

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

Focus: Rural 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 we 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 rural community 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 Rural Setting: Loving High School, Loving, New Mexico

Loving High School (LHS) is located in a community of approximately 1,400 people in rural southeast New Mexico, 12 miles from the city of Carlsbad. In the *U.S. News & World Report* ranking of the best high schools in the country for 2010, LHS received a Bronze Medal. It is an exemplary high school that has implemented the National Career Clusters modelⁱ since 2004 and in turn has excelled particularly in leadership, standards and student achievement.

This success has been achieved despite significant demographic challenges. The school serves a student body that is 85 percent Hispanic, 14 percent white and 1 percent representing other ethnicities. Ninety percent of students qualify for free or reduced price lunch and nearly 40 percent are English Language Learners.

Turning Around Struggling Schools

New momentum and progressive change came to LHS in 2004 when it became a High Schools That Work siteⁱⁱ. The entire community was involved in this systemic change, which facilitated

the adoption of curriculum with programs of study aligned to the National Career Clusters model. Since this implementation began, students no longer choose between a job-specific vocational or college-bound track, but instead they have integrated learning opportunities. The student response to the new programming has yielded positive results. Students understand the real-world applications of their school work and the opportunities available to them beyond high school, whether it is college or career. And today, the average on-time graduation rate of the three most recent ninth-grade cohorts is above 95 percent.ⁱⁱⁱ

Setting academic and technical standards contributed greatly to LHS's success. In 2005, district-wide content standards were completed, putting in place a standards-driven curriculum that allows school leaders to use assessment data to measure the progress of student achievement. All classes were tied directly to a set of standards developed and adopted by the New Mexico Public Education Department. Each course was aligned to these standards, to which the daily lesson plans are also linked. The standards were developed for the core subjects (mathematics, science, social studies, and language arts) as well as CTE areas.

Further, courses were reorganized and partnerships were developed with local colleges and universities to offer students concurrent and dual-credit courses. Students can earn up to 24 college credits prior to graduation. And those interested in earning a state license in carpentry only need to attend one additional year of postsecondary training. From 2004 to 2009, college attendance rates have averaged 60 percent.

Cultivating Effective Teachers and Principals

In 2005, a community-needs assessment identified the lack of quality, affordable housing as a barrier to economic development. Superintendent David Chavez saw an opportunity to meet both school and community needs through the addition of a home construction course as a capstone in the program of study for Architecture and Construction. Students in the course would apply acquired knowledge and skills while building a home that could be sold to a family looking to move into the community. From this idea, the Building Trades Project was born and the school further implemented the Career Clusters model by collaborating with business leaders, educators and other stakeholders to establish the construction of energy-efficient, single-family homes as part of the program.

One of the most significant steps in developing this program was recognizing the need for qualified, professional help. Turning to the community, LHS found Brigido Garcia, an experienced home building contractor with an alternate teaching certificate. Teaming with Mr. Doug Santo, an experienced building trades instructor who taught many of the introductory courses in the program of study, Mr. Garcia now brings the classroom out into the world, where students are not only helping to counter the lack of quality, affordable housing in Loving, but are also applying acquired knowledge and skills.

LHS has leadership that seeks opportunities in the obstacles and in particular, directly collaborates with industry in a teaching capacity. If LHS had not accepted Garcia's alternate teaching certificate, students would not have the depth of real-world learning opportunities or the professional-level skills that they now have available to them every day.

CTE at the Top

Through CTE programs, LHS transformed itself by implementing the National Career Clusters model and providing students with integrated learning opportunities and real-world experiences with industry professionals. In turn, graduation and college attendance rates have significantly increased, which stakeholders expect to continue to rise as the program continues. High-quality CTE programs, like those in Loving, New Mexico, deliver results and help more students become college and career ready. LHS demonstrates that CTE is poised to align with the Race to the Top priority areas.

ⁱ The National Career Clusters are groupings of occupations used as an organizing tool for curriculum design. They provide an education framework that ensures real-world relevance in high school learning that will help students progress to college and into the workplace.

ⁱⁱ For more information, visit the Southern Regional Education Board site:
http://www.sreb.org/page/1078/high_schools_that_work.html

ⁱⁱⁱ New Mexico began a graduation cohort rating system that rolled out the first set of data beginning with the graduation class of 2009. The cohort was followed as the students progressed from the beginning entry as a 9th grader and tracked to see if he/she graduated within the first four years. This data was set to districts and is found within the New Mexico PED website. There were some districts, Loving as one, that disputed the validity of the rates. Some students were tracked by Loving High School and not included within the data set supplied by the PED. New Mexico began using a state-wide numerical student ID#, and when a student relocates to another public school within the state that particular school is to "locate" the original ID number assigned and reassign it.