Signed into law in May 1994, the School-to-Work Opportunities (STWO) Act provides states and communities with funds to develop systems that connect academic knowledge with technical skills and workplace competencies. The Act links the Goals 2000: Educate America Act with workforce and economic development and is designed to help the nation prepare for the effects of technological changes. STWO differs from previous efforts in that it is driven by technological changes and does not establish federal mandates, allowing states to distribute funds and design local systems. Community colleges are poised to become major players in school-to-work initiatives because of their strong community links and experience with occupational and customized training, with over three-fourths of the colleges involving students in work-based learning as of 1993.

Strengths of the colleges' work-based programs include strong program leadership, strong connections with the business or industry, the inclusion of school-based learning components, and diverse funding sources. STWO will present challenges, however, for two-year colleges, including the use of state- rather than federal-based funding, the need for alternative schedules other than semesters, and conflicts between credit and non-credit courses. Although community colleges are effective at delivering workforce training, the opportunity to secure the lead in STWO must either be used or it will be quickly lost. (HAA)
The School-to-Work Opportunities Act (1994) and Community College Preparedness

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Signed into law by President Clinton in May 1994, the School-to-Work Opportunities Act (STWO Act) provides states and communities with funds to develop systems that connect academic knowledge with technical skills and workplace competencies. It is the result, according to the STWO Act Report to Congress (1996, p. 5), of educational and business leaders in the United States realizing in the 1970s and early 1980s that economic success in a highly competitive, global marketplace requires American workers who have developed knowledge and skills that do not occur in isolation. The Act is closely linked with the Goals 2000: Educate America Act, which provides a framework for state efforts to improve student academic achievement. STW links education reform, Goals 2000, with workforce development and economic development. Preparing for the effects of dramatic shifts in technology and the revolution in telecommunications on the workplace is perhaps the principal task of the STWO Act, and community colleges are positioned to be principal players in the post-secondary strand of the initiative.

Is the STWO Act an actual transformation that will dramatically affect community colleges or just the newest name for vocational education, an area in which community colleges already have a strong track record? It's at least somewhat different because it's driven by new forces--changes in technology and telecommunications--and its success is made possible by recent forms of management structures, especially those that solicit front-line workers' expertise and problem-solving skills in an effort to improve quality over the long run. Management strategies like Total Quality Management (TQM) that emphasize awareness of process and solicit front-line participation over inspection of the final product are characteristic of companies that win the Malcolm Baldrige National Quality Award (Mondy and Premeaux, 1995, p. 563). Because of its inclusiveness and its recognition of individuals, the TQM strategy of business management, increasing in popularity because of its demonstrated effectiveness, may make school-to-work systems more feasible and seamless than previous vocational initiatives.
According to the STWO Act Report to Congress (p. 2), the act is different than previous training and employment initiatives in several other ways, too. First, the STWO Act did not establish federal mandates such as exist for the Perkins Vocational and Applied Technology program, Tech Prep, Adult Education/Adult Literacy, and Vocational Rehabilitation. Tech Prep, for instance, outlines a program available specifically for grades eleven through fourteen. The STWO Act directs the financial support to the states for the implementation of school-to-work systems. States distribute the funds to schools, businesses, private councils and community organizations who have developed specific, sometimes very specialized partnerships.

So the STWO Act is unlike previous vocational training initiatives enough to test community colleges, and the central questions are: Is the U.S. community college system prepared for its on-going and upcoming roles in STW initiatives, and what can community colleges do now to prepare further?

Community colleges, because of strong links to communities, a track record of cost-effective occupational training and career preparation, the ability to customize training and the perception that the quality of instruction is high, are principal players in school-to-work programs.

In a National Center for Research in Vocational Education study, Bragg and Hamm (1996) point out that community colleges and two-year technical schools have a long, consistent history of active, effective participation in school-to-work programs (p. 2). In examining current school-to-work practices at community colleges, Bragg and Hamm identified ten work-based learning programs for their study. Quantitative results of the study regarding current program effectiveness--outcomes data provided by local administrators--portrayed the programs as very successful at transitioning students into the labor force in training-related employment.

Bragg and Hamm report that more than three-quarters of the country's two-year colleges had students involved in work-based learning in 1993 (p. 8), although very few
students were involved with work-based learning outside of occupational-technical education. The STWO Act, with its emphasis on school-to-work links across the curriculum, will require more. Content areas such as remedial and developmental education, continuing education, liberal studies and transfer will require attention for a strengthened relationship between vocational and academic education, a specific aim of the STWO Act.

Community colleges have always been, are now and will continue to be primary providers of work-based learning, but assessing to what degree 2-year schools are prepared for new demands and challenges must factor in that, according to Bragg and Hamm, "two-year colleges seem to have a preponderance of responsibility for delivering work-based learning as compared to employers or other organizations" (p. 12). In addition, support for work-based learning must be more visible and active on the part of senior college administrators (p. 6).

Bragg and Hamm document seven strengths of effective work-based programs at two-year schools (p. 4). These components, when examined at specific community colleges and even more specifically in their programs, are a basis from which to judge current and future preparedness.

Strong program leadership is a significant factor in overall effectiveness. The proficient leaders/directors have a formal education, considerable knowledge of the occupation, and related work experience. They are actively involved, politically smart, and excellent managers. Another positive factor are tight, exclusive connections between the school-to-work program and the business/industry it is in partnership with. The programs thus capture most of the training market and are perceived as having direct local impact.

A third strength is frequent, productive communication with local employers. These relationships are developed by communication mechanisms that are in some cases carefully constructed and in others naturally emerging. The beliefs of those in the partnership about a program's excellence is also significant because it bonds constituencies together. Such
beliefs provide a common understanding in a school-to-work partnership, although taken to the extreme they can create a closed system. A fifth positive factor is a school-based learning component that has connections to the rest of the college curriculum. Programs that operate effectively do so do so within the wider structure of the college.

Seeking adequate and diverse financial support is key for community colleges' preparation of on-going and future work-based learning programs. The best programs seek funding from local, state, and federal sources and also from the private sector, which creates an opportunity for long-range planning and predicted, managed growth. Finally, exemplary programs utilize an array of pedagogical approaches, including individualized student plans, college and workplace mentoring, and work-based models in classrooms. These features support the idea that work-based learning is realistic, applied, and academically challenging.

Dr. Philip R. Day, Jr., chairman of the Commission on Workforce and Community Development of the American Association of Community Colleges (AACC), also believes that community colleges and their experience with work-based programs poises them to continue to be at the center of such programs. The large number of the two-year schools and their strategic locations alone makes them principal players. According to Day (1996), there are approximately 1,300 community colleges within 25 miles of 95% of the nation's population base (p.3). Day asserts that community colleges are actively involved in workforce training in many forms of collaborative ventures and are prepared to meet the continuing challenges posed by the STWO Act (p. 5). He says that community colleges can provide one-stop operations with services that include assessment, education, career counseling, financial assistance and transition-to-work assistance. The colleges can further provide targeted job training and on-the-job training, including very specific-skill training and apprenticeships, internships, cooperative education and paid, work-based learning experiences.
Additional preparatory components that are already in place include industry-specific customized training and services for special populations such as the economically disadvantaged, Native Americans and veterans. Technology and laboratories that are a "mirror-image" of worksite conditions have already been developed by community colleges, and community colleges have significant investments in student assessment, remediation, basic skills, counseling, career exploration and job placement, all important elements in any system developed as a result of the STWO Act.

Day recognizes the challenges the STWO Act will present, however, especially because it represents a shift from previous systems used to deliver school-to-work training. According to Day, "New federal welfare, health care and workforce development reform legislation is likely to consolidate myriad programs into a number of block grants, substantially reduce federal financial support, and shift primary authority for the design and delivery of support programs and services to states and communities" (p. 2).

Phyllis Eisen, executive director of the Manufacturing Institute's Center for Workforce Initiative, also recognizes that community colleges have been and are committed to partnerships with business, saying that in a world that is changing rapidly, community colleges have missions to assist and educate students for a workplace where technical, analytical and interpersonal skills will be required (1997, p. 5). She does list specific impediments, however, that reveal perceptions about current community college readiness from a business point of view and consequently generates ideas about what must be done to strengthen systems that emerge from the STWO Act.

According to Eisen (p. 5), the following barriers impede many community colleges from delivering good workforce development programs: a strict adherence to semester or term scheduling; expecting companies to come to community colleges rather than teaching at the company site; conflicts between credit and non-credit courses; and limited access to the latest technology. She would also like to see community colleges use their position to influence public opinion. In Eisen's view, "Community colleges must decide that they
want to make learning more relevant to work, and work more relevant to further education..." (p. 5). Eiesen apparently sees community colleges as being primarily responsible even for the strands of successful school-to-work programs that provide further on-the-job education. Community colleges should plan on addressing such assumptions as business values evolve and true school-to-work agreements become more common, the result of less product orientation in workplaces and more process orientation strategies to insure quality like TQM.

Some educators believe that although community colleges are effective at delivering workforce training, the opportunity to secure the lead must either be used or it will be quickly lost (Anthony and Kent, p. 4). Virtual colleges, made possible by the Internet, will be necessary to satisfy training needs, and this represents the bridge to the future of workforce training. Nigel Paine, chief executive of the Scottish council for Educational Technology in Glasgow, says that the Internet currently has 45 million total users with as many as 30 million of those in North America (qtd. in Anthony and Kent, p. 4). World Wide Web-based training will be a $2 billion industry in coming years, according to Glasgow, yet this communications medium has "hardly been touched by education and training."

Over the next 25 years, more than 90 percent of the world's population growth will be in developing countries. It is these people who will assume the biggest share of unskilled jobs. The 18 percent of the population that makes up the industrialized world, say Anthony and Kent, must have skills to operate in tomorrow's sophisticated workplace, and U.S. community colleges face unprecedented opportunity and challenges in helping make this happen (p. 4).

To date, a modest investment has been made to realize the goals of the Act. In the 1994 fiscal year, $100 million was appropriated from the Job Training Partnership Act and the Carl D. Perkins Vocational and Applied Technology Education Act to lay the groundwork for STW. After passage of the Act, $245 million was appropriated in FY95,
and $350 million was appropriated in FY96. The grants are one-time, five-year grants, and the initiative ends in 2001. The Act was the culmination of 15 years of research and experimentation with how students learn, and how classroom teaching can be linked to the workplace. In 2001, the law "sunsets," with the expectation that locally designed school-to-work systems will be well on their way to becoming the norm in every State. The expectation from within and without community colleges is that they will be a principal part of making this happen.
REFERENCES


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