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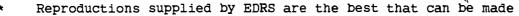
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#### ABSTRACT

This annotated resource list consists of print materials, educational information centers/services, and organizations providing practitioners with information on Tech Prep resources for program improvement. Each listing includes some or all of the following: title, author(s), publisher, address/contact, description, pages, and cost. Ten references, three newsletters, two organizations, and three centers for education/information services are listed. (NLA)





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from the original document.





# National Center for Research in Vocational Education

University of California, Berkeley

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# ANNOTATED RESOURCE LIST: TECH PREP

Compiled by

Technical Assistance for Special Populations Program (TASPP)

University of Illinois

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# INTRODUCTION

Practitioners have limited time available to seek out and obtain the techprep resources necessary for program improvement. In light of the multiple objectives in the 1990 Perkins Act, the need for these resources is even more crucial. Therefore, TASPP has compiled this annotated resource list of references, educational information centers/services, and organizations to provide practitioners with this information. The TASPP staff will periodically update this list, changing addresses and contact persons as necessary.

If you have any questions about this list, or need resources on other topics of concern to special populations in vocational education, please contact the TASPP staff.

A service program of the National Center for Research in Vocational Education at the University of California, Berkeley, TASPP is located at the University of Illinois. Through a variety of services and activities, TASPP meets the 1990 Perkins Act mandate to provide technical assistance to vocational education programs serving special populations. Additional information on TASPP services, activities, and publications is available by calling or writing TASPP, University of Illinois, 345 Education Building, 1310 South Sixth Street, Champaign, Illinois 61820, (217) 333-0807.



## REFERENCES

# APPRENTICESHIP FOR ADULTHOOD: PREPARING YOUTH FOR THE FUTURE

Hamilton, S. F. (1990). New York: The Free Press.

This book draws upon successful systems in West Germany and the U.S. in explaining how apprenticeships for youth aged 16 through 21 can capitalize upon workplaces as learning environments; create opportunities for mentor relationships to provide important adult roles; and develop the flexibility, dependability, and vocational skills of the future as identified by employers. The author describes an effective apprenticeship as one which contains the following essential features: (1) exploits workplaces and other community settings as learning environments; (2) links work experiences to academic learning; (3) gives youth constructively ambiguous roles, as simultaneously, workers with real responsibilities and learners; and (4) fosters close relationships between youth and adult mentors. Apprenticeship is viewed not solely as a preparation for work, but as a dynamic, supportive transition to adulthood. It provides opportunities for education and training to collegebound youth as well as noncollege-bound youth, offering more support services to disadvantaged youth to ensure their success.

The book includes an overview of the future of youth and work, discusses the issues surrounding transition from school to work, describes the history, current state, and future of academic and vocational education, recommendations for restructuring, and a model American apprenticeship program. Principles involving personalized insuluction, performance standards, and integration of community service with vocational education are discussed. jb (223 pages, \$22.95)

# ARTICULATION MODELS FOR VOCATIONAL EDUCATION (INFORMATION SERIES NO. 343)

Robertson-Smith, M. (1990).

Columbus: The Ohio State University, Center on Education and Training for Employment.

The role of articulation in vocational education is highlighted in this monograph which reviews the process of coordinating curricula at different levels of education. It examines various secondary and postsecondary models of articulation including tech-prep; cooperative education; proprietary schools; retention of at-risk students; intercollegiate arrangements; and arrangements between educational institutions and agencies, such as business and industry, government, and the military with training needs. The author notes that coordination involves more than curricula—admissions, assessment, credit, and transfer policies and procedures must also be articulated. sck (36 pages, \$5.25)

#### ADDRESS:

MacMillan Publishers Front and Brown Streets Riverside, NJ 08375 (609) 461-6500

# ADDRESS:

Center on Education and Training for Employment The Ohio State University 1900 Kenny Road Columbus, OH 43210-1090 (614) 292-4353 in OH (800) 848-4815



# ARTICULATION WORKBOOK FOR COOPERATIVE EDUCATION

Lux, D., Rush, P., & Campbell, R. (1990).

Lincoln: Nebraska Department of Education.

This workbook provides an overview of the Tech Prep, 2 + 2, and articulation process of cooperative education. It defines articulation and related terminology, provides rationales and benefits of articulation, examines implementation strategies, and lists steps for successful programs and characteristics of successful programs. It also answers commonly asked questions on articulation. Appendices provide sample agreements, guidelines, and other examples of handouts. ieb (55 pages)

### ADDRESS:

Nebraska Department of Education P.O. Box 94987 Lincoln, NE 68509 (402) 471-4808

# COMBINING SCHOOL AND WORK: OPTIONS IN HIGH SCHOOLS AND TWO-YEAR COLLEGES

Stern, D. (1991, March).

Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education.

The role of vocational-technical education in the transition from school to work and how it can contribute to a competent, highly-skilled work force is the focus of this report. It discusses how quality vocational-technical programs can make transition experiences efficient, effective, and meaningful. Traditional approaches and the latest innovations that respond to the challenge of preparing young people for a more learning intensive workplace are described.

The traditional approaches, including apprenticeship, cooperative education, and school-based enterprise, make deliberate use of work as part of the learning experience. The latest innovations, including vocational academies and tech-prep programs, are reconstructing the high school curriculum to unite vocational with academic disciplines. The report concludes with a discussion of the importance that employers play in all of the programs through business-school partnerships. sck (45 pages, no charge)

### ADDRESS:

Clearinghouse of Adult Education and Literacy
U.S. Department of Education Division of Adult Education and Literacy
Office of Vocational and Adult Education
400 Maryland Avenue, S.W.
Washington, DC 20202-7240
(202) 732-2396



#### ILLINOIS TECH PREP PLANNING STRATEGIES

Bragg, D. D., Huffman, G. K., Hamilton, L., & Hlavna, D. P. (1991, August). Springfield, IL: Illinois State Board of Education, Department of Adult, Vocational and Technical Education.

While Tech Prep planning is a grassroots effort, common objectives include: (1) customizing the Tech Prep concept to develop successful local initiatives, (2) creating an exciting combination of academic and technical education for career development, (3) creating partnerships that benefit students, (4) forming teams that involve key groups in substantive planning and decision-making strategies, and (5) helping all key groups commit to and take ownership of Tech Prep.

Based largely on the day-to-day experiences of Tech Prep planners in Illinois, this handbook provides a mix of practical and research-based information designed to provide ideas for initiating successful programs for project directors, coordinators, and other parties involved in Tech Prep planning activities. It is intended to generate ideas, share successful practices, and encourage communication for the successful design of Tech Prep initiatives.

Chapters cover applying the Tech Prep planning process; involving and organizing key groups (educators, business and industry representatives, students, and parents); developing the components of Tech Prep using alternative approaches; implementing various strategies; and evaluating Tech Prep initiatives. Each chapter includes the purpose of the activity described, issues to consider, parties to involve, when to begin, and a relevant success story. jeb (115 pages, \$5.00)

#### ADDRESS:

Curriculum Publications Clearinghouse Western Illinois University Horrabin Hall 46 Macomb, Illinois 61455 (800) 322-3905



# IMPROVING GENERAL AND VOCATIONAL EDUCATION IN THE HIGH SCHOOLS

Bottoms, G., & Presson, A. (1989).

Atlanta, GA: Southern Regional Education Board.

Sponsored by the Southern Regional Education Board (SREB) State Vocational Education Consortium, this report highlights the need to improve the academic competencies of students enrolled in general and vocational courses and presents recommendations and strategies for state and local school boards to implement. The Consortium members believe that significant improvements in the school graduates from the general and vocational curriculum produce a coherent and challenging To achieve this goal, specific high school program of study. recommendations for developing and implementing programs to boister students' skills in communications, mathematics, and science are forwarded on policies, curriculum development and redesign, improving access to quality programs, transition, tech prep, guidance and counseling, staff development, job placement, and performance standards. Through this report, the Consortium urges the state and local boards to initiate actions designed to establish a clear direction and express serious intent to "stay the course" in the task of improving vocational and general education.

The actions recommended include: (a) adopting an affirmative statement of intent to improve general and vocational education, (b) upgrading high school graduation requirements for the Class of 1996, (c) establishing state teams composed of vocational and academic educators to provide technical assistance to local school divisions, (d) establishing a comprehensive system to assess student performance, and (e) providing resources to achieve the goal of improving general and vocational education. ztb (36 pages, \$6.50)

# SCANS BLUEPRINT FOR ACTION: BUILDING COMMUNITY COALITIONS

Secretary's Commission on Achieving Necessary Skills. (1991). Washington, DC: U.S. Department of Labor.

In its first report, SCANS defined a common core of skills that constitute work readiness for the jobs of today and tomorrow. As a companion volume, this report is designed to assist schools and workplaces in developing local plans of action to implement the SCANS initiative. It explains implementing the SCANS action plan; building coalitions (networking, roles, outreach, follow-up, community workshops, and local surveys); and utilizing existing resources (Department of Labor Regional Offices, organizational contacts, and relevant publications). The appendix includes examples of successful programs implementing the SCANS initiative. jeb (44 pages, no charge)

#### ADDRESS:

Southern Regional Education Board 592 Tenth Street. N.W. Atlanta, GA 30318-5790 (404) 875-9211

### ADDRESS:

Secretary's Commission on Achieving Necessary Skills U.S. Department of Labor Washington, DC 20210 (800) 788-SKILL



# TECH PREP ASSOCIATE DEGREE: A WIN/WIN EXPERIENCE Hull, D., & Parnell, D. (Comps.). (1991).

Waco, TX: Center for Occupational Research and Development.

The reauthorized Carl D. Perkins Vocational and Applied Technology Act of 1990 has added major new momentum to the applicability and relevance of tech-prep programs. In response, this book provides a step-by-step process on how to develop and implement a Tech Prep/Associate Degree (TPAD) program. It is designed for faculty and counselors; local, state, and federal administrators; institutional leaders; and policymakers involved in the development, implementation, or initiative of a Tech Prep/Associate Degree. The book also provides useful information for employers, parents, students, community and business leaders, and economic development organizations.

Characteristics of the TPAD program include but are not limited to: begins with a solid foundation of applied academics and builds around career clusters and a technical system of study, encourages students to stay in high school to complete their high-school education, and helps students develop broad-based competence in a career field and avoid the pitfalls of more short-term and narrowly delineated job training. The development of TPAD programs, which emphasizes the following five "Cs," offers students another definition of education excellence: (1) continuity in learning, (2) context-based teaching (applied academics), (3) competency-based teaching, (4) communication between learning institutions (especially between high schools and postsecondary institutions), and (5) completion of the program with an associate degree.

Included in the book are special instructions and suggestions for the TPAD coordinator, issues and obstacles that commonly occur in the development and implementation process, resources for counselors, and examples of successful TPAD programs. sck (408 pages, \$32.50)

# TECH PREP IN ILLINOIS: RESOURCES FOR PROGRAM PLANNERS

Illinois Vocational Curriculum Center. (1990, September). Springfield, IL: Author.

This resource guide was designed in response to the reauthorization of the Carl D. Perkins Act. The booklet contains a listing of resources in the area of Tech Prep and related subject areas such as articulation, integrating academics, and business-education linkages now available on free loan from the Illinois Vocational Curriculum Center. A list of Tech Prep programs currently funded in community colleges and Education for Employment Systems in Illinois is also included. sck (25 pages, no charge)

#### ADDRESS:

Center for Occupational Research and Development 601C Lake Air Drive Waco, TX 76710 (817) 772-8756 in TX (800) 231-3015

#### ADDRESS:

Illinois Vocational Curriculum Center Sangamon State University, F-2 Springfield, IL 62794-9243 (217) 786-6375 (800) 252-4822



TECH-PREP PROGRAMS: ISSUES IN IMPLEMENTING THE CARL PERKINS AMENDMENTS OF 1990 (PAPER PRESENTED AT THE SEPTEMBER 1990 CONFERENCE OF THE NATIONAL ASSOCIATION OF STATE DIRECTORS OF VOCATIONAL EDUCATION) (WORKING PAPERS SERIES, MDS-233) (ERIC DOCUMENT REPRODUCTION SERVICE NO. ED 328 764)

Grubb, W. N. (1991, January).

Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

Several issues concerning tech-prep programs that federal and state policymakers face in implementing the Carl Perkins Amendments of 1990 are outlined in this document. It is based on research sponsored by the National Center for Research in Vocational Education, University of California, Berkeley. Each issue is presented with a brief comment outlining several alternatives. Since it was intended to stimulate discussion, this document does not present any recommendations. mcw (4 pages, \$2.00)

#### ADDRESS:

National Center for Research in Vocational Education Materials Distribution Service Western Illinois University 46 Horrabin Hall Macomb, IL 61455 (800) 637-7652



#### **CHANGE AGENT**

Articles in this newsletter highlight current best practices applied research, and resources on topics such as integrating academic and vocational education, tech-prep, serving learners with special needs, accountability, performance standards, and administration and teacher preparation. This newsletter would be of interest to practitioners, administrators, researchers, and policymakers concerned with issues in vocational education. sck (\$35.00)

#### **TECH PREP**

Articles on Delaware's tech prep programs, state and federal legislation affecting tech prep programming, and the latest resources are included in this quarterly newsletter. jeb (no charge)

## **WORKFORCE DEVELOPMENT STRATEGIES**

The focus of this monthly newsletter is on serving the education, business, and government sectors concerned with the training and education of America's workforce. Articles provide information on technology trends, human resource development systems, innovative state policies, resources, training trends by specific industries, successful programs and practices, latest research, legislation updates, and upcoming conferences. Past issues have covered topics such as skills and the new economy, youth apprenticeship, tech-prep, integrating academic and vocational education, workplace literacy, and research priorities for vocational education. sck (\$135.00)

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# AGENCY FOR INSTRUCTIONAL TECHNOLOGY (AIT)

The Agency for Instructional Technology is a nonprofit U.S.-Canadian organization established in 1973 to strengthen education through technology. AIT provides leadership and service to the education community through cooperative development, acquisition, and distribution of technology-based instructional materials.

The instructional materials made available through AIT are either developed and financed through joint program projects organized and managed by AIT, or acquired from state and local education agencies.

A variety of video and software materials for vocational, occupational, and career programs are available from this organization. In addition, curriculum materials which integrate academic and vocational instruction with physics, math, and communication are also available.

AiT's free, quarterly newsletter provides up-to-date information about videos and activities. mcw

# CENTER FOR OCCUPATIONAL RESEARCH AND DEVELOPMENT (CORD)

A variety of products and services are available from the Center for Occupational Research and Development, a nonprofit public-service organization dedicated to the advancement of vocational and technical education. Spanning secondary, postsecondary, and adult training and education, CORD provides services, forecasts, strategies, curricula, and materials that are used to promote a more productive and competitive workforce.

CORD's goal is to assist educational institutions and other organizations who provide education, training, and retraining for America's technical workers. In recent years, CORD has become involved in designing curricula using applied academic instructional materials. These materials are being implemented in secondary, postsecondary, and adult retraining programs. CORD has worked with schools to develop 2 + 1 and 2 + 2 curricula in which the last two years of secondary school are linked to one or two years of postsecondary school. CORD also helps postsecondary schools devise articulation strategies in which the institution grants credit for the work done at the secondary level as part of a two-year or four-year program. mcw

#### CONTACT:

Agency for Instructional Technology Box A Bloomington, IN 47402-0120 (812) 339-2203 (800) 457-4509

#### CONTACT:

Center for Occupational Research and Development 601 C Lake Air Drive Waco, TX 76710 (817) 772-8756 (512) 323-0779 Austin, TX office (800) 231-3015



# **CENTERS FOR EDUCATION/INFORMATION SERVICES**

#### **AVIATION MAINTENANCE TECHNOLOGY PROGRAM**

This 1990 Secretary of Education Award-winning program offers Diploma. Associate of Science, and Bachelor of Science options. Students receive both hands-on and theoretical training culminating in eligibility to test for the Federal Aviation Airframe and Power Plant License. For the Associate program the student is required to complete 32 credits of general education requirements at Northland Community College. They are then qualified for junior status at the University of North Dakota Center for Aerospace Sciences where they can earn a Bachelor of Science degree in Aviation Maintenance Management. The Bachelor of Airway Science is a cooperative program between Thief River Fails and the University of North Dakota. It stresses hard science, the human side of management, and computer skills and is designed primarily to prepare graduates for entry level positions in the Federal Aviation Administration and the aviation industry.

The aviation program has a stated goal of achieving the highest concentration of females in any aviation program in the nation. jeb

#### **HORIZON 2000**

Technical jobs are increasing, while prepared and trained labor to fill these technical jobs is decreasing. Horizon 2000 is a cooperative effort between Sandhills Community College, local business and industry, and the Moore County schools in North Carolina to enroll high school and junior high students in one of three Tech-Prep tracks. Local business and industry will support the education of students who expression interest in a technical curriculum both at the high school and postse, and industry level. Sandhills Community College provides 30 scholarships annually for Tech-Prep students, sck

### NATIONAL TECH PREP CLEARINGHOUSE OF RESOURCES

Committed to sharing information, curriculum, and resources to assist in implementing Tech Prep programs defined in P.L. 101-392, the Carl D. Perkins Vocational Education and Applied Technology Act, the National Tech Prep Clearinghouse of Resources provides promotional samples, orientation videotapes, state definitions and guidelines, curricular planning models, speeches and presentations, articulation agreements, and academic integration curriculum. The Clearinghouse maintains state and local contacts and speaker referrals. It is coordinated with the National Center for Research in Vocational Education, University of California, Berkeley; Center for Occupational Research and Development; Tech Prep Consortium; and U.S. Department of Labor. jeb

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