one of the questions.

| | Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|---|--|--|---|--|
| "The Tonkin Gulf Crisis," by Gareth Porter | | | | | | |
| "Fact or Fiction," by Douglas Pike | | | | | | |
| "Secrets of the Vietnam War," by Philip Davidson | | | | | | |
| "The Tonkin Gulf Resolution," (textbook excerpt) | | | | | | |
| "As I Saw It," by Dean Rusk | | | | | | |
| "The Fog of War," video excerpt | | | | | | |
| Wayne Morse Says No | | | | | | |
| President Johnson's Midnight Address to the American people (YouTube) | | | | | | |
| Robert McNamara Phone Call | | | | | | |

(space provided)

| Did the Johnson Administration deliberately incite the Gulf of Tonkin Incident? | | |
|--|-----------------|----------------------------|
| YES | OUR VIEW | NO |
| Gareth Porter | | Gareth Porter |
| Douglas Pike | | Douglas Pike |
| Philip Davidson | | Philip Davidson |
| Dean Rusk | | Dean Rusk |
| Textbook excerpt | | Textbook excerpt |
| Fog of War | | Fog of War |
| Wayne Morse Says No | | Wayne Morse Says No |
| Johnson's Midnight Address | | Johnson's Midnight Address |
| Robert McNamara Phone Call | | Robert McNamara Phone Call |

| What really happened on August 4, 1964? | | |
|--|-----------------|----------------------------|
| YES | OUR VIEW | NO |
| Gareth Porter | | Gareth Porter |
| Douglas Pike | | Douglas Pike |
| Philip Davidson | | Philip Davidson |
| Dean Rusk | | Dean Rusk |
| Textbook excerpt | | Textbook excerpt |
| Fog of War | | Fog of War |
| Wayne Morse Says No | | Wayne Morse Says No |
| Johnson's Midnight Address | | Johnson's Midnight Address |
| Robert McNamara Phone Call | | Robert McNamara Phone Call |

| Did Johnson knowingly use a questionable report of an attack to push the Tonkin Gulf Incident through Congress and escalate the war? | | |
|---|-----------------|----------------------------|
| YES | OUR VIEW | NO |
| Gareth Porter | | Gareth Porter |
| Douglas Pike | | Douglas Pike |
| Philip Davidson | | Philip Davidson |
| Dean Rusk | | Dean Rusk |
| Textbook excerpt | | Textbook excerpt |
| Fog of War | | Fog of War |
| Wayne Morse Says No | | Wayne Morse Says No |
| Johnson's Midnight Address | | Johnson's Midnight Address |
| Robert McNamara Phone Call | | Robert McNamara Phone Call |

(space provided)

The Tonkin Gulf Crisis

Gareth Porter

Source: Gareth Porter is a historian who wrote an editorial on the OpEd page in the New York Times on the 20th anniversary of the Tonkin Gulf Incident—August 9, 1984. He is considered a Vietnam expert, and has published a two-volume set of annotated documents from the conflict.

The 20th anniversary of the Gulf of Tonkin resolution this week is an occasion for a reassessment. For years it has been debated whether or not the Johnson administration deliberately misled Congress and the public about a second attack on United States destroyers in the Gulf. But the information now available suggests that it was a classic case of self-deception and blundering deeper into conflict.

The accumulated evidence makes it reasonably certain that the alleged North Vietnamese PT boat attack of Aug 4 was a figment of the US government's imagination. CIT Deputy Director Ray Cline evaluated the reports and intelligence data on the incident some days later and found the case for an attack unconvincing.

But leading national security officials were so geared up for military confrontation with Hanoi that they refused to consider evidence that it was not happening. They believed that Hanoi had attacked the Maddox on Aug 2 because it saw a connection between the US ship and South Vietnamese islands commando raids on North Vietnamese islands on July 31. They expected the same thing to happen after another commando raid on the coast Aug 3-4. And they knew that this time, the President wanted to retaliate against the North.

Word reached the Pentagon on the morning of Aug 4 that an intercepted North Vietnamese message indicated a "naval action" was imminent. Although the message did not say that it would take the form of an attack, it triggered a process of preparing for retaliatory action that had an irreversible momentum. Before the first reports from the Maddox that the attack was under way, Defense Secretary Robert S. McNamara and other Pentagon officials immediately met to discuss various options for retaliatory strikes against North Vietnam.

Even after the commander of the two destroyers warned that earlier reports of torpedo attacks were in doubt and recommended no further action be taken until after a "complete evaluation," the preparations for air attacks continued. Mr. McNamara spent a little more than one hour with the Joint Chiefs of Staff considering whether an attack had taken place before releasing the strike order—without benefit of any complete evaluation of the incident. It took President Lyndon Johnson only 18 minutes of discussion with his advisers to approve the strike. When the planes took off to bomb North Vietnamese targets that night, detailed reports from the two destroyers had not even reached Washington.

More serious than this rampant subjectivity and excessive haste in considering the evidence and using force was the administration's ignorance of the effect its bombings would have on Hanoi policy. US officials believed that graduated military pressure on

the North, combined with other evidence of US determination to escalate and direct threats to devastate the North, would force Hanoi to reconsider to support for the war in the South. The first such direct threat had been conveyed to Hanoi in June via a Canadian diplomat, and the threat was repeated through the same channel a few days after the Tonkin bombings.

The campaign to coerce Hanoi was based on an image of the North Vietnamese as foreign aggressors in the South whose “ambitions” could be curbed by raising the cost high enough. A serious effort to understand Hanoi’s perspective on the war and on the issue of North-South relations, however, would have suggested the probability that a demonstration by the US of an intention to carry the war to the North would push Hanoi’s leaders into direct participation in combat in the South rather than forcing them to step back from the war. According to three Vietnamese officials I interviewed recently, a few days after the Tonkin Gulf reprisals the Vietnamese Communist leadership secretly convened a Central Committee plenum to consider the implications of the American move. Party leaders concluded that direct US military intervention in the South and the bombing of the North were probable, and that the party and government had to prepare for a major war in the South. In September the first combat units of the Vietnam People’s Army began to move down the Ho Chi Minh Trail.

The self-defeating errors of the Tonkin crisis were not unique to that administration of that conflict. The subjective expectation of aggressive action by an adversary can create imaginary threats and lead to unnecessary violence. Ignorance of an adversary’s viewpoint may cause a state to provoke unwittingly an action it would have wished to avoid. Until US decision makers are trained to think about managing conflict in a more disciplined way, the risk of blundering into confrontation will never be far off.

Fact or Fiction

Douglas Pike

The following is a letter to the Editor that was published in Response to this column. Douglas Pike was a military historian working at University of California, Berkely.

Gareth Porter’s “Lessons of the Tonkin Gulf Incident: (Aug 9) concludes that the Gulf of Tonkin Incident “was a figment of the US government’s imagination.” He says “accumulated evidence” now makes this “reasonably certain.”

He is flatly contradicted by Hanoi historians who not only assert there was indeed a naval confrontation, but claim it ended in great victory for North Vietnam.

What Mr. Porter calls “the alleged North Vietnamese PT boat attack” is described in the PAVN Publishing House (Hanoi work “Military Events” as “three torpedo boats from Navy Squadron. Three attacked the destroyer Maddox...and chased it away.”

The Gulf of Tonkin incident was regarded as such a great victory that the PAVN navy uses Aug. 4, 1964 as its “anniversary date,” and celebrates it each year.

Secrets of the Vietnam War

By Philip B. Davidson

Philip B Davidson is a former CIA agent who served in Vietnam. He became a self-taught historian after the Vietnam War and self-published the book in which this excerpt appears.

Myth: The Tonkin Gulf incident never happened, or if it did, the United States Intentionally provoked it

The Tonkin Gulf Incident refers to the attacks the North Vietnamese Patrol Torpedo (PT boats made on the US Destroyer Maddox on 2 August 1964 and to the alleged second attacks made on the US. Destroyers Maddox and C. Turner Joy on 4-5 August. The impact of this myth is that these unprovoked North Vietnamese attacks brought about the Gulf of Tonkin Resolution passed by the Congress on 7 August 1964. This resolution empowered President Johnson to commit United States forces in Vietnam. If the attacks did not occur, or if the United States forces provoked them, the incident, and thus, the basis for the resolution, was fraudulent. And since subsequent United States military operations were authorized by it, they, too were illegitimate.

There has never been any doubt that three North Vietnamese PT boats made an attack on the USS Maddox in international waters on 2 August 1964. In fact, the North Vietnamese boast about it in their official history of the Vietnam War.

The doubts arise about whether the United States had either unintentionally or deliberately provoked the North Vietnamese attacks. This requires some background detail. In early 1964, the United States and South Vietnam initiated a program known as Operation Plan (OPLAN) 34A, in which the South Vietnamese, with American advice and support, conducted a series of minor, largely ineffectual raids against North Vietnamese coast installations. The United States Navy alone conducted another operations program, called DESOTO, an operation to gain intelligence regarding North Vietnamese electronic devices and to acquire information of navigational and hydrographic conditions in the Tonkin Gulf.

On the night of 30-31 July, 120 to 130 miles away from the islands in international waters on its way to carry a DESOTO mission, which it initiated the following night (31 July – August), three North Vietnamese PT boats began high speed runs at the Maddox which at the time was 29 miles off the North Vietnamese coast. The attackers fired torpedo and 12.7 mm machine guns at the Maddox. The destroyer returned the fire, hitting one of the North Vietnamese boats. At 1730 hours (5:30 PM), four F-8E fighters from the USS Ticonderoga joined the fracas. They made several rocket and strafing runs, adding to the damage inflicted on the boats by the Maddox. By 1800 hours (6:00 PM) when the fighters had to leave the area, one North Vietnamese PT boat was dead in the water, and the other two, badly damaged, were running for the North Vietnamese coast.

Many opponents of the Vietnam War argue that the United States either intentionally or unintentionally (through negligence or lack of coordination) provoked the North

Vietnamese attacks on the Maddox of 2 August 1964. Those who argue to the affirmative point out that the North Vietnamese logically would confuse the raids of OPLAN 34A with the DESOTO mission of the Maddox.

They maintain that the instructions to the Maddox to approach no closer than eight nautical miles to the North Vietnamese coast and four miles to the off-shore islands, would result in violations of North Vietnam's definition of its coastal water, believed to be twelve nautical miles. Finally, they cite messages of 1 August from the captain of the Maddox, who stated that he realized that the mission was dangerous, but who did not retire from his provocative course or abort the mission.

Those who hold that the Maddox's actions were not provocative argue that the North Vietnamese should not have attacked the ship until they were sure that the Maddox had in fact bombarded the islands on 31 July. Adm. U.S. Grant Sharp, Commander in Chief, Pacific (CINCPAC) at the time, has gone further. He maintains that the North Vietnamese had tracked the Maddox by radar from the time it crossed the 17th Parallel (DMZ) and knew throughout its cruise where it was and what it was. In effect, Sharp claims that the North Vietnamese knew the Maddox had not engaged in the raids and yet attacked her anyway.

Sharp and others maintain that the orders given to the Maddox to stay eight miles from the North Vietnamese shore and four miles from the islands was in keeping with the declaration of the North Vietnamese that their coastal waters extended for five nautical miles, not twelve, and that the four-mile circumnavigation of islands complied with the internationally recognized three-mile territorial waters limit. Finally, those who think the Maddox was attacked without provocation, hold that the mission of the Maddox (to monitor electronic emissions from the North Vietnamese shore installations) was nothing new and had been carried out by both surface craft and aircraft all over the world. Further, the USS Craig had patrolled along the North Vietnamese coast on a similar mission some months earlier without incident. President Johnson, with some grumbling and vague threats, initially decided to accept the incident as a mistake on the part of the North Vietnamese. Of course, this was largely a domestic political decision. In 1964 he was running for president as the "peace candidate," contrasting his martial restraint to the bellicose blasts of his Republican Opponent, Senator Barry Goldwater. The president, however, in an effort to balance himself between action and inaction, ordered the DESOTO patrols to continue, reinforcing the Maddox with another destroyer, the USS Turner Joy.

On 4 August, the Maddox and the Turner Joy apprehensively returned to their patrol route. The cruise continued without incident until around 1915 hours, when the National Security Agency (NSA), after intercepting a North Vietnamese message, flashed the task force commander, Capt. John Herrick, a warning of a possible enemy PT boat attack. At 2035 hours the ship's radars picked up indications of the approach of three high-speed craft some thirty miles from the American vessels, and the crews of both ships went to General Quarters. At about 2130 hours, a confused fracas began. The night was dark, with an overcast sky and almost zero visibility. Radar men reported enemy contacts at various ranges, and the sonar men reported hearing the approach of some twenty enemy torpedo toward the American ships. The skipper of the Turner Joy

observed a column of black smoke arising from the water, but when he tried to get a closer look, the smoke had vanished. The pilots of the aircraft called from the Ticonderoga saw no enemy boats or any wakes of such craft.

To this day, no one (other than the North Vietnamese) is sure that on 4-5 August 1964 North Vietnamese craft attacked the two American ships. Intercepts of pertinent North Vietnamese radio communication (not all of which have been declassified) indicated almost certainly that the enemy decided to begin a hostile action against the American ships. Although NSA informed Captain Herrick that an enemy attack was imminent, another analyst studying the same message or messages believes that the messages ordered enemy patrol boat to investigate the destroyer. This latter interpretation would be confirmed by the original (and probably valid radar sensing of approaching enemy vessels.

After the shooting started, the reports of smoke, torpedo noises, torpedo sightings, radar contacts, and sinkings can be put down to combat hysteria. These crews were not combat veterans, and in the fear and excitement of their first or second battle, particularly under conditions of almost zero visibility, their minds could easily have played strange tricks. Captain Herrick, who was a combat veteran, was the first to question the factuality of the North Vietnamese attacks. To this day, Captain Herrick's simple statement remains the most valid summation of the "second attack of 4-5 August 1964.

At noon on 4 August (Washington time is thirteen hours behind Vietnam time), President Johnson convened the National Security Council and decided to launch a retaliatory strike against the North Vietnamese support facilities' at Vinh, where the attacking 100 hours, 5 August (Vietnam time). The pilots reported that fuel oil tanks at Vinh were burning and exploding, with smoke rising to 14,000 feet, and that eight North Vietnamese PT boats had been destroyed and twenty-one damaged. Two United States Navy aircraft were lost.

In summary—the North Vietnamese attacked the Maddox in international waters on 2 August 1964. They may have attacked the Maddox and the Turner Joy on the night of 4-5 August. If they did not attack on 4-5 August, the bulk of evidence indicates that the Communists at least made a hostile approach toward the two United States Warships. The actions of the two American vessels were at no time provocative. They kept out of North Vietnam's territorial waters. In fact, before each North Vietnamese attack or hostile approach, the vessels altered course so as to turn away from the Vietnamese coast. The United States vessels did not fire on their attackers until fired upon.

The Gulf of Tonkin Resolution

This excerpt came from a college level textbook from a chapter called "LBJ and the Vietnam conflict" written in 1990.

In 1964 LBJ took bold steps to impress the North Vietnamese with American resolve and to block his vigorously anticommunist opponent, Barry Goldwater, from capitalizing on Vietnam in the presidential campaign. In February Johnson ordered the Pentagon to prepare for air strikes against North Vietnam. In May his advisors had drafted a congressional resolution authorizing an escalation of American military action and in July LBJ appointed General Maxwell Taylor, an advocate of a greater American role in Vietnam, as ambassador to Saigon. In early August, North Vietnamese patrol boats reportedly clashed with two US destroyers patrolling the Gulf of Tonkin. Despite virtually no evidence of an attack, Johnson announced that Americans had been victims of "open aggression on the high seas." Withholding the information that the U.S destroyers had been aiding the South Vietnamese in clandestine raids against North Vietnam, the president condemned the alleged North Vietnamese attacks as unprovoked.

Card 1: Attacks

Johnson called on Congress to pass a resolution giving him the authority to "take all necessary measures to repel any armed attack against the forces of the United States and to prevent further aggression." Assured that this power would lead to no "extension of the present conflict," the Senate passed the Gulf of Tonkin Resolution 88-2, and the House 416-0. Johnson called the resolution "grandma's nightshirt - it covered everything." The president, moreover, considered the resolution a mandate to commit U.S. Forces to Vietnam as he saw fit. But the resolution would soon create a credibility problem for Johnson, allowing opponents of the war to charge that he had misled Congress and lied to the American people. By providing LBJ with a blank check, the resolution also made massive U.S. Military intervention likely.

Card 2: The Resolution

AS I SAW IT, Autobiography of Dean Rusk, 1990

On August 2 and 4, 1964, we received reports that the USS *Maddox* and USS *C. Turner Joy*, American destroyers operating in the Gulf of Tonkin off the coast of North Vietnam, had been attacked by North Vietnamese torpedo boats in two separate incidents. Neither destroyer was hit. There is no doubt that the first attack took place, but we more or less brushed that aside as possibly the action of a trigger-happy local commander. Some doubt existed about whether a second attack ever occurred, but when we heard reports of a second attack, that raised the possibility that Hanoi might have decided to challenge the American presence in the Gulf of Tonkin.

Card 1: The attacks

I wasn't on the decks of those American destroyers that evening, but at the time, on the basis of the information available to us, we in Washington thought the second attack had occurred. The captains of those destroyers thought their ships had been attacked, and most convincing to me, our intercepts of North Vietnamese radio transmissions suggested that the North Vietnamese thought a second attack was in progress. The Republic of Vietnam today celebrates August 2-the day of the Tonkin Gulf attacks-as part of its national war effort against the Americans, so whatever happened that night in the Tonkin Gulf, evidently it takes credit for it now.

Lyndon Johnson was not looking for a pretext to launch retaliatory raids or escalate the war. Had he wanted a pretext, we could have used the first attack. Our two destroyers were on intelligence-gathering missions in international waters, and the American Navy had a right to operate in those waters. North Vietnam was using coastal waters to infiltrate men and arms into South Vietnam; from our point of view, this conduct was contrary to international law. South Vietnam under the doctrine of self-defense was trying to block this infiltration and mount retaliatory raids of its own-a secret operation called 34-A, supported by the American Navy.

Card 2: 34-A

But the destroyers attacked in the Gulf of Tonkin were on intelligence-gathering missions, not participating in South Vietnamese actions along the coast. It is entirely possible that the North Vietnamese thought that our destroyers were involved in these 34-A raids and in blockading operations along North Vietnam's coast to stop their infiltration of the South by sea. But even if Hanoi thought this, it isn't valid to call the exercise of self-defense a provocation.

After the second attack President Johnson called together about thirty congressional leaders, briefed them on what had happened, and told them about the retaliatory air strikes he intended to order. He then reminded them of President Truman's experience with Senator Robert Taft at the outbreak of the Korean War. Despite congressional assurances that Truman should respond to the North Korean invasion without seeking Congress's authorization. Taft had attacked Truman publicly.

Card 3: Self-Defense or Provocation

As I Saw It

2

Lyndon Johnson's memories of that experience were the real genesis of the Tonkin Gulf Resolution. Shortly after becoming president, Johnson told us, "If we stay in South Vietnam much longer or have to take firmer action, we've got to go to Congress." Various drafts of what eventually became the resolution circulated around the State Department long before the actual attacks occurred. But when the time came, we put aside those drafts, worked with the members of the Senate Foreign Relations Committee, and put together a streamlined version.

Having told congressional leaders about the Taft episode, Johnson asked if this was an appropriate time for a congressional resolution on American policy toward South Vietnam. The leadership, with near unanimity, urged him to go ahead but keep it short; it would be passed promptly and with a strong vote. Indeed, the Tonkin Gulf Resolution, in which Congress declared its support for the United States' willingness to come to the assistance of those protected by the SEATO Treaty, including the use of armed force "as the President shall determine," was passed rapidly: 88-2 by the Senate and 416-0 by the House.

Card 4: The Tonkin Gulf Resolution

The resolution was simply worded, and there was no question about its meaning during the floor discussion. One senator asked Foreign Relations Committee Chairman William Fulbright if this resolution would permit dispatching large numbers of American forces to South Vietnam. Fulbright said he hoped it wouldn't be necessary to take such steps, but if this proved necessary, the resolution would allow it. Fulbright's views were those of Lyndon Johnson's; both men hoped there would be no escalation of the war. At the close of Secretary of Defense Robert McNamara's testimony, Fulbright told me privately that this was the best resolution of its sort he had ever seen presented to the Senate. I never forgot Fulbright's remark. He was all for it at the time. He urged the Senate to give it immediate and unanimous approval.

Senator Wayne Morse opposed the resolution as an unwarranted delegation of the war powers of Congress, warning of its far-reaching implications. But he was nearly alone. When some members of Congress later changed their minds about the war, they tried to throw a cloud on the resolution itself and the way we had presented it. But I have no doubt that they knew exactly what they were voting for. It was simply stated, and the floor discussion brought out all relevant aspects. Some later complained, "We didn't anticipate sending a half million men to South Vietnam," but neither did Lyndon Johnson.

Card 5: The Vote in Congress

I never worried about the constitutionality of the Tonkin Gulf Resolution or about subsequent actions based upon its authority. If Congress can declare war, surely it can take measures short of declaring war that fall within its constitutional powers. I felt the Tonkin Gulf Resolution was not congressional evasion of its war powers responsibility, but an exercise of that responsibility.

Card 6: Defense of the Resolution

Dean Rusk was Secretary of State at the time of the incident. He wrote his autobiography when he held an endowed chair later in life at the University of Georgia.

YouTube: Lyndon Johnson - Report on the Gulf of Tonkin Incident
<http://www.youtube.com/watch?v=Dx8-ffiYyzA>

The Fog of War: Gulf of Tonkin: McNamara admits it didn't happen
<http://www.youtube.com/watch?v=EROOxBEZ3mk>

Secretary of Defense Robert McNamara phone call to LBJ:
<http://www2.gwu.edu/~nsarchiv/NSAEBB/NSAEBB132/04%20Track%204.wma>

Senator Wayne Morse says no to Vietnam 1964
http://www.youtube.com/watch?v=DyFq9yco_Kc

Activity Three

After Reading the Documents (Approx. 30 minutes)

After students have read, written their notes in the organizers and come to an agreement with their partner, have each pair join another pair. The task of this new group of four is to share their decisions and evidence in an effort that allows them to come to a consensus about their answers on all three questions. If the four agree on an answer to a question, they should explain what they believe is the best evidence and why. If they disagree on a question, they should each provide their evidence and try to resolve their disagreement. Before beginning this exercise, remind students that their goal is not to win, but to come up with the most reasonable answer, given the evidence. Therefore, they should be willing to listen open-mindedly to the other side, be respectful, and be willing to change their minds, given better evidence.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 After Reading the Documents

After coming to a consensus with your partner about your answers to the three questions, given the evidence, talk to another pair. Share your decisions and resolve any disagreements. Record any new decisions here. Then discuss your answers with the class.

If students cannot come to an agreement, or if there is just one hold out, that is okay. Tell students they can always have a minority or alternate opinion, and when they get a chance to write their ideas, their essays do not have to reflect the ideas of the group.

When students have finished that discussion, open the discussion to the whole class. Ask for a report out from each group. Have each group pick a spokesperson for each question. The spokesperson should pick the top two pieces of evidence that support their opinion. This limit will keep the discussion sufficiently truncated.

After the discussion, consider asking students these questions:

1. How did you rate the credibility of the various documents? Which were the most credible? The least credible? Why did you rate them that way?

(Note: Not all students understand the difference between a self-published book and one that is published by a reputable publisher, or the difference between a newspaper like the New York Times and a small town local paper, and what an editorial page offers versus a news page. These ideas should be discussed.)

2. Several authors or speakers were there at the time of the incident. Robert McNamara was Secretary of Defense, Dean Rusk was Secretary of State, Philip Davidson was serving in Vietnam at the time. What is the impact of “being there” on one’s credibility?

(Note: Students often say that being there makes one credible, not considering the impact of one’s perspective and that in reporting events, those who have something to hide or gain may not be entirely truthful. Talking through these ideas can be helpful to students.)

3. What agreements and disagreements did you notice across the documents? What excerpts from these documents show agreement or disagreement?
4. Looking at the ways these documents were “published,” what publication outlets seem credible to you? Why?
5. Return to the Philip Davidson document. What does he do to structure his argument? (He presents the other side or the counter-argument then attempts to refute it.) Is this kind of argument persuasive? Why or why not?

(Davidson uses structure in a way that subtly obscures some of the evidence. For example, he starts with a very strong statement, calling it a myth that the event never happened, but only presents reasonable evidence for August 2nd and acknowledges that nobody really knows what happened on the 4th. But the reported attack on August 2nd was ignored by Johnson, meaning that only the August 4th attack was the issue. Davidson’s evidence mainly serves to bolster the argument that the US did not provoke the attack. Davidson ends with a strong restatement of his earlier contention. His refutational style makes his argument seem fair [like he is looking at the other side and considering the facts]. Sometimes readers are confused by this structure, tending to think that whatever he says that agrees with their view is his view, even if it was the straw man. In addition, he uses a quote from Captain Herrick that does not really address the issue of what happened on August 4, but discusses the consequences. Return to this document and have students list the moves that Davidson makes in this argument. They would then be in a better position to analyze and evaluate it.)

6. Dean Rusk discusses Johnson’s motivations for seeking the Tonkin Gulf resolution. Does his discussion agree or disagree with other things you have read?
7. Looking at one of the documents just read, choose the most important sentence in it and explain why it is so important.

(Consider dividing the documents up between the members of your class, so two or three students are picking a sentence from each of the documents. You could first have the students who have gone to the same document talk together about their choices, then have some students share their choices and reasoning with the entire class. This exercise helps students to dig into the texts at the word level to carefully consider issues of word choice, tone, and word meaning, ultimately leading to a better understanding of author perspective.)

Activity Four

After Reading the Documents (Approx. 30 minutes)

Have students choose one of the questions to answer, then plan and write an argument that makes a claim (answering the question) and supports the claim with evidence from their readings (including the Danzer chapter). Students are to imagine they are writing an essay for a history website on the Gulf of Tonkin Incident that will be read by other students.

Ask students to read the excerpts of an argument in their academic notebook. Say, “It is important that you embed evidence into your argument.”

FROM THE STUDENT ACADEMIC NOTEBOOK

Study the examples of document-based essays (DBQ). Decide what you think makes a good essay. Then, review the rubric for a DBQ essay and evaluate the essay using the rubric.

Directions: The following question requires you to construct a coherent essay that integrates your interpretation of Documents A-H and your knowledge of the period referred to in the question. High scores will be earned only by essays that both cite key pieces of evidence from the documents and draw on outside knowledge of the period.

How and for what reasons did United States foreign policy change between 1920 and 1941?

Use the documents and your knowledge of the period 1920-1941 to construct your response.

Document A

Source: Candidate Warren G. Harding in a speech at Des Moines, Iowa, October 1920.

I oppose the League not because I fail to understand what . . . ‘we are being let in for,’ but because I believe I understand precisely what we are being let in for.

I do not want to clarify these obligations; I want to turn my back on them. It is not interpretation but rejection that I am seeking. My position is that the present League strikes a deadly blow at our constitutional integrity and surrenders to a dangerous extent our independence of action.

Document B

Source: Charles Evans Hughes, secretary of state, Washington, D.C., November 12, 1921.

The world looks to this Conference to relieve humanity of the crushing burden created by competition in armament, and it is the view of the American Government that we should meet that expectation without any unnecessary delay. It is therefore proposed that the Conference should proceed at once to consider the question of the limitation of armament. . . .

Document C

Source: Edwin L. James, European correspondent of The New York Times, October 1930.

Officially, our government stays out of world organizations . . . we continue to shy at the World Court. But such things count for less and less. We must deal with the world and the world must deal with us. Let there be an international conference, and imponderable influences bring the United States there.

A conference on reparations, we are there. The International Bank is set up, an American is made

president. The World Court meets, an American is put on the bench . . . It is always the case that the American position is among the most important. Such is one of the prices of our power. Few world problems arise in which the influence of the United States will not swing the decision if we take a real interest. Opposition to the United States is a serious undertaking. Our dollars are powerful; there are so many of them.

Document D

Source: "Butchery Marked Capture of Nanking." The New York Times, December 18, 1937.

Through wholesale atrocities and vandalism at Nanking the Japanese Army has thrown away a rare opportunity to gain the respect and confidence of the Chinese inhabitants and of foreign opinion there . . . Wholesale looting, the violation of women, the murder of civilians, the eviction of Chinese from their homes, mass executions of war prisoners and the impressing of able-bodied men [have] turned Nanking into a city of terror. The killing of civilians [has been] widespread. Foreigners who traveled widely through the city Wednesday found dead on every street. Some of the victims were aged men, women, and children . . . Many victims were bayoneted and some of the wounds were barbarously cruel. Any person who ran because of fear or excitement was likely to be killed on the spot as was anyone caught by roving patrols in streets or alleys after dusk.

Document E

Source: Republican Party platform, June 1940.

The Republican Party is firmly opposed to involving this nation in a foreign war. We are still suffering from the ill effects of the last World War . . .

The Republican Party stands for Americanism, preparedness and peace. We accordingly fasten upon the New Deal full responsibility for our unpreparedness and for the consequent danger of involvement in war.

We declare for the prompt, orderly, and realistic building of our national defense to the point at which we shall be able not only to defend the United States, its possessions, and essential outposts from foreign attack, but also efficiently to uphold in war the Monroe Doctrine.

Document F

Source: Full-page advertisement in the St. Louis Post-Dispatch, September 1940.

Mr. Roosevelt today committed an act of war. He also became America's first

dictator. Secretly his Secretary of State, Mr. Hull, entered into an agreement with the British Ambassador that amounts to a military and naval alliance with Great Britain . . .

The President has passed down an edict that compares with the edicts forced down the throats of Germans, Italians and Russians by Hitler, Mussolini and Stalin. He hands down an edict that may eventually result in the shedding of the blood of millions of Americans; that may result in transforming the United States into a goose-stepping regimented slave-state . . . Of all the sucker real estate deals in history, this is the worst, and the President of the United States is the sucker.

Document G

Source: Chicago Daily News, November 25, 1940.

(Picture not available)

Essay 1:

After 1920, the world was recovering from the horror of WWI. Many Americans were upset with the loss of life that had occurred; which led to a policy of isolationism. With the rise of totalitarian regimes in Europe and the start of WWII American grudgingly began to change. There were many reasons for this change, from isolationist to world player both at home and abroad.

The end of WWI left Americans shocked and horrified at the deaths that had occurred. Congress did not support the Versailles Treaty, and politicians spoke out against it, specifically the League of Nations (Document A). People felt that the league would encroach upon American policies, and Americans didn't like the idea of Europeans having a say in their affairs.

In the Roaring Twenties the economy boomed and to continue economic success protective tariffs were raised. Military spending was down and there was an effort to disarm (Document B). This idea that the weapons would no longer be needed was founded in the idea that the first world war had been so bad that there would never be another. This and what led to the policy of appeasement.

After Black Tuesday in 1929, the economies of all the nations in the world were doing badly. The London Conference was called and Hoover promised to go. It was important that American attend because many of the war debts were owed to her, and one of the main goals was to stabilize currency. America's dollar was relatively strong, but in the end, Hoover elected not to attend the conference. His no show rendered the conference useless (Document C) and continued Americas policy of isolationism.

On September 18, 1931, Japan attacked Manchuria. America condemned the action but did nothing. It was not until many years later that public opinion (shown by Document D) had shifted enough to support embargos against Japan. Still no military action was taken but the U.S. could no longer ignore world affairs.

After the outbreak of WWII, specifically the defeat of France and the Battle of

But as the US began taking a more active role in world affairs, still neutral American continued to maintain that it would not enter the war (Document E). This was very important to FDR because he was re-elected on the campaign slogan “he kept us out of the war.” However tariffs had been lowered during the “New Deal” and trade with foreign powers commenced on the basis that they pay cash and take bought good away themselves.

As American began siding more and more with the Allies isolationism broke down, (Document H) FDR developed a policy of “lending” munitions and supplies to England, France and eventually Russia. Many Americans doubted this (Document F).

In the 20 years between 1920 and 1940 America went from completely isolated to taking an active (but neutral) part in world affairs. In 1941 the Japanese bombed Pearl Harbor and war was declared. By this point the army and navy had been built up (Document E) and America was ready for war.

Document E, showing the platforms of the Republican and Democratic parties for the election of 1940, reveal the platforms are incredibly similar. Both reflect the resolution to keep out of World War II, started in 1939. Both are determined to uphold the Monroe Doctrine of isolationism. The Republican Party criticizes the New Deal but, like the Democrats, advocated preparedness and military buildup. The comment of the need for a strong navy by the Democrats reflects the opinions of Alfred Mahan, who expressed that the country who rules the seas rules the world. Document F criticizes FDR’s principle of aiding Great Britain in the war. The public was concerned with this because of the Nye committee report which stated that the reason America was dragged into World War I was because of the bankers who had economic ties with Europe by lending them money. However, FDR is aware of this and established the cash and carry rule, in violation of the Neutrality Acts, and states that Britain may receive supplies from the U.S. only if they pay cash and carry the supplies in their own ships, in order to prevent the debt problem of WWI. The cartoon of Document G reflects the growing question of the U.S. role in the war and the confusion and differences of opinion. Some people question the “wiseness” in appeasing Hitler while many are determined to remain isolated. However, it is clear that since these are becoming major issues and questions, the U.S. is no longer totally to themselves. The statement FDR makes in Document H and his analogy to the fire hose reflects the need he sees to keep Great Britain alive by helping it defend himself. If Britain falls, there is threat of the rest of the free world falling to communism or fascism. William H. Taft, now the Supreme Court Chief Justice, referred to FDR’s statement as the “chewing gum theory”—once you lend a country war supplies, you do not want it back. This portrays the other opinion of keeping totally out of the war.

Until the Japanese attack on Pearl Harbor in 1941, the U.S. would continue to lend supplies to the allies but do everything else to not fight. Nonetheless, this shows a change from the general feeling of the 1970s of complete isolationism to the growing concern of the fate of the free world during WWII.

Essay 2:

After 1920, the world was recovering from the horror of WWI. Many Americans were upset with the loss of life that had occurred; which led to a policy of isolationism. With the rise of totalitarian regimes in Europe and the start of WWII American grudgingly began to change. There were many reasons for this change, from isolationist to world player both at home and abroad.

The end of WWI left Americans shocked and horrified at the deaths that had occurred. Congress did not support the Versailles Treaty, and politicians spoke out against it, specifically the League of Nations (Document A). People felt that the league would encroach upon American policies, and Americans didn't like the idea of Europeans having a say in their affairs.

In the Roaring Twenties the economy boomed and to continue economic success protective tariffs were raised. Military spending was down and there was an effort to disarm (Document B). This idea that the weapons would no longer be needed was founded in the idea that the first world war had been so bad that there would never be another. This and what led to the policy of appeasement.

After Black Tuesday in 1929, the economies of all the nations in the world were doing badly. The London Conference was called and Hoover promised to go. It was important that American attend because many of the war debts were owed to her, and one of the main goals was to stabilize currency. America's dollar was relatively strong, but in the end, Hoover elected not to attend the conference. His no show rendered the conference useless (Document C) and continued Americas policy of isolationism.

On September 18, 1931, Japan attacked Manchuria. America condemned the action but did nothing. It was not until many years later that public opinion (shown by Document D) had shifted enough to support embargos against Japan. Still no military action was taken but the U.S. could no longer ignore world affairs.

After the outbreak of WWII, specifically the defeat of France and the Battle of Batan the US began taking a more active role in world affairs. Still neutral American continued to maintain that it would not enter the war (Document E). This was very important to FDR because he was re-elected on the campaign slogan "he kept us out of the war." However tariffs had been lowered during the "New Deal" and trade with foreign powers commenced on the basis that they pay cash and take bought good away themselves.

As American began siding more and more with the Allies isolationism broke down, (Document H) FDR developed a policy of "lending" munitions and supplies to England, France and eventually Russia. Many Americans doubted this (Document F).

In the 20 years between 1920 and 1940 America went from completely isolated to taking an active (but neutral) part in world affairs. In 1941 the Japanese bombed Pearl Harbor and war was declared. By this point the army and navy had been built up (Document E) and America was ready for war.

What makes a DBQ good?

Evaluate the two essays using the DBQ rubric on the next two pages.

AP U.S. HISTORY: GENERIC RUBRIC FOR DBQ RESPONSES

The list of characteristics following the grades apply to both free response essays and DBQs and indicate what student essays need to contain in order to score in a particular category. In addition, DBQ essays must incorporate document analysis and substantial information that is not contained in the documents (outside information).

8-9 points

- Strong, well-developed thesis which clearly addresses the question; deals with the most significant issues and trends relevant to the question and the time period.
- Abundant, accurate specifics; may contain insignificant errors.
- Depending on what is called for, demonstrates well-reasoned analysis of relationship of events and people, cause and effect, continuity and change.
- Covers all areas of the prompt in approximate proportion to their importance (extremely good papers need not be totally balanced).
- Effective organization and clear language.

DBQ: Sophisticated use of a substantial number of documents; substantial relevant outside information; chronologically coherent.

5-7 points

- Has a valid thesis; deals with relatively significant issues and trends.
- Some accurate specific information relevant to the thesis and question
- Analyzes information: uses data to support opinions and conclusions; recognizes historical causation, change and continuity.
- Adequately addresses all areas of prompt; may lack balance.
- May contain a few errors, usually not major.
- Adequately organizes; generally clear language; may contain some minor grammatical errors.

DBQ: Use of some documents and some relevant outside information.

2-4 points

- Thesis may be absent, limited, confused, or poorly developed; may take a very general approach to the topic, failing to focus on the question; position may be vague or unclear.

- Superficial or descriptive data which is limited in depth and/or quantity.
- Limited understanding of the question; may be largely descriptive and narrative.
- Adequately covers most areas of the prompt; may ignore some tasks.
- May contain major errors.
- Demonstrates weak organization and writing skills, which may interfere with comprehension.

DBQ: Misinterprets, briefly cites, or simply quotes documents; little outside information, or information which is inaccurate or irrelevant.

0-1 point

- Usually has no discernible thesis, contains a thesis that does not address the question, or simply restates the question.
- Superficial, inappropriate or erroneous information; or information limited to a small portion of the prompt.
- Analysis may be fallacious.
- May contain numerous errors, both major and minor.
- May cover only portions of the prompt; refers to the topic but does not address the prompt.
- Erratic organization; grammatical errors may frequently hinder comprehension.

DBQ: Poor, confused or no use of documents; inappropriate or no outside information.

Conversion to numerical grades:

| | |
|---|----|
| 9 | 98 |
| 8 | 93 |
| 7 | 88 |
| 6 | 83 |
| 5 | 78 |
| 4 | 74 |
| 3 | 68 |
| 2 | 63 |
| 1 | 58 |

Essay 1: Score

Reason for score:

Essay 2: Score

Reason for score:

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Preparing to Write a Historical Argument

Read the following from John Prados, Aug 4, 2004, retrieved from: <http://www2.gwu.edu/~nsarchiv/NSAEBB/NSAEBB132/essay.htm>. John Prados is a National Security Archive Fellow at George Washington University and this is from his website on the Gulf of Tonkin.

A fresh addition to the declassified record is the intelligence estimate included in this briefing book, *Special National Intelligence Estimate 50-2-64*. Published in May 1964, the estimate again demonstrates that the United States purposefully directed OPLAN 34-A to pressure North Vietnam, to the extent of attempting to anticipate Hanoi's reaction. It wrongly concluded that North Vietnam, while taking precautionary measures, "might reduce the level of the insurrections for the moment." (Note 1) In fact Hanoi decided instead to commit its regular army forces to the fighting in South Vietnam.

And,

American pilots from the carrier *USS Ticonderoga* sent to help defend the destroyers from their supposed attackers told the same story. Commander James B. Stockdale, who led this flight of jets, spotted no enemy, and at one point saw the *Turner Joy* pointing her guns at the *Maddox*. As Stockdale, who retired an admiral after a distinguished career that included being shot down and imprisoned by the North Vietnamese, later wrote: "There was absolutely no gunfire except our own, no PT boat wakes, not a candle light let alone a burning ship. None could have been there and not have been seen on such a black night."

How did this author use evidence in his argument? What can you learn from this example?

(space provided)

Ask students to notice how this writer inserts evidence into his work and includes quotes. These embedded pieces are contextualized. That is, the reason for including them is evident in the way they are introduced.

“Published in May 1964, the estimate again demonstrates that...”

(“Again” tells me that the evidence about to be explained is another piece of evidence pointing to a familiar contention, and so is corroborative.)

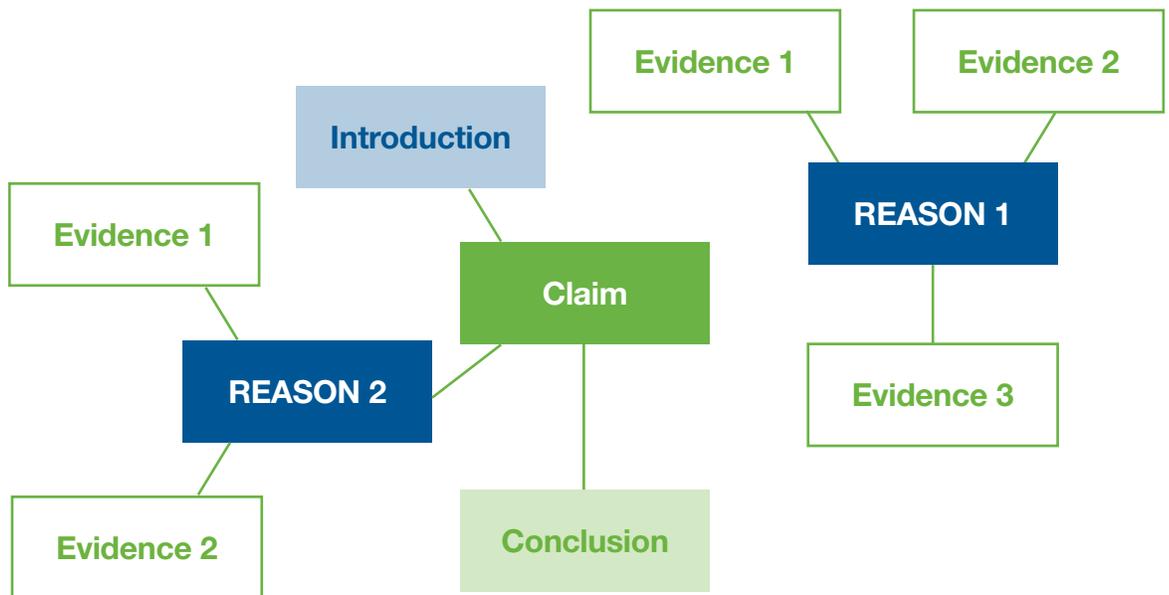
“American pilots...told the same story. Commander James B. Stockdale, who led this flight of jets...”

(“Same” tells me that the testimony of American pilots corroborates other reports. The description of Stockdale, as the pilot who led the flight of jets, shows that the information probably is credible.)

If you have some particular conventions that you want students to use when they embed quotes or other evidence, share with students at this time.

Otherwise, ask them to think about why they are using particular pieces of evidence and showing that reasoning in their writing. They should not simply drop in a quote or a piece of evidence without providing some reasoning.

Give students time to plan their essays. They should write their claim, then consider the argument they will make in support of the claim. Writing an outline or a jot list or making a concept map are all reasonable ways to plan for an essay, and consider encouraging students to use whatever strategies work for them or use a format that you have used before successfully.



As students are planning their essays, circulate around the room to provide support (without being too directive). Use this time as an opportunity to assess how well students understand the task.

Activity Five

Writing the Argument (Approx. 50 minutes plus homework)

Provide time in class to write the argument. Students who take longer and do not finish should be able to complete their work at home.

When they have finished, have them use the DBQ rubric you previously used to evaluate the two essays. Or consider, depending upon how well your class works together, having students switch their essays with a partner and having the partners evaluate each other's essays using the rubric. Based upon their evaluations, students should rewrite their essays before submission.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

5 Writing the Argument

Write your essay.

When you are finished, evaluate your essay using the rubric on the next page. Then rewrite it.

(space provided)

AP U.S. HISTORY: GENERIC RUBRIC FOR DBQ RESPONSES

The list of characteristics following the grades apply to both free response essays and DBQs and indicate what student essays need to contain in order to score in a particular category. In addition, DBQ essays must incorporate document analysis and substantial information that is not contained in the documents (outside information).

8-9 points

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- Abundant, accurate specifics; may contain insignificant errors.
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DBQ: Sophisticated use of a substantial number of documents; substantial relevant outside information; chronologically coherent.

5-7 points

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| 3 | 68 |
| 2 | 63 |
| 1 | 58 |

Essay 1: Score

Reason for score:

Essay 2: Score

Reason for score:

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Had students read and discuss the task, determining what they will have to know about each document.
2. Helped students understand the graphic organizers, their use and why they are important.
3. Had students read the documents, annotate, and complete the graphic organizers in pairs
4. Had pairs join other pairs to come to consensus, then “report out” from the groups and a whole class discussion.
5. Asked students follow-up questions, as appropriate, given discussion.
6. Had students reflect on how to embed evidence and use quotes in essays.
7. Provided time for students to plan and write their essays.
8. Had students evaluate their own or a partner’s essay.
9. Provided students time to rewrite their essays.

Lesson 13

Addressing the Essential Question

Overview and Rationale:

This lesson uses a Socratic Seminar to help students think about the essential question(s) that guide the unit:

Were American concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis and the Vietnam Conflict?

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

As mentioned earlier, a Socratic Seminar is a discussion technique where students sit in a circle facing each other to reflect on a genuine question that has no “right” answer. The dialogue that ensues, while initially prompted by the teacher, is between students. The teacher acts as a facilitator in that he or she can pose questions when the discussion lulls or moves off-topic and can sometimes provide clarification when asked by a student, but does not comment on what the students say and remains invisible and silent when a discussion is taking place. The students’ responsibilities are to study the text(s) in advance, listen actively (with pen in hand) and share ideas using evidence from the text(s) for support.

As before, to keep the discussion going and have everyone participate, some teachers have used the following tools:

- “Chips” that are dispensed equally to participants at the start of the discussion that they turn in when they talk. All chips and no more can be used.
- Checklist to monitor contributions.
- Fishbowl—students outside the inner circle observe students in the seminar to evaluate their participation.

Remind students a Socratic Seminar is not a debate. Rather, it is an open discussion of ideas for the purpose of enlightenment rather than persuasion. Remind students it is not their task to convince others to share their opinions, nor is it their task to attack others’ arguments. They should be interested in helping students to explain and support their views.

Tasks/Expected Outcomes:

1. Students will demonstrate their ability to use evidence from the texts they have read to create and support a claim in answer to the essential question.
2. Students will participate meaningfully in a Socratic Seminar.
3. Students will use vocabulary that they have read in their previous lessons.
4. Students will organize a claim and evidence in essay form.
5. Students will explain the choices in evidence they made in the essay.

Texas Essential Knowledge and Skills (TEKS)

(§110.34) English Language Arts Standards: Reading

- (1) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:
 - (A) determine the meaning of technical academic English words in multiple content areas (e.g., science, mathematics, social studies, the arts) derived from Latin, Greek, or other linguistic roots and affixes;
 - (B) analyze textual context (within a sentence and in larger sections of text) to draw conclusions about the nuance in word meanings;
 - (C) use the relationship between words encountered in analogies to determine their meanings (e.g., synonyms/antonyms, connotation/denotation);
 - (D) analyze and explain how the English language has developed and been influenced by other languages; and
 - (E) use general and specialized dictionaries, thesauri, histories of language, books of quotations, and other related references (printed or electronic) as needed.
- (9) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about expository text and provide evidence from text to support their understanding. Students are expected to:
 - (A) summarize a text in a manner that captures the author's viewpoint, its main ideas, and its elements without taking a position or expressing an opinion;
 - (B) explain how authors writing on the same issue reached different conclusions because of differences in assumptions, evidence, reasoning, and viewpoints;
 - (C) make and defend subtle inferences and complex conclusions about the ideas in text and their organizational patterns; and
 - (D) synthesize ideas and make logical connections (e.g., thematic links, author analysis) among multiple texts representing similar or different genres and technical sources and support those findings with textual evidence.
- (10) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:
 - (A) evaluate the merits of an argument, action, or policy by analyzing the relationships (e.g., implication, necessity, sufficiency) among evidence, inferences, assumptions, and claims in text; and
 - (B) draw conclusions about the credibility of persuasive text by examining its implicit and stated assumptions about an issue as conveyed by the specific use of language.

- (12) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques (e.g., layout, pictures, typeface in print media, images, text, sound in electronic journalism) used in multi-layered media;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.

Figure 19: Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

- (A) reflect on understanding to monitor comprehension (e.g., asking questions, summarizing and synthesizing, making connections, creating sensory images); and
- (B) make complex inferences (e.g., inductive and deductive) about text and use textual evidence to support understanding.

(§110.34) English Language Arts Standards: Writing

- (16) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write an argumentative essay (e.g., evaluative essays, proposals) to the appropriate audience that includes:
- (A) a clear thesis or position based on logical reasons with various forms of support (e.g., hard evidence, reason, common sense, cultural assumptions);
 - (B) accurate and honest representation of divergent views (i.e., in the author's own words and not out of context);
 - (C) an organizing structure appropriate to the purpose, audience, and context;
 - (G) an awareness and anticipation of audience response that is reflected in different levels of formality, style, and tone.
- (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
- (A) follow the research plan to gather evidence from experts on the topic and texts written for informed audiences in the field, distinguishing between reliable and unreliable sources and avoiding over-reliance on one source;

- (B) systematically organize relevant and accurate information to support central ideas, concepts, and themes, outline ideas into conceptual maps/timelines, and separate factual data from complex inferences; and
 - (C) paraphrase, summarize, quote, and accurately cite all researched information according to a standard format (e.g., author, title, page number), differentiating among primary, secondary, and other sources.
- (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
- (A) modify the major research question as necessary to refocus the research plan;
 - (B) differentiate between theories and the evidence that supports them and determine whether the evidence found is weak or strong and how that evidence helps create a cogent argument; and
 - (C) critique the research process at each step to implement changes as the need occurs and is identified.

Texas College and Career Readiness English/Language Arts Standards: I. Writing

- A. Compose a variety of texts that demonstrate clear focus, the logical development of ideas in well-organized paragraphs, and the use of appropriate language that advances the author's purpose.
 - 1. Determine effective approaches, forms, and rhetorical techniques that demonstrate understanding of the writer's purpose and audience.
 - 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
 - 3. Evaluate relevance, quality, sufficiency, and depth of preliminary ideas and information, organize material generated, and formulate a thesis.

Texas College and Career Readiness English/Language Arts Standards: II. Reading

- A. Locate explicit textual information, draw complex inferences, and analyze and evaluate the information within and across texts of varying lengths.
 - 1. Use effective reading strategies to determine a written work's purpose and intended audience.
 - 2. Use text features and graphics to form an overview of informational texts and to determine where to locate information.
 - 3. Identify explicit and implicit textual information including main ideas and author's purpose.
 - 5. Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument.
 - 11. Identify, analyze, and evaluate similarities and differences in how multiple texts present information, argue a position, or relate a theme.

- B. Understand new vocabulary and concepts and use them accurately in reading, speaking, and writing.
 - 1. Identify new words and concepts acquired through study of their relationships to other words and concepts.
 - 2. Apply knowledge of roots and affixes to infer the meanings of new words.
 - 3. Use reference guides to confirm the meanings of new words or concepts.

Texas College and Career Readiness English/Language Arts Standards: V. Research

- A. Formulate topic and questions.
 - 1. Formulate research questions.
 - 2. Explore a research topic.
 - 3. Refine research topic and devise a timeline for completing work.
- B. Select information from a variety of sources.
 - 1. Gather relevant sources.
 - 2. Evaluate the validity and reliability of sources.
 - 3. Synthesize and organize information effectively.

Texas College and Career Readiness History Standards: IV. Analysis, Synthesis, and Evaluation of Information

- A. Critical examination of texts, images, and other sources of information
 - 1. Identify and analyze the main idea(s) and point(s)-of-view in sources.
 - 2. Situate an informational source in its appropriate contexts (contemporary, historical, cultural).
 - 3. Evaluate sources from multiple perspectives.
 - 4. Understand the differences between a primary and secondary source and use each appropriately to conduct research and construct arguments.
 - 5. Read narrative texts critically.
 - 6. Read research data critically.
- B. Research and methods
 - 1. Use established research methodologies.
 - 2. Explain how historians and other social scientists develop new and competing views of past phenomena.
 - 3. Gather, organize, and display the results of data and research.
 - 4. Identify and collect sources.
- D. Reaching conclusions
 - 1. Construct a thesis that is supported by evidence.
 - 2. Recognize and evaluate counter-arguments.

Texas College and Career Readiness History Standards: V. Effective Communication

- A. Clear and coherent oral and written communication
 - 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.
 - 2. Use conventions of standard written English.
- B. Academic integrity
 - 1. Attribute ideas and information to source materials and authors.

Throughout this course, only grade 12 standards are used.

Materials:

- Notes and note organizers
- Academic notebook

Timeframe:

Approx. 150 minutes

Activity One

Orientation to the Task (Approx. 10 minutes)

Remind students they have been reading to understand concepts of liberty, and in this lesson, they will get a chance to discuss their answers to three questions about liberty using all of the texts in the unit about the Cuban Missile Crisis and the Vietnam War. Have them read the essential questions in their academic notebook, and place them on the smart board, overhead, bulletin board or other place in the classroom where they can be seen.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

1 Orientation to the Task

Review the essential questions. In this task, you will be thinking about answer to these questions, using the readings from two topics you have studied—the Cuban Missile Crisis and the Vietnam Conflict.

Were American concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? In the Vietnam Conflict?

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

To make the task more focused, have them pick one prompt in which they are most interested. Alternately, divide the class into three groups and use the fishbowl technique, with one group participating in a discussion in the inner circle and students in the outer circle listening, taking notes, and evaluating the discussion, then switching. The second option will take longer.

Remind students of the way Socratic Seminars work. To prepare for the discussion, students will get a chance to review their texts and notes. Tell them to look at their previous writing on the essential question, and to construct an essential question notes organizer.

A note-taker can list the texts down the side of a chart and list the question on the top. Then, as students review the texts read for this unit, they can write in information addressing each one of the questions (or just one, if that is the decision). The three questions can be answered using the following three note-takers as examples.

Determine an answer (make a claim) for one or more of these questions so you will be ready to participate in a seminar. Use all of your readings and notes. Use the following notes organizers to help you collect evidence across all of the texts you have read so to help you form your answer *based upon evidence*.

Activity Two

Preparing for the Socratic Seminar (Approx. 50 minutes)

Have students read the documents and fill out the graphic organizers in pairs.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

2 Preparing for the Socratic Seminar

Determine an answer (make a claim) for one or more of these questions so you will be ready to participate in a seminar. Pay attention to all of your readings and notes. Use the following notes organizers to help you find evidence across all of the texts you have read so that you can form your answer based upon evidence.

| <i>Were American concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | | |
|--|------------|-----------|
| | YES | NO |
| Danzer chapter | | |
| Richard Reeves' account of Diem assassination | | |
| Checklist in case of a coup | | |
| Ho Chi Minh's Declaration of Independence | | |
| Manifesto of the Laodong Party | | |
| Viet Cong program | | |
| Gareth Porter's "The Tonkin Gulf Crisis" | | |

| | | |
|---|------------|-----------------|
| Douglas Pike, "Fact or Fiction" | | |
| Davidson, "Secrets of the Vietnam War" | | |
| Dean Rusk, "As I Saw It" | | |
| "Fog of War" video | | |
| Johnsons "Midnight Address" video | | |
| "Senator Wayne Morris says No to Vietnam" video | | |
| Textbook excerpt | | |
| Robert McNamara phone call | | |
| My answer: | Yes or No? | Why or Why Not? |

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? In the Vietnam Conflict

| Cuban Missile Crisis | Castro Administration | Kennedy Administration | Khrushchev Administration |
|-------------------------------------|------------------------------|-------------------------------|----------------------------------|
| Khrushchev photo | | | |
| Khrushchev-Nixon cartoon | | | |
| Khrushchev quotes | | | |
| Cuban Missile Crisis lecture notes | | | |
| Tindall and Shi chapter excerpt | | | |
| Khrushchev letter to Kennedy | | | |
| Dobrynin report to Foreign Ministry | | | |
| Kennedy report to Rusk | | | |
| Eisenhower speech | | | |
| Kennedy speech | | | |

| Vietnam | Johnson Administration | Ho Chi Minh and North Vietnam | South Vietnam (various leaders) |
|---|-------------------------------|--------------------------------------|--|
| Vietnam overview | | | |
| Danzer chapter | | | |
| Richard Reeves' account of Diem assassination | | | |
| Checklist in case of a coup | | | |
| Ho Chi Minh's Declaration of Independence | | | |
| Manifesto of the Laodong Party | | | |
| Viet Cong program | | | |
| Gareth Porter's "The Tonkin Gulf Crisis" | | | |
| Douglas Pike, "Fact or Fiction" | | | |
| Davidson, "Secrets of the Vietnam War" | | | |
| Dean Rusk, "As I Saw It" | | | |

| | | | |
|---|--|--|--|
| Robert McNamara Phone Call | | | |
| “Fog of War” video | | | |
| Johnsons “Midnight Address” video | | | |
| “Senator Wayne Morris says No to Vietnam” video | | | |
| Textbook excerpt | | | |

| | | |
|-------------------|-----------------------------|-------------------------|
| My Answer: | U.S. administration: | Other countries: |
| | | |

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

| | Earlier | Later | Change? Why or Why Not? |
|-------------------------------------|----------------|--------------|------------------------------------|
| Khrushchev photo | | | |
| Khrushchev-Nixon cartoon | | | |
| Khrushchev quotes | | | |
| Cuban Missile Crisis lecture notes | | | |
| Tindall and Shi chapter excerpt | | | |
| Khrushchev letter to Kennedy | | | |
| Dobrynin report to Foreign Ministry | | | |
| Kennedy report to Rusk | | | |
| Eisenhower speech | | | |
| Kennedy speech | | | |
| Vietnam overview | | | |

| | Earlier | Later | Change? Why or Why Not? |
|---|----------------|--------------|------------------------------------|
| Danzer chapter | | | |
| Richard Reeves' account of Diem assassination | | | |
| Checklist in case of a coup | | | |
| Ho Chi Minh's Declaration of Independence | | | |
| Manifesto of the Laodong Party | | | |
| Viet Cong program | | | |
| Gareth Porter's "The Tonkin Gulf Crisis" | | | |
| Douglas Pike, "Fact or Fiction" | | | |
| Davidson, "Secrets of the Vietnam War" | | | |
| Dean Rusk, "As I Saw It" | | | |
| Robert McNamara phone call | | | |

Have students create a graphic organizer to prepare for discussion. They can work in pairs if desired.

Assessment:

Outcome 1: Students will demonstrate their ability to use evidence from the texts they have read to create and support a preliminary claim in answer to the essential question(s).

Use the graphic organizers to evaluate this outcome, and use the student’s Socratic Seminar Evaluation. Points to look for include:

| | No | Some | Yes |
|--|----|------|-----|
| Student’s answer to the question (or claim) is reasonable given the evidence they have gathered. | | | |
| Student cites important textual information in graphic organizers and in response to the question. | | | |
| Student relies on a number of texts for evidence, not just one or two. | | | |
| Student looks at all sides of an issue before answering question. | | | |

Activity Three

Socratic Seminar (Approx. 25 minutes)

Have students sit in a circle or in a way that they are facing each other.

Remind students they are to engage in open discussion for the purpose of enlightenment and, during the discussion you will be monitoring *in the background*, their ability to take turns, to actively listen (and take notes on what others say), to provide evidence from the texts to support their ideas, and be respectful. **Also, tell them they will engage in self-assessment after the discussion.** If students use a fishbowl, students outside the fishbowl will also be assessing the performance of those inside. Have students turn to their academic notebooks to look at the assessment rubric.

Restate the essential question and choose an individual to begin the discussion. Turns can be taken by: (a) the next person just speaking up without hand raising, or (b) the person who has just finished choosing the next person to speak from the group of people with hands raised.

While the discussion is taking place, use the monitoring form on the next page or something similar to note who is participating thoughtfully. This form can also be used to evaluate whether or not students are using targeted discipline-specific vocabulary.

After the discussion is finished, have students return to their academic notebooks and complete the evaluation.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

3 Participating in the Socratic Seminar

Come to the Socratic Seminar ready to participate in discussion. After you participate in the seminar, evaluate your performance using this rubric.

Socratic Seminar Self-Evaluation Rubric

Check the boxes that reflect your participation.

| Socratic Seminar Rubric | Understands the texts | Participates in discussion | Supports ideas with evidence | Demonstrates critical mindedness | Demonstrates tolerance for uncertainty | Listens and respects others |
|-------------------------|---|--|---|--|---|---|
| Above Target | Uses parts of the texts in the discussion and shows understanding of the texts. Shows command of vocabulary. | Demonstrates active participation throughout circle time. | Makes specific references to texts and regularly defends ideas with evidence. | Questions others during discussion in a way that makes sense and adds to the group's discussion. | Is able to listen to and accept others' opinions different from his/her own. | Makes comments reflecting active listening and respect of others. |
| Target | Uses texts during the discussion but does not show understanding of them. Uses some text vocabulary. | Demonstrates active participation in at least half of the circle time. | Makes references to texts and at times defends ideas with evidence when | Questions and comments to others make sense but do not add to the group's discussion. | Is able to listen to others' opinions different from his/her own but does not use them in remaining discussion. | Generally listens, but is not attentive to details. |
| Below Target | Does not use any of the texts in the discussion. Does not use text vocabulary. | Demonstrates some participation, but off-task most of the circle time. | Makes no references to texts or does not defend ideas. | Does not question others or questions don't make sense. | Does not accept others' opinions and is unwilling to hear them. | Is consistently inattentive. |

What I did do well _____

What I didn't do well _____

What I will do next time _____

Assessments:

Outcome 2: Students will participate meaningfully in a Socratic Seminar.

Outcome 3: Students will use vocabulary that they have read in their previous lessons.

As students participate, listen for their use of discipline-specific vocabulary. In addition, use the same rubric to assess students' self-assessment.

Activity Four

Outlining Claim and Evidence and Writing the Essay (Approx. 50 minutes)

After the discussion and a chance to listen and take notes on other's ideas and evidence, ask students to revise their claim about one of the questions based on the discussion, then list support for the claim from the texts they read. They should make sure that the support is trustworthy and is clearly related to the claim.

Have students write a first draft of their essay.

After reading the informational texts and participating in the Socratic Seminar, write an essay in which you address the question and argue your claim. Support your claim with evidence from the texts.

Working in pairs, have students critique each other's essays using the rubric to refine development, including line of thought, language usage and tone. Especially have students pay attention to the way sources are embedded in the essay—citing their sources and contextualizing them rather than just dropping in a quote.

Give students an opportunity to revise and edit their essays based upon the feedback they receive.

FROM THE STUDENT ACADEMIC NOTEBOOK

Activity

4 Outlining Claim and Evidence and Writing the Essay

Based upon what you learned in this discussion, revise your seminar notes into an essay outline, with a claim the evidence you will use to support your claim, an introductory and a closing paragraph.

Claim:

Intro paragraph:

Evidence:

1

2

3

Etc.

Closing paragraph:

Then, write a first draft of your essay (on separate paper). Using the rubric that follows, evaluate your draft and/or have a student in your class do it with you.

(space provided)

FROM THE STUDENT ACADEMIC NOTEBOOK

Literacy Design Collaborative Rubric

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|--|-----|---|-----|---|-----|---|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. | | Establishes a claim. | | Establishes a credible claim. | | Establishes and maintains a substantive and credible claim or proposal. |
| Reading/ Research | Attempts to establish a claim, but lacks a clear purpose. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

Assessment:

Outcome 4: Students will organize claim and evidence in essay form.

Use the same rubric that students use for self-assessment to evaluate students' essays. Also, use their essays to assess their use of discipline specific vocabulary.

**Teacher
Checklist**

Use this list to ensure that you have completed all of the lesson components. I . . .

1. Reviewed the essential questions.
2. Reviewed the procedures for a Socratic Seminar.
3. Introduced students to the note organizers in the academic notebook.
4. Provided students time to prepare for the Socratic Seminar.
5. Held the Socratic Seminar and assessed student performance.
6. Asked students to evaluate their own performance and, if appropriate, the performance of those in the fishbowl.
7. Had students outline their essays (claim and evidence).
8. Asked students to write the first draft of their essays and work in pairs to assess each other's essays, then revised.
9. Asked students to return to the academic notebook and provide a rationale for each piece of evidence they used to support their claim.

Unit 2

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SREB Readiness Courses
Transitioning to college and careers

Literacy Ready

History Unit 2

The Academic Notebook



Name

Unit 2

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Course Overview

Welcome! You are enrolled in the second history unit of the SREB Readiness Course-Literacy Ready. What does historical literacy mean? Historical literacy is the ability to read and determine meaning from historical sources whether they are primary, secondary or tertiary sources. In this course, you will take part in several activities to improving your historical literacy. While the content covered in this course is important, a principal purpose is to equip you with the tools necessary to be more successful in college coursework. To that end, the creators of the course have developed this academic notebook.

Purposes of the Academic Notebook

The academic notebook has two roles in this course. The first role of the notebook is to provide you with a personal space to record your work. The academic notebook is where you should record your thoughts about materials you are reading. For example, if you are hearing a lecture, take notes in this notebook. Use the tools in the notebook to assist you in organizing your notes.

The second role of the notebook is that of an assessment tool. Your instructor may periodically collect the notebooks and review your work to insure that you are remaining on task and to assist with any material that is causing difficulty. Your instructor may also assign tasks to be completed in the notebook, such as in-class writing assignments. At the end of this six-week unit, your instructor will review the contents of this notebook as part of your overall grade. Thus, it is important that you work seriously as this notebook becomes the (historical) record of your activity in this course.

Essential Questions

The following essential questions for the entire six-week unit should be used to guide your thinking when analyzing the materials presented in this class. When taking notes, come back to the questions and consider how the historical sources you are analyzing help to answer these questions. The first question is especially important as it represents the theme of the course. In the back of your mind, in every task you complete, you should consider this question. This is partly how historians work, and it is important for you to realize that up front. Historians, like all scientists, approach a problem and try to hypothesize a solution to the problem. Therefore, historians think thematically as they work through source material, which helps account for why two tertiary sources on the same topic may have two different perspectives on the event being studied.

Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? The Vietnam Conflict?

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

Lesson 1

Gateway Activity— The Meaning of Liberty

In this lesson, you will . . .

- Analyze a group of photographs depicting walls in various parts of the country.
- Interpret photographs using information about context and source in addition to their content.
- Explain how sourcing, contextualization and chronology are aspects of history reading.
- Begin to think about the liberty of nations and people other than those in the United States.

Activity

2 Analyze Photographs

As you look at the representations of the following “Walls,” answer the questions that follow for each slide.

Slide One: Berlin Wall

1. What is your overall impression of the subject matter? What is your background knowledge?

2. What activities are taking place in each quadrant of the photo(s)?

3. What inferences can you make from the photo(s)?

4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?

5. What more do you need to know about this slide?



Slide Two: West Bank Barrier

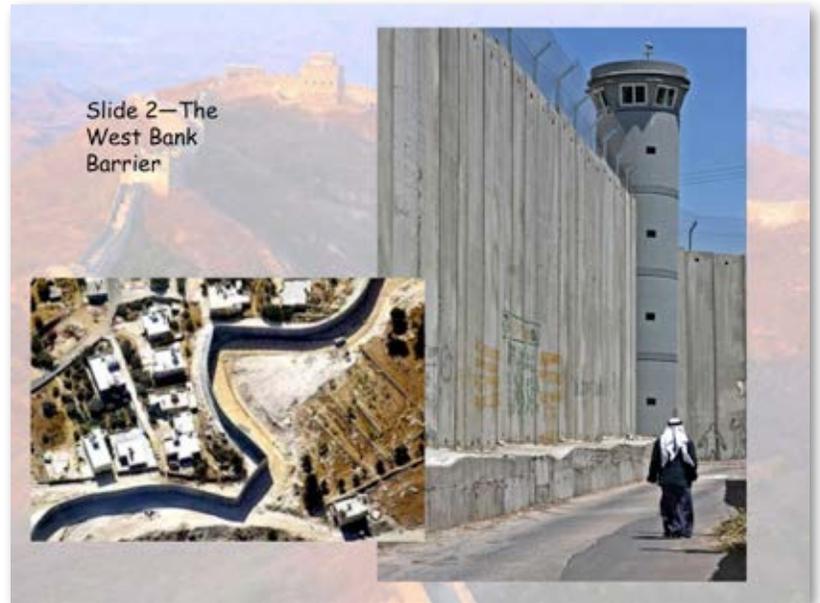
1. What is your overall impression of the subject matter? What is your background knowledge?

2. What activities are taking place in each quadrant of the photo(s)?

3. What inferences can you make from the photo(s)?

4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?

5. What more do you need to know about this slide?



Slide Three: Vietnam War Memorial

1. What is your overall impression of the subject matter? What is your background knowledge?

2. What activities are taking place in each quadrant of the photo(s)?

3. What inferences can you make from the photo(s)?

4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?

5. What more do you need to know about this slide?



Slide Four: Peace Walls in Northern Ireland

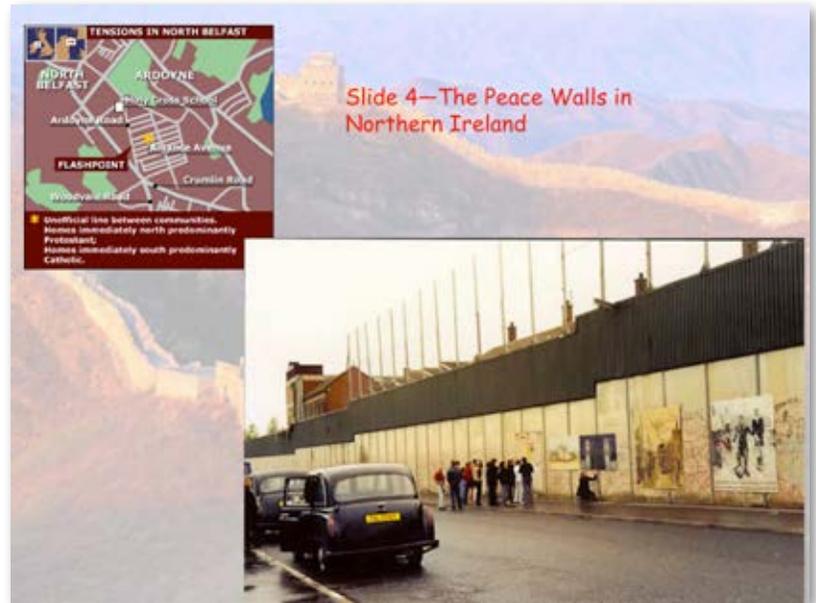
1. What is your overall impression of the subject matter? What is your background knowledge?

2. What activities are taking place in each quadrant of the photo(s)?

3. What inferences can you make from the photo(s)?

4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?

5. What more do you need to know about this slide?



Slide Five: U.S. Border Fence between the U.S. and Mexico

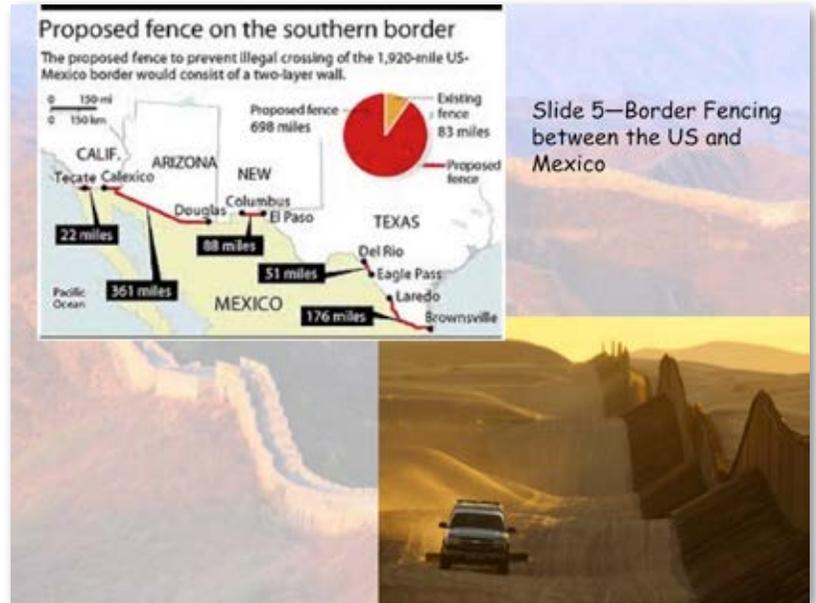
1. What is your overall impression of the subject matter? What is your background knowledge?

2. What activities are taking place in each quadrant of the photo(s)?

3. What inferences can you make from the photo(s)?

4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?

5. What more do you need to know about this slide?



Slide Six: Quarantine during Cuban Missile Crisis

1. What is your overall impression of the subject matter? What is your background knowledge?

2. What activities are taking place in each quadrant of the photo(s)?

3. What inferences can you make from the photo(s)?

4. Some “walls” bring us together. Some separate us. Some increase our liberty. Some decrease our liberty. What are the roles of photo(s) on this slide?

5. What more do you need to know about this slide?



Activity

3 Considering the Context

Read about each of these walls. As you do, consider two questions. First, does the context add to your initial impressions? Second, is the site trustworthy or biased? Be prepared to discuss your ideas.

1. **Berlin Wall:** “On August 13, 1961, the Communist government of the German Democratic Republic (GDR, or East Germany) began to build a barbed wire and concrete “Antifascistischer Schutzwall,” or “antifascist bulwark,” between East and West Berlin. The official purpose of this Berlin Wall was to keep Western “fascists” from entering East Germany and undermining the socialist state, but it primarily served the objective of stemming mass defections from East to West. The Berlin Wall stood until November 9, 1989, when the head of the East German Communist Party announced that citizens of the GDR could cross the border whenever they pleased. That night, ecstatic crowds swarmed the wall. Some crossed freely into West Berlin, while others brought hammers and picks and began to chip away at the wall itself. To this day, the Berlin Wall remains one of the most powerful and enduring symbols of the Cold War.”

(Retrieved from History.com at: <http://www.history.com/topics/berlin-wall>. Also available on this site are video, other pictures, and links to related topics.)

2. **West Bank Barrier:** This wall was constructed in 2002 after Israel’s evacuation of settlements in the Gaza strip. Most of its 420 miles is a concrete base with a five-meter high wire-and-mesh over-structure. Rolls of razor wire and a four-meter deep ditch are placed on one side. The structure also has electronic sensors on it and a “trace road” beside it, so that footprints of people crossing the barrier can be seen. Some of the wall is built to act as a “sniper wall to prevent gun attacks against Israeli motorists. The Israeli government says that it built the wall to keep suicide bombers out of Israel. Palestinians argue, among other things, that the wall causes economic and daily living hardship.

(Find more about this barrier from PBS at: http://www.pbs.org/newshour/indepth_coverage/middle_east/conflict/map_westbank.html and from the BBC at: http://news.bbc.co.uk/2/hi/middle_east/3111159.stm.)

3. **Vietnam Memorial:** The Vietnam Veterans Memorial Wall honors those who died in the Vietnam War. “The Vietnam Veterans Memorial was founded by Jan Scruggs, who served in Vietnam (in the 199th Light Infantry Brigade) from 1969-1970 as a infantry corporal. He wanted the memorial to acknowledge and recognize the service and sacrifice of all who served in Vietnam. The Vietnam Veterans Memorial Fund, Inc. (VVMF), a nonprofit charitable organization, was incorporated on April 27, 1979, by a group of Vietnam veterans... Jan Scruggs (President of VVMF) lobbied Congress for a two-acre plot of land in the Constitution Gardens... On July 1, 1980, in the Rose Garden, President Jimmy Carter signed the legislation (P.L. 96-297) to provide a site in Constitution Gardens near the Lincoln Memorial. It was a three and half year task to build the memorial and to orchestrate a celebration to salute those who served in Vietnam.”

(Retrieved from the Vietnam Veterans Memorial at: <http://thewall-usa.com>.)

- 4. Peace Walls in Northern Ireland:** These walls are built across Northern Ireland’s capital city of Belfast in an attempt to defuse tensions between the nationalist Catholic neighborhoods and the loyalist Protestant ones. Some of the walls date from the earliest years of “the Troubles,” (the conflict between the two sides beginning in the 1960s and substantially ending in 1998, although sporadic violence continues). Some walls have been built since the ceasefire of 1994. Now, various walls have openings in them called “peace gates” that are meant to foster greater cooperation and communication between communities.

(Information found at Wikipedia at: en.wikipedia.org/wiki/Peace_Walls.)
- 5. Border Fencing between U.S. and Mexico:** “The United States’ border with Mexico is nearly 2,000 miles long. Over that vast distance the protective barriers between the two countries vary greatly. It may be interesting to note that nowhere along the entire border has Mexico installed any barrier of its own. All the barriers between the countries have been paid for by the U.S. Taxpayer... The barrier systems along the border vary greatly. In the urban areas these barriers may be doubled to include a “Secondary” barrier with a “No Man’s Land” between. In some of the more violent areas populated by violent gangs or drug cartels, the barrier has been improved with a third obstacle—usually another fence.” Approximately 345 miles of border fencing was constructed between 2008 and 2009.

(Information retrieved from US Border Patrol at: www.usborderpatrol.com/Border_Patrol1301.htm.)
- 6. The Quarantine of Cuba during the Missile Crisis:** “During the Cuban Missile Crisis, leaders of the U.S. and the Soviet Union engaged in a tense, 13-day political and military standoff in October 1962 over the installation of nuclear-armed Soviet missiles on Cuba, just 90 miles from U.S. shores. In a TV address on October 22, 1962, President John Kennedy (1917-63) notified Americans about the presence of the missiles, explained his decision to enact a naval blockade around Cuba and made it clear the U.S. was prepared to use military force if necessary to neutralize this perceived threat to national security. Following this news, many people feared the world was on the brink of nuclear war. However, disaster was avoided when the U.S. agreed to Soviet leader Nikita Khrushchev’s (1894-1971) offer to remove the Cuban missiles in exchange for the U.S. promising not to invade Cuba. Kennedy also secretly agreed to remove U.S. missiles from Turkey.”

(Retrieved from History.com at: www.history.com/topics/cuban-missile-crisis.)

Activity

5 Considering the Vocabulary of Historians

Define each of the following terms. Explain how you used each of them in this lesson and why historians use them (i.e., what they help historians think about).

Sourcing

Contextualization

Primary Sources

Lesson 2

Analysis of Primary Documents: Cuban Missile Crisis

In this lesson, you will . . .

- Analyze a political cartoon, a photograph and two quotes from Nikita Khrushchev in order to better understand the context of the Cold War and the Cuban Missile Crisis.
- Speculate about the concept of liberty during the Cuban Missile Crisis.

These activities should pique your interest in the Cuban Missile Crisis!

Activity

2 Analyzing the Documents

1. Analyze the photograph below using the technique suggested by the National Archives and Records Administration.



“We will bury you”

Picture taken sometime in autumn, 1960. Nikita Khrushchev addresses the United Nations.

Photo Analysis Worksheet

Complete the information on the worksheet for your assigned photograph.

Step 1. Observation

- A. Study the photograph for two minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.
- B. Use the chart below to list people, objects and activities in the photograph.

| People | Objects | Activities |
|--------|---------|------------|
| | | |
| | | |
| | | |
| | | |
| | | |

Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

Step 3. Questions

- A. What questions does this photograph raise in your mind?

- B. Where could you find answers to them?

Designed and developed by the Education Staff, National Archives and Records Administration, Washington, DC 20408. Modified by J. Barger 9-9-12.

2. Analyze the political cartoon by answering the questions after it.

Welsh-born cartoonist Leslie Gilbert Illingworth drew the famous cartoon of John F. Kennedy and Soviet Premier Nikita Khrushchev arm wrestling while sitting on hydrogen bombs. It appeared in the October 29, 1962 edition of the British newspaper *The Daily Mail*.



“OK Mr. President, let’s talk”

Cartoon retrieved from Multimedia Learning at:

<http://multimedialearningllc.wordpress.com/2010/05/02/kennedy-versus-khrushchev-cold-war-political-cartoon/>

A. Describe the items, people and actions in the cartoon.

B. What technique is being used in this cartoon? (Refer to the list of techniques in the document below.)

C. What does the arm wrestling tell you about the relationship between Khrushchev and JFK?

D. What is the meaning of the cartoon?

Political Cartoon Analysis Guide

| | |
|---------------------|---|
| Symbolism | Cartoonists use simple objects, or symbols , to stand for larger concepts or ideas. After you identify the symbols in a cartoon, think about what the cartoonist means each symbol to stand for. |
| Exaggeration | Sometimes cartoonists overdo, or exaggerate , the physical characteristics of people or things in order to make a point. When you study a cartoon, look for any characteristics that seem overdone or overblown. (Facial characteristics and clothing are some of the most commonly exaggerated characteristics.) Then, try to decide what point the cartoonist was trying to make by exaggerating them. |
| Labeling | Cartoonists often label objects or people to make it clear exactly what they stand for. Watch out for the different labels that appear in a cartoon, and ask yourself why the cartoonist chose to label that particular person or object. Does the label make the meaning of the object clearer? |
| Analogy | An analogy is a comparison between two unlike things. By comparing a complex issue or situation with a more familiar one, cartoonists can help their readers see it in a different light. After you've studied a cartoon for a while, try to decide what the cartoon's main analogy is. What two situations does the cartoon compare? Once you understand the main analogy, decide if this comparison makes the cartoonist's point clearer to you. |
| Irony | Irony is the difference between the ways things are and the way things should be, or the way things are expected to be. Cartoonists often use irony to express their opinion on an issue. When you look at a cartoon, see if you can find any irony in the situation the cartoon depicts. If you can, think about what point the irony might be intended to emphasize. Does the irony help the cartoonist express his or her opinion more effectively? |

3. Analyze the two quotes, answering the questions that follow.

“If you don’t like us, don’t accept our invitations and don’t invite us to come to see you. Whether you like it or not, history is on our side. We will bury you.”

Nikita Khrushchev, November 18, 1956

“America has been in existence for 150 years and this is the level she has reached. We have existed not quite 42 years and in another seven years we will be on the same level as America. When we catch you up, in passing you by, we will wave to you.”

Nikita Khrushchev, July 24, 1959

You can read more about Nikita Khrushchev at this URL:

<http://www.historyinanehour.com/2011/10/31/khrushchev-and-destalinization-summary/>

A. What factual information is contained in the quotes?

B. What can you infer from the quotes?

C. What is the tone of the speaker? What does this tone say about the relationship between America and Russia?

Activity

4 Considering Vocabulary

The following words were introduced in the last lesson. Can you still remember their meanings? How did you use these in the lessons today?

Sourcing

Contextualization

Primary Sources

Lesson 3

Taking Notes from a Lecture

In this lesson, you will . . .

- Demonstrate your understanding of a lecture through your lecture notes, using a modified Cornell Method of note-taking.
- Show your understanding of vocabulary words through the definitions you write and your talk-throughs.

Activity

1 The Modified Cornell Method of Note-taking

As you listen to the lecture, you will be thinking of answers to the following questions:

- a. What were the sources of tension between the U.S. and the U.S.S.R prior to the Cuban Missile Crisis?
- b. Was the policy towards the USSR prior to the Cuban Missile Crisis a reasonable reaction to Soviet threat or an overreaction?
- c. What was the impact of the early Cold War on “liberty” domestically and abroad?

You will also be taking notes using a Modified Cornell Method with the format shown on the next page. Line your paper ahead of time so that you will not have to waste time as you are listening to the lecture.

Directions:

- Write on one side of the page only. Later, you will fill in the other side with notes from reading.
- Do not copy word-for-word—paraphrase.
- Shorten what you write by using abbreviations.

| | | |
|----------|-------|--------|
| Name: | Date: | Topic: |
| | | |
| Summary: | | |

Activity

2 Taking Notes on a PowerPoint

Take notes on the PowerPoint presented in class. Remember to pay attention to the following:

- Relationships among events—chronology, causation, etc.
- Frameworks of interpretation—political, geographical, religious, social, economic, etc. (G-Sprite).
- Actors—what individuals or groups are engaging in actions aimed at meeting goals?
- Actions—what are the actors doing? What tactics or methods are they using?
- Characteristics—of actions, actors, policies, movements, events.
- Motivations—the goals that lead the actors towards action.
- Comparison and Contrasts of interpretations of cause/effect, motivations, characteristics, etc.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts, and words that signal relationships among events.
- Claims made by the lecturer and evidence to back up claims.

When you are finished taking notes, work with a partner to compare them. Revise, if necessary. Discuss your answers to the questions that guided your reading.

- a. What were the sources of tension between the U.S. and the U.S.S.R prior to the Cuban Missile Crisis?
- b. Was the policy towards the USSR prior to the Cuban Missile Crisis a reasonable reaction to Soviet threat or an overreaction?
- c. What was the impact of the early Cold War on “Liberty” domestically and abroad?

Also, determine answers to the following questions. Make sure that you have reasons from the lecture for your answers.

- 1. Do you think there were political reasons why the Yalta and Potsdam Conferences were where they were? What had happened in the time between the two conferences?

- 2. What do you think the effect of Churchill’s “Iron Curtain” speech had on the world? Would things have been different if he had not made the speech?

- 3. Choose the most important word in the following quote from the Truman Doctrine. Explain to a partner why you thought this word was most important.

The U.S. should support free peoples throughout the world who were resisting takeovers by armed minorities or outside pressures... We must assist free peoples to work out their own destinies in their own way.”

Put that word on a chart in the room. After everyone has finished, look at the words on the chart and pick the two most important words that go together. Explain to your partner why you picked both of these words.

First word: _____

Second word: _____

Activity

3 Vocabulary

Did you have difficulty with any of the following words (unsure of their meanings even after working with your partner)? If so, use available resources to find out their meanings in the context of the lecture. Complete the activity provided after the list of words for each word you do not know.

| Word | Context |
|---------------------------------------|---|
| domestically abroad | What was the impact of the early Cold War on Liberty domestically and abroad ? |
| tribunals reparations | Agreements—to govern Germany jointly, Zones of Occupation, War Crimes Tribunals, Reparations |
| superpowers | How would these issues continue to be sources of tension between the superpowers ? |
| appeasement | Was Yalta an example of appeasement of a dictator, or was it the best deal FDR believed he could get? |
| embarked | It does not mean that they should be considered as embarked upon a do-or-die program to overthrow our society |
| command economy capitalist economy | Ideological competition for the minds and hearts of Third World peoples (Communist govt. & command economy vs. democratic govt. & capitalist economy) |
| bi-polarization | Bi-Polarization of Europe (NATO vs. Warsaw Pact) |

| Word: | Rate my understanding + or - |
|---|------------------------------|
| Context (write the phrase or sentence where you found this word, including page number): | |
| | |
| Dictionary definition (pay attention to context and choose the one best definition): | |
| | |
| What does that mean? (Put the definition in your own words.) | |
| | |
| Write a synonym: | |
| | |
| Write an antonym: | |
| | |
| If the word is an adjective or adverb, put the word on a continuum (put an x along the line where you think it lies between each of the opposites) compared to its synonym, then compared to its antonym: | |
| Slow | Fast |
| Negative | Positive |
| Weak | Strong |

| | |
|---|-------------------------------------|
| Word: | Rate my understanding + or - |
| Context (write the phrase or sentence where you found this word, including page number): | |
| | |
| Dictionary definition (pay attention to context and choose the one best definition): | |
| | |
| What does that mean? (Put the definition in your own words.) | |
| | |
| Write a synonym: | |
| | |
| Write an antonym: | |
| | |
| If the word is an adjective or adverb, put the word on a continuum (put an x along the line where you think it lies between each of the opposites) compared to its synonym, then compared to its antonym: | |
| Slow _____ Fast | |
| Negative _____ Positive | |
| Weak _____ Strong | |
| Word: | Rate my understanding + or - |
| Context (write the phrase or sentence where you found this word, including page number): | |
| | |
| Dictionary definition (pay attention to context and choose the one best definition): | |
| | |
| What does that mean? (Put the definition in your own words.) | |
| | |
| Write a synonym: | |
| | |
| Write an antonym: | |
| | |
| If the word is an adjective or adverb, put the word on a continuum (put an x along the line where you think it lies between each of the opposites) compared to its synonym, then compared to its antonym: | |
| Slow _____ Fast | |
| Negative _____ Positive | |
| Weak _____ Strong | |

| | |
|---|-------------------------------------|
| Word: | Rate my understanding + or - |
| Context (write the phrase or sentence where you found this word, including page number): | |
| | |
| Dictionary definition (pay attention to context and choose the one best definition): | |
| | |
| What does that mean? (Put the definition in your own words.) | |
| | |
| Write a synonym: | |
| | |
| Write an antonym: | |
| | |
| If the word is an adjective or adverb, put the word on a continuum (put an x along the line where you think it lies between each of the opposites) compared to its synonym, then compared to its antonym: | |
| Slow ————— Fast | |
| Negative ————— Positive | |
| Weak ————— Strong | |

| | |
|---|-------------------------------------|
| Word: | Rate my understanding + or - |
| Context (write the phrase or sentence where you found this word, including page number): | |
| | |
| Dictionary definition (pay attention to context and choose the one best definition): | |
| | |
| What does that mean? (Put the definition in your own words.) | |
| | |
| Write a synonym: | |
| | |
| Write an antonym: | |
| | |
| If the word is an adjective or adverb, put the word on a continuum (put an x along the line where you think it lies between each of the opposites) compared to its synonym, then compared to its antonym: | |
| Slow ————— Fast | |
| Negative ————— Positive | |
| Weak ————— Strong | |

Use the following terms to talk-through what you have learned from the lecture. That is, with a partner, explain what the lecture said about each of these terms.

Events

- Cold War
- Yalta Conference
- Potsdam Conference
- Bay of Pigs Invasion
- Berlin Wall
- Cuban Missile Crisis
- Iron Curtain Speech
- U.S. aid to Greece and Turkey
- Berlin Airlift and the “Easter Parade”
- Korean War
- Sputnik

Places

- United States
- Soviet Union – USSR
- Berlin
- Czechoslovakia
- Postwar Germany
- Poland
- China

Other Academic Vocabulary:

- domestically
- abroad
- tribunals
- reparations
- superpowers
- appeasement
- embarked
- command economy
- capitalist economy

People

- Churchill
- Truman
- Clement Atlee
- Stalin
- Che Guevara
- George Kennan
- Fidel Castro
- Leonid Brezhnev
- Francis Gary Powers

Policies/Doctrines

- The Truman Doctrine
- Policy of Containment
- The Marshall Plan
- Sino-Soviet Pact
- The Domino Theory

Organizations

- Communism
- NATO
- NASA

Lesson 4

Annotating a Chapter— Cuban Missile Crisis

In this lesson, you will . . .

- Demonstrate your ability to engage in close reading.
- Show through your annotations that they are identifying historically important information about the Cuban Missile Crisis from reading.
- Increase your understanding of vocabulary.
- Combine information from lecture and text in order to show your understanding of the events, causes, and effects of the Cuban Missile Crisis.
- Reflect on the relationship between what they are reading and the theme/essential question.

Activity

2 Analyzing History Texts

Use the following to help you determine what kinds of information you should annotate:

G-SPRITE

Geography: (*human interactions with the environment*) includes the physical location of civilizations, how geographical features influence people, how people adapted to the geographical features, demography and disease, migration, patterns of settlement.

Social: includes living conditions, gender roles and relations, leisure time, family and kinship, morals, racial & ethnic constructions, social & economic classes - and ways these are changing or being challenged.

Political: includes political structures and forms of governance, laws, tax policies, revolts and revolutions, military issues, nationalism.

Religious: includes belief systems, religious scriptures, the church/religious body, religious leaders, the role of religion in this society, impact of any religious divisions/sects within the society.

Intellectual: includes thinkers, philosophies and ideologies, scientific concepts, education, literature, music, art & architecture, drama/plays, clothing styles, - and how these products reflect the surrounding events.

Technological: (*anything that makes life easier*) includes inventions, machines, tools, weapons, communication tools, infrastructure (e.g., roads, irrigation systems) and how these advances changed the social and economic patterns.

Economic: includes agricultural and pastoral production, money, taxes, trade and commerce, labor systems, guilds, capitalism, industrialization and how the economic decisions of leaders affected the society.

When you annotate, also pay attention to:

- Relationships among events—chronology, causation.
- Actors—who (individuals or groups) is engaging in actions aimed at meeting goals.
- Actions—what the actors (are) doing, the tactics or methods they are using.
- Characteristics—of actions, actors, policies, movements, events.
- Motivations—the goals that lead the actors towards action.
- Comparison and Contrast—of interpretations of cause/effect, motivations, characteristics, etc.
- Claims of the authors and evidence to support claims.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts and words that signal relationships among events.

Activity

3 Annotating the Text

After annotating, complete the following Annotation Evaluation for History.

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source
- 2. Information that signaled
 - a. Cause/effect
 - b. Comparison contrast
 - c. chronology (words signaling time)
 - d. Bias or judgment
 - e. discipline-specific information and vocabulary
 - Other _____
- 3. Unknown general academic vocabulary
- 4. Key actors, actions, goals, and tactics, etc.
- 5. Political, social, economic, legal, or other characterizations of information
- 6. Marginal notations that show
 - a. summarizing
 - b. inferencing
 - c. reacting
 - d. connecting to other information
 - e. graphic or pictorial representations of information (e.g. cause-effect chains, time lines)

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

Activity

4 After-reading Discussion and Vocabulary

Discuss what you have read with your class.

Using the following discipline specific terms, talk-through what you have learned through your reading.

Organizations

- CIA
- Joint Chiefs of Staff
- National Security Council

Events

- blockade or *quarantine*
- hotline
- Bay of Pigs debacle

Documents

- Test Ban Treaty

People

- Nikita Khrushchev
- President Kennedy
- Fidel Castro

Places

- Bay of Pigs
- Berlin
- Turkey

Activity

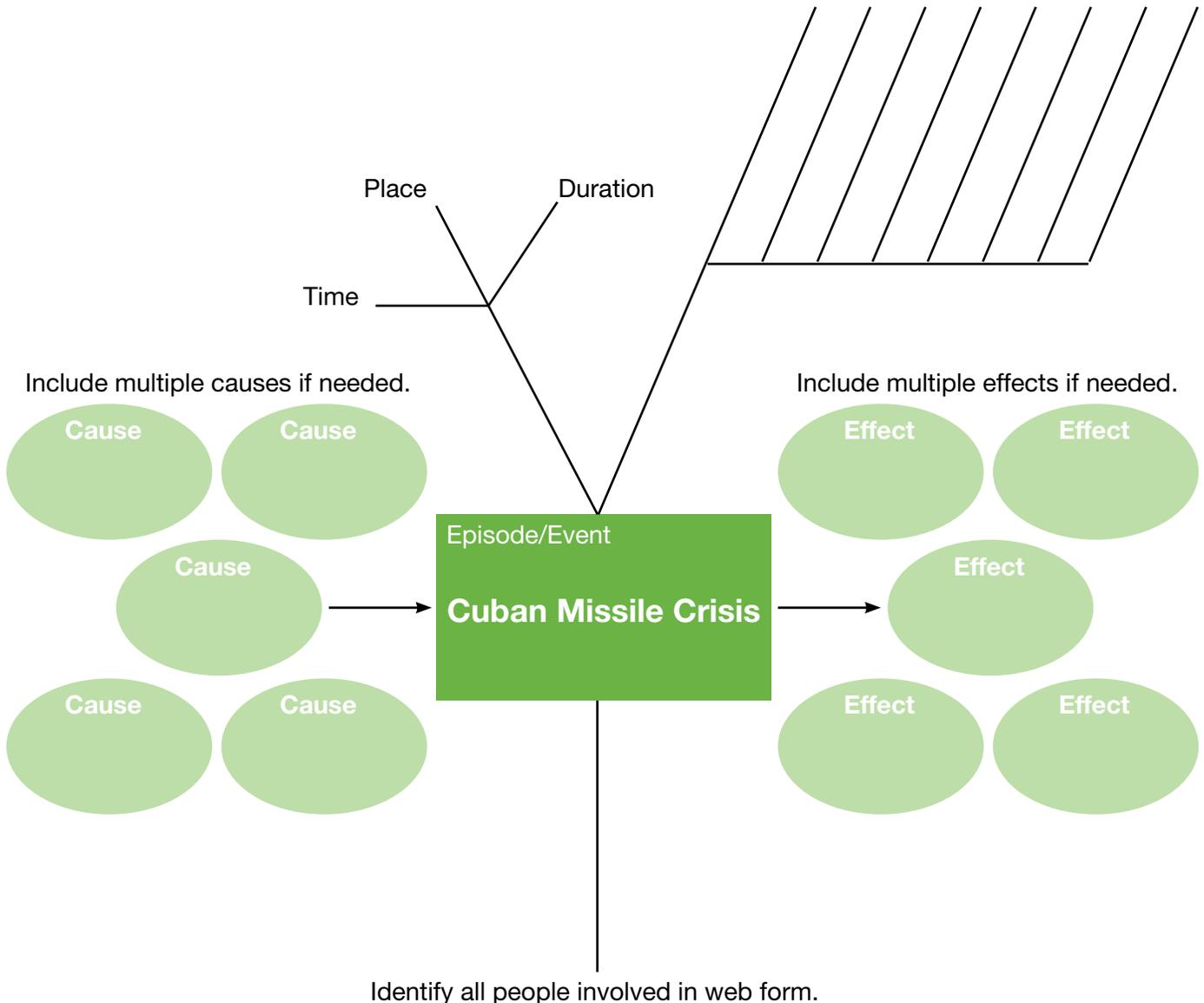
5 Combining Lecture and Text

1. Take out the Cornell notes you took on the Cold War lecture. Add what you learned from reading the text. Then, write a summary of the information at the bottom of each page. (Your summary should include major points only.)
2. Use your notes to complete the following Pattern Organizer.

Name _____

Episode Pattern Organizer for the Cuban Missile Crisis

Identify the sequence of events – in order related to the episode and the cause/effect.



Lesson 5

Reading Primary Documents

In this lesson, you will . . .

- Use SOAPStone to help you analyze documents.
- Engage in close reading of primary documents.
- Compare and contrast documents.
- Understand meanings of vocabulary found in the documents.

Activity

1 Orientation to the Task

1. Review SOAPStone.

SOAPStone Document Analysis Method

SOAPStone was developed by College Board (the Advanced Placement folks) and is a method for examining and interpreting a document. Often documents contain complex language or symbolism, which makes determining the meaning and significance of the document more difficult. Utilization of this method will help in unwrapping the meaning of the document.

Speaker – who is the author (speaker) of this piece? Do you know anything about the person's background? For example, is the person a public figure with a known agenda or title? A speech from a president would have different implications than that of a minister or on looker.

Occasion – what is the time and place of the document? What was going on at the time that prompted the person to write this piece?

Audience – to whom is this piece directed? What kind of document is this – newspaper article, speech, diary entry, letter, etc.? Was it an editorial piece in a local newspaper? Can any assumptions be made about the audience? Do you know why the document was created? What kind of language does the document contain?

Purpose – what was the purpose or meaning behind the text? Is the speaker trying to provoke some reaction from the audience? How does s/he try to accomplish this?

Subject – what is the subject of the document? What is the general topic or idea of the piece?

Tone – what is the attitude of the speaker based on the content of the piece? Does s/he use humor, sarcasm, irony, fear or an objective tone? Is there any bias to what s/he is saying?

Make sure to include enough information in your analysis of the document, not just two or three word descriptions. For example, if the speaker has a title or is an official or has a known profession, be sure to include that as part of the 'speaker' description.

Activity

2 Using SOAPStone to Source and Contextualize Documents

The teacher may lead an exercise using SOAPStone on a portion of the first document with your entire class. Either record the information from the class in the first chart below or use SOAPStone on your own with the first document.

Before reading the full documents that follow, use SOAPStone to analyze the source and context of the second and third document. Fill out the second and third chart below.

| | |
|---|--|
| Title of Document 1: | |
| S peaker (Who) | |
| O ccasion (time, place, events) | |
| A udience (To whom is this piece directed?) | |
| P urpose (What is the author trying to achieve?) | |
| S ubject (What is the document about?) | |
| T one (What is the attitude of the speaker) | |

Title of Document 2:

Speaker (Who)

Occasion (time, place, events)

Audience (To whom is this piece directed?)

Purpose (What is the author trying to achieve?)

Subject (What is the document about?)

Tone (What is the attitude of the speaker)

Title of Document 3:

Speaker (Who)

Occasion (time, place, events)

Audience (To whom is this piece directed?)

Purpose (What is the author trying to achieve?)

Subject (What is the document about?)

Tone (What is the attitude of the speaker)

Activity

3 Reading the Documents

Read and annotate the documents to better understand and compare/contrast the perceptions in Russia and the U.S. about the Cuban Missile Crisis.

Also, remember what you have learned about annotation from previous lessons. After you read, complete the comparison/contrast chart that follows.

Document 1:

Retrieved from Library of Congress at: <http://www.loc.gov/exhibits/archives/x2jfk.html>.

Dear Mr. President,

Imagine, Mr. President, what if we were to present to you such an ultimatum as you have presented to us by your actions. How would you react to it? I think you would be outraged at such a move on our part. And this we would understand.

Having presented these conditions to us, Mr. President, you have thrown down the gauntlet. Who asked you to do this? By what right have you done this? Our ties with the Republic of Cuba, as well as our relations with other nations, regardless of their political system, concern only the two countries between which these relations exist. And, if it were a matter of quarantine as mentioned in your letter, then, as is customary in international practice, it can be established only by states agreeing between themselves, and not by some third party. Quarantines exist, for example, on agricultural goods and products. However, in this case we are not talking about quarantines, but rather about much more serious matters, and you yourself understand this.

You, Mr. President, are not declaring quarantine, but rather issuing an ultimatum, and you are threatening that if we do not obey your orders, you will then use force. Think about what you are saying! And you want to persuade me to agree to this! What does it mean to agree to these demands? It would mean for us to conduct our relations with other countries not by reason, but by yielding to tyranny. You are not appealing to reason; you want to intimidate us. No, Mr. President, I cannot agree to this, and I think that deep inside, you will admit that I am right. I am convinced that if you were in my place you would do the same.

.... This Organization [of American States] has no authority or grounds whatsoever to pass resolutions like those of which you speak in your letter. Therefore, we do not accept these resolutions. International law exists; generally accepted standards of conduct exist. We firmly adhere to the principles of international law and strictly observe the standards regulating navigation on the open sea, in international waters. We observe these standards and enjoy the rights recognized by all nations.

You want to force us to renounce the rights enjoyed by every sovereign state; you are attempting to legislate questions of international law; you are violating the generally accepted standards of this law. All this is due not only to hatred for the Cuban people and their government, but also for reasons having

to do with the election campaign in the USA. What morals, what laws can justify such an approach by the American government to international affairs? Such morals and laws are not to be found, because the actions of the USA in relation to Cuba are outright piracy.

This, if you will, is the madness of a degenerating imperialism. Unfortunately, people of all nations, and not least the American people themselves, could suffer heavily from madness such as this, since with the appearance of modern types of weapons, the USA has completely lost its former inaccessibility.

Therefore, Mr. President, if you weigh the present situation with a cool head without giving way to passion, you will understand that the Soviet Union cannot afford not to decline the despotic demands of the USA. When you lay conditions such as these before us, try to put yourself in our situation and consider how the USA would react to such conditions. I have no doubt that if anyone attempted to dictate similar conditions to you—the USA, you would reject such an attempt. And we likewise say—no.

The Soviet government considers the violation of the freedom of navigation in international waters and air space to constitute an act of aggression propelling humankind into the abyss of a world nuclear-missile war. Therefore, the Soviet government cannot instruct captains of Soviet ships bound for Cuba to observe orders of American naval forces blockading this island. Our instructions to Soviet sailors are to observe strictly the generally accepted standards of navigation in international waters and not retreat one step from them. And, if the American side violates these rights, it must be aware of the responsibility it will bear for this act. To be sure, we will not remain mere observers of pirate actions by American ships in the open sea. We will then be forced on our part to take those measures we deem necessary and sufficient to defend our rights. To this end we have all that is necessary.

Respectfully,

/s/ N. Khrushchev
N. KHRUSHCHEV

Document 2:

Moscow 24 October 1962

This letter and the one that follows come from the Library of Congress, “Revelations from the Russian Archives,” found at: <http://www.loc.gov/exhibits/archives/colc.html>.

Transcription:

TOP SECRET

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Copy No. 1

CIPHERED TELEGRAM

Late tonight R. Kennedy invited me to come see him. We talked alone.

The Cuban crisis, R. Kennedy began, continues to quickly worsen. We have just received a report that an unarmed American plane was shot down while carrying out a reconnaissance flight over Cuba. The military is demanding that the President arm such planes and respond to fire with fire. The USA government will have to do this.

I interrupted R. Kennedy and asked him what right American planes had to fly over Cuba at all, crudely violating its sovereignty and accepted international norms? How would the USA have reacted if foreign planes appeared over its territory?

“We have a resolution of the Organization of American states that gives us the right to such overflights,” R. Kennedy quickly replied.

I told him that the Soviet Union, like all peace-loving countries, resolutely rejects such a “right” or, to be more exact, this kind of true lawlessness, when people who don’t like the social-political situation in a country try to impose their will on it—a small state where the people themselves established and maintained (their system). “The OAS resolution is a direct violation of the UN Charter,” I added, “and you, as the Attorney General of the USA, the highest American legal entity, should certainly know that.”

R. Kennedy said that he realized that we had different approaches to these problems and it was not likely that we could convince each other. But now the matter is not in these differences, since time is of the essence. “I want,” R. Kennedy stressed, “to lay out the current alarming situation the way the president sees it. He wants N. S. Khrushchev to know this. This is the thrust of the situation now.”

“Because of the plane that was shot down, there is now strong pressure on the president to give an order to respond with fire if fired upon when American reconnaissance planes are flying over Cuba. The USA can’t stop these flights, because this is the only way we can quickly get information about the state of construction of the missile bases in Cuba, which we believe pose a very serious threat to our national security. But as we start to fire in response—a chain reaction will quickly start that will be very

hard to stop. The same thing in regard to the essence of the issue of the missile bases in Cuba. The USA government is determined to get rid of those bases—up to, in the extreme case, bombing them, since, I repeat, they pose a great threat to the security of the USA. But in response to the bombing of these bases, in the course of which Soviet specialists might suffer, the Soviet government will undoubtedly respond with the same against us, somewhere in Europe. A real war will begin, in which millions of Americans and Russians will die. We want to avoid that any way we can; I'm sure that the government of the USSR has the same wish. However, taking time to find a way out [of the situation] is very risky (here R. Kennedy mentioned as if in passing that there are many unreasonable heads among the generals, and not only among the generals, who are "itching for a fight"). The situation might get out of control, with irreversible consequences."

"In this regard," R. Kennedy said, "the president considers that a suitable basis for regulating the entire Cuban conflict might be the letter N. S. Khrushchev sent on October 26 and the letter in response from the President, which was sent off today to N. S. Khrushchev through the US Embassy in Moscow. The most important thing for us," R. Kennedy stressed, "is to get as soon as possible the agreement of the Soviet government to halt further work on the construction of the missile bases in Cuba and take measures under international control that would make it impossible to use these weapons. In exchange the government of the USA is ready, in addition to repealing all measures on the 'quarantine' to give the assurances that there will not be any invasion of Cuba and that other countries of the Western Hemisphere are ready to give the same assurances—the US government is certain of this."

"And what about Turkey?" I asked R. Kennedy.

"If that is the only obstacle to achieving the regulation I mentioned earlier, then the president doesn't see any insurmountable difficulties in resolving this issue," replied R. Kennedy. "The greatest difficulty for the president is the public discussion of the issue of Turkey. Formally the deployment of missile bases in Turkey was done by a special decision of the NATO Council. To announce now a unilateral decision by the president of the USA to withdraw missile bases from Turkey—this would damage the entire structure of NATO and the US position as the leader of NATO, where, as the Soviet government knows very well, there are many arguments. In short, if such a decision were announced now it would seriously tear apart NATO."

"However, President Kennedy is ready to come to agreement on that question with N. S. Khrushchev, too. I think that in order to withdraw these bases from Turkey," R. Kennedy said, "we need 4-5 months. This is the minimum amount of time necessary for the US government to do this, taking into account the procedures that exist within the NATO framework. On the whole Turkey issue," R. Kennedy added, "If Premier N.s. Khrushchev agrees with what I've said, we can continue to exchange opinions between him and the president, using him, R. Kennedy and the Soviet ambassador. However, the president can't say anything public in this regard about Turkey," R. Kennedy said again. R. Kennedy then warned that his comments about Turkey are extremely confidential; besides him and his brother, only 2-3 people know about it in Washington.

“That’s all that he asked me to pass on the N. S. Khrushchev,” R. Kennedy said in conclusion. “The president also asked N. S. Khrushchev to give him an answer (through the Soviet ambassador and R. Kennedy) if possible within the next day (Sunday) on these thoughts in order to have a business-like, clear answer in principle. [He asked him] not to get into a wordy discussion, which might drag things out. The current serious situation, unfortunately, is such that there is very little time to resolve this whole issue. Unfortunately, events are developing too quickly. The request for a reply tomorrow,” stressed R. Kennedy, “is just that—a request, and not an ultimatum. The president hopes that the head of the Soviet government will understand him correctly.”

I noted that it went without saying that the Soviet government would not accept any ultimatums and it was good that the American government realized that. I also reminded him of N.S. Khrushchev’s appeal in his last letter to the president to demonstrate state wisdom in resolving this question. Then I told R. Kennedy that the president’s thoughts would be brought to the attention of the head of the Soviet government. I also said that I would contact him as soon as there was a reply. In this regard, R. Kennedy gave me the number of a direct telephone line to the White House.

In the course of the conversation, R. Kennedy noted that he knew about the conversation that television commentator Scali had yesterday with an Embassy advisor on possible ways to regulate the Cuban conflict [one-and-a-half lines whited out].

I should say that during our meeting R. Kennedy was very upset; in any case, I’ve never seen him like this before. True, about twice he tried to return to the topic of “deception,” (that he talked about so persistently during our previous meeting), but he did so in passing and without any edge to it. He didn’t even try to get into fights on various subjects, as he usually does, and only persistently returned to one topic: time is of the essence and we shouldn’t miss the chance.

After meeting with me he immediately went to see the president, with whom, as R. Kennedy said, he spends almost all his time now.

27/X-62 A. DOBRYNIN

*[Source: Russian Foreign Ministry archives, translation from copy provided by NHK, in Richard Ned Lebow and Janice Gross Stein, *We All Lost the Cold War* (Princeton, NJ: Princeton University Press, 1994). Appendix, pp. 523-526; also printed in the Cold War International History Project Bulletin No. 5 with minor revisions.]*

Document 3:

Transcript of letter from Kennedy to Secretary of State recounting same conversation as above.

Office of the Attorney General
Washington, D. C.
October 30, 1962

MEMORANDUM FOR THE SECRETARY OF STATE FROM THE ATTORNEY GENERAL

At the request of Secretary Rusk, I telephoned Ambassador Dobrynin at approximately 7:15 p.m. on Saturday, October 27th. I asked him if he would come to the justice Department at a quarter of eight.

We met in my office. I told him first that we understood that the work was continuing on the Soviet missile bases in Cuba. Further, I explained to him that in the last two hours we had found that our planes flying over Cuba had been fired upon and that one of our U-2's had been shot down and the pilot killed. I said these men were flying unarmed planes.

I told him that this was an extremely serious turn in events. We would have to make certain decisions within the next 12 or possibly 24 hours. There was a very little time left. If the Cubans were shooting at our planes, then we were going to shoot back. This could not help but bring on further incidents and that he had better understand the full implications of this matter.

He raised the point that the argument the Cubans were making was that we were violating Cuban air space. I replied that if we had not been violating Cuban air space then we would still be believing what he and Khrushchev had said (word crossed out)—that there were no long-range missiles in Cuba. In any case I said that this matter was far more serious than the air space over Cuba and involved peoples all over the world.

I said that he had better understand the situation and he had better communicate that understanding to Mr. Khrushchev. Mr. Khrushchev and he had misled us. The Soviet Union had secretly established missile bases in Cuba while at the same time proclaiming, privately and publicly, that this would never be done. I said those missile bases had to go and they had to go right away. We had to have a commitment by at least tomorrow that those bases would be removed. This was not an ultimatum, I said, but just a statement of fact. He should understand that if they did not remove those bases then we would remove them. His country might take retaliatory action but he should understand that before this was over, while there might be dead Americans there would also be dead Russians.

He asked me then what offer we were making. I said a letter had just been transmitted to the Soviet Embassy, which stated in substance that the missile bases should be dismantled and all offensive weapons should be removed from Cuba. In return, if Cuba and Castro and the Communists ended their subversive activities in other Central and Latin-American countries, we would agree to keep peace in the Caribbean and not permit an invasion from American soil.

He then asked me about Khrushchev's other proposal dealing with the removal of the missiles from Turkey. I replied that there could be no quid pro quo—no deal of this kind could be made. This was a matter that had to be considered by NATO and that it was up to NATO to make the decision. I said it was completely impossible for NATO to take such a step under the present threatening position of the Soviet Union. If some time elapsed—and per your instructions, I mentioned four or five months—I said I was sure that these matters could be resolved satisfactorily.

Per your instructions I repeated that there could be no deal of any kind and that any steps toward easing tensions in other parts of the world largely depended on the Soviet Union and Mr. Khrushchev taking action in Cuba and taking it immediately.

I repeated to him that this matter could not wait and that he had better contact Mr. Khrushchev and have a commitment from him by the next day to withdraw the missile bases under United Nations supervision or otherwise, I said, there would be drastic consequences.

RFK: amn

| Khrushchev to Kennedy | | |
|--|--------|------------------------|
| | Answer | Evidence from the text |
| What argument was made about U.S. interference in Cuba (quarantine/ reconnaissance flights)? | | |
| How willing was the USSR and the US to engage in battle (first and last document)? | | |
| What did R. Kennedy offer regarding Turkey (last two documents)? | | |
| What do these documents say about U.S. conceptions of liberty? | | |

| Dobrynin to Foreign Ministry | | |
|---|---------------|-------------------------------|
| | Answer | Evidence from the text |
| What argument was made about U.S. interference in Cuba (quarantine/reconnaissance flights)? | | |
| How willing was the USSR and the US to engage in battle (first and last document)? | | |
| What did R. Kennedy offer regarding Turkey (last two documents)? | | |
| What do these documents say about U.S. conceptions of liberty? | | |

| R. Kennedy to Rusk | | |
|--|---------------|-------------------------------|
| | Answer | Evidence from the text |
| What argument was made about U.S. interference in Cuba (quarantine/ reconnaissance flights)? | | |
| How willing was the USSR and the US to engage in battle (first and last document)? | | |
| What did R. Kennedy offer regarding Turkey (last two documents)? | | |
| What do these documents say about U.S. conceptions of liberty? | | |

What was the tone of the three documents?

| | What words signaled tone? | How would you describe the tone? |
|------------|---------------------------|----------------------------------|
| Document 1 | | |
| Document 2 | | |
| Document 3 | | |

What was the purpose of the three documents?

| | What parts of the text signaled purpose? | How would you describe the purpose? |
|------------|--|-------------------------------------|
| Document 1 | | |
| Document 2 | | |
| Document 3 | | |

Based upon your reading of the three documents, how trustworthy are they? In other words, can you take these documents at their word? Why or why not?

Document 1:

Document 2:

Document 3:

Activity

4 Vocabulary

How did you resolve the meaning of vocabulary you did not know? Are there words that you still do not understand? Here is a list of words. Do you know their meanings? If not, discuss these in class.

| | |
|----------------|--|
| ultimatum | What if we were to present to you such an <i>ultimatum</i> . |
| gauntlet | You have thrown down the <i>gauntlet</i> . |
| intimidate | You are not appealing to reason; you want to <i>intimidate</i> us. |
| sovereign | You want to force us to renounce the rights enjoyed by every <i>sovereign</i> state. |
| abyss | The <i>abyss</i> of a world nuclear-war. |
| reconnaissance | Carrying out a <i>reconnaissance</i> flight over Cuba. |
| unilateral | To announce a <i>unilateral</i> decision by the President of the USA. |
| proclaiming | While at the same time <i>proclaiming</i> , privately and publicly, that this would never be done. |
| quid pro quo | I replied that there could be no <i>quid pro quo</i> —no deal of this kind could be made. |

“Talk-through” the following discipline specific words with a partner.

Organizations

- Organization of American States (OAS)

Places

- Soviet Union
- U.S.
- Cuba
- Turkey

People

- Attorney General Robert Kennedy
- Secretary of State Dean Rusk
- President Kennedy
- Soviet Ambassador Dobrynin

Lesson 6

Comparing Two Presidential Speeches

In this lesson, you will . . .

- Engage in close reading of two presidential speeches.
- Compare and contrast the two speeches, and be able to explain the differences using the other information about the Cold War you have learned.
- Summarize the important information in a document through a précis.

Activity

1 Orientation to the Task

1. Review SOAPStone.

SOAPStone Document Analysis Method

SOAPStone was developed by College Board (the Advanced Placement folks) and is a method for examining and interpreting a document. Often documents contain complex language or symbolism, which makes determining the meaning and significance of the document more difficult. Utilization of this method will help in unwrapping the meaning of the document.

Speaker – who is the author (speaker) of this piece? Do you know anything about the person’s background? For example, is the person a public figure with a known agenda or title? A speech from a president would have different implications than that of a minister or on looker.

Occasion – what is the time and place of the document? What was going on at the time that prompted the person to write this piece?

Audience – to whom is this piece directed? What kind of document is this – newspaper article, speech, diary entry, letter, etc.? Was it an editorial piece in a local newspaper? Can any assumptions be made about the audience? Do you know why the document was created? What kind of language does the document contain?

Purpose – what was the purpose or meaning behind the text? Is the speaker trying to provoke some reaction from the audience? How does s/he try to accomplish this?

Subject – what is the subject of the document? What is the general topic or idea of the piece?

Tone – what is the attitude of the speaker based on the content of the piece? Does s/he use humor, sarcasm, irony, fear or an objective tone? Is there any bias to what s/he is saying?

Make sure to include enough information in your analysis of the document, not just two or three word descriptions. For example, if the speaker has a title or is an official or has a known profession, be sure to include that as part of the ‘speaker’ description.

Activity

2 Sourcing and Contextualizing Documents

Before reading the two presidential speeches that follow, use SOAPStone to analyze the source and context of these speeches.

Title of Document 1:

Speaker (Who)

Occasion (time, place, events)

Audience (To whom is this piece directed?)

Purpose (What is the author trying to achieve?)

Subject (What is the document about?)

Tone (What is the attitude of the speaker)

Title of Document 2:

Speaker (Who)

Occasion (time, place, events)

Audience (To whom is this piece directed?)

Purpose (What is the author trying to achieve?)

Subject (What is the document about?)

Tone (What is the attitude of the speaker)

Activity

3 Reading the Speeches

Read the speeches for at least three purposes:

- To better understand Eisenhower’s and Kennedy’s ideas about liberty, as evidence to help you craft an answer to the essential question: What were the concepts of liberty in the U.S. in relation to its foreign affairs?
- To better understand the changing concepts of and responses to the Cold War.
- To determine the arguments Eisenhower and Kennedy made and the evidence used to back up the arguments. What was the line of reasoning?

Also, remember what you learned about annotation from previous lessons. Annotate with the above three purposes in mind. After reading, complete the comparison/contrast chart that follows.

For a full transcript available from Our Documents, at:

http://ourdocuments.gov/print_friendly.php?page=transcript&doc=90&title=Transcript+of+President+Dwight+D.+Eisenhower%27s+Farewell+Address+%281961%29.

Transcript of President Dwight D. Eisenhower’s Televised Farewell Address (January 17, 1961) Edited

My Fellow Americans:

Three days from now, after half a century in the service of our country, I shall lay down the responsibilities of office as, in traditional and solemn ceremony, the authority of the Presidency is vested in my successor.

This evening I come to you with a message of leave-taking and farewell, and to share a few final thoughts with you, my countrymen.

Like every other citizen, I wish the new President, and all who will labor with him, Godspeed. I pray that the coming years will be blessed with peace and prosperity for all . . .

Throughout America’s adventure in free government, our basic purposes have been to keep the peace; to foster progress in human achievement, and to enhance liberty, dignity and integrity among people and among nations. To strive for less would be unworthy of a free and religious people. Any failure traceable to arrogance, or our lack of comprehension or readiness to sacrifice would inflict upon us grievous hurt both at home and abroad.

Progress toward these noble goals is persistently threatened by the conflict now engulfing the world. It commands our whole attention, absorbs our very beings. We face a hostile ideology—global in scope, atheistic in character, ruthless in purpose, and insidious in method. Unhappily the danger it poses promises to be of indefinite duration. To meet it successfully, there is called for, not so much the emotional and transitory sacrifices of crisis, but rather those which enable us to carry forward steadily, surely, and without complaint the burdens of a prolonged and complex struggle—with liberty at stake. Only thus shall we remain, despite every provocation, on our chartered course toward permanent peace and human betterment . . .

A vital element in keeping the peace is our military establishment. Our arms must be mighty, ready for instant action, so that no potential aggressor may be tempted to risk his own destruction.

Our military organization today bears little relation to that known by any of my predecessors in peace time, or indeed by the fighting men of World War II or Korea.

Until the latest of our world conflicts, the United States had no armaments industry. American makers of plowshares could, with time and as required, make swords as well. But now we can no longer risk emergency improvisation of national defense; we have been compelled to create a permanent armaments industry of vast proportions. Added to this, three and a half million men and women are directly engaged in the defense establishment. We annually spend on military security more than the net income of all United State corporations.

This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence—economic, political, even spiritual—is felt in every city, every state house, every office of the Federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.

We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted; only an alert and knowledgeable citizenry can compel the proper meshing of huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades.

In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers.

The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present and is gravely to be regarded.

Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.

It is the task of statesmanship to mold, to balance, and to integrate these and other forces, new and old, within the principles of our democratic system—ever aiming toward the supreme goals of our free society.

Another factor in maintaining balance involves the element of time. As we peer into society's future, we-you and I, and our government-must avoid the impulse to live only for today, plundering, for our own ease and convenience, the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.

Down the long lane of the history yet to be written America knows that this world of ours, ever growing smaller, must avoid becoming a community of dreadful fear and hate, and be, instead, a proud confederation of mutual trust and respect.

Such a confederation must be one of equals. The weakest must come to the conference table with the same confidence as do we, protected as we are by our moral, economic, and military strength. That table, though scarred by many past frustrations, cannot be abandoned for the certain agony of the battlefield.

Disarmament, with mutual honor and confidence, is a continuing imperative. Together we must learn how to compose difference, not with arms, but with intellect and decent purpose. Because this need is so sharp and apparent I confess that I lay down my official responsibilities in this field with a definite sense of disappointment. As one who has witnessed the horror and the lingering sadness of war—as one who knows that another war could utterly destroy this civilization which has been so slowly and painfully built over thousands of years—I wish I could say tonight that a lasting peace is in sight.

Happily, I can say that war has been avoided. Steady progress toward our ultimate goal has been made. But, so much remains to be done. As a private citizen, I shall never cease to do what little I can to help the world advance along that road . . .

Transcription courtesy of <http://www.ourdocuments.gov/doc.php?doc=90&page=transcript>.

Commencement Address at American University, June 10, 1963—Edited

President John F. Kennedy
Washington, D.C.
June 10, 1963

. . . I have, therefore, chosen this time and this place to discuss a topic on which ignorance too often abounds and the truth is too rarely perceived—yet it is the most important topic on earth: world peace.

What kind of peace do I mean? What kind of peace do we seek? Not a Pax Americana enforced on the world by American weapons of war. Not the peace of the grave or the security of the slave. I am talking about genuine peace, the kind of peace that makes life on earth worth living, the kind that enables men and nations to grow and to hope and to build a better life for their children—not merely peace for Americans but peace for all men and women—not merely peace in our time but peace for all time . . .

. . . Today the expenditure of billions of dollars every year on weapons acquired for the purpose of making sure we never need to use them is essential to keeping the peace. But surely the acquisition of such idle stockpiles—which can only destroy and never create—is not the only, much less the most efficient, means of assuring peace.

I speak of peace, therefore, as the necessary rational end of rational men. I realize that the pursuit of peace is not as dramatic as the pursuit of war—and frequently the words of the pursuer fall on deaf ears. But we have no more urgent task . . .

Some say that it is useless to speak of world peace or world law or world disarmament—and that it will be useless until the leaders of the Soviet Union adopt a more enlightened attitude. I hope they do. I believe we can help them do it. But I also believe that we must reexamine our own attitude . . . First: Let us examine our attitude toward peace itself. Too many of us think it is impossible. Too many think it unreal. But that is a dangerous, defeatist belief. It leads to the conclusion that war is inevitable—that mankind is doomed—that we are gripped by forces we cannot control.

We need not accept that view. Our problems are manmade—therefore, they can be solved by man. And man can be as big as he wants. No problem of human destiny is beyond human beings . . .

Let us focus instead on a more practical, more attainable peace—based not on a sudden revolution in human nature but on a gradual evolution in human institutions—on a series of concrete actions and effective agreements, which are in the interest of all concerned. There is no single, simple key to this peace—no grand or magic formula to be adopted by one or two powers. Genuine peace must be the product of many nations, the sum of many acts . . .

Second: Let us reexamine our attitude toward the Soviet Union. It is discouraging to think that their leaders may actually believe what their propagandists write. It is discouraging to read a recent

authoritative Soviet text on Military Strategy and find, on page after page, wholly baseless and incredible claims—such as the allegation that “American imperialist circles are preparing to unleash different types of wars . . . that there is a very real threat of a preventive war being unleashed by American imperialists against the Soviet Union . . . [and that] the political aims of the American imperialists are to enslave economically and politically the European and other capitalist countries . . . [and] to achieve world domination . . . by means of aggressive wars.”

Truly, as it was written long ago: “The wicked flee when no man pursueth.” Yet it is sad to read these Soviet statements—to realize the extent of the gulf between us. But it is also a warning—a warning to the American people not to fall into the same trap as the Soviets, not to see only a distorted and desperate view of the other side, not to see conflict as inevitable, accommodation as impossible, and communication as nothing more than an exchange of threats.

Let us not be blind to our differences—but let us also direct attention to our common interests and to the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity. For, in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children’s future. And we are all mortal.

Third: Let us reexamine our attitude toward the cold war, remembering that we are not engaged in a debate, seeking to pile up debating points. We are not here distributing blame or pointing the finger of judgment. We must deal with the world as it is, and not as it might have been had the history of the last 18 years been different . . .

. . . It is our hope—and the purpose of allied policies—to convince the Soviet Union that she, too, should let each nation choose its own future, so long as that choice does not interfere with the choices of others. The Communist drive to impose their political and economic system on others is the primary cause of world tension today. For there can be no doubt that, if all nations could refrain from interfering in the self-determination of others, the peace would be much more assured.

This will require a new effort to achieve world law—a new context for world discussions. It will require increased understanding between the Soviets and ourselves. And increased understanding will require increased contact and communication. One step in this direction is the proposed arrangement for a direct line between Moscow and Washington, to avoid on each side the dangerous delays, misunderstandings, and misreadings of the other’s actions which might occur at a time of crisis . . .

I am taking this opportunity, therefore, to announce two important decisions in this regard.

First: Chairman Khrushchev, Prime Minister Macmillan, and I have agreed that high-level discussions will shortly begin in Moscow looking toward early agreement on a comprehensive test ban treaty. Our hopes must be tempered with the caution of history—but with our hopes go the hopes of all mankind. . .

Second: To make clear our good faith and solemn convictions on the matter, I now declare that the United States does not propose to conduct nuclear tests in the atmosphere so long as other states do not do so. We will not be the first to resume. Such a declaration is no substitute for a formal binding treaty, but I hope it will help us achieve one. Nor would such a treaty be a substitute for disarmament, but I hope it will help us achieve it.

Finally, my fellow Americans, let us examine our attitude toward peace and freedom here at home. The quality and spirit of our own society must justify and support our efforts abroad. We must show it in the dedication of our own lives—as many of you who are graduating today will have a unique opportunity to do, by serving without pay in the Peace Corps abroad or in the proposed National Service Corps here at home.

But wherever we are, we must all, in our daily lives, live up to the age-old faith that peace and freedom walk together. In too many of our cities today, the peace is not secure because the freedom is incomplete.

It is the responsibility of the executive branch at all levels of government—local, State, and National—to provide and protect that freedom for all of our citizens by all means within their authority. It is the responsibility of the legislative branch at all levels, wherever that authority is not now adequate, to make it adequate. And it is the responsibility of all citizens in all sections of this country to respect the rights of all others and to respect the law of the land.

All this is not unrelated to world peace. “When a man’s ways please the Lord,” the Scriptures tell us, “he maketh even his enemies to be at peace with him.” And is not peace, in the last analysis, basically a matter of human rights—the right to live out our lives without fear of devastation—the right to breathe air as nature provided it—the right of future generations to a healthy existence?

The United States, as the world knows, will never start a war. We do not want a war. We do not now expect a war. This generation of Americans has already had enough—more than enough—of war and hate and oppression. We shall be prepared if others wish it. We shall be alert to try to stop it. But we shall also do our part to build a world of peace where the weak are safe and the strong are just. We are not helpless before that task or hopeless of its success. Confident and unafraid, we labor on—not toward a strategy of annihilation but toward a strategy of peace.

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Vocabulary

Were there words in the two speeches that you did not know even after using available resources? Did you read the word in the context of the sentence, try breaking it into meaning parts, consult a dictionary or glossary, or ask another student? Remember, it is okay, in fact necessary, to struggle with meaning in order to truly understand what you read.

Interpret the following phrases and sentences from the two speeches.

...the authority of the Presidency is vested in my successor.

Progress toward these noble goals is persistently threatened by the conflict now engulfing the world.

We face a hostile ideology—global in scope, atheistic in character, ruthless in purpose and insidious in method.

Not so much the emotional and transitory sacrifices of crisis.

Only thus shall we remain, despite every provocation, on our chartered course toward permanent peace and human betterment.

We have been compelled to create a permanent armaments industry of vast proportions.

We must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex.

We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.

Not a Pax Americana enforced on the world by American weapons of war.

I speak of peace, therefore, as the necessary rational end of rational men.

But that is a dangerous, defeatist belief.

Let us focus instead on a more practical more attainable peace—based not on a sudden revolution in human nature but on a gradual evolution in human institutions.

Such as the allegation that, “American imperialist circles are preparing to unleash different types of wars.”

Not to see only a distorted and desperate view of the other side, not to see conflict as inevitable, accommodation as impossible.

It is our hope—and the purpose of allied policies—to convince the Soviet Union that she, too, should let each nation choose its own future, so long as that choice does not interfere with the choices of others.

Our hopes must be tempered with the caution of history.

Notes:

Activity

4 Compare and Contrast the Two Speeches

Complete the following comparison/contrast chart.

| | Eisenhower | | Kennedy | |
|---|------------|------------------------|---------|------------------------|
| | Answer | Evidence from the text | Answer | Evidence from the text |
| How was the U.S. responding to the Cold War? | | | | |
| How was the USSR responding to the Cold War? | | | | |
| What were the concepts of liberty in the U.S. in relation to Foreign Affairs? | | | | |
| What argument was being made? What evidence did they use to back up the argument? | | | | |

Activity

5 Writing a Précis

Précis is a type of summarizing that requires you to reproduce the author's argument; the logic, organization and emphasis of the original text in a much shorter form and in one's own words.

Original

For a hundred years and more the monarchy in France had been absolute and popular. It was beginning now to lose both power and prestige. A sinister symptom of what was to follow appeared when the higher ranks of society began to lose their respect for the sovereign. It started when Louis XV selected as his principal mistress a member of the middle class, it continued when he chose her successor from the streets. When the feud between Madame Du Barry and the Duke de Choiseul ended in the dismissal of the Minister, the road to Chanteloup, his country house, was crowded with carriages, while familiar faces were absent from the court at Versailles. For the first time in French history the followers of fashion flocked to do honor to a fallen favorite. People wondered at the time, but hardly understood the profound significance of the event. The king was no longer the leader of society. Kings and presidents, prime ministers and dictators, provide at all times a target for the criticism of philosophers, satirists, and reformers. Such criticism they can usually afford to neglect, but when the time-servers, the sycophants, and the courtiers begin to disregard them, then should the strongest of them tremble on their thrones. (208 words)

Duff Cooper, *Talleyrand*

Précis example on World History lesson, from:
<http://homecomcast.net/~mruland/Skills/précis.htm>.

Précis

From Duff Cooper, *Talleyrand*

For more than a hundred years the monarchy in France had been absolute and popular. But Louis XV lost the respect of the upper ranks of society by choosing his mistresses from lower classes. When the feud of the Duke de Choiseul with Madame Du Barry resulted in the Minister's dismissal, the court turned its attention to him, away from the king. The king, no longer the leader of society, could well tremble for his throne. (76 words)

Précis example on World History lesson, from:
<http://homecomcast.net/~mruland/Skills/précis.htm>.

Lesson 7

Participating in a Socratic Seminar

In this lesson, you will . . .

- Use evidence from the texts you have read to create and support a preliminary claim in answer to the essential questions.
- Organize the claim and evidence in graphic form.
- Participate meaningfully in a Socratic Seminar.
- Use discipline-specific vocabulary in your discussion.

Activity

1 Orientation to the Task

Essential Questions

Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What differences existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? (later: The Vietnam Conflict)

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

Activity

2 Preparing for a Socratic Seminar

Before beginning the Socratic Seminar, review your texts to find out how they address the essential questions and complete the following graphic organizer.

| Text | <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>What differences existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis?</i> | <i>Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |
|------------------------|---|---|--|
| Political Cartoon | Author's Claim | | |
| | Evidence | | |
| Photograph | Author's Claim | | |
| | Evidence | | |
| Quotes from Khrushchev | Author's Claim | | |
| | Evidence | | |
| Lecture | Author's Claim | | |
| | Evidence | | |

| Text | <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>What differences existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis?</i> | <i>Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |
|---|---|---|--|
| Tindall and Shi text | Author's Claim | | |
| | Evidence | | |
| Khrushchev's message to Kennedy | Author's Claim | | |
| | Evidence | | |
| Dobrynin's report to Foreign Affairs Ministry | Author's Claim | | |
| | Evidence | | |
| Robert Kennedy's report to Secretary of State | Author's Claim | | |
| | Evidence | | |
| Eisenhower speech | Author's Claim | | |
| | Evidence | | |
| Kennedy speech | Author's Claim | | |
| | Evidence | | |

After reviewing your evidence, what claim can you make about the answer to the question?
What evidence best supports your claim?

My **claim** (Question 1):

My **evidence** (Question 1):

My **claim** (Question 2):

My **evidence** (Question 2):

My **claim** (Question 3):

My **evidence** (Question 3):

Activity

3 Participating in the Socratic Seminar

Review the rubric by which you will evaluate your performance before the Socratic Seminar begins, assemble your notes, and have your ideas ready. When finished, use the rubric and following questions as an evaluation tool.

Socratic Seminar Self-Evaluation Rubric

Check the boxes that reflect your participation.

| | Understands the texts | Participates in discussion | Supports ideas with evidence | Demonstrates critical mindedness | Demonstrates tolerance for uncertainty | Listens and respects others |
|--------------|---|---|--|---|--|--|
| Above Target | <input type="checkbox"/> Uses parts of the texts in the discussion and shows understanding of the texts. <input type="checkbox"/> Shows command of vocabulary. | <input type="checkbox"/> Demonstrates active participation throughout circle time. | <input type="checkbox"/> Makes specific references to texts and regularly defends ideas with evidence. | <input type="checkbox"/> Questions others during discussion in a way that makes sense and adds to the group's discussion. | <input type="checkbox"/> Is able to listen to and accept others' opinions different from his/her own. | <input type="checkbox"/> Makes comments reflecting active listening and respect of others. |
| Target | <input type="checkbox"/> Uses texts during the discussion but does not show understanding of them. <input type="checkbox"/> Uses some text vocabulary. | <input type="checkbox"/> Demonstrates active participation in at least half of the circle time. | <input type="checkbox"/> Makes references to texts and at times defends ideas with evidence when | <input type="checkbox"/> Questions and comments to others make sense but do not add to the group's discussion. | <input type="checkbox"/> Is able to listen to others' opinions different from his/her own but does not use them in remaining discussion. | <input type="checkbox"/> Generally listens, but is not attentive to details. |
| Below Target | <input type="checkbox"/> Does not use any of the texts in the discussion. <input type="checkbox"/> Does not use text vocabulary. | <input type="checkbox"/> Demonstrates some participation, but off-task most of the circle time. | <input type="checkbox"/> Makes no references to texts or does not defend ideas. | <input type="checkbox"/> Does not question others or questions don't make sense. | <input type="checkbox"/> Does not accept others' opinions and is unwilling to hear them. | <input type="checkbox"/> Is consistently inattentive. |

What I did do well

What I didn't do well

What I will do next time

Activity

4 Using the Rubric to Evaluate Performance

Complete the rubric above based upon your participation in the Socratic Seminar.

If you are asked to evaluate the performance of an entire group, use the following evaluation format.

Group number (circle): 1 2 3

Evaluate this group by checking each statement that most accurately describes this group's performance.

- Participation
- Some students did not participate or did so rarely.
 - Some students took over the discussion, not encouraging others to speak.
 - Everyone participated fairly equally.

- Preparation
- No students were prepared.
 - Some students were prepared.
 - Most students were prepared.
 - All students were prepared.

- Support
- No students used text evidence to support claims.
 - Some students used text evidence to support claims.
 - Most students used text evidence to support claims.
 - All students used text evidence to support claims.

- Respect
- No student listened, took turns or honored differences.
 - Some students listened, took turns and honored differences.
 - Most students listened, took turns and honored differences.
 - All students listened, took turns and honored differences.

Activity

5 Revising Claims and Evidence

Use the following form to list your revised claims and evidence. Also, explain why the evidence you chose supports the claim (e.g., this claim shows that Kennedy did not agree with Russia's building of the Berlin Wall, and that he equated the wall with a lack of freedom).

Claim:

Evidence 1:

Explanation of Evidence:

Evidence 2:

Explanation of Evidence:

Evidence 3:

Explanation of Evidence:

Evidence 4:

Explanation of Evidence:

Evidence 5:

Explanation of Evidence:

Evidence 6:

Explanation of Evidence:

Lesson 8

Overview: U.S. and Vietnam

In this lesson, you will . . .

- Demonstrate an understanding of claim and evidence in history.
- Demonstrate understanding of vocabulary you encountered during reading.

Activity

1 Orientation to the Task

List words, phrases, images, etc. that you associate with the Vietnam War:

1.

2.

3.

4.

5.

Write an explanation of each of these terms based upon what you already know about Vietnam.

Lyndon Johnson

Geneva Accord

Viet Cong

Saigon

Tet Offensive

Gulf of Tonkin

Gulf of Tonkin Incident

Activity

2 Viewing the PowerPoint and Taking Notes

Take notes, paying attention to what learn about the vocabulary words above, and thinking about the kind of information that is important in history.

Claims & Insights

Notes

Summary:

Activity

3 Thinking about Evidence for Claims

The last slide of the PowerPoint includes some of the interpretations of historians regarding the Vietnam Conflict. These are CLAIMS, which need evidence to back them up. What kind of evidence do you think would be convincing? Next to each claim below, write down what kind of evidence would convince you the claim is true.

| Claim | What evidence would be convincing? | Why |
|--|------------------------------------|-----|
| LBJ escalated the Vietnam Conflict because he thought his reputation would be hurt if he lost Vietnam to the Communists. | | |
| LBJ felt he had to follow the lead of his advisors about Vietnam, because they were “Harvards.” | | |
| Because of the problems in Vietnam, LBJ had no choice but to get more heavily involved. | | |
| LBJ did not want to get involved in Vietnam. | | |
| LBJ and his advisors set up the Gulf of Tonkin incident so they could get more heavily involved. | | |
| LBJ hid from Americans the cost of escalation. | | |

Graphic Organizer – PowerPoint Overview

| Johnson’s motivations for involvement and escalation | Johnson’s goal | Johnson’s tactics |
|--|---------------------------|-------------------|
| | To win the war in Vietnam | |

Also, look for evidence that helps you answer the essential questions:

| | | |
|---|---|--|
| <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>Did the concepts of liberty and freedom change over the course of the 60s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |
|---|---|--|

Activity

4 Vocabulary

Revise your definitions based upon information you learned in the PowerPoint.

Lyndon Johnson-

Geneva Accords-

Viet Cong-

Saigon-

Tet Offensive-

Gulf of Tonkin-

Gulf of Tonkin Incident-

Lesson 9

Types of Texts

In this lesson, you will . . .

- Classify a variety of historical texts and identify challenges to credibility posed by them.
- Learn text-type vocabulary.

Activity

1 Orientation to the Task

List some types of texts you associate with historical study:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Activity

2 Classifying and Reasoning about Texts

Using the information you received in class, classify the following examples of texts by noting if they are primary, secondary or tertiary texts and assigning a genre to each one in the space provided. Then, identify the challenges to credibility that might be a characteristic of the genre.

| Text | Primary, Secondary or Tertiary? (Circle One) | Genre | Challenges to credibility |
|---|---|-------|---------------------------|
| Constitution of the United States | Primary Secondary Tertiary | | |
| Goodwin, Doris Kearns, <i>Lyndon Johnson & The American Dream</i> (1991) | Primary Secondary Tertiary | | |
| Article from the <i>New York Times</i> describing U.S. troop deployment (1968) | Primary Secondary Tertiary | | |
| Image of a Vietnamese village on fire after a U.S. attack (1969) | Primary Secondary Tertiary | | |
| Caputo, Philip, <i>A Rumor of War</i> (1977) | Primary Secondary Tertiary | | |
| A cartoon depicting Lyndon Johnson's gradual escalation of U.S. troops in Vietnam(1965) | Primary Secondary Tertiary | | |
| The Gulf of Tonkin Resolution (1964) | Primary Secondary Tertiary | | |
| Transcript of questions and answers exchanged between a reporter and a U.S. Army officer (1968) | Primary Secondary Tertiary | | |
| <i>Vietnam: A Television History</i> (1983) | Primary Secondary Tertiary | | |

Can you tell the structure of a text excerpt? Determine if the following excerpts are *description*, *explanation*, or *argumentation/justification*. Write your answers on the line below each excerpt.

1. The Johnson Administration essentially found itself in a predicament—a “political war trap” that was a product of the nuclear era, the Cold War, and domestic politics in the United States. The “trap” involved a wavering ally whose regime was threatened. The option of not using military force was discounted for fear of a “communist success” if the ally fell and the domestic repercussions this would trigger (Dennis M. Simon, August 2002; retrieved from: <http://www.srvhs.srvusd.k12.ca.us/Staff/teachers/abgardner/Vietnam/The%20Vietnam%20War>).

2. Johnson brought to the White House a marked change of style from Kennedy. A self-made and self-centered man who had worked his way out of a hardscrabble rural Texas environment to become one of Washington’s most powerful figures, Johnson had none of the Kennedy elegance. He was a bundle of conflicting elements: earthy, idealistic, domineering, insecure, gregarious, suspicious, affectionate, manipulative, ruthless, and compassionate. Johnson’s ego was as huge as his ambition (Tindall and Shi, page 1318).

3. In the end, the United States failed either to avert a communist takeover of South Vietnam, or to avoid humiliation, loss of prestige, and domestic recrimination. To be sure, the North Vietnamese Army (NVA) and southern National Liberation Front (NLF) did not directly evict US forces from Vietnam, nor even inflict upon them a major set-piece battlefield defeat like the Viet Minh did on the French at Dien Bien Phu in 1954... But if US forces were not defeated, neither did they inflict a strategically decisive defeat on the communist side (6)... Years of bombing North Vietnam and “attriting” communist forces in South Vietnam neither broke Hanoi’s will nor crippled its capacity to fight. The absence of US military defeat did not guarantee political success. The appearance of Saigon as Ho Chi Minh City for the past 20 years on maps of Southeast Asia is testimony to the defeat of the American cause in Vietnam (Record, Jeffries, [Winter, 1996-96], Vietnam in retrospect: Could we have won? Parameters, 51-65).

4. On several occasions before March 9, the Vietminh League urged the French to ally themselves with it against the Japanese. Instead of agreeing to this proposal, the French colonialists so intensified their terrorist activities against the Vietminh members that before fleeing they massacred a great number of our political prisoners detained at Yen Bay and Cao Bang (taken from The Declaration of Independence, Democratic Republic of Vietnam, written by Ho Chi Minh in 1945).

Circle any words or phrases that helped you decide what type of text each excerpt was. Discuss your choices.

Lesson 10

Timeline of Vietnam

In this lesson, you will . . .

- Infer historical trends and relationships regarding the Vietnam Conflict using a timeline.
- Ask questions about the Vietnam Conflict after studying the timeline.
- Determine vocabulary meanings by using available resources.

Activity

2 Making Inferences from a Timeline

Study the following timeline and come up with: (a) three inferences, and (b) three questions. Specify what kind of evidence you would need to be surer of your inference and what kind of evidence you would need to answer your questions. A map is provided so that you can locate the sites that are referenced in the timeline.



Timeline of American Involvement in Vietnam

1945

Ho Chi Minh Creates Provisional Government.

Following the surrender of Japan to Allied forces, Ho Chi Minh and his People's Congress create the National Liberation Committee of Vietnam to form a provisional government. Japan transfers all power to Ho's Vietminh.

Ho Declares Independence of Vietnam.

British Forces Land in Saigon, Return Authority to French.

1946

Indochina War begins.

The Democratic Republic of Vietnam launches its first concerted attack against the French.

1950

Chinese, Soviets Offer Weapons to Vietminh.

U.S. Pledges \$15M to aid French.

The United States sends \$15 million dollars in military aid to the French for the war in Indochina. Included in the aid package are military advisors.

1954

Battle of Dienbienphu begins.

A force of 40,000 heavily armed Vietminh lay siege to the French garrison at Dienbienphu. Using Chinese artillery to shell the airstrip, the Vietminh make it impossible for French supplies to arrive by air. It soon becomes clear that the French have met their match.

Eisenhower cites "Domino Theory" regarding Southeast Asia.

Responding to the defeat of the French by the Vietminh at Dienbienphu, President Eisenhower outlines the Domino Theory: "You have a row of dominoes set up. You knock over the first one, and what will happen to the last one is the certainty that it will go over very quickly."

Geneva Agreements announced.

Vietminh and French generals sign the Agreement on the Cessation of Hostilities in Vietnam. As part of the agreement, a provisional demarcation line is drawn at the 17th parallel, which will divide Vietnam until nationwide elections are held in 1956. The United States does not accept the agreement, and neither does the government.

1955

Prime Minister of Vietnam Ngo Dinh Diem holds fraudulent referendum. Diem becomes President of Republic of Vietnam.

1956

French Leave Vietnam.

U.S. Training South Vietnamese:

The U.S. Military Assistance Advisor Group (M.A.A.G.) assumes responsibility from the French for training South Vietnamese forces.

1957

Communist Insurgency in South Vietnam.

Communist insurgent activity in South Vietnam begins. Communist Guerrillas assassinate more than 400 South Vietnamese officials. Thirty-seven armed companies are organized along the Mekong Delta.

1959

Weapons Moving Along Ho Chi Minh Trail.

North Vietnam begin infiltrating cadres and weapons into South Vietnam via the Ho Chi Minh Trail. The Trail will become a strategic target for future military attacks.

1961

Vice President Johnson Tours Saigon.

During a tour of Asian countries, Vice President Lyndon Johnson visits Diem in Saigon. Johnson assures Diem that he is crucial to U.S. objectives in Vietnam and calls him “the Churchill of Asia.”

1963

Buddhists Protest Against Diem.

Tensions between Buddhists and the Diem government are further strained as Diem, a Catholic, removes Buddhists from several key government positions and replaces them with Catholics. Buddhist monks protest Diem’s intolerance for other religions and the measures he takes to silence them. In a show of protest, Buddhist monks start setting themselves on fire in public places.

Diem Overthrown, Murdered.

With the tacit approval of the United States, operatives within the South Vietnamese military overthrow Diem. He and his brother Ngo Dinh Nhu are shot and killed.

1964

Gulf of Tonkin Incident.

On August 2, three North Vietnamese PT boats allegedly fire torpedoes at the U.S.S. Maddox, a destroyer located in the international waters of the Tonkin Gulf, some thirty miles off the coast of North Vietnam. The attack comes after six months of covert U.S. and South Vietnamese naval operations. A second, even more highly disputed attack, is alleged to have taken place on August 4.

Debate on Gulf of Tonkin Resolution.

The Gulf of Tonkin Resolution is approved by Congress on August 7 and authorizes President Lyndon Johnson to “take all necessary measures to repel any armed attack against forces of the United States and to prevent further aggression.” The resolution passes unanimously in the House, and by a margin of 82-2 in the Senate. The Resolution allows Johnson to wage all out war against North Vietnam without ever securing a formal Declaration of War from Congress.

1966

LBJ Meets With South Vietnamese Leaders.

President Lyndon Johnson meets with South Vietnamese premier Nguyen Cao Ky and his military advisors in Honolulu. Johnson promises to continue to help South Vietnam fend off aggression from the North, but adds that the U.S. will be monitoring South Vietnam's efforts to expand democracy and improve economic conditions for its citizens.

1967

Martin Luther King, Jr. Speaks Out Against War.

Calling the U.S. "the greatest purveyor of violence in the world," Martin Luther King publicly speaks out against U.S. policy in Vietnam. King later encourages draft evasion and suggests a merger between antiwar and civil rights groups.

1968

North Vietnamese Launch Tet Offensive.

In a show of military might that catches the U.S. military off guard, North Vietnamese and Vietcong forces sweep down upon several key cities and provinces in South Vietnam, including its capital, Saigon. Within days, American forces turn back the onslaught and recapture most areas. From a military point of view, Tet is a huge defeat for the Communists, but turns out to be a political and psychological victory. The U.S. military's assessment of the war is questioned and the "end of the tunnel" seems very far off.

My Lai Massacre:

On March 16, the angry and frustrated men of Charlie Company, 11th Brigade, America Division enter the village of My Lai. "This is what you've been waiting for -- search and destroy -- and you've got it," say their superior officers. A short time later the killing begins. When news of the atrocities surfaces, it will send shockwaves through the U.S. political establishment, the military's chain of command, and an already divided American public.

Paris Peace talks begin.

Following a lengthy period of debate and discussion, North Vietnamese and American negotiators agree on a location and start date of peace talks. Talks are slated to begin in Paris on May 10 with W. Averell Harriman representing the United States, and former Foreign Minister Xuan Thuy heading the North Vietnamese delegation.

1969

Ho Chi Minh Dies at age 79.

News of My Lai Massacre Reaches U.S.

Through the reporting of journalist Seymour Hersh, Americans read for the first time of the atrocities committed by Lt. William Calley and his troops in the village of My Lai. At the time the reports are made public, the Army has already charged Calley with the crime of murder.

1971

Pentagon Papers published.

The New York Times publishes the Pentagon Papers, revealing a legacy of deception concerning U.S. policy in Vietnam on the part of the military and the executive branch. The Nixon administration, eager to stop leaks of what it considers sensitive information, appeals to the Supreme Court to halt the publication. The Court decides in favor of the Times and the First Amendment right to free speech.

1973

Cease-fire Signed in Paris.

A cease-fire agreement that, in the words of Richard Nixon, “brings peace with honor in Vietnam and Southeast Asia,” is signed in Paris by Henry Kissinger and Le Duc Tho. The agreement is to go into effect on January 28.

End of Military Draft Announced.

Last American Troops Leave Vietnam.

Adapted from: <http://www.pbs.org/wgbh/amex/vietnam/timeline/tl3.html#a>.

| Inference | What evidence would you need to give you confidence in this inference? |
|-----------|--|
| 1. | |
| 2. | |
| 3. | |

| Question | What evidence would you need to answer this question? |
|----------|---|
| 1. | |
| 2. | |
| 3. | |

Think about these inferences and questions as you read the chapter in the next lesson.

Lesson 11

Reading and Annotating a Chapter about the Vietnam Conflict

In this lesson, you will . . .

- Show through your annotations that you are identifying historically important information about Vietnam from reading.
- Show through discussion and graphic organizers that you can think critically about the information in the chapter.
- Show through annotations and discussion your understanding or discipline-specific and general academic vocabulary.
- Show your understanding of chronology and significance by adding to the Vietnam Timeline.
- Collect textual evidence that addresses the essential questions.

Activity

2 Analyzing History Textbook Chapters

Review G-SPRITE: Geographical, Social, Religious, Intellectual, Technological, and Economic. Review Annotation Guidelines.

Annotate....

- Relationships among events—chronology, causation.
- Actors—who (individuals or groups) is engaging in actions aimed at meeting goals.
- Actions—what the actors (are) doing, the tactics or methods they are using.
- Characteristics—of actions, actors, policies, movements, events.
- Motivations—the goals that lead the actors towards action.
- Categorizations of actions into political, social, economic, religious, cultural, etc.
- Comparison and Contrast—of interpretations of cause/effect, motivations, characteristics, etc.
- Vocabulary—use of words that signal intentions of the author or bias, words that describe key concepts, and words that signal relationships among events.

Read to verify your inferences and answer your questions. Read to find evidence to answer the essential questions.

The essential questions are:

| | | |
|---|---|--|
| <i>Were the concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | <i>What conflicts existed in conceptions of liberty and freedom by those participating in The Vietnam Conflict?</i> | <i>Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?</i> |
|---|---|--|

Activity

3 Annotating the Text

Annotate the text. After you are finished, evaluate your annotations using the form below.

Annotation Evaluation for History

Check all the features of annotation that you used:

- 1. Information about the source
- 2. Information that signaled
 - a. Cause/effect
 - b. Comparison contrast
 - d. Chronology (words signaling time)
 - c. Bias or judgment
 - e. Discipline-specific information and vocabulary
 - f. Other
- 3. Unknown general academic vocabulary
- 4. Key actors, actions, goals, and tactics, etc.
- 5. Political, social, economic, legal, or other characterizations of information
- 6. Marginal notations that show
 - a. summarizing
 - b. inferencing
 - c. reacting
 - d. connecting to other information,
 - e graphic or pictorial representations of information (e.g., cause-effect chains, time lines).

Evaluate your annotations

- 1. My annotations helped me to focus on the information. Yes No
- 2. My annotations would help me review the chapter for a test. Yes No
- 3. My annotations helped me understand the information better. Yes No
- 4. My annotations helped me to think critically. Yes No

What did you do well?

What could you improve?

Complete G-Sprite using the chart below on this and every section in this chapter as you read. What factors were important in each of the phases of the Vietnam Conflict? Write the information and page number in the spaces to help you analyze the reasons for why the Vietnam War proceeded the way it did.

| | Moving Toward Conflict | U.S. Involvement and Escalation | A Nation Divided | 1968: A Tumultuous Year |
|---------------|------------------------|---------------------------------|------------------|-------------------------|
| Geographical | | | | |
| Social | | | | |
| Political | | | | |
| Religious | | | | |
| Intellectual | | | | |
| Technological | | | | |
| Economic | | | | |

Activity

4 Debriefing

Section One: Moving Toward Conflict

Discuss what you paid attention to with your class in this section.

Think about the questions that are raised in this discussion, including the following:

Danzer (textbook): “On November 1, 1963, a U.S.-supported military coup toppled Diem’s regime. Against Kennedy’s wishes, Diem was executed.”

Timeline: “With the tacit approval of the United States, operatives within the South Vietnamese military overthrow Diem. He and his brother Ngo Dinh Nhu are shot and killed.”

How do these statements differ? How would you determine the most supported interpretation?

Read the document on the next page and decide which interpretation it supports. Write your thoughts here:

~~TOP SECRET~~

October 25, 1963

Check-List of Possible U.S. actions
in Case of Coup

1. Evacuation of American dependents.
2. Movement of U.S. forces into positions outside Viet-Nam from which they can be readily dispatched to Viet-Nam, if the occasion arises, for:
 - a. Protecting Americans in Viet-Nam.
 - b. Removal of U.S. equipment from Viet-Nam.
 - c. Intervention into political struggle.
 - d. Stabilization of military situation vis-a-vis the Viet-Cong.
3. Inducement (financial, political or otherwise) to opportunists or recalcitrants to join in coup.
4. Cessation of all U.S. aid to Diem Government and announcement thereof.
5. Use U.S. facilities in Viet-Nam (military advisors, transport, communications, etc.) in support of coup group.
6. Political actions to point coup toward civilian government.
 - a. Discussions with military officers.
 - b. Protection of potential civilian heads of state and discussions with them.
7. Once coup group has seized power, rally promptly to its support with statements and assistance.

FE:JAMendenhall:aws

~~TOP SECRET~~

DECLASSIFIED
E.O. 12958, Sec. 3.5(b)
Department of State Guidelines
By mmk NARA, Date 3/21/97

The question left unanswered by the text above is whether President Kennedy supported Diem’s assassination. Read the following account offered by historian Richard Reeves in his book, *President Nixon: Alone in the White House*, page 371. (Retrieved from http://www.historycommons.org/context.jsp?item=vietnam_637&scale=2#vietnam_637.)

President Nixon’s aides have diligently tried to find evidence linking former President John F. Kennedy to the 1963 assassinations of South Vietnamese President Ngo Dinh Diem and his brother, Ngo Dinh Nhu (see June 17, 1971), but have been unsuccessful. “Plumber” E. Howard Hunt (see July 7, 1971) has collected 240 diplomatic cables between Washington, DC, and Saigon from the time period surrounding the assassinations, none of which hint at any US involvement in them. White House aide Charles Colson, therefore, decides to fabricate his own evidence. Using a razor blade, glue, and a photocopier, Colson creates a fake “cable” dated October 29, 1963, sent to the US embassy in Saigon from the Kennedy White House. It reads in part, “At highest level meeting today, decision reluctantly made that neither you nor Harkin [apparently a reference to General Paul Harkins, the commander of US forces in Vietnam at the time] should intervene on behalf of Diem or Nhu in event they seek asylum.” [REEVES, 2001, PP. 371]

What implications for interpreters of history are there for fabricated or made-up evidence?

Do you know yet whether or not the President approved or did not approve the assassination of Diem? If not, what kind of evidence would you look for?

Section Two: U.S. Involvement and Escalation

Read and annotate the next section. Add to G-Sprite when you are finished. Discuss your thoughts in class. Join the discussion. How do these statements differ? How would you determine the most supported interpretation?

Section Three: A Nation Divided

Read and annotate this next section. Add to G-Sprite when you finished. Discuss your thoughts in class. Join the discussion.

Think about the effects of the Vietnam Conflict. List these, then make a concept map that illustrates their relationship.

1.

2.

3.

4.

5.

6.

Etc.

Concept Map:

Section Four: 1968: A Tumultuous Year

Read and annotate the next section. Add to G-Sprite when you finished. Discuss your thoughts in class. Join the discussion.

Three questions to ponder:

- Do you think that President Johnson should have stayed in the race for the Presidency? Why or Why not? What evidence are you basing your answer on?
- Read Danzer’s description of the 1968 Chicago Democratic Convention again. Do you think Danzer agrees with the way the Chicago police handled the protesters? What in the text makes you answer that way? Based upon your reading, what is your opinion? Do you believe that the Chicago police overstepped their bounds, or were they justified? What in the text makes you answer that way?
- When Nixon became president, he said he wanted, “peace with honor,” what did that mean to him? Did he achieve his goal? Why or why not?

Consider using a T-Chart, writing down evidence for both “Yes” and “No” to each question, then deciding.

Yes

No

Yes

No

Yes

No

Activity

5 Vocabulary

With what words are you still struggling? Write these below. In class discussions, determine their meanings.

Discipline specific vocabulary: Talk through the following discipline specific terms. What can you say about them now that you have read the chapter?

Organizations

- Vietminh/National Liberation Front
- Vietcong
- ARVN
- Green Berets
- SDS
- FSM

Documents

- Geneva Accords
- Tonkin Gulf Resolution

Events

- Tet Offensive
- Cold War

Other Terms

- Communism
- fragging
- Domino theory
- USS Maddox
- USS Turner Joy
- War of Attrition
- Napalm
- Agent Orange
- search and destroy mission
- Doves and Hawks

People

- Ho Chi Minh
- Ngo Dinh Diem
- Barry Goldwater
- Robert McNamara
- Walter Cronkite
- Dean Rusk
- General William Westmoreland
- Senator William J. Fulbright
- Robert Kennedy
- Eugene McCarthy
- Hubert Humphrey
- Richard Nixon
- George Wallace

Places

- French Indochina
- Ho Chi Minh Trail
- Cambodia
- Gulf of Tonkin
- Laos
- Dien Bien Phu

Policies

- containment
- escalation

Activity

6 Returning to the Timeline

Go back to the timeline that you studied in Lesson 10.

Is there anything you read in the text that is not mentioned here? If there is, is it significant enough to add? Is there anything already on the time that you would like to change, remove, or add? Write these in their appropriate year.

1945 _____

1946 _____

1950 _____

1954 _____

1955 _____

1956 _____

1957 _____

1959 _____

1961 _____

1963 _____

1964 _____

1966 _____

1967 _____

1968 _____

1969 _____

1971 _____

1973 _____

Lesson 12

Interpreting History and Writing an Argument

In this lesson, you will . . .

- Demonstrate your ability to interpret primary and secondary source documents.
- Show your understanding of the issues in the Gulf of Tonkin Incident through graphic organizers and discussion.
- Demonstrate your ability to write a historical argument that takes a stand on a historical controversy and provides evidence to support the stand.

Activity

2 Reading the Documents

In this lesson, you will be reading a number of interpretations of an event about which historians still have different opinions you will determine the credibility and perspective of the authors of these documents. You will determine their positions regarding the three questions. After reading and annotating, both of you are to fill in information for a “Yes” and a “No” answer, judge the weight of evidence and come to consensus about your views. Then, another pair will join you. Once again, you will come to consensus.

Credibility Analysis

The Tonkin Gulf Crisis,” by Gareth Porter

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors’ purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

“Fact or Fiction,” by Douglas Pike

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

“Secrets of the Vietnam War,” by Philip Davidson

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

“As I Saw It,” by Dean Rusk

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

“The Fog of War,” video excerpt

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

Wayne Morse Says No

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

President Johnson's Midnight Address to the American people (YouTube)

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

Robert McNamara Phone Call

| Speaker (what do you know about the author and publisher?) | Occasion (When was this written and what was happening at the time?) | Audience (Who is the expected reader of this document?) | Purpose (What is the purpose for this text? What are the author(s) trying to do?) | Tone (What words are used that help you determine the authors' purpose?) | Credible? (Is the perspective in this document something that you can trust? Why or Why not?) |
|---|---|--|--|---|--|
| | | | | | |

| Did the Johnson Administration deliberately incite the Gulf of Tonkin Incident? | | |
|--|-----------------|----------------------------|
| YES | OUR VIEW | NO |
| Gareth Porter | | Gareth Porter |
| Douglas Pike | | Douglas Pike |
| Philip Davidson | | Philip Davidson |
| Dean Rusk | | Dean Rusk |
| Textbook excerpt | | Textbook excerpt |
| Fog of War | | Fog of War |
| Wayne Morse Says No | | Wayne Morse Says No |
| Johnson's Midnight Address | | Johnson's Midnight Address |
| Robert McNamara Phone Call | | Robert McNamara Phone Call |

| What really happened on August 4, 1964? | | |
|--|-----------------|----------------------------|
| YES | OUR VIEW | NO |
| Gareth Porter | | Gareth Porter |
| Douglas Pike | | Douglas Pike |
| Philip Davidson | | Philip Davidson |
| Dean Rusk | | Dean Rusk |
| Textbook excerpt | | Textbook excerpt |
| Fog of War | | Fog of War |
| Wayne Morse Says No | | Wayne Morse Says No |
| Johnson's Midnight Address | | Johnson's Midnight Address |
| Robert McNamara Phone Call | | Robert McNamara Phone Call |

| Did Johnson knowingly use a questionable report of an attack to push the incident with Congress in order to escalate the war? | | |
|--|-----------------|----------------------------|
| YES | OUR VIEW | NO |
| Gareth Porter | | Gareth Porter |
| Douglas Pike | | Douglas Pike |
| Philip Davidson | | Philip Davidson |
| Dean Rusk | | Dean Rusk |
| Textbook excerpt | | Textbook excerpt |
| Fog of War | | Fog of War |
| Wayne Morse Says No | | Wayne Morse Says No |
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| Robert McNamara Phone Call | | Robert McNamara Phone Call |

The Tonkin Gulf Crisis

Gareth Porter

Source: Gareth Porter is a historian who wrote an editorial on the OpEd page in the New York Times on the 20th anniversary of the Tonkin Gulf Incident—August 9, 1984. He is considered a Vietnam expert, and has published a two-volume set of annotated documents from the conflict.

The 20th anniversary of the Gulf of Tonkin resolution this week is an occasion for a reassessment. For years it has been debated whether or not the Johnson administration deliberately misled Congress and the public about a second attack on United States destroyers in the Gulf. But the information now available suggests that it was a classic case of self-deception and blundering deeper into conflict.

The accumulated evidence makes it reasonably certain that the alleged North Vietnamese PT boat attack of Aug 4 was a figment of the US government's imagination. CIT Deputy Director Ray Cline evaluated the reports and intelligence data on the incident some days later and found the case for an attack unconvincing.

But leading national security officials were so geared up for military confrontation with Hanoi that they refused to consider evidence that it was not happening. They believed that Hanoi had attacked the Maddox on Aug 2 because it saw a connection between the US ship and South Vietnamese islands commando raids on North Vietnamese islands on July 31. They expected the same thing to happen after another commando raid on the coast Aug 3-4. And they knew that this time, the President wanted to retaliate against the North.

Word reached the Pentagon on the morning of Aug 4 that an intercepted North Vietnamese message indicated a "naval action" was imminent. Although the message did not say that it would take the form of an attack, it triggered a process of preparing for retaliatory action that had an irreversible momentum. Before the first reports from the Maddox that the attack was under way, Defense Secretary Robert S. McNamara and other Pentagon officials immediately met to discuss various options for retaliatory strikes against North Vietnam.

Even after the commander of the two destroyers warned that earlier reports of torpedo attacks were in doubt and recommended no further action be taken until after a "complete evaluation," the preparations for air attacks continued. Mr. McNamara spent a little more than one hour with the Joint Chiefs of Staff considering whether an attack had taken place before releasing the strike order—without benefit of any complete evaluation of the incident. It took President Lyndon Johnson only 18 minutes of discussion with his advisers to approve the strike. When the planes took off to bomb North Vietnamese targets that night, detailed reports from the two destroyers had not even reached Washington.

More serious than this rampant subjectivity and excessive haste in considering the evidence and using force was the administration's ignorance of the effect its bombings would have on Hanoi policy. US officials believed that graduated military pressure on

the North, combined with other evidence of US determination to escalate and direct threats to devastate the North, would force Hanoi to reconsider to support for the war in the South. The first such direct threat had been conveyed to Hanoi in June via a Canadian diplomat, and the threat was repeated through the same channel a few days after the Tonkin bombings.

The campaign to coerce Hanoi was based on an image of the North Vietnamese as foreign aggressors in the South whose “ambitions” could be curbed by raising the cost high enough. A serious effort to understand Hanoi’s perspective on the war and on the issue of North-South relations, however, would have suggested the probability that a demonstration by the US of an intention to carry the war to the North would push Hanoi’s leaders into direct participation in combat in the South rather than forcing them to step back from the war. According to three Vietnamese officials I interviewed recently, a few days after the Tonkin Gulf reprisals the Vietnamese Communist leadership secretly convened a Central Committee plenum to consider the implications of the American move. Party leaders concluded that direct US military intervention in the South and the bombing of the North were probable, and that the party and government had to prepare for a major war in the South. In September the first combat units of the Vietnam People’s Army began to move down the Ho Chi Minh Trail.

The self-defeating errors of the Tonkin crisis were not unique to that administration of that conflict. The subjective expectation of aggressive action by an adversary can create imaginary threats and lead to unnecessary violence. Ignorance of an adversary’s viewpoint may cause a state to provoke unwittingly an action it would have wished to avoid. Until US decision makers are trained to think about managing conflict in a more disciplined way, the risk of blundering into confrontation will never be far off.

Fact or Fiction

Douglas Pike

The following is a letter to the Editor that was published in Response to this column. Douglas Pike was a military historian working at University of California, Berkely.

Gareth Porter’s “Lessons of the Tonkin Gulf Incident: (Aug 9) concludes that the Gulf of Tonkin Incident “was a figment of the US government’s imagination.” He says “accumulated evidence” now makes this “reasonably certain.”

He is flatly contradicted by Hanoi historians who not only assert there was indeed a naval confrontation, but claim it ended in great victory for North Vietnam.

What Mr. Porter calls “the alleged North Vietnamese PT boat attack” is described in the PAVN Publishing House (Hanoi work “Military Events” as “three torpedo boats from Navy Squadron. Three attacked the destroyer Maddox...and chased it away.”

The Gulf of Tonkin incident was regarded as such a great victory that the PAVN navy uses Aug. 4, 1964 as its “anniversary date,” and celebrates it each year.

Secrets of the Vietnam War

By Philip B. Davidson

Philip B Davidson is a former CIA agent who served in Vietnam. He became a self-taught historian after the Vietnam War and self-published the book in which this excerpt appears.

Myth: The Tonkin Gulf incident never happened, or if it did, the United States Intentionally provoked it

The Tonkin Gulf Incident refers to the attacks the North Vietnamese Patrol Torpedo (PT boats made on the US Destroyer Maddox on 2 August 1964 and to the alleged second attacks made on the US. Destroyers Maddox and C. Turner Joy on 4-5 August. The impact of this myth is that these unprovoked North Vietnamese attacks brought about the Gulf of Tonkin Resolution passed by the Congress on 7 August 1964. This resolution empowered President Johnson to commit United States forces in Vietnam. If the attacks did not occur, or if the United States forces provoked them, the incident, and thus, the basis for the resolution, was fraudulent. And since subsequent United States military operations were authorized by it, they, too were illegitimate.

There has never been any doubt that three North Vietnamese PT boats made an attack on the USS Maddox in international waters on 2 August 1964. In fact, the North Vietnamese boast about it in their official history of the Vietnam War.

The doubts arise about whether the United States had either unintentionally or deliberately provoked the North Vietnamese attacks. This requires some background detail. In early 1964, the United States and South Vietnam initiated a program known as Operation Plan (OPLAN) 34A, in which the South Vietnamese, with American advice and support, conducted a series of minor, largely ineffectual raids against North Vietnamese coast installations. The United States Navy alone conducted another operations program, called DESOTO, an operation to gain intelligence regarding North Vietnamese electronic devices and to acquire information of navigational and hydrographic conditions in the Tonkin Gulf.

On the night of 30-31 July, 120 to 130 miles away from the islands in international waters on its way to carry a DESOTO mission, which it initiated the following night (31 July – August), three North Vietnamese PT boats began high speed runs at the Maddox which at the time was 29 miles off the North Vietnamese coast. The attackers fired torpedo and 12.7 mm machine guns at the Maddox. The destroyer returned the fire, hitting one of the North Vietnamese boats. At 1730 hours (5:30 PM), four F-8E fighters from the USS Ticonderoga joined the fracas. They made several rocket and strafing runs, adding to the damage inflicted on the boats by the Maddox. By 1800 hours (6:00 PM) when the fighters had to leave the area, one North Vietnamese PT boat was dead in the water, and the other two, badly damaged, were running for the North Vietnamese coast.

Many opponents of the Vietnam War argue that the United States either intentionally or unintentionally (through negligence or lack of coordination) provoked the North

Vietnamese attacks on the Maddox of 2 August 1964. Those who argue to the affirmative point out that the North Vietnamese logically would confuse the raids of OPLAN 34A with the DESOTO mission of the Maddox.

They maintain that the instructions to the Maddox to approach no closer than eight nautical miles to the North Vietnamese coast and four miles to the off-shore islands, would result in violations of North Vietnam's definition of its coastal water, believed to be twelve nautical miles. Finally, they cite messages of 1 August from the captain of the Maddox, who stated that he realized that the mission was dangerous, but who did not retire from his provocative course or abort the mission.

Those who hold that the Maddox's actions were not provocative argue that the North Vietnamese should not have attacked the ship until they were sure that the Maddox had in fact bombarded the islands on 31 July. Adm. U.S. Grant Sharp, Commander in Chief, Pacific (CINCPAC) at the time, has gone further. He maintains that the North Vietnamese had tracked the Maddox by radar from the time it crossed the 17th Parallel (DMZ) and knew throughout its cruise where it was and what it was. In effect, Sharp claims that the North Vietnamese knew the Maddox had not engaged in the raids and yet attacked her anyway.

Sharp and others maintain that the orders given to the Maddox to stay eight miles from the North Vietnamese shore and four miles from the islands was in keeping with the declaration of the North Vietnamese that their coastal waters extended for five nautical miles, not twelve, and that the four-mile circumnavigation of islands complied with the internationally recognized three-mile territorial waters limit. Finally, those who think the Maddox was attacked without provocation, hold that the mission of the Maddox (to monitor electronic emissions from the North Vietnamese shore installations) was nothing new and had been carried out by both surface craft and aircraft all over the world. Further, the USS Craig had patrolled along the North Vietnamese coast on a similar mission some months earlier without incident. President Johnson, with some grumbling and vague threats, initially decided to accept the incident as a mistake on the part of the North Vietnamese. Of course, this was largely a domestic political decision. In 1964 he was running for president as the "peace candidate," contrasting his martial restraint to the bellicose blasts of his Republican Opponent, Senator Barry Goldwater. The president, however, in an effort to balance himself between action and inaction, ordered the DESOTO patrols to continue, reinforcing the Maddox with another destroyer, the USS Turner Joy.

On 4 August, the Maddox and the Turner Joy apprehensively returned to their patrol route. The cruise continued without incident until around 1915 hours, when the National Security Agency (NSA), after intercepting a North Vietnamese message, flashed the task force commander, Capt. John Herrick, a warning of a possible enemy PT boat attack. At 2035 hours the ship's radars picked up indications of the approach of three high-speed craft some thirty miles from the American vessels, and the crews of both ships went to General Quarters. At about 2130 hours, a confused fracas began. The night was dark, with an overcast sky and almost zero visibility. Radar men reported enemy contacts at various ranges, and the sonar men reported hearing the approach of some twenty enemy torpedo toward the American ships. The skipper of the Turner Joy

observed a column of black smoke arising from the water, but when he tried to get a closer look, the smoke had vanished. The pilots of the aircraft called from the Ticonderoga saw no enemy boats or any wakes of such craft.

To this day, no one (other than the North Vietnamese) is sure that on 4-5 August 1964 North Vietnamese craft attacked the two American ships. Intercepts of pertinent North Vietnamese radio communication (not all of which have been declassified) indicated almost certainly that the enemy decided to begin a hostile action against the American ships. Although NSA informed Captain Herrick that an enemy attack was imminent, another analyst studying the same message or messages believes that the messages ordered enemy patrol boat to investigate the destroyer. This latter interpretation would be confirmed by the original (and probably valid radar sensing of approaching enemy vessels.

After the shooting started, the reports of smoke, torpedo noises, torpedo sightings, radar contacts, and sinkings can be put down to combat hysteria. These crews were not combat veterans, and in the fear and excitement of their first or second battle, particularly under conditions of almost zero visibility, their minds could easily have played strange tricks. Captain Herrick, who was a combat veteran, was the first to question the factuality of the North Vietnamese attacks. To this day, Captain Herrick's simple statement remains the most valid summation of the "second attack of 4-5 August 1964.

At noon on 4 August (Washington time is thirteen hours behind Vietnam time), President Johnson convened the National Security Council and decided to launch a retaliatory strike against the North Vietnamese support facilities' at Vinh, where the attacking 100 hours, 5 August (Vietnam time). The pilots reported that fuel oil tanks at Vinh were burning and exploding, with smoke rising to 14,000 feet, and that eight North Vietnamese PT boats had been destroyed and twenty-one damaged. Two United States Navy aircraft were lost.

In summary—the North Vietnamese attacked the Maddox in international waters on 2 August 1964. They may have attacked the Maddox and the Turner Joy on the night of 4-5 August. If they did not attack on 4-5 August, the bulk of evidence indicates that the Communists at least made a hostile approach toward the two United States Warships. The actions of the two American vessels were at no time provocative. They kept out of North Vietnam's territorial waters. In fact, before each North Vietnamese attack or hostile approach, the vessels altered course so as to turn away from the Vietnamese coast. The United States vessels did not fire on their attackers until fired upon.

The Gulf of Tonkin Resolution

This excerpt came from a college level textbook from a chapter called "LBJ and the Vietnam conflict" written in 1990.

In 1964 LBJ took bold steps to impress the North Vietnamese with American resolve and to block his vigorously anticommunist opponent, Barry Goldwater, from capitalizing on Vietnam in the presidential campaign. In February Johnson ordered the Pentagon to prepare for air strikes against North Vietnam. In May his advisors had drafted a congressional resolution authorizing an escalation of American military action and in July LBJ appointed General Maxwell Taylor, an advocate of a greater American role in Vietnam, as ambassador to Saigon. In early August, North Vietnamese patrol boats reportedly clashed with two US destroyers patrolling the Gulf of Tonkin. Despite virtually no evidence of an attack, Johnson announced that Americans had been victims of "open aggression on the high seas." Withholding the information that the U.S destroyers had been aiding the South Vietnamese in clandestine raids against North Vietnam, the president condemned the alleged North Vietnamese attacks as unprovoked.

Card 1: Attacks

Johnson called on Congress to pass a resolution giving him the authority to "take all necessary measures to repel any armed attack against the forces of the United States and to prevent further aggression." Assured that this power would lead to no "extension of the present conflict," the Senate passed the Gulf of Tonkin Resolution 88-2, and the House 416-0. Johnson called the resolution "grandma's nightshirt - it covered everything." The president, moreover, considered the resolution a mandate to commit U.S. Forces to Vietnam as he saw fit. But the resolution would soon create a credibility problem for Johnson, allowing opponents of the war to charge that he had misled Congress and lied to the American people. By providing LBJ with a blank check, the resolution also made massive U.S. Military intervention likely.

Card 2: The Resolution

AS I SAW IT, Autobiography of Dean Rusk, 1990

On August 2 and 4, 1964, we received reports that the USS *Maddox* and USS *C. Turner Joy*, American destroyers operating in the Gulf of Tonkin off the coast of North Vietnam, had been attacked by North Vietnamese torpedo boats in two separate incidents. Neither destroyer was hit. There is no doubt that the first attack took place, but we more or less brushed that aside as possibly the action of a trigger-happy local commander. Some doubt existed about whether a second attack ever occurred, but when we heard reports of a second attack, that raised the possibility that Hanoi might have decided to challenge the American presence in the Gulf of Tonkin.

Card 1: The attacks

I wasn't on the decks of those American destroyers that evening, but at the time, on the basis of the information available to us, we in Washington thought the second attack had occurred. The captains of those destroyers thought their ships had been attacked, and most convincing to me, our intercepts of North Vietnamese radio transmissions suggested that the North Vietnamese thought a second attack was in progress. The Republic of Vietnam today celebrates August 2-the day of the Tonkin Gulf attacks-as part of its national war effort against the Americans, so whatever happened that night in the Tonkin Gulf, evidently it takes credit for it now.

Lyndon Johnson was not looking for a pretext to launch retaliatory raids or escalate the war. Had he wanted a pretext, we could have used the first attack. Our two destroyers were on intelligence-gathering missions in international waters, and the American Navy had a right to operate in those waters. North Vietnam was using coastal waters to infiltrate men and arms into South Vietnam; from our point of view, this conduct was contrary to international law. South Vietnam under the doctrine of self-defense was trying to block this infiltration and mount retaliatory raids of its own-a secret operation called 34-A, supported by the American Navy.

Card 2: 34-A

But the destroyers attacked in the Gulf of Tonkin were on intelligence-gathering missions, not participating in South Vietnamese actions along the coast. It is entirely possible that the North Vietnamese thought that our destroyers were involved in these 34-A raids and in blockading operations along North Vietnam's coast to stop their infiltration of the South by sea. But even if Hanoi thought this, it isn't valid to call the exercise of self-defense a provocation.

After the second attack President Johnson called together about thirty congressional leaders, briefed them on what had happened, and told them about the retaliatory air strikes he intended to order. He then reminded them of President Truman's experience with Senator Robert Taft at the outbreak of the Korean War. Despite congressional assurances that Truman should respond to the North Korean invasion without seeking Congress's authorization. Taft had attacked Truman publicly.

Card 3: Self-Defense or Provocation

As I Saw It

2

Lyndon Johnson's memories of that experience were the real genesis of the Tonkin Gulf Resolution. Shortly after becoming president, Johnson told us, "If we stay in South Vietnam much longer or have to take firmer action, we've got to go to Congress." Various drafts of what eventually became the resolution circulated around the State Department long before the actual attacks occurred. But when the time came, we put aside those drafts, worked with the members of the Senate Foreign Relations Committee, and put together a streamlined version.

Having told congressional leaders about the Taft episode, Johnson asked if this was an appropriate time for a congressional resolution on American policy toward South Vietnam. The leadership, with near unanimity, urged him to go ahead but keep it short; it would be passed promptly and with a strong vote. Indeed, the Tonkin Gulf Resolution, in which Congress declared its support for the United States' willingness to come to the assistance of those protected by the SEATO Treaty, including the use of armed force "as the President shall determine," was passed rapidly: 88-2 by the Senate and 416-0 by the House.

Card 4: The Tonkin Gulf Resolution

The resolution was simply worded, and there was no question about its meaning during the floor discussion. One senator asked Foreign Relations Committee Chairman William Fulbright if this resolution would permit dispatching large numbers of American forces to South Vietnam. Fulbright said he hoped it wouldn't be necessary to take such steps, but if this proved necessary, the resolution would allow it. Fulbright's views were those of Lyndon Johnson's; both men hoped there would be no escalation of the war. At the close of Secretary of Defense Robert McNamara's testimony, Fulbright told me privately that this was the best resolution of its sort he had ever seen presented to the Senate. I never forgot Fulbright's remark. He was all for it at the time. He urged the Senate to give it immediate and unanimous approval.

Senator Wayne Morse opposed the resolution as an unwarranted delegation of the war powers of Congress, warning of its far-reaching implications. But he was nearly alone. When some members of Congress later changed their minds about the war, they tried to throw a cloud on the resolution itself and the way we had presented it. But I have no doubt that they knew exactly what they were voting for. It was simply stated, and the floor discussion brought out all relevant aspects. Some later complained, "We didn't anticipate sending a half million men to South Vietnam," but neither did Lyndon Johnson.

Card 5: The Vote in Congress

I never worried about the constitutionality of the Tonkin Gulf Resolution or about subsequent actions based upon its authority. If Congress can declare war, surely it can take measures short of declaring war that fall within its constitutional powers. I felt the Tonkin Gulf Resolution was not congressional evasion of its war powers responsibility, but an exercise of that responsibility.

Card 6: Defense of the Resolution

Dean Rusk was Secretary of State at the time of the incident. He wrote his autobiography when he held an endowed chair later in life at the University of Georgia.

You Tube: Lyndon Johnson – Report on the Gulf of Tonkin Incident

<http://www.youtube.com/watch?v=Dx8-ffiYyzA>

The Fog of War: Gulf of Tonkin: McNamara admits it didn't happen

<http://www.youtube.com/watch?v=EROOxBEZ3mk>

Secretary of Defense Robert McNamara phone call to LBJ:

<http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB132/04%20Track%204.wma>

Senator Wayne Morse says no to Vietnam 1964

http://www.youtube.com/watch?v=DyFq9yco_Kc

Activity

3 After Reading the Documents

After coming to a consensus with your partner about your answers to the three questions, given the evidence, talk to another pair. Share your decisions and resolve any disagreements. Record any new decisions here. Then discuss your answers with the class.

Activity

4 Preparing to Write a Historical Argument

Read the following from John Prados, Aug 4, 2004, retrieved from: <http://www2.gwu.edu/~nsarchiv/NSAEBB/NSAEBB132/essay.htm>. John Prados is a National Security Archive Fellow at George Washington University and this is from his website on the Gulf of Tonkin.

A fresh addition to the declassified record is the intelligence estimate included in this briefing book, *Special National Intelligence Estimate 50-2-64*. Published in May 1964, the estimate again demonstrates that the United States purposefully directed OPLAN 34-A to pressure North Vietnam, to the extent of attempting to anticipate Hanoi’s reaction. It wrongly concluded that North Vietnam, while taking precautionary measures, “might reduce the level of the insurrections for the moment.” (Note 1) In fact Hanoi decided instead to commit its regular army forces to the fighting in South Vietnam.

And,

American pilots from the carrier *USS Ticonderoga* sent to help defend the destroyers from their supposed attackers told the same story. Commander James B. Stockdale, who led this flight of jets, spotted no enemy, and at one point saw the *Turner Joy* pointing her guns at the *Maddox*. As Stockdale, who retired an admiral after a distinguished career that included being shot down and imprisoned by the North Vietnamese, later wrote: “There was absolutely no gunfire except our own, no PT boat wakes, not a candle light let alone a burning ship. None could have been there and not have been seen on such a black night.”

How did this author use evidence in his argument? What can you learn from this example?

Begin by planning your essay. On the next page, write the claim and outline, make a jot list or construct a concept map.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a template for a student's response.

A large rectangular area with a green border, containing 25 horizontal green lines for writing. The lines are evenly spaced and extend across the width of the page, providing a template for a student's response.

Rubric for Argument Essay

AP U.S. HISTORY: GENERIC RUBRIC FOR DBQ RESPONSES

The list of characteristics following the grades apply to both free response essays and DBQs and indicate what student essays need to contain in order to score in a particular category. In addition, DBQ essays must incorporate document analysis and substantial information that is not contained in the documents (outside information).

8-9 points

- Strong, well-developed thesis which clearly addresses the question; deals with the most significant issues and trends relevant to the question and the time period.
- Abundant, accurate specifics; may contain insignificant errors.
- Depending on what is called for, demonstrates well-reasoned analysis of relationship of events and people, cause and effect, continuity and change.
- Covers all areas of the prompt in approximate proportion to their importance (extremely good papers need not be totally balanced).
- Effective organization and clear language.

DBQ: Sophisticated use of a substantial number of documents; substantial relevant outside information; chronologically coherent.

5-7 points

- Has a valid thesis; deals with relatively significant issues and trends.
- Some accurate specific information relevant to the thesis and question
- Analyzes information: uses data to support opinions and conclusions; recognizes historical causation, change and continuity.
- Adequately addresses all areas of prompt; may lack balance.
- May contain a few errors, usually not major.
- Adequately organizes; generally clear language; may contain some minor grammatical errors.

DBQ: Use of some documents and some relevant outside information.

2-4 points

- Thesis may be absent, limited, confused, or poorly developed; may take a very general approach to the topic, failing to focus on the question; position may be vague or unclear.
- Superficial or descriptive data which is limited in depth and/or quantity.
- Limited understanding of the question; may be largely descriptive and narrative.
- Adequately covers most areas of the prompt; may ignore some tasks.
- May contain major errors.
- Demonstrates weak organization and writing skills, which may interfere with comprehension.

DBQ: Misinterprets, briefly cites, or simply quotes documents; little outside information, or information which is inaccurate or irrelevant.

0-1 point

- Usually has no discernible thesis, contains a thesis that does not address the question, or simply restates the question.
- Superficial, inappropriate or erroneous information; or information limited to a small portion of the prompt.
- Analysis may be fallacious.
- May contain numerous errors, both major and minor.
- May cover only portions of the prompt; refers to the topic but does not address the prompt.
- Erratic organization; grammatical errors may frequently hinder comprehension.

DBQ: Poor, confused or no use of documents; inappropriate or no outside information.

Conversion to numerical grades:

| | |
|---|----|
| 9 | 98 |
| 8 | 93 |
| 7 | 88 |
| 6 | 83 |
| 5 | 78 |
| 4 | 74 |
| 3 | 68 |
| 2 | 63 |
| 1 | 58 |

Essay 1: Score

Reason for score:

Essay 2: Score

Reason for score:

Lesson 13

Addressing the Essential Question

In this lesson, you will . . .

- Use evidence from the texts you have read to create and support a claim in answer to the essential questions.
- Organize a claim and evidence in essay form.
- Participate meaningfully in a Socratic Seminar.
- Use vocabulary read in previous lessons.
- Explain the choices in evidence you made in the essay.

Activity

1 Orientation to the Task

Review the essential questions. In this task, think about the answer to these questions, using the two topics you have studied—The Cuban Missile Crisis and the Vietnam Conflict.

Were American concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis and the Vietnam Conflict.

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

After reading the informational texts and participating in the Socratic Seminar, write an essay in which you address the question and argue your claim. Support your claim with evidence from the texts.

Activity

2 Preparing for the Socratic Seminar

Determine an answer (make a claim) for one or more of these questions so you will be ready to participate in a seminar. Pay attention to all of your readings and notes. Use the following notes organizers to help you find evidence across all of the texts you have read so that you can form your answer *based upon evidence*.

Activity

2 Preparing for the Socratic Seminar

Determine an answer (make a claim) for one or more of these questions so you will be ready to participate in a seminar. Pay attention to all of your readings and notes. Use the following notes organizers to help you find evidence across all of the texts you have read so that you can form your answer based upon evidence.

| <i>Were American concepts of liberty and equality reflected in U.S. foreign policy? If so, how? If not, why not?</i> | | |
|--|------------|-----------|
| | YES | NO |
| Danzer chapter | | |
| Richard Reeves' account of Diem assassination | | |
| Checklist in case of a coup | | |
| Ho Chi Minh's Declaration of Independence | | |
| Manifesto of the Laodong Party | | |
| Viet Cong program | | |
| Gareth Porter's "The Tonkin Gulf Crisis" | | |
| Douglas Pike, "Fact or Fiction" | | |
| Davidson, "Secrets of the Vietnam War" | | |

| | | |
|---|------------|-----------------|
| Dean Rusk, "As I Saw It" | | |
| "Fog of War" video | | |
| Johnsons "Midnight Address" video | | |
| "Senator Wayne Morris says No to Vietnam" video | | |
| Textbook excerpt | | |
| Robert McNamara Phone Call | | |
| My answer: | Yes or No? | Why or Why Not? |

What conflicts existed in conceptions of liberty and freedom by those participating in the Cuban Missile Crisis? In the Vietnam Conflict

| Cuban Missile Crisis | Castro Administration | Kennedy Administration | Khrushchev Administration |
|-------------------------------------|------------------------------|-------------------------------|----------------------------------|
| Khrushchev photo | | | |
| Khrushchev-Nixon cartoon | | | |
| Khrushchev quotes | | | |
| Cuban Missile Crisis lecture notes | | | |
| Tindall and Shi chapter excerpt | | | |
| Khrushchev letter to Kennedy | | | |
| Dobrynin report to Foreign Ministry | | | |
| Kennedy report to Rusk | | | |
| Eisenhower speech | | | |
| Kennedy speech | | | |

| Vietnam | Johnson Administration | Ho Chi Minh and North Vietnam | South Vietnam (various leaders) |
|---|-------------------------------|--------------------------------------|--|
| Vietnam overview | | | |
| Danzer chapter | | | |
| Richard Reeves' account of Diem assassination | | | |
| Checklist in case of a coup | | | |
| Ho Chi Minh's Declaration of Independence | | | |
| Manifesto of the Laodong Party | | | |
| Viet Cong program | | | |
| Gareth Porter's "The Tonkin Gulf Crisis" | | | |
| Douglas Pike, "Fact or Fiction" | | | |
| Davidson, "Secrets of the Vietnam War" | | | |
| Dean Rusk, "As I Saw It" | | | |

| | | | |
|---|-----------------------------|-------------------------|--|
| "Fog of War" video | | | |
| Johnsons "Midnight Address" video | | | |
| "Senator Wayne Morris says No to Vietnam" video | | | |
| Textbook excerpt | | | |
| Robert McNamara Phone Call | | | |
| My Answer: | U.S. administration: | Other countries: | |

Did the concepts of liberty and freedom change over the course of the 1960s as reflected in U.S. foreign policy? If so, how? If not, why not?

| | Earlier | Later | Change? Why or Why Not? |
|-------------------------------------|----------------|--------------|------------------------------------|
| Khrushchev photo | | | |
| Khrushchev-Nixon cartoon | | | |
| Khrushchev quotes | | | |
| Cuban Missile Crisis lecture notes | | | |
| Tindall and Shi chapter excerpt | | | |
| Khrushchev letter to Kennedy | | | |
| Dobrynin report to Foreign Ministry | | | |
| Kennedy report to Rusk | | | |
| Eisenhower speech | | | |
| Kennedy speech | | | |
| Vietnam overview | | | |

| | Earlier | Later | Change? Why or Why Not? |
|---|----------------|--------------|------------------------------------|
| Danzer chapter | | | |
| Richard Reeves' account of Diem assassination | | | |
| Checklist in case of a coup | | | |
| Ho Chi Minh's Declaration of Independence | | | |
| Manifesto of the Laodong Party | | | |
| Viet Cong program | | | |
| Gareth Porter's "The Tonkin Gulf Crisis" | | | |
| Douglas Pike, "Fact or Fiction" | | | |
| Davidson, "Secrets of the Vietnam War" | | | |
| Dean Rusk, "As I Saw It" | | | |
| Robert McNamara Phone Call | | | |

Activity

3 Participating in the Socratic Seminar

Come to the Socratic Seminar ready to participate in discussion. After you participate in the seminar, evaluate your performance using this rubric.

Socratic Seminar Self-Evaluation Rubric
Check the boxes that reflect your participation.

| | Understands the texts | Participates in discussion | Supports ideas with evidence | Demonstrates critical mindedness | Demonstrates tolerance for uncertainty | Listens and respects others |
|--------------|---|---|--|---|--|--|
| Above Target | <input type="checkbox"/> Uses parts of the texts in the discussion and shows understanding of the texts. <input type="checkbox"/> Shows command of vocabulary. | <input type="checkbox"/> Demonstrates active participation throughout circle time. | <input type="checkbox"/> Makes specific references to texts and regularly defends ideas with evidence. | <input type="checkbox"/> Questions others during discussion in a way that makes sense and adds to the group's discussion. | <input type="checkbox"/> Is able to listen to and accept others' opinions different from his/her own. | <input type="checkbox"/> Makes comments reflecting active listening and respect of others. |
| Target | <input type="checkbox"/> Uses texts during the discussion but does not show understanding of them. <input type="checkbox"/> Uses some text vocabulary. | <input type="checkbox"/> Demonstrates active participation in at least half of the circle time. | <input type="checkbox"/> Makes references to texts and at times defends ideas with evidence when | <input type="checkbox"/> Questions and comments to others make sense but do not add to the group's discussion. | <input type="checkbox"/> Is able to listen to others' opinions different from his/her own but does not use them in remaining discussion. | <input type="checkbox"/> Generally listens, but is not attentive to details. |
| Below Target | <input type="checkbox"/> Does not use any of the texts in the discussion. <input type="checkbox"/> Does not use text vocabulary. | <input type="checkbox"/> Demonstrates some participation, but off-task most of the circle time. | <input type="checkbox"/> Makes no references to texts or does not defend ideas. | <input type="checkbox"/> Does not question others or questions don't make sense. | <input type="checkbox"/> Does not accept others' opinions and is unwilling to hear them. | <input type="checkbox"/> Is consistently inattentive. |

What I did do well:

What I didn't do well:

What I will do next time:

Activity

4 Outlining Claim and Evidence and Writing the Essay

Based upon what you learned in this discussion, revise your seminar notes into an essay outline with a claim and the evidence to support your claim, an introductory and a closing paragraph.

Claim:

Introductory paragraph:

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Rubric for Final Essay

| Scoring Elements | 1 Not Yet | 1.5 | 2 Approaches Expectations | 2.5 | 3 Meets Expectations | 3.5 | 4 Advanced |
|-----------------------|--|-----|---|-----|---|-----|---|
| Focus | Attempts to address prompt, but lacks focus or is off-task. | | Addresses prompt appropriately and establishes a position, but focus is uneven. | | Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position. | | Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position. |
| Controlling Idea | Attempts to establish a claim, but lacks a clear purpose. | | Establishes a claim. | | Establishes a credible claim. | | Establishes and maintains a substantive and credible claim or proposal. |
| Reading/ Research | Attempts to establish a claim, but lacks a clear purpose. | | Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. | | Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim. | | Accurately and effectively presents important details from reading materials to develop argument or claim. |
| Development | Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. | | Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. | | Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. | | Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim. |
| Organization | Attempts to organize ideas, but lacks control of structure. | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument. | | Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument. |
| Conventions | Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation | | Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources. | | Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors. | | Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format. |
| Content Understanding | Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate. | | Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation | | Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding. | | Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding. |

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