Re-envisioning Career and Technical Education

any trends abound in education, and the virtual disappearance of vocational education is one of them. As our economy dramatically changed during the last several decades, woodshop, welding, and metalworking all but vanished from high school course offerings. Education experts and policymakers increasingly began to view traditional academic classes-not technical ones-as the ultimate preparation for both a four-year degree and a professional career. And so, unlike Germany and other European countries that continued their strong commitment to ensuring students could choose technical paths to career and postsecondary success-building a technically skilled workforce in the process-the United States largely turned its back on craftsmanship and innovation flowing from the high school shop floor.

An overwhelming consensus emerged instead: the talent and intelligence required to learn and apply technical skills were considered less important. Rather than vocational education being geared up to meet the challenges of the new technology economy, it slowly became a repository for students not regarded as "college material"—an overwhelming majority of whom were low income and minority. The quality of technical and vocational education suffered—that is, until relatively recently.

For a number of years now, vocational education in much of the country has been undergoing a very real transformation, one that extends both to high school students who are career bound and to those who are college bound. Now called career and technical education (CTE), and commonly defined as the education that prepares students for careers in skilled trades, applied sciences, and technology, vocational education has experienced a resurgence of interest. As teachers, administrators, and policymakers begin to see cracks in the college-for-all mentality, they are revisiting CTE as a viable and powerful option for students-both for those who wish to work immediately after high school and for those who plan to pursue a two- or four-year postsecondary program.

The emphasis of CTE is to prepare students for a career at whatever point they decide to pursue one. Employers continue to lament the lack of knowledge and skills among new hires, leading many to question whether high school and college classes effectively prepare students to enter the workplace. Likewise, students themselves often question the value of what they are learning in traditional school settings and long to see more explicit connections between their studies and possible careers. And that is where the best CTE programs come in. They show the relationships between academic subjects like English, history, science, and math to technical

fields that provide students with opportunities for not simply jobs but careers.

As a result, the best CTE programs today foster student learning that is both concrete *and* abstract. They also incorporate the "soft skills," such as teamwork, critical thinking, and collaboration, that employers say are sometimes missing from more traditional general education.

It is this kind of learning that we highlight here. The following articles make the case for investing in CTE programs and describe the fea-

tures of rigorous ones. Several articles in this issue trace the troubled past of this country's class bias against working with one's hands and acknowledge the class and racial biases that once led to steering students into CTE. Once primarily viewed as an inferior program for low-income and minority children assumed incapable of taking on challenging work, CTE—as it is re-emerging today—is undergoing dramatic changes in terms of the curriculum offered, the students who enroll, and the meaningful connections that develop with local businesses and colleges. Today's CTE advocates are committed to ensuring these programs do not track students or "dumb down" the academics required of high schoolers.

This issue also provides examples of successful programs in Europe and closer to home. One such program is the Toledo Technology Academy (TTA) in Ohio. A magnet school focused on engineering and related technologies, TTA was established thanks to a labor-management partnership. The school excels in preparing students for college (many pursue engineering degrees) and career (many pursue engineering careers).

The AFT is proud to represent CTE educators, whose instructional needs our union is trying to understand better. To that end, the AFT's educational issues department



recently surveyed members teaching in CTE programs. The results (some of which are highlighted on pages 40-41) reveal the variety of subject matter they teach, many stories of student achievement, and frustrations with inadequate funding.

As discussion in education continues to focus on how best to prepare students for work and life, we hope this issue helps dispel two persistent myths: that a fouryear degree is the only path to professional success, and that career and technical education is second-best.

-EDITORS