DOCUMENT RESUME

ED 342 932 CE 060 476

AUTHOR Lankard, Bettina A.
TITLE Tech Prep. Trends and Issues Alerts.
INSTITUTION ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, Ohio.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE 92
CONTRACT RI88062005
NOTE 3p.
PUB TYPE Information Analyses - ERIC Clearinghouse Products (071) -- Reference Materials - Bibliographies (131)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Articulation (Education); *College School Cooperation; Educational Mobility; Educational Planning; Federal Legislation; Institutional Cooperation; *Integrated Curriculum; Postsecondary Education; Program Implementation; Secondary Education; State Programs; Statewide Planning; Technical Education; *Technology; *Vocational Education
IDENTIFIERS *Carl D Perkins Voc and Appl Techn Educ Act 1990; *Tech Prep

ABSTRACT

Tech prep is an educational initiative that promotes increased cooperation between local educational agencies and postsecondary institutions. Its intent is to improve the quality of instruction and employment potential of students, particularly those enrolled in general or vocational education. Tech prep's strength lies in the partnership commitment it promotes between academic and technical educators, secondary and postsecondary education institutions, and education and the business community to provide a program competitive with a college prep program that responds more directly to industry's real skill needs. Tech prep is a shift away from a job-skills orientation; the integration of academic and vocational education is emphasized. Other goals of tech prep are ensuring continuity in education and streamlining the transfer process. With funds from the Carl D. Perkins Vocational and Applied Technology Act of 1990, state departments of education are implementing tech prep programs and researching issues that have implications for success of their efforts. (An annotated bibliography lists 17 print resources. Two resource organizations are cited.) (YLB)

ERIC Clearinghouse on Adult, Career, and Vocational Education

TRENDS AND ISSUES

ALERTS

TECH PREP

Tech prep is an educational initiative that promotes increased cooperation and communication between local educational agencies and postsecondary institutions for the purpose of improving the quality of instruction and employment potential of students, particularly those enrolled in general or vocational education. It represents a trend in educational reform that employs strategies of articulation and integration between secondary and postsecondary levels of education to improve the credentials, certification, and transition of students into successful employment. Its strength lies in the partnership commitment it promotes between academic and technical educators, secondary and postsecondary education institutions, and education and the business community to provide a program that is competitive with a college prep program and that responds more directly to industry's real skill needs (Mensel 1991).

Tech prep represents a shift "away from the traditional job-skills orientation of vocational education and toward the broader purpose of using vocational education as a vehicle for learning academics and other kinds of thinking skills and for linking thought with action" (Wirt 1991, p. 424). This philosophy is in concert with that of total quality management, a process being adopted by businesses across the country that relies on input, problem solving, and decision making by all members of an organization and its customers (Spanbauer and Hillman 1987). It encourages the expansion of technology education to include skills in creative thinking, reasoning, and communication, as well as math and science, thus emphasizing the integration of academic and vocational education.

Ensuring continuity in education and streamlining the transfer process are other goals of tech prep. These goals require that tech prep programs are systematic and coordinate curricula across two or more institutions leading students to a two-year associate degree, a two-year certificate, or a four-year bachelor's degree without duplication of effort or loss of credit. With funds from the Carl D. Perkins Vocational and Applied Technology Act of 1990, state departments of education are moving to implement tech prep programs that offer these benefits, and, in the process, are looking into issues that have implications for the success of their efforts. Grubb (1991) details some of these issues:

- Definition of what constitutes tech prep
- Relationship between secondary and postsecondary state agencies
- Types of approaches or models appropriate for tech prep funding
- Method of allocating tech prep funds
- Process by which states set state policies and develop state plans
- Fields of study that qualify for tech prep programs

Other issues mentioned by Grubb (1991) include ensuring that as many students as possible complete tech prep programs and that tech prep programs are well connected to other programs in both secondary and postsecondary institutions. Also to be considered is the relationship between tech prep programs and efforts to integrate academic and vocational education under basic state grants.

This *Trends and Issues Alert* lists resources that can be used in reviewing the tech prep concept and requirements for its implementation, the trends in vocational and technical education evolving from this effort, and the issues confronting states using funds for tech prep that are allocated through the Perkins Act.

Print Resources

Betts, R.; Welsh, H.; and Ryerson, T. "Tech Prep/Technology Education Relationship." *Technology Teacher* 51, no. 5 (February 1992): 5-6.

The technological literacy skills developed in technology education programs are a solid foundation for Tech Prep. Technology education's contribution to Tech Prep can be for career exploration, enrichment, or integration of math, science, and communications with occupation-specific courses.

Brand, B. "Preparing Students for Leadership in Tomorrow's Work Force." Conference paper, 1990. (ED 331 952)

One focus of the new Perkins Act is the Tech Prep Education Program, which strengthens the partnership between secondary and postsecondary institutions and business. Stronger education-business relationships help vocational education respond to labor market changes.

Center on Education and Training for Employment. *Partners in Progress.* Columbus: CETE, The Ohio State University, 1990. (ED 321 092)

A partnership of regional schools, colleges, and Job Training Partnership Act agencies is offering youth in Clermont and Hamilton Counties, Ohio, a program leading to a high school diploma and the level of beginning technician, or an associate degree and the level of master technician.

Delaware Consortium on Technical Preparation Programs. *Tech Prep Compendium of Models.* Dover: Delaware Statewide Vocational-Technical High Schools and Delaware Technical and Community Colleges, 1989. (ED 319 927)

Four tech prep models are described: program organization, student progress, tech prep data collection and evaluation, and school/community.

Doucette, D., ed. *Leadership Abstracts, Volume 3, Nos. 1-20.* Laguna Hills, CA: League for Innovation in the Community College; Austin: Community College Leadership Program, University of Texas, 1990. (ED 331 574)

In "The Tech Prep Program: A New Course of Study," Joe Grimsley describes Richmond (North Carolina) Community College's Tech Prep Program, offered in business, engineering, and health and human services. A principal purpose is strengthening the academic preparation of students who would not otherwise pursue postsecondary education.

Grubb, W. N. *Tech-Prep Programs: Issues in Implementing the Carl Perkins Amendments of 1990.* Berkeley, CA: National Center for Research in Vocational Education, 1991. (ED 328 764)

Among the issues are (1) relationship between secondary and postsecondary state agencies; (2) types of tech prep models appropriate for federal funding; (3) funding allocation by competition or formula; and (4) the question of limitations on the ages of postsecondary students in funded programs.

Hull, D., and Parnell, D., compilers. *Tech Prep Associate Degrees: A Win-Win Experience.* Waco, TX: Center for Occupational Research and Development, 1991.

This detailed synthesis of Tech Prep/Associate Degree consortia and programs contains 10 chapters providing a rationale, methodology, structure, and process for forming and operating a consortium as well as curriculum models and examples of successful programs.

Lankard, B. A. *Tech Prep. ERIC Digest No. 108.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1991. (ED 329 808)

Factors influencing the success of tech prep are (1) counseling, orientation, mentoring, and automatic postsecondary admission for students; and (2) faculty leadership. Articulation offers more efficient use of tax dollars and provision of the technological content and skills required by employers.

Mensel, F. "Tech-Prep Funding." *Community, Technical and Junior College Times* 3, no. 1 (January 1, 1991): 9.

Describes how $63.4 million for 2+2 partnerships between high schools and community colleges was authorized by Congress to provide a fast start for Tech Prep.

Roanoke City Public Schools. *Roanoke Area 2+2 Program in Automated Manufacturing Technology.* Roanoke, VA: RCPS, 1990. (ED 333 220)

A joint program of six area school systems, Virginia Western Community College, and industry representatives features a strong public relations component to attract able students. The Developing a Curriculum (DACUM) process was used to identify the necessary duties and tasks for automated manufacturing.

Robertson-Smith, M. *Articulation Models for Vocational Education. Information Series No. 343.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1990. (ED 327 737)

Tech prep programs are one form of school-to-school articulation that can improve efficiency and effectiveness. Successful arrangements can be achieved through local and state leadership, involvement of key personnel, consensus on goals and purpose, formal written agreements, and positive human relations.

Spanbauer, S. J., and Hillman, J. A. *Quality First in Education . . . Why Not?* Appleton, WI: Fox Valley Technical College, 1987. (ED 318 508)

The Quality First Process Model uses private sector quality and productivity measures and management styles to serve technical college students more effectively and maintain a cost-effective organization.

"Tech-Prep in Wisconsin." *Wisconsin Vocational Educator* 15, no. 2 (Spring 1991): 1-19. (EJ 426 602)
This special issue includes 14 articles discussing a definition of tech prep, its implementation in a rural community, issues surrounding tech prep and why business and industry support it, recommendations for implementing occupational options, and the dual credit conundrum.

"Tech Prep Partnerships Today Prepare Students for Tomorrow." *Open Entries* 11, no. 2 (December 1991): 1, 7.

Forms of tech prep in Illinois include (1) partnerships between academic and technical educators that strengthen the relationship between academic content and application; (2) secondary/postsecondary articulation arrangements; and (3) education/business partnerships through which employers communicate their performance standards as well as provide incentives for tech prep students.

U.S. Congress. *Carl D. Perkins Vocational and Applied Technology Act as Amended.* Washington, DC: U.S. Congress, 1991. (ED 330 818)

Title III, Special Programs, includes provisions for Tech Prep Education.

Wentling, T. L.; Leach, J. A.; and Galloway, J. R. *Technology Preparation Pilot Test.* Indianapolis: Indiana Department of Education, 1990. (ED 323 350)

An evaluation of tech prep at five Indiana sites found that no single curriculum model emerged as best: each focused on specific needs of its community and students. A positive result was that tech prep was not labeled as a science, math, or vocational program at any site.

Wirt, J. G. "A New Federal Law on Vocational Education: Will Reform Follow?" *Phi Delta Kappan* 72, no. 6 (February 1991): 424-433. (EJ 421 306)

One purpose of tech prep funding in the Perkins Act is to establish the same expectations for achievement at the high school level as are required at the postsecondary level. A tech prep program is an ideal way to demonstrate the value of applied learning.

Resource Organizations

National Tech Prep Clearinghouse of Resources, East Central Curriculum Coordination Center, Sangamon State University, F-2, Springfield, IL 62794-9243 (217/786-6375).

National Tech Prep Network, Center for Occupational Research and Development, Inc., 601 Lake Air Drive, Waco, TX 76710 (817/772-8756).

This *Trends and Issues Alert* was developed in 1992 by Bettina A. Lankard with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under Contract No. RI88062005. Opinions expressed do not necessarily reflect the position or policies of OERI or the Department. *Trends and Issues Alerts* may be freely reproduced.

CENTER ON EDUCATION
AND TRAINING FOR EMPLOYMENT
THE OHIO STATE UNIVERSITY
1900 KENNY ROAD • COLUMBUS OHIO 43210
Telephone: (614) 292-4353 or (800) 848-4815