Two problems confront the school-to-work (STW) transition initiative: the quality of STW transitions and the equity with which those experiences are distributed among different student groups, including those with disabilities. In the past, the goals of equity and quality seemed to conflict. Many persons advocating increases in quality appeared to be unconcerned with equity and vice versa. The following criteria for developing STW transitions in which equity and excellence coexist have been identified: (1) access to all; (2) individualization; (3) generic problem-solving; (4) community settings; and (5) guaranteed benefits (recognized and accepted credentials authorizing entry into career opportunities or postsecondary education programs; placement or acceptance in postsecondary vocational and educational programs; placement in competitive or supported employment; and participation in continuing and adult education, adult services, and independent living in community settings). Studies have confirmed the positive effects that participation in vocational education and work experience programs have on the employment outcomes of secondary school students in special education. The identified criteria for developing/evaluating STW programs for students with disabilities can be used to design equitable STW programs emphasizing community-based training and experience. (Contains 15 references.) (MN)
EQUITY AND EXCELLENCE IN SCHOOL-TO-WORK TRANSITIONS OF SPECIAL POPULATIONS

It has been a decade since *A Nation at Risk* defined the problem of American schooling as a fall from grace. The Secretary of Education's blue ribbon commission, reporting that three out of four U.S. students left school unprepared to meet the basic problem-solving demands of college or work, drew a stunning conclusion: "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war" (National Commission on Excellence, 1983). Since then, the nation has embarked on a mission to improve schooling so that by the year 2000 the U.S. will be first internationally in science and mathematics achievement, and all students will be prepared for productive employment in our modern economy.

This commitment to excellence in education overlays a national commitment to equality of educational opportunity that began in 1954 when the Supreme Court ruled that segregated schooling was a denial of educational opportunity for African-American students. In 1975, Congress broadened the principle of equal educational opportunity; Public Law 94-142 guarantees a free and appropriate public education for all children with disabilities, permitting children never before served in the public schools to receive their instructional experiences there.

In the 1980s The William T. Grant Foundation Commission on Work, Family and Citizenship called attention to the inequities experienced by yet another student group—non-college bound youth who planned to work toward the American Dream but found, instead, low-paying, dead-end jobs. While paths from school to college and beyond are clearly marked, comparable routes for the non-college bound are dimly lit and poorly paved. A Government Accounting Office study found that federal aid to students and to schools averaged $15,500 a year for college graduates and only $1,460 for young people who do not go to college (Manegold, 1994). A decline in career-building work opportunities has made the school-to-work transition even more difficult for these students.

The Clinton administration's School-to-Work Opportunity Bill addresses some of these inequities through a community-based youth apprenticeship model that will be accessible to all students—college-bound, work-bound, those with disabilities, and those without disabilities. Moreover, it emphasizes training on the job through mentoring by employers at work sites. If passed, the Bill will give priority to the needs of student populations neglected by previous school reforms.

This paper identifies criteria for developing school-to-work transitions to ensure that all students, including those with disabilities, will be included in these efforts and will experience success as a result of this inclusion. Perhaps these criteria will help us understand how equity and excellence can coexist in the vital transition zone where youth prepare for adult opportunity.

Bailey and Merritt's (1993) *Centerfocus* on "Youth Apprenticeship: Lessons from the U.S. Experience" identified four basic components of the new youth apprenticeship model: (1) it is designed to be an integral part of the basic education of a broad cross-section of students, (2) it integrates academic and vocational instruction, (3) it combines classroom and on-the-job instruction, and (4) it culminates in recognized and accepted credentials. I argue that these components, with modification and expansion, should be central elements of school-to-work transitions for students with disabilities.

Criteria to Achieve Both Equity and Excellence

The criteria I propose for guiding the development of school-to-work transition programs that are both equitable and excellent are as follows.

1. Access to All. School-to-work apprenticeships should be accessible to all youth 16 years and older, regardless of goals for college or non-college opportunity and presence or absence of conditions of disability.

2. Individualization. School-to-work apprenticeships should be individualized according to the needs, interests, and abilities of each student.

3. Generic Problem-Solving. Instructional content in school-to-work apprenticeships should prepare all students to meet the generic problem-solving demands of college or work.

4. Community Settings. A combination of classroom, community, and work environments will work best to produce high school graduates who are more mature, more responsible, and better motivated.

5. Guaranteed Benefits. Successful completion of school-to-work apprenticeships should lead to:
   a. recognized and accepted credentials authorizing entry into career opportunities or postsecondary education programs;
   b. placement or acceptance in postsecondary vocational and educational programs;
   c. placement in competitive or supported employment; and
   d. participation in continuing and adult education, adult services, and independent living in community settings.

Criterion 1: Access to All

One of the values driving interest in school-to-work transitions is equality of opportunity, which translates into equality of access to adult opportunity. The William T. Grant Foundation Commission recommendations are consistent with this principle. It would eliminate barriers preventing students with disabilities from full participation in community life through (1) aggressive enforcement of state and Federal legislation protecting their civil rights; (2) incentives for employers to hire students with disabilities, restructuring their benefit packages, increasing support for independent living programs; and (3) inclusion of youth with disabilities in community service and youth organizations.

These efforts have substantial implications for existing school and commu-
Community programs serving school-to-work populations because students with disabilities have not received the full range of services they need. Data from a national longitudinal study of special education students revealed that only half of all students leaving special education programs had taken an occupationally specific course in their most recent year in secondary school. Moreover, there was substantial variation in vocational participation rates by handicapping condition, with rates for students with multiple handicaps at 26 percent, with learning disabilities at 53 percent, and for students who were deaf at 69 percent (D'Amico, 1991).

Other studies point to similar deficiencies in vocational preparation of youth with disabilities. Benz and Halpern (1993), for example, found that “parents and teachers rated the majority of students with disabilities as performing insufficiently when the comparison was an external criterion. According to parents, even the best performing students with disabilities failed to perform as well as the comparison group of students without disabilities. According to teachers, over half of all students with disabilities required at least moderate assistance to perform 9 of the 16 vocational competencies we investigated; and about a quarter of students could not perform these competencies at all” (p. 203).

**Criterion 2: Individualization**

Individualization of instruction is the hallmark of special education opportunity: all students enrolled in special education programs must have an individualized educational plan (IEP) specifying goals, objectives, and instructional activities to meet their individual needs. Although this approach to instruction is less likely in general education, it is common in vocational education and training where student projects reflect their own occupational and career needs and interests. It is also common in youth apprenticeships.

The Individuals with Disabilities Education Act (IDEA) mandates individualized programming for students with disabilities during school-to-work transitions. Every student’s education plan must include a statement of the needed transition services beginning no later than age 16 and annually thereafter and, as well, a statement of each public agency’s responsibilities or linkages (or both) before the student leaves the school setting.

The U.S. Office of Special Education Programs will award two research grants to develop materials for the IEP process to increase student involvement in transition planning. Perhaps the model that best captures the spirit of student involvement in transition planning is that reported by Martin, Marshall, and Maxson (1993) for the Academy School District in Colorado Springs, where students are expected to develop the skills to participate in and ultimately lead the development of their own IEP.

**Criterion 3: Generic Problem-Solving**

It is clear to all that both college-bound and non-college-bound students must master the basics of generic problem-solving if they are to pursue adult opportunity successfully. It is also clear that the charge against public schooling leveled a decade ago in A Nation at Risk—that students leave unprepared to meet the basic problem-solving demands of college or work—remains true today. Perhaps there is no juncture in the lives of youth where problem-solving is of greater utility than during school-to-work transitions, yet most youth cannot perform these basic skills; consequently they fail to take advantage of opportunities they find in adult life (Mithaug, 1991).

Therefore, focusing on generic problem-solving during youth apprenticeships is a basic requirement for success. Youth who master these skills will succeed because they know how to match personal needs and interests with available opportunity, how to set personal goals to satisfy needs and interests, how to develop plans for accomplishing goals, how to initiate and follow through to complete plans, and how to evaluate results and adjust to subsequent opportunity.

Bailey and Merritt (1993) recommend connecting academic and vocational components of youth apprenticeships with generic problem-solving, but worry that this may cause problems when applying general conceptual strategies to specific work problems. “The logic of a youth apprenticeship system points to an emphasis on broad conceptual, problem-solving skills. But where does this leave the actual preparation for jobs?”

One hopeful sign comes from IDEA, which mandates student participation in planning school-to-work transitions. Students must be active players in developing their own individualized transition plans, and they must take responsibility for determining the direction for their lives after school.

Anticipating the problem-solving skills this responsibility will entail, the Department of Education’s Office of Special Education Programs has funded more than 20 model demonstration projects to develop self-determination skills in youth with disabilities and five research projects to develop measurement instruments to assess levels of self-determination in children and youth with disabilities.

For most educators, the notion of instilling greater levels of self-determination in students is new. Indeed, a review of outcomes targeted by 20 of the Federally funded projects illustrates the difficulties. A basic definition of self-determination would include self-awareness, choice making, enacting choice, and control over one’s life. But only 15 projects identified any definitional components at all, and, of those that did, only one included three of the above self-determination components, five included two of them, and seven specified only one (Grayson, Harmon, Leach, Wallace, and Huang, 1993).

The significance of these initiatives lies in their application of problem-solving skills to achieve personal outcomes in terms of jobs, independent living arrangements, and community activities. In this sense, they unify academic and vocational goals—the academic goal being increased problem-solving capacity, and the vocational goal being applications of that capacity to adult opportunity. They also forge a natural connection between freedom and opportunity to choose. Students
learn to think in order to choose, and this enhances their freedom to act independently. Students learn to identify adult opportunities that match their needs and then to act on those matches rationally.

**Criterion 4: Community Settings**

The coordination of experiences is the key to satisfying this criterion. Bailey and Merritt (1993) found that programs that simply placed young people on the job to gain experience were devoid of real learning because the participating employers were not required to teach. The William T. Grant Foundation Commission argued that the major unmet need was for better quality work experiences and closer integration between work experience and schooling.

IDEA requires school and community service providers to work together to develop effective transition experiences for youth with disabilities. Coordination, however, occurs only at service delivery, not at the instructional content level. This is where generic problem-solving (Criterion 3) can come into play.

The School-to-Work Opportunity Bill requires employee mentors to help apprenticing youth learn specific skills and work routines on the job. This may solve the experience-but-no-learning problem, but coordination with schooling will still need attention. A bridging conceptual framework between school and community experiences may be helpful in defining the nature and direction of instructional coordination will take. The adaptability model suggested by Mithaug, Martin, and Agran (1987) is an example. It defines the problem facing all transition candidates as one of adjustment to changes in environmental opportunity.

Using this framework, teachers and job mentors can teach the same process but with different applications so that students can learn the needed generic problem-solving skills. The instructional units of the model are decision making, independent performance, self-evaluation, and adjustment. During decision making, students identify their needs, interests, and abilities; consider alternatives; and then select goals to satisfy a need or interest that is consistent with what they can do. During independent performance they follow through on a plan of action that specifies what they will accomplish and when. Then they monitor and record performance outcomes and compare results with expectations. In classroom and work situations, self-evaluations usually focus upon being on time, task selections, productivity, accuracy, and earnings. In the last component, students adjust to their results, using self-evaluations to decide whether to change goals, task selections, schedules, behaviors, or expected outcomes. These adjustments are essential to the problem-solving cycle and the learning-to-learning paradigm it exemplifies. They connect future action with past performance by requiring students to review outcomes for future decisions about goals, plans and performance before trying again.

**Criterion 5: Guaranteed Benefits**

This last criterion is a frequently overlooked piece of the transition puzzle. Bailey and Merritt (1993), however, explicitly list recognized and accepted credentials as an essential component of the youth apprenticeship model. The William T. Grant Foundation Commission recommends a variety of incentives, including guaranteed postsecondary and continuing education, jobs, and training. In the same spirit, IDEA identifies eight outcomes youth with disabilities should expect as a consequence of their transitions from school, including postsecondary education, vocational education, vocational training, integrated employment, continuing and adult education, adult services, independent living and/or community participation.

But even these expectations fail to capture the spirit of what students should be able to experience. Halpern (1993) argues convincingly that postsecondary schooling and working define ultimate outcomes too narrowly. Other important outcomes are physical and material well-being, performance of adult roles (mobility and community access; vocation, career, and employment; leisure and recreation; educational attainment; citizenship; and social responsibility), and personal fulfillment.

We can expect that a guarantee of benefits will have two effects. The first is the incentive it will give youth to participate. The William T. Grant Foundation Commission recognized that school-to-work transition programs, "would require young people to work harder. . . . . At the same time, it is reasonable to ask: What's in it for the youth? An answer couched solely in terms of general benefits to their education and development is unlikely to be highly motivating" (The forgotten half, 1988, p. 51).

The second effect will be the accountability it will affix to service providers for assuring that school-to-work transitions are responsive to student needs in the community. Failure to accomplish expected outcomes reflects the quality of services provided rather than an assessment of the ability of students served.

The guarantee of free and appropriate public education for all students with disabilities extends beyond the provision of educational services. It includes the expectation that students will benefit from those services, as was made clear in the majority opinion of the Supreme Court's 1982 ruling in Board of Education v. Rowley:

The statutory definition of "free appropriate public education," in addition to requiring that States provide each child with "specially designed instruction," expressly requires the provision of "such . . . supportive services . . . as may be required to assist a handicapped child to benefit from special education" (Turnbull, 1993).

A spate of state-wide follow-up studies on special education graduates reported less than expected benefits from their special education experience. Mithaug and Horiuchi (1983) found that, of 234 Colorado students who graduated from special education programs in 1978 and 1979, only 32 percent were employed full-time; Fardig, Algozzine, Schwartz, Hensel, and Westling (1985) interviewed students
with mild handicaps who exited rural schools in Florida and found that 41 percent were employed full-time; and Edgar, Levine, and Maddox (1986) found that, of 1,292 special education graduates in Washington between 1976 and 1981, only 42 percent were currently employed.

In 1987, the U.S. Office of Special Education Programs conducted a national longitudinal study of 8,000 youth who were age 13 to 21 and had been secondary school students in special education in the 1985-86 school year. The results indicated that the competitive employment rate for all students with disabilities who were 21 years or older was only 35.9 percent (D’Amico, 1991). However:

- Students enrolled in vocational education in the last secondary school year were more likely to be competitively employed (50.7%) than students who were not enrolled in vocational education that year (38%).

- Students who had work experience as part of their secondary vocational education were more likely to be competitively employed (62.2%) than students who did not have that experience (45.2%).

The positive employment outcome attributable to vocational experience is encouraging. If there are to be educational benefits attributable to special education during the secondary school years, school-to-work transition with its emphasis on community-based training and experience may be where we can find them.

Summary

Two problems confront the school-to-work transition initiative: the quality of school-to-work transitions, and the equity with which those experiences are distributed among different student groups. In the past these values have seemed to conflict, with those advocating increases in quality appearing to be unconcerned with equity, and those advocating greater equity appearing to be unconcerned with quality. This brief attempts to show that the passage of IDEA and the progress in program development on behalf of school-to-work transitions for youth with disabilities means that there can be both equity and excellence in transition outcomes for all students.

Dennis E. Mithaug, Ph.D.
Professor of Special Education
Teachers College, Columbia University

This brief was developed at the Institute on Education and the Economy, Teachers College, Columbia University, which is part of the National Center for Research in Vocational Education.

References


Benz, M. R., and Halpern, A. S. (1993). Vocational and transition services needed and received by students with disabilities during their last year of high school. Career Development for Exceptional Individuals, 16(2), 197-211.


Manegold, G. S. (February 9, 1994). "Two bills to bolster school methods clear the Senate: Effort to make workers more able to compete." New York Times.


