



Trailblazers

Stepping Up To A Nontraditional Challenge

Recruiting and retaining underrepresented gender students in nontraditional CTE programs

Volume 3 Issue 5, November 2010

COMPLETER FOLLOW-UP

CTE administrators should now all have received passwords, via the SSWS dropbox, to view results of the 2010 Completer Follow-Up Survey. If you are an administrator and have not collected your passwords from the dropbox, please call or email to have them resent.

[Trailblazers @virginia.edu](mailto:Trailblazers@virginia.edu) 434-982-5582

EMPLOYMENT NEEDS DATA

New occupational employment projections are available for Virginia's LWIs from the Virginia Employment Commission. Administrators can use these data to prepare new courses, complete local plans, and prepare plans of study. Excel files are available on the [Trailblazers website](#).

We can help you use the projections for program planning. Call or email us.

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WORKPLACE READINESS SKILLS

Virginia's new list of 21 Workplace Readiness Skills requires the attention of CTE Teachers and administrators this fall.

All the details and resources you need to implement this change in the curriculum are online at [Virginia's CTE Resource Center](#) website.

The 21 skills are listed individually in each course framework in Verso and at the top of the list of skills. These skills are listed first to emphasize their importance and to remind teachers that each of these skills is designated "essential" and teachers are required to teach them in all CTE courses. Using the student competency record for each course teachers must rate each student on his/her performance of each skill.

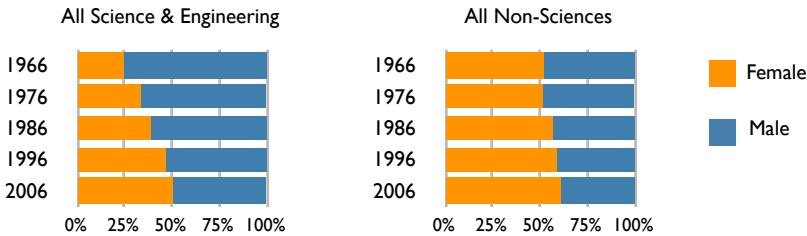
VERSO now has a complete set of resources to help teachers implement the new skills and integrate them into the classroom. To view these, please go to <http://cteresource.org>, click on Verso, then a program area, then a specific course. You will see the skills list and instructional resources for each skill.

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Women have made significant gains in STEM education

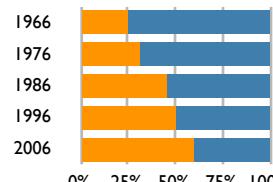
Women In STEM: How Are They Doing?

Bachelor's Degrees Earned by Gender, 1966-2006

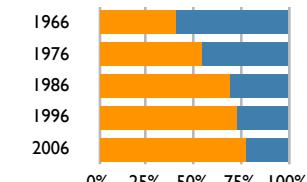


Women now earn the majority of all non-science bachelor's degrees, and they are making significant advancements in science and engineering degrees. In 1966, women earned 24 percent of all STEM degrees. By 2006, this had risen to 51 percent. In biology, psychology and social sciences, women now earn more degrees than men. However, few women complete engineering or mathematics and computer science degrees. In fact, women actually earn fewer bachelor's degrees in mathematics and computer science than they did in 1966. Obviously, career and technical educators are not the only ones who find it difficult to recruit and retain women in these two fields.

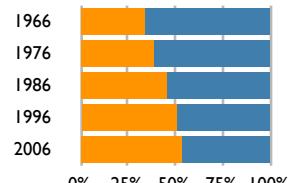
Biological & Agricultural Sciences



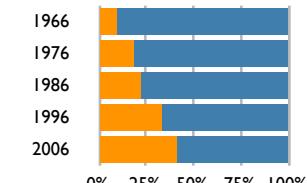
Psychology



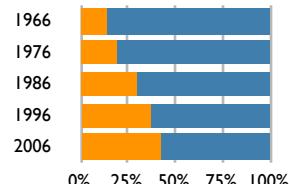
Social Sciences



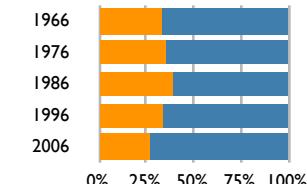
Earth Sciences



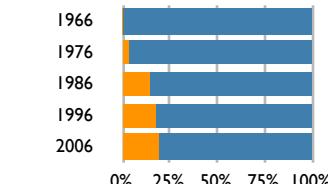
Physical Sciences



Mathematics & Computer Science



Engineering



These crucial skills have a new importance in Career and Technical Education

Workplace Readiness Skills

Virginia has recently made big changes to the workplace readiness skills curriculum in Career and Technical Education. Back in the 1990s the curriculum included 13 skills, which were included as just one competency in course frameworks. Beginning this fall, the list of skills was expanded to 21 and these skills were given a new prominence in VERSO's course com-

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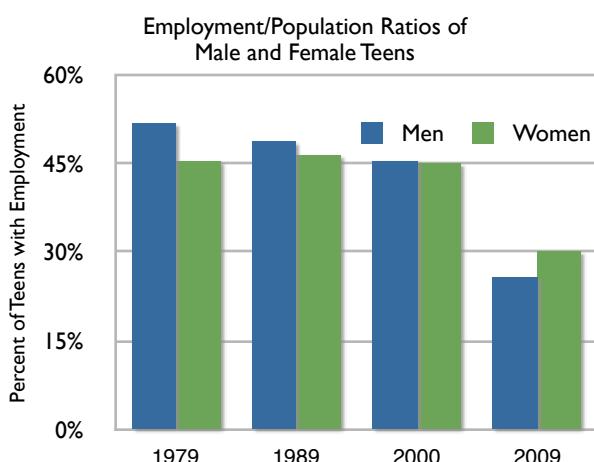
Workplace Readiness Skills (continued)

petency lists. Each of the 21 skills is included as an essential competency for every CTE course; and they are placed first in the list of competencies to emphasize how important they are for today's students.

This change has been made in Virginia because national and local research shows how important these skills are to employers. Of course, employers want technical and academic skills of the sort that CTE has always provided; but this is not enough. They also want new workers who understand the work environment and the personal, professional, and basic technology skills that they will need to succeed. CTE's new list of workplace readiness skills is based on research done by the University of Virginia's Weldon Cooper Center, Virginia's CTE Resource Center and VTECS. A paper recently released by the Weldon Cooper Center explains some of the background research and some of the reasons why it is so important to emphasize these skills in today's curriculum.

The largest and most important national evaluation of workplace readiness skills in recent years was conducted jointly by The Conference Board, Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management, and captured in a report entitled: *Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce*. In this study over 400 employers across the nation ranked the importance of eleven "applied" skills (called workplace readiness skills in Virginia), and nine basic or "academic" knowledge/skills. For these employers, applied skills topped the list of skills rated "very important" for high school, two-year, and four-year college graduates.

This study also shows that employers want to see more attention paid to these skills in high school. Parents, communities, and others need to be involved in this work, but it should begin in schools. One reason why these skills need to be given more emphasis in schools today than in the past is that young people have much less work experience than they used to. According to Andrew Sum of Northeastern University's Center for Labor Market Studies, from 1979 to 2009 the employment to population ratio of youth 16 to 19 fell by half for young men and by a third for young women. The 2009 employment to population ratio for teens of both genders is the lowest ever recorded in post-World War II history. Low-income youth are significantly less likely than their middle class



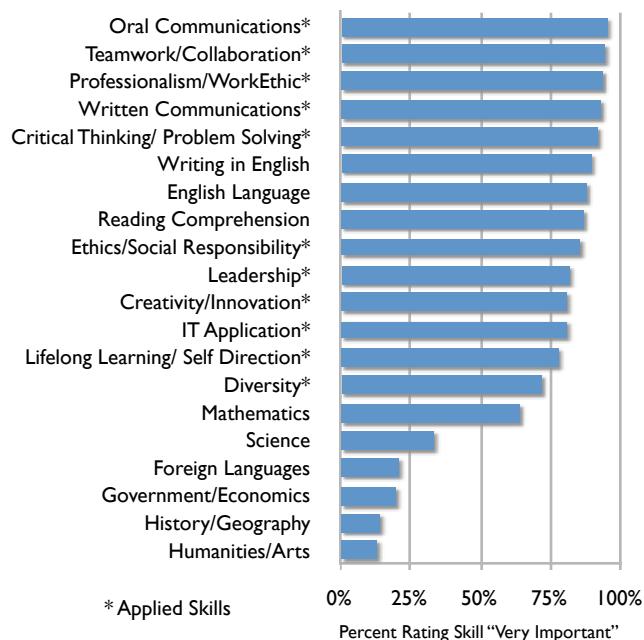
peers to build work experience in their teenage years. Racial and ethnic disparities are also very large. Black and Hispanic teens have lower employment rates than white teens from families of the same income level.

The disparity is particularly severe for black teens. Sum reports that, "the employment rate for upper middle income White teens was four times as high as that for low income Black teens, (40.1% vs. 9%), an extremely large gap in employment prospects."

By increasing the emphasis on workplace readiness skills in the curriculum, CTE can help improve the future for students across Virginia. Resources to help teachers accomplish this are available in VERSO and a new assessment that will qualify for verified credit is anticipated in the spring of 2011.

Source: [Critical Workplace Skills for Virginia's Economic Vitality](#)

'Very Important' Skills for 4-year College Graduates



* Applied Skills

0% 25% 50% 75% 100%
Percent Rating Skill "Very Important"