

How Effective Are School-to-Career Programs?

School-to-career (STC) programs, which integrate academic education and vocational skills training, seek to improve the transitions of young people from school to work. These programs were an important component of educational reform efforts in the 1990s and are one of the nation's policy responses to low-wage work. Their principal goal is to increase labor market skills and to guide young people into career paths with greater potential for growth of such skills.

So, how successful are these programs?

David Neumark answers this question in *The Effects of School-to-Career Programs on Postsecondary Enrollment and Employment*. Using a national dataset for his analysis, he finds some evidence that STC programs increase college enrollment and employment. But he also finds, in a state-specific analysis, that evaluations of programs in California are lacking in many respects, and he recommends that any future funding of such activities in California be predicated on rigorous, professional evaluations of the specific programs involved.

School-to-Career Programs in California

In 1994, Congress passed the School-to-Work Opportunities Act (STWOA), which provided more than \$1.5 billion over a five-year period to support increased school-to-work activities in the nation's public high schools. In 1996, California was awarded \$130 million to establish an extensive STC system, and the state received a supplemental \$7.2 million grant in 2000. The activities funded under STWOA are one of three branches of STC activities in California. The other two branches are Career Academies and Tech Prep, which focus much more narrowly on specific student populations, in contrast to the general and broad-based approach of STWOA.

This research examined the most common types of programs and activities supported by the federal grants to the states:

- *Internships*: For a specified period of time, students work for an employer to learn about a particular industry or occupation.
- *Apprenticeships*: Typically, these are multiyear programs that combine school- and work-based learning in a specific occupational area designed to lead directly into either a related postsecondary program, entry-level job, or registered apprenticeship program.
- *Cooperative education*: Students alternate or parallel their academic and vocational studies with a job in a related field.
- *Job shadowing*: As part of career exploration activities in early high school, a student follows an employee for one or more days to learn about a particular occupation or industry.
- *Mentoring*: A student is paired with an employee over an extended period of time, during which the employee models workplace behavior, helps the student master certain skills and knowledge, challenges the student to perform well, and assesses the student's performance.
- *School-sponsored enterprises*: Students produce goods or services for sale to or use by others. Enterprises may be undertaken on or off the school site.

After its initial five years, STWOA was not reauthorized. Although funding for Career Academies and Tech Prep from the state or federal governments has continued, the state has not made up the shortfall of funding for general STC activities. Given this change in funding, it is an appropriate time to evaluate the effectiveness of the various STC activities in

California that were supported by the federal legislation and to investigate whether reallocations from the other two branches of STC or other areas of spending on education might be considered.

Which Programs Show Promise?

STWOA funds were directed toward the provision of general or broad-based STC programs and activities that served all students, helping guide them not only into careers that could be entered immediately after high school or with additional vocational or technical education, but also into careers that entail higher education at four-year institutions. The loss of STWOA funds represents more than a one-third decline in funding for STC activities overall and will likely curtail broad-based STC activities. Nonetheless, the ability of the educational system to put students on the path to successful school-to-work transitions should remain a criterion in assessing educational success, and it is important to determine the types of programs that best promote successful transitions.

With regard to postsecondary *education*, evidence from the national data indicates that, among the general STC programs, school-sponsored enterprises boost the probability of college enrollment in the immediate post-high school period by about 13 percentage points. On the other hand, participation in Tech Prep appears to lower the probability of postsecondary enrollment by about 10 percentage points. However, there is some evidence that the decline in enrollment is accompanied by an increase in full-time work, as opposed to part-time work, which may mitigate the apparent adverse effects of Tech Prep on further education.

With regard to postsecondary *employment*, the data indicate positive effects for the three types of STC programs that most closely combine high school education with work experience: co-op programs, internships, and apprenticeships. Participation in co-op programs boosts the probability of employment in the immediate post-high school period by about 9 percentage points, and participation in internship/apprenticeship programs increases the probability of employment by about 7 percentage points.

There is some evidence of differences in the effects of STC programs across race/ethnicity and other characteristics associated with socioeconomic status. Internship/apprenticeship programs have particularly beneficial effects for less-advantaged groups; participation in these programs appears to boost college enrollment among those with the lowest test scores and to boost employment among blacks and those with less-educated mothers and those in nontraditional living arrangements. Overall, however, the evidence does not provide a clear message that STC programs are more effective for less-advantaged than for more-advantaged groups; instead, there is some evidence of beneficial effects for all groups, although the programs that deliver the benefits vary.

Recommendations

With the demise of STWOA, funding has continued for Career Academies and Tech Prep, whereas direct funding for general types of STC programs has been sharply reduced. Yet the evidence on Tech Prep and Career Academies does not make a strong case that these branches of STC are more effective. It appears that a case can be made for restoring some funding to the types of programs supported by STWOA or, barring that, possibly considering some reallocation of funds from other STC activities toward these types of programs.

There is also a pressing need for a serious evaluation of the effectiveness of the specific STC activities remaining in California and for any activities that might arise in the future. Given the evidence of beneficial effects of general STC programs nationally, and the more ambiguous evidence regarding Tech Prep and Career Academies, an evaluation of all three types of programs is needed.

Future STC efforts in California would be well served by better articulating the goals of the program and establishing clear criteria for measuring and assessing progress toward these goals. The weaknesses of the existing local evaluations of STC efforts in California indicate that evaluation of STC effectiveness in the state would be well served by substantive expert assistance in designing data collection efforts and in conducting the evaluations.

This research brief summarizes a report by David Neumark, The Effects of School-to-Career Programs on Postsecondary Enrollment and Employment (2004, 132 pp., \$12.00, ISBN 1-58213-088-4). The report may be ordered by phone at (800) 232-5343 [U.S. mainland] or (415) 291-4400 [Canada, Hawaii, overseas]. A copy of the full text is also available on the Internet (www.ppic.org). The Public Policy Institute of California is a private, nonprofit organization dedicated to independent, objective, nonpartisan research on economic, social, and political issues affecting California.
