

## ***Already At the Top: CTE Programs Show Positive Impact on Student Achievement***

***Focus: Suburban school (three part series)***

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Global competition, demographics, and changes in the labor market require that we expeditiously increase the pace in which build systems that ensure that every student in the United States is prepared for success. At the federal level, the Obama administration recognized this urgency and incentivized sweeping changes in four priority areas through its Race to the Top Fund. While the funding dedicated to these priorities through Race to the Top is unprecedented, these priorities are not new. Career technical education programs (CTE) across the United States have made significant gains to improve student achievement and success.

This issue brief highlights a high school in a suburban setting and its work to transform a CTE program into a rigorous college and career readiness program with positive outcomes and impact on student achievement. The success of the program aligns to at least one of the Race to the Top priority areas. Once stereotyped as a dumping ground for those less academically- inclined, CTE has been transforming itself to a system that offers rigorous, relevant, real-world instruction with positive outcomes and impact on student achievement.

**Race to the Top four priority areas:**

- **Adopting standards and assessments** that prepare students to succeed in college and the workplace and to compete in the global economy;
- **Building data systems** that measure student growth and success, and inform teachers and principals about how they can improve instruction;
- **Cultivating effective teachers and principals**, especially where they are needed most; and
- **Turning around struggling schools.**

### **CTE in a Suburban Setting: Livonia Career Technical Center, Michigan**

Livonia Career Technical Center (LCTC) is a career technical school that serves about 800 students in grades 11 - 12 from three Livonia high schools. Students attend LCTC for two- or three-hour programs and return to their home high school for the remainder of the day. LCTC offers 17 programs in areas ranging from architectural technology to sports medicine to fashion merchandising. Livonia sits about 14 miles west of Detroit in a city with a population of just over 100,000. The median family income is \$72,720, which is 31 percent above the national average.<sup>1</sup>

While the Livonia Public School District has a relatively low rate of students who qualify for free and reduced lunch (about 20 percent) – a demographic strongly linked to students who perform poorly in school -- LCTC did have its challenges. LCTC once suffered from the stigma of being a traditional vocational school - a school designed for the students who did not achieve

or desire to go on to college or achieve academically. Today, that is not the case. All CTE courses at LCTC are aligned with at least one of seven postsecondary institutions in the state.

At LCTC, administrators credit the adoption of a high-expectation culture and commitment to professional development to the cultivation of a high-performing school. The high performance is exhibited in the rate of students who leave LCTC on a pathway to two- and four-year postsecondary institutions, employment rates and the development of high-rigor program, noted Janet Haas, LCTC principal.

### **Adopting Standards and Assessments**

Shaping the school standards, LCTC established articulation agreements between various career technical center programs, and two- and four-year colleges and universities such as Ferris State University, Henry Ford Community College and Davenport University. Those policies linked the standards and courses at LCTC with those at the postsecondary level. Now, all LCTC CTE courses are aligned with those of at least one of seven postsecondary institutions.

Aligning LCTC's program with those at the postsecondary level played a significant role in steering students to succeed in college and the workplace, Haas said. According to the state's Career Technical Education Information Services (CTEIS), which includes a follow up survey of the students who graduated and took courses in the state's career technical center, a significant number of students find employment in a field relevant to their CTE training and advance to a two- or four-year institution.

The report found that about 76 percent of students who completed studies at LCTC in 2008, had a job, and about 61 percent of which were related to their CTE studies. Most students, about 79 percent secured part time jobs, and about 52 percent of which were related to their CTE studies. While the rate of employed graduates declined from 89 percent among 2006 graduates to 76 percent among 2008 graduates, the rate of students who pursued continuing education – particularly in community colleges and universities – has increased steadily.

In 2008, of the 469 students or their proxies<sup>ii</sup> surveyed, about 87 percent said they were continuing their education primarily at a community college or college/university. About 57 percent said they were enrolled in a community college and 56 percent of those students were studying in a field related to their CTE programs. Further, about 42 percent of students said they were enrolled in a college or university and 43 percent of those students said they were studying in a field related to their program. The rate of students enrolled in colleges/universities increased from about 37 percent in 2006 to the latest rate of about 42 percent in 2008.

### **Cultivating Effective Teachers and Principals**

To foster a college-going culture at LCTC, Haas said she realized she had to start with changing attitudes among staff and students. The transformation began in the 1980s with a focus on changing the perception of their school, which housed a few hundred students. Administrators pushed the change, shaping LCTC to an environment that engages students through relevant courses to prepare them for not only success in the workplace, but further education as well.

Haas made achieving academic excellence a goal of LCTC and the teachers, who were then focused primarily on teaching trade or career skills. To buttress new, higher academic expectations, investment in professional development among teachers proved to be critical.

A notable and recent example of professional development efforts includes LCTC's algebra II integration program, which kicked off in 2006. This endeavor involved significant planning, starting with staff assessing the math content in all of their CTE courses. By the 2008-2009 school year, LCTC teachers committed to a year-long professional development program. LCTC hired a math instructor to work with the staff that engaged in full-day refresher courses on algebra and weekly sessions and staff received support through online and traditional tutoring. The project spearheaded the state's academic and CTE integration effort in algebra II and earned LCTC a statewide accolade for academic excellence.

In the 2008-2009 school year, LCTC rolled out the algebra II program, which allows students to earn academic credits that are required for graduation by taking career-relevant courses that blend academic and technical studies. The program earned LCTC the state's 2010 Excellence in Practice Award.

Not losing sight of LCTC's focus and the value-added of CTE by providing a career-minded curriculum, the school continues to provide staff with professional development opportunities through its relationship with its advisory committees comprised of postsecondary institutions, and business and industry. Each instructor meets bi-annually with a committee that consists of professionals in their field to discuss curriculum, equipment, career pathway to college and jobs. The meetings allow instructors to keep informed about changing technology, procedures, equipment and other issues related to the business/industry that they teach.

### **CTE at the Top**

Through CTE programs, LCTC improved its school by raising academic standards and improving the way it supported its educators to teach to and meet those high standards that prepared students postsecondary education. LCTC attributes those improvement strategies to its success, the increase in the number of students who are prepared and enroll in two- and four-year colleges; and relevant, up-to-date curriculum that prepares students to pursue careers. LCTC demonstrates that CTE is poised to align with the Race to the Top priority areas.

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<sup>i</sup> City of Livonia compiled the information from the 2000 Census data. Demographics can be found at <http://www.ci.livonia.mi.us/tabid/305/Departments/Economic%20Development/EconDevCensusData.aspx>

<sup>ii</sup> Michigan Department of Education's Office of Career and Technical Education survey allows a proxy to answer questions about CTE students' employment and continuing education status.