Suddenly, vocational training back in vogue

Enrollment soars in 'career technical ed,' as demand grows for workers with specific skills.

By Daniel B. Wood | Staff writer of The Christian Science Monitor

Six years ago, as his 11th-grade classmates struggled with the college-application ritual, Toby Hughes tried to envision his future.

A Georgia honors student with a 1350 SAT score, he knew he wanted to go into computer science, so he went to local computer companies and asked what they wanted in an employee. "They told me I would be more marketable if I had practical technical training as opposed to theoretical academic training," says Mr. Hughes.

He began taking specialized computer-networking classes while still in high school, landed a $52,000 job after graduating, and now, at 24, makes well past that.

Similar scenarios are repeating so often that the world of career technical training - once known somewhat disparagingly as "vocational training" - is experiencing a renaissance in America. Enrollment in technical education soared by 57 percent - from 9.6 million students in 1999 to 15.1 million in 2004, the US Department of Education reported to Congress.

There's every indication that interest is continuing to rise, as families struggle ever harder to afford the traditional college education and as demand grows for skilled US workers in fields such as aviation mechanics, computer technology, electronics, global positioning, and trades ranging from culinary arts to construction.

"American career technical education is being redefined because the needs of the evolving US and world economies are changing," says Darrell Luzzo, incoming president of the National Career Development Association. "Educators at all levels are recognizing that the world's employers increasingly need skill sets that the conventional four-year college degree doesn't give."

The once-standard offerings of technical education - wood shop, metal shop, machining - don't cut it in today's economy either.

"We are redefining almost everything that has to do with the intersection of new technology and the global economy," says Mark Whitlock, CEO of Central Educational Center in Newnan, Ga., a charter school. "The economy is changing and therefore education has to continue to change."

Fields of study today are likely to include more forward-looking careers: crime forensics, composite-plastic fuselage design, robotics, nanotechnology, radiological diagnostics, 3-D animation, and the burgeoning field of "industrial maintenance technology" (keeping the high-tech systems in a modern industrial building up and running).

"When a light-sensor toilet doesn't function anymore, who ya gonna call? Not a regular plumber," says Bill Murphy, recruiter for the McMurry Regional Training Center in Casper, Wyo. "You need someone who knows how to program computers."

Employer demand for such technical skills is prompting some states - including North Carolina and Florida, perennial leaders in education reform and experimentation - to revive or reinvent their tech-ed programs. California, home to 1 in 9 US students, sank $100 million into new technical education programs in its 2006 budget. And in August, President Bush signed legislation renewing the Carl Perkins Vocational and Technical...
Training Act, boosting to $1.3 billion the amount states will get next fiscal year for career technical education in high schools and community colleges.

"High schools, community colleges, universities, parents, and employers are all beginning to realize that ... to be competitive, our educational system needs more than academic theory," says Jan Bray, executive director of the Association for Career and Technical Education. "They are realizing there needs to be more relevance to the workplace, to what students are interested in and to what the changing economy needs."

**Training with a specific job in mind**

One result of that quest for workplace relevance is a rise in partnerships among community/technical colleges, high schools, and employers.

A case in point is the pairing of RF MicroDevices in Greensboro, N.C., with local Guilford Technical Community College. RFMD has developed several programs to help train student operators for his "water fab" facilities, which turn out integrated computer circuits.

"There's no place else around here where someone can learn the skills necessary to perform efficiently in our facility," says Ralph Knupp of RFMD. "Someone who graduates with a bachelor of arts would not arrive bringing the specific experience we need. So vocational training is critical for us to maintain our manufacturing strength in Greensboro."

North Carolina, which has seen its textile and furniture industries contract dramatically in the face of foreign competition, has relied heavily on its community college system, founded in 1958, to redevelop and retrain displaced workers.

"We did a major study with industry and found that for two-thirds of all bio-tech jobs in this state, no four-year degree was necessary," says Martin Lancaster, president of the North Carolina Community College system.

**California revives a defunct program**

In California, meanwhile, the renewed interest in tech ed follows a 25-year decline in such instruction. About three-quarters of high school technical programs were dismantled, and the number of such high school courses dwindled from 40,000 to 24,000 in that time.

But Gov. Arnold Schwarzenegger (R) supports targeted vocational education, based on European models from his childhood. The governor is touring the state in support of a November ballot proposition that will provide $10 billion in bond money to overcrowded schools, including 170 community colleges.

"The renaissance of career technical training is absolutely confirmed in California," says Brice Harris, chancellor of Los Rios Community College District in Sacramento. Fall enrollment there is up 5,000 from last year, a 6 percent jump.

Companies clamoring for specific skills are driving much of the tech-ed rebirth, analysts say.

"Industry has been complaining about shortages of skilled labor they need, so they have been sharing that with college administrations, counselors, and technical advisers," says Trent Munsey, CEO of Skills USA California, a state and national organization that connects students, educators, industries, and businesses. "They have been screaming for trained people [coming] out of the school system as it is ... and enticing people back to the trades."

The disconnect between employers and American education remains a serious problem, say some observers.

"America still has way too many parents and students reflexively applying to four-year colleges on the old adage that in the long run, that is how to get to the top," says Peg Hendershot, director of Career Vision, a Chicago-based career consulting service.

More than 90 percent of US high school seniors say they plan to attend college, and about 70 percent of high school graduates actually do go to college within two years, according to the Education Trust.
"Many more have been going to college without really knowing why and finding out they don't acquire the skills they need to get a job," says Ms. Hendershot. "Now the conversation has started over how to create shorter, alternative pathways."

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