



Career-Relevant Education Prepares Students for Real World, Helps Fill Skills Shortage

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By Jennifer Ortega

Forty-seven graduates from El Cerrito High School entered the “real world” June 4 prepared for college and careers in the IT industry, thanks to the education and hands-on training they received through the school’s Information Technology Academy known as [TechFutures](#).

These young men and women, who have already charted their paths by selecting which college to attend, have also chosen their intended majors, including: Computer Science, Computer Engineering, Electrical Engineering, Animation, Photography, Game Design, and Business Administration.

Unfortunately, too few high school students in California have access to this kind of career-relevant education and that spells trouble for our state’s economy, according to a new report by the national business leader organization [America’s Edge](#).

The report, titled “[Can California Compete? Reducing the Skills Gap and Building a Skilled Workforce through Linked Learning](#),” found that nearly half (47 percent) of California jobs are in “middle skills” careers – requiring education beyond a high school diploma but less than a 4-year college degree. However, only 38 percent of California workers have the skills to fill these positions, creating a nearly 10-percentage-point skills gap.

According to the report, California’s economic health looks even more dire when this middle-skill “gap” is coupled with the shortage of workers expected for careers requiring

science, technology, engineering and math skills – the so-called STEM jobs. These jobs are growing much faster than other jobs, but three-quarters of STEM job openings through 2016 will require postsecondary education and half of them require bachelor’s degrees.

Filling those jobs will be difficult. Just six years ago, the Golden State ranked 14th in the nation in recent bachelor’s degrees awarded in science and engineering (per 1,000 workers). Today, California has fallen to 45th in the nation, recently awarding 40 percent fewer degrees in science and engineering than the national average.

As education and training needs are going up, however, California’s education system is falling further behind. In 1970, California ranked seventh in the nation in percent of the workforce that had completed high school; in 2008, it ranked last.

If unaddressed, these trends will further harm our state’s businesses and recovering economy. That is why the business leaders of America’s Edge are calling for greater access to the career-relevant [Linked Learning](#) education approach, like that offered through the IT Academy at El Cerrito High School.

Linked Learning integrates rigorous academics, relevant career-technical education, support services for students and real-world work-based learning experiences supported by industry and community partners over a three- or four-year period. Linked Learning students opt-in to industry themed pathways in a wide range of fields, such as

engineering, arts and media, biomedicine and health. These pathways prepare high school students for future careers and a full range of postsecondary options, including two- and four-year college, an apprenticeship, the military or formal employment training.

This flexible approach can be found in a number of existing models, such as small theme-based learning communities, state-funded [California Partnership Academies](#) (CPAs), other career academies and regional occupation centers and programs, to name a few.

Not only does career-relevant education keep students engaged in school, studies have shown that students in such programs had higher pass rates on the California High School Exit Exam and higher graduation rates than the state average. Further, a national study on career academies showed participating students went on to work more hours per week and earn more money over their lifetimes than non-participating students.

While West Contra Costa Unified School District maintains 15 Linked Learning pathways at five schools, many students throughout the county and around the state do not have access to this effective education approach.

More troubling is the fact that one of the biggest [funding](#) sources for such programs is scheduled to be cut by more than one-third next year. The state currently funds more than 500 CPAs at approximately 300 schools in [35 counties](#), including 14 schools in Contra Costa County. When Senate Bill 70 (2005) sunsets next June, 186 CPAs – including the IT Academy at El Cerrito High School – will lose their state funding, unless the Legislature appropriates funding for these CPAs in the 2012-13 budget bill.

Fortunately, the IT Academy does have other sources of funding courtesy of the Whittier Education Foundation. But not all CPAs are so lucky.

At a time when California businesses are having trouble filling jobs due to a serious skills gap and as traditional education is failing to capture students' attention, we must

look toward practical solutions to addressing these problems. In an effort to strengthen California's future workforce and ensure that students are leaving high school with the kind of college- and career-readiness skills that they need to succeed in the 21st-century global economy, America's Edge is urging state lawmakers to embrace the Linked Learning approach and preserve funding for CPAs.

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Additional information about the Information Technology Academy's class of 2011:

On June 4, TechFutures/Information Technology Academy graduated its 10th class (2001-2011). The 10th graduating class was the largest ever, with 85 graduates from El Cerrito High and Kennedy High School in Richmond, where TechFutures supports another IT Academy.

College enrollment is as follows:

- 5 students will be attending UC Berkeley
- 6 students will be attending other UCs (UC Santa Cruz, Davis, and Irvine)
- 5 students will be attending Cal Poly San Luis Obispo
- 7 students will be attending CSU schools
- 1 Student will be attending Brown University
- 9 students will be attending other private schools
- 52 Students will be attending Community Colleges

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