This report highlights recommendations made in recent research reports concerning the role of vocational education in enhancing the success of students at risk of dropping out of school. It has been found that components of vocational education programs successful at retaining students include mechanisms for helping at-risk youth to follow "normal" transitional paths through vocational programs and to take advantage of the job training aspects of those programs. It is suggested that work-study programs offered to at-risk students early in their high school careers may actually encourage them to drop out because those activities are often unrelated to the ongoing school program and may actually serve as inducements for quitting school. It is further suggested that vocational education's contribution to the successful transition of disadvantaged youth may be improved by providing counseling and exploration prior to program placement, expanding cooperative education, integrating academic and vocational course work, developing criterion-referenced competency profiles, helping students obtain good jobs, and rewarding effective programs. Carefully monitored work experience, incentives such as personalized adult attention and guarantees of postsecondary educational opportunity, career counseling, and school volunteers serving as mentors and tutors are among recommendations for improving school-to-work transition programs. New policy objectives at the federal, state, and local levels have also been recommended, as well as the development of performance measures in academic achievement, vocational attainment and skills, employment outcomes, and postsecondary continuation and attainment. (Six references are included.) (CML)
WHAT WORKS IN VOCATIONAL EDUCATION FOR STUDENTS WHO ARE AT RISK

Recent research has emphasized the important role that vocational education can play in enhancing the success of students who are at risk. This BRIEF highlights recommendations made in some of the most recent research reports. These recommendations focus on improving vocational education's capacity to facilitate the successful transition of at-risk youth from educational settings to the labor market.

Components of Successful Vocational Education Programs

In examining the relationship between vocational and non-vocational coursework and a student's decision to drop out of school, Weber (1987) analyzed data on 1980 sophomores in a national longitudinal study entitled High School and Beyond and conducted interviews with nine exemplary dropout prevention programs. In a comparison of dropouts with youth who completed high school despite being considered at risk for dropping out, Weber identified the following characteristics of dropouts:

- Dropouts earned significantly fewer vocational credits than students in the comparison group.
- Dropouts earned significantly fewer total credits than students in the comparison group.
- Dropouts earned credits in fewer vocational program areas than did students in the comparison group.
- Dropouts earned credits in exploratory, or overview, vocational areas to a greater degree than did students in the comparison group.
- Significantly fewer dropouts than comparison students had a vocational specialty.
- Dropouts tended to earn more work-study credits early in their high school careers than comparison students. (Weber, 1987, p. x)

Weber recommends assisting these youth to follow the "normal" transitional paths through their schools' vocational programs and to take advantage of the job training aspects of those programs. He identifies the following mechanisms for providing such assistance:

- Offer occupational courses earlier in the students' high school careers and do not require a variety of "exploratory" prerequisites to those courses.
- Offer a special series of occupational courses or even minicourses after school, on weekends, or during school hours via flexible course scheduling, so as to afford opportunities for students to acquire job-specific skills.
- Offer the exploratory courses as well as any required remedial courses at an earlier time (e.g., 8th grade) or as special courses (i.e., after school, summer, and so forth) in order to ensure that time during the high school day is devoted to taking occupational courses. For example, encourage community business and industry to work with students to give experiences and course credit on students' own time.
- Implement more extensive planning systems that involve more decision points where counselors and teachers may discuss, modify, and adapt the students' basic program plans. In so doing, the advisability of students taking more "exploratory" versus "occupational" courses could be monitored and evaluated. (Weber, 1987, p. 17)

Weber strongly recommends that school administrators evaluate the advisability of offering work-study programs for dropout-prone youth early in their high school careers. These activities, he suggests are often unrelated to the ongoing school program and may serve as inducements for quitting school.
Making Vocational Education More Effective

After reviewing literature on the effects of vocational education coursework, Bishop (1988) makes several recommendations for improving vocational education's contribution to the successful labor market transition of disadvantaged youth. These recommendations are:

- **Counseling and Exploration**
  - Students should receive counseling before choosing an occupationally specific program. This may include career exploration courses for 9th and 10th grade students, supplementing skill instruction and hands-on experience with worksite visits, and the joint development of an individual employability plan by school staff and students.

- **Expanding Cooperative Education**
  - Most vocational students should have co-op jobs during summers and the final year of occupational training. In order to decrease conflicting demands on the students' time, cooperative jobs may be scheduled outside of school hours. Alternately, co-op related classes might be held outside of normal school hours.

- **Integrating Academic and Vocational Coursework**
  - Vocational instructors should demand and reinforce reasoning, problem solving, and oral and written communication skills. Vocational students should be expected to learn occupational skills from printed material in addition to verbal explanations and visual demonstrations. Students should also practice explaining job tasks to others through both written and verbal instructions. In addition, they should be encouraged to take more demanding math and science courses.

- **Developing Criterion-Referenced Competency Profiles**
  - Students should be given feedback on their performance through criterion-referenced competency profiles. Ratings on the profile should be relative to an absolute standard rather than to other students in the class.

- **Helping Students Obtain Good Jobs**
  - School should improve the quality and flow of employment-related information to students and their potential employers. A policy objective designed to ease school-to-work transition should include the following components:
    - courses in job search skills
    - job placement and referral services
    - rewarding teachers for placing their students
    - guiding students in assessing jobs and employers
    - inviting employers into the school
    - releasing student records to potential employers contacted by the student (providing a signed request is on file)
    - developing a job search portfolio listing all the student's achievements as a self-marketing tool for the student seeking employment
  - State funding formulas should reward programs demonstrating improved outcomes for students and discontinue programs that do poorly placing students in jobs or further education related to training and raising graduate earnings. In addition, programs that demonstrate such success in serving students with learning disabilities and students at risk of dropping out should be rewarded.

**Effective School-To-Work Transition**

The William T. Grant Foundation Commission on Work, Family and Citizenship (1988, January) has recommended that school-to-work transition programs are an important means of preventing youth from dropping out and giving them a chance to get started in a productive job. The several approaches recommended by the Commission are as follows:

- **Carefully Monitored Work Experience**
  - Monitored work experiences should provide students with opportunities to work and exposure to adult supervisors and role models in the workplace. Such experiences should provide the student with opportunities to relate their academic learning to the working world.

- **Incentives**
  - Community and neighborhood service programs should complement work-experiences by providing the student with additional exposure to the adult world and the responsibilities of citizenship.

- **Career Information and Counseling**
  - Guarantees of postsecondary and continuing education, employment, and training for students are needed to provide incentives to succeed in school. Such incentives should be supported by personalized adult attention.

- **School Volunteers**
  - Adult-volunteers serving as friends, mentors, and tutors and student volunteers serving as peer-tutors can provide opportunities for mastery of subject matter, support, and exploration of career possibilities.
The Commission points out that vocational education programs which combine hands-on work experience with academic subject matter deserve greater attention. In addition to improving vocational skills, vocational education may provide an alternative means of improving basic and higher order thinking skills. (1988, November)

Re-Focusing Vocational Education Policy

The National Assessment of Vocational Education (NAVE) has completed a series of studies examining the implementation of the Carl D. Perkins Act of 1984 and the status of vocational education at the secondary and postsecondary levels. In the first of five volumes which summarize this series of studies, NAVE researchers identify two goals: (1) increasing the access of special populations to high-quality vocational education and (2) improving the overall quality of programs (NAVE, 1989, July).

At the secondary level, NAVE staff have developed the following new objectives for local, state, and federal policy:

- Revise and rebuild the high school vocational curriculum to upgrade skill levels and provide students with both occupationally specific and transferable skills which are necessary for employment, additional training, or postsecondary education.
- Integrate high school academic and vocational curricula.
- Accelerate the education of at-risk students.
- Expand efforts to place students in good jobs.
- Improve linkages between secondary and postsecondary training.
- Raise the quality of vocational programs in schools with high concentrations of poor and low achieving students.

NAVE researchers suggest that these objectives may be accomplished through increased focus on improving vocational education at the local school level and targeting federal resources on raising the quality of programs in schools where it is most needed (i.e., where the quality of programs is the lowest and the concentration of disadvantaged students is high).

The plan proposed by NAVE researchers concentrates federal resources and technical assistance on improving the quality of vocational education in those schools most in need of improvement. In addition, the plan seeks to increase state capacity to implement program improvement goals and allocate resources based on indicators of performance. These performance indicators would measure vocational education's success in serving different populations of students, meeting state needs, and accomplishing program reform objectives. NAVE staff recommend that states develop performance measures in the following four areas:

- **Academic Achievement**: Academic course work taken by students in relation to vocational course work, and gains in the academic achievement of students in relation to prior achievement, courses taken, and plans after high school.
- **Vocational Attainment and Skills**: Vocational credits accumulated by students in different course areas, the coherence and concentration of the course work taken, occupational competencies achieved by students, rates of school attendance, and rates of graduation from high school.
- **Employment Outcomes**: Employment experience over time and the earnings of vocational course takers, skill levels of jobs obtained, the supply and demand for graduates of vocational programs, and student and employer satisfaction.
- **Postsecondary Continuation and Attainment**: The rate of enrollment in postsecondary programs of different kinds, the academic and vocational preparation of the enrollees, the "match" between students' high school and postsecondary vocational credits, and the proportion of postsecondary vocational credits at introductory and advanced levels of instruction. (NAVE, 1989, p. 88)

The policy recommendations resulting from NAVE research include the elimination of the special population set-asides, the intrastate formula, the excess cost and matching provisions, and the service mandates in the Carl D. Perkins Act of 1984. The National Association of Vocational Education Special Needs Personnel (July, 1969) has recommended that set-asides or fiscal assurances for handicapped and disadvantaged students should be specified. Federal assurances, they maintain, should preserve access to relevant and quality vocational education for all, but that they should place emphasis on serving the educationally disadvantaged, economically disadvantaged, handicapped, and other non-traditional populations.
Resources Addressing Vocational Education Reform


This publication was prepared pursuant to a grant from the Office of Vocational and Adult Education, U.S. Department of Education, authorized by the Carl D. Perkins Vocational Education Act.

TASPP BRIEF
National Center for Research in Vocational Education
University of California, Berkeley
Developed by:
Technical Assistance for Special Populations
Program (TASPP)
University of Illinois at Urbana-Champaign Site
Address all comments, questions, requests for additional copies to:
Dr. Carolyn Maddy-Bernstein, TASPP Director
345 Education Building
1310 South Sixth Street
Champaign, IL 61820
(217) 333-0807

This is the second in a series of TASPP BRIEFS. Research concerning the benefits of vocational education for students at risk of dropping out of school was discussed in the first BRIEF. Forthcoming issues will examine the latest research, newest resources, and exemplary vocational programs for students with special needs. This BRIEF was prepared by Maureen Coyle-Williams, TASPP Resource Specialist.

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