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Schools should prepare students for real-world jobs

By Jack M. Stewart - Special to the Bee

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The numbers are striking. Thirty percent of California high school students drop out prior to graduating, most of them citing school's irrelevance to their lives. Of those who enter ninth grade, only one in four will go on to obtain a four-year college degree. Many of those who do not obtain a bachelor's degree are left unprepared by the public school system for opportunities in the workplace for middle-wage jobs that do not require a college degree. That's about 72 percent of the jobs in America.

We have lost touch with the purpose of public education to prepare our children for meaningful careers. Biases against career technical education among academia coupled with a growing pressure to teach to standardized tests are forcing schools to prepare students for a future they will never have, rather than delivering graduates armed with the real-world skills to take 21st century jobs.

"We have trouble finding employees to fill family-wage jobs here," says Kellie Johnson, president of Ace Clearwater Enterprises, a parts manufacturer based in Torrance. "Yet, when one of my mid-level employees was recently asked why he is in manufacturing, he responded with pride, 'I have only a high school diploma, I make \$72,000 a year, and I design and make things that go to the moon.' "

Skilled manufacturers in California earn salaries of between \$50,000 and \$80,000 a year, according to the California Employment Department. The average industrial technician, for example, earned \$54,643 last year, while all other full-time U.S. workers earned a median income of less than \$34,000. Manufacturing jobs in California, by the process of elimination, are becoming one of the state's few sources of middle-class and family-wage jobs.

Peter Zierhut of Haas Automation Inc., a machine tool builder based in Oxnard that pays skilled workers up to \$28 an hour with benefits, says, "I have visited dozens of community colleges and vocational training centers, all over America. Every school tells me the same story -- that local business is overwhelming them with requests for new graduates with employable skills."

A recent survey of California community college students provides insight. In Contra Costa County, 75 percent of students stated that they had not considered applying for a manufacturing job because they thought the pay was too low. This perception has consequences that are harmful to the state's economy. Shortages of applicants have forced companies like Dow Chemical in Contra Costa County, which pays skilled workers up to \$100,000, to recruit laborers outside California.

California's education system is attempting to prepare all students for the same future, while failing to embrace the evolution of our economy. An excessive emphasis on college prep courses leaves most high school students without skills to apply for the fastest growing sectors in the California economy. Bureau of Labor Statistics projections show less than a 1 percent increase in the proportion of jobs in the national economy requiring a bachelor's degree or higher in the next six years. Between 2003 and 2005, 27 percent of all new California jobs were in the construction industry, according to the Employment Development Department. The Bureau of Labor Statistics' projections anticipate that 72 percent of American jobs will not require a four-year college degree.

Exacerbating the problem in the state are the California High School Exit Exam and standardized testing. The pressure is on educators to improve the numbers associated with these oft-politicized tests, and any improvement will undoubtedly come to the detriment of career technical education. As schools focus more resources on teaching to these tests, students are being removed from rigorous courses such as career and technical education. In 2005, 40,000 fewer students enrolled in courses that provided skills in robotics, agriculture, automotive technology, business, construction, pre-engineering and manufacturing than in the previous year. Today, California has the lowest percentage of students enrolled in career and technical education courses in our state's history, according to the state Department of Education.

There are other forces at work that undermine career technical education. California's university system has a thinly veiled bias against vocational studies that has, as a practical effect, discouraged high schools from expanding career technical education courses. In an Aug. 7 letter, a University of California lobbyist spelled out the institution's opposition to legislation that would have barred the UC system from discriminating against an applicant for secondary curriculum meeting State Board of Education standards, including career technical education courses.

The letter reads: "SB 1543 could jeopardize the quality of student preparation by ... asking UC to accept courses that may not be related to preparation for college, such as cabinetmaking, food service, and welding but meet the State Board-approved standards that were written to prepare students for those particular career paths."

Ironically, under the bill, career technical education courses, like those described in the letter, and which meet the academically rigorous standards established by the Board of Education, are rejected, while visual and performing art courses such as "dance movement," "tap-dancing" and "choir" are accepted by the UC system.

But some education leaders are catching on to the trend in technical careers. Founded 10 years ago in California's wine country, Napa's New Technology High School prepares students with project-based courses that require students to work in teams on group tasks to give them real-world work force experience.

"In the wake of regional (military) base closures and our growing economy, the business community came to the school board and pressed for the creation of a new type of learning," says Susan Schilling of New Technology Foundation. "The result was the creation of our innovative high school where all courses -- everything from English to technical courses -- are taught as interactive and project-based. The students employ the tools of the modern workplace including technology and group collaboration. We prepare them for admission to the UC or the modern workplace, wherever they set their sights."

Sparked by new state and federal investment funds, Freestyle High School in Mountain View is another one of the few high schools focusing on technical education. "More districts are starting to look at this and finding this is a great way to deal with the dropout problem," said Pat Ainsworth, assistant state superintendent of schools and director of career technical education.

Gone are the nostalgic days when the majority of American workers could build a successful career and support a family without a high school diploma. But conversely, it is unrealistic to expect that every high school student will earn a bachelor's degree and be guaranteed a highfalutin corporate salary.

The future of California's economy clearly demands that lawmakers and education leaders embrace career technical education as an equal partner in the matriculation of our youth. Anything less will result in the outsourcing of our best family-wage jobs, and with them, California's future.

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