

Benefits of Vocational Education

After a decade of decline, the 1990s have seen a resurgence of vocational education enrollments. Of 39 states surveyed in recent research, 70 percent reported an increase since 1990 (Husain 1999). Nevertheless, secondary vocational education continues to suffer from a negative image among students, parents, educators, and policymakers. This *Myths and Realities* examines some popular beliefs about secondary vocational education, along with some related beliefs about the labor market and about college degrees—and some facts that may or may not support those popular beliefs.

“Voc Ed Is for Dummies and Misfits!”

Perhaps the most enduring belief about vocational education is that it's only for the noncollege bound, the potential dropouts, or other students with special needs (Stone 1993). And this belief is not confined to students and their parents; it is often shared by other educators and policymakers (“What Do People Think of Us?” 1997)—perhaps explaining why postsecondary vocational-technical education scholarship money sometimes goes untapped (West 1996). But do the facts bear it out?

No, they don't. Almost all high school students take at least some vocational courses; 80 percent take at least one occupationally specific vocational course, and one in eight academic students actually takes more vocational courses than vocational students do. Furthermore, vocational education students enter postsecondary education at about the same rate as all high school graduates (Kober and Rentner 2000; Stone 1993), and vocational students with applied academics such as math and reading in high school are just as proficient as college-prep students.

“Voc Ed Doesn't Pay Off!”

On the contrary—it does. A range of studies show that vocational graduates are more likely to be employed and earn more than their nonvocational counterparts, particularly vocational graduates who worked part time during high school (Stone 1993). There is strong evidence that the generic technical skills and occupationally specific skills provided in vocational education increase worker productivity, skill transfer, job access, and job stability when vocational graduates find training-related jobs (Bishop 1995).

“But a Four-Year College Degree Is the Ticket!”

A related set of beliefs about the labor market may reinforce the traditional negative image of vocational education. Assuming that technical training is inferior to academic programs (West 1996), parents want *their* children to go to college and get a four-year degree because it will assure them a job (Vo 1997). Indeed, there is a widespread belief among parents that a four-year college degree will guarantee their children a place in the middle class. Students themselves are often quite confident on this point; in one study, half of male and 68 percent of female high school students believed that with a four-year degree, they would have a nice, professional job by the time they were 30 years old (Gray 1997). Such beliefs are often attributed to numerous reports in the 1980s that American industry would suffer severely in the 21st century from shortages of scientists, engineers, and mathematicians (Berliner and Biddle 1996).

The reality of the labor market is quite different, however. Gray (1997) gives this analysis:

- Among college students who graduate with a four-year degree, only *two of three* will find employment related to their field of study.
- Among college students who graduate with a professional credential (e.g., for teaching, engineering, or accounting), only *one in two* will find related employment.
- A four-year degree does not guarantee a high income. Although college graduates have higher average earnings than high school graduates, only *some* of the variation in earnings can be attributed to education; supply and demand are the most important factors.
- The U.S. Department of Labor's Managerial/Professional job grouping is indeed at the top of the salary ladder. But the next rung down on the ladder is Craft, Precision Metal, and Specialized Repair—occupations in virtually every industry and every work environment like construction drafter, medical lab technician, manufacturing systems operator, computer repairperson, and paralegal *that pay well but require specific occupational skills* available in secondary and postsecondary vocational-technical programs or apprenticeship programs.

A closer look at supply and demand in the labor market uncovers another reality to contradict the belief that a four-year college degree is the ticket to success. That fact is that professional occupations make up only 20 percent of all jobs (*ibid.*). The numbers are startling:

At the start of this decade [the 1990s], the economy was creating nine new cashier jobs for every computer programming job, and the U.S. now has nine times as many janitors as it has lawyers, accountants, investment bankers, stockbrokers, and computer programmers combined. The biggest sector of the job market is now service, not manufacturing. (Berliner and Biddle 1996, p. 38)

Technical employment is the fastest-growing segment of the labor market.... Most technical work will not require a four-year college degree. Only 25 percent of all technical work requires a four-year or graduate degree. The fastest-growing piece of the high-skill, high-wage technical workplace is occupations that require an associate's degree. (Gray 1997, p. 26)

“One million new programming jobs come open in the next nine years.” That one million is only the beginning. Add many more million positions going begging for skilled welders and machinists, electricians and plumbers, healthcare workers, and repair people of all stripes, and you begin to get the picture. (Brady 1999, p. 41)

Although technologically sophisticated jobs will grow, the biggest chunk of openings will be in services—and not very high-tech services at that. In the next decade, five million new jobs will be created for food workers, including kitchen help, waiters, and waitresses. Another four million will be for cashiers and retail salespeople. More than three million will be for clerks. Two million will be for helpers, packagers, and laborers. Openings for truck drivers will abound. Managerial and professional occupations will also need more workers, but their numbers pale compared with openings requiring less education.... The Labor Department projects an increase from 1996 to 2006 of less than 1 percent in the overall share of workers in occupations requiring a college degree. (Rothstein 1999, p. B-9)

“College—One Size Fits All!”

Another common belief among parents is that every child has the aptitude and interests to succeed in an academic four-year college degree program. Parents often believe that if their children get grades of B or C in the high school college-prep track, they are well prepared for college. After all, why would a college accept them if they weren't well prepared? Likewise, parents often believe that *their* child will, if necessary, make the crucial transition from community college to a four-year college (Gray 1997).

Of course, many high school graduates do have the interests, aptitude, and academic preparation needed for college academic courses, but statistics do not present a rosy picture across the board (ibid.):

- According to some estimates, only about 30 percent of high school graduates possess the aptitude and receive the academic preparation needed for success in college academic courses.
- In 1996, 27 percent of college freshmen dropped out—an all-time high.
- The best estimates are that about half of the students in four-year programs graduate within *six years*; the worst estimates, as low as 30 percent.
- Only about 12 percent of community college students are found at four-year colleges 3 years later.

Another study looked at graduation rates 5 years after starting college for students of different income groups (Bracey 1999): (1) among students from families with income of \$68,000 or more, 41 percent had graduated; (2) among students from families with income of between \$22,000 and \$68,000, 19 percent had graduated; and (3) among students from families with income of \$22,000 or less, only 6 percent had graduated.

Those differences across income groups were much more pronounced than differences across ethnic groups. After the same 5 years, graduation rates were 27 percent for whites, 18 percent for Hispanics, and 17 percent for blacks.

A Ray of Hope?

As we have seen, there is a raft of common misconceptions about vocational education, the labor market, and the four-year college degree; in particular the name “vocational education” often invokes an automatic negative response. At the same time, however, people often reveal very favorable attitudes toward many of the elements that are a traditional part of vocational education (Vo 1997):

- In a nationwide survey of 1,000 people, 83 percent agreed that “schools should focus on career preparation” (p. 20).
- In a survey of nearly 1,400 Missouri residents, 91 percent thought schools should place “much greater emphasis on teaching knowledge and skills relevant to the job market, like computers, math, and science” (p. 22).
- In a random telephone survey of 500 Oklahoma citizens, nearly all were in favor of career preparation in school.

A survey of Washington residents revealed similar attitudes (Washington State Workforce Training and Education Board 1997). Almost 9 of 10 respondents agreed that high schools should provide some kind of career preparation to every student before graduation; 3 of 4 said that career education should start before high school; and a whopping 96 percent favored education for every student that provided a strong academic foundation, hands-on learning experience, and an opportunity to practice what he or she has learned in a work-based setting.

In a smaller nationwide survey (“What Do People Think of Us?” 1997), respondents split exactly 50-50 on the big question of whether or not vocational education was for high school students who didn't plan to go to college. However, respondents had overwhelmingly

positive reactions to smaller, individual questions about vocational education:

- 76 percent said that *all* students would benefit from vocational education.
- 90 percent agreed or strongly agreed that vocational education prepared students for good-paying jobs.
- 92 percent agreed or strongly agreed that vocational education can lead students to go to college.
- Only 4 percent agreed that vocational education led to low-skill jobs.
- 98 percent said that internships or apprenticeships in different career fields were appropriate for high school juniors and seniors.
- 90 percent said that real work-based problems or career-related projects were a good way to teach subjects like math and English.

These survey results present a curious contradiction. Many people—but not all—have a negative overall image of vocational education, probably based at least in part on mistaken assumptions about how today's labor market actually works. Yet the great majority of people have a very positive reaction to the elements that are the very foundation of vocational education: a focus on career preparation; knowledge and skills that are relevant for the job market; the possibility of challenging careers, good-paying jobs, *and* college. Such favorable attitudes toward the foundation elements of vocational education may represent a new trend for the new millennium.

References

- Berliner, D. C., and Biddle, B. J. “In Defense of Schools.” *Vocational Education Journal* 71, no. 3 (March 1996): 36-38. (EJ 519 291)
- Bishop, J. H. *Expertise and Excellence*. Ithaca: School of Industrial and Labor Relations at Cornell University, 1995. (ED 389 853)
- Bracey, G. W. “The Forgotten 42%.” *Phi Delta Kappan* 80, no. 9 (May 1999): 711-712. (EJ 585 687)
- Brady, J. T. “My Son, the Technician...” *Tech Directions* 58, no. 7 (February 1999): 41.
- Gray, K. C. “The Gatekeepers.” *Techniques* 71, no. 9 (January 1997): 24-27. (EJ 535 321)
- Husain, D. D. “Good News on the Horizon.” *Techniques* 74, no. 3 (March 1999): 14-17. (EJ 580 988)
- Kober, N., and Rentner, D. S. *Do You Know the Good News about American Education?* Washington, DC: Center on Education Policy and American Youth Policy Forum, 2000. <www.aypf.org/whatsnew.htm>
- Rothstein, R. “Shortage of Skills? A High-Tech Myth” *New York Times*, October 27, 1999, p. B-9. <nytimes.com/library/national/102799les-sons-edu.html>
- Stone, J. “Debunking the Myths.” *Vocational Education Journal* 68, no. 1 (January 1993): 26-27, 56. (EJ 455 319)
- Vo, C. H. “Not for My Child.” *Techniques* 71, no. 9 (January 1997): 20-23. (EJ 535 320)
- Washington State Workforce Training and Education Board. *Education and Workforce Issues: Public Attitudes and Awareness*. Olympia, WA: WSWTEB, 1997. (ED 425 347)
- West, P. “Scholarships for Voc Ed Go Untapped.” *Education Week* 15 (April 3, 1996): 3.
- “What Do People Think of Us?” *Techniques* 72, no. 6 (September 1997): 15. (EJ 553 296)

This project has been funded at least in part with Federal funds from the U.S. Department of Education under Contract No. ED-99-CO-0013. The content of this publication does not necessarily reflect the views or policies of the U.S. Department of Education nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. Government. *Myths and Realities* may be freely reproduced and are available at <<http://ericacve.org/fulltext.asp>>.



**Center on Education and Training
for Employment**

The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210