This document compiles representative resources to assist state and local administrators of vocational special needs programs, special needs educators, counselors, researchers, and policymakers in implementing and complying with the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. Entries in the publications section are categorized by these headings: program administration, vocational and academic education integration, performance standards, tech prep, educational reform, work force development policy initiatives, and policy studies. The following sections list these types of resources: newsletters; journals; agencies, associations, and organizations; centers for educational information/services; clearinghouses; computer-based information networks; databases; and model programs. For each entry of a print resource, an annotation, the price, ordering information, and address are provided. For each organizational resource, an annotation, contact, address, and telephone number are provided. Directories of resource personnel are included for the following: National Network for Curriculum Coordination in Vocational and Technical Education; State Vocational and Technical Education Curriculum Centers; Office of Educational Research and Improvement Regional Educational Laboratories; State Directors of Vocational Education; State Personnel Responsible for Vocational Education for Handicapped, Disadvantaged, and Limited English Proficient Persons; and National Association of State Directors of Special Education, Inc. Indexes by title and author are provided. (YLB)
CARL D. PERKINS
VOCATIONAL AND APPLIED TECHNOLOGY EDUCATION ACT OF 1990:
SELECTED RESOURCES FOR IMPLEMENTATION

Supported by
the Office of Vocational and Adult Education,
U.S. Department of Education

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CARL D. PERKINS
VOCATIONAL AND APPLIED TECHNOLOGY EDUCATION ACT
OF 1990:
SELECTED RESOURCES FOR IMPLEMENTATION

Compiled by
Sheri Kallembach, Zipura Burac, Maureen Coyle-Williams,
Julie Benesh, Cheryl Bullock, and Linda Iliff

Technical Assistance for Special Populations Program (TASPP)
University of Illinois

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PREFACE

Changes in the quality and scope of vocational education called for in the new Perkins Act present unprecedented challenges and opportunities. Overlooked during the "Academic Excellence" movement of the 80s, vocational education now has an opportunity to prove its value for all populations. Along with this opportunity comes a challenge to achieve some specific improvements. If successful, the law will change the direction, structure, and focus of the field. (Coyle-Williams, M., 1991, p. 3)

Those concerned with promoting the multiple objectives in the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (P.L. 101-392) have a limited amount of time available for seeking out and sorting through the overwhelming number of resources addressing educational issues. Consequently, many high-quality resources never reach those who need them most. In response to the Perkins legislation, Technical Assistance for Special Populations Program (TASPP) has identified resources to assist state and local administrators of vocational special needs programs, special needs educators, counselors, researchers, policymakers, and others in implementing and complying with the reauthorization of the Perkins legislation.

Materials contained in this document include publications; newsletters; journals; agencies, associations, and organizations; centers for educational information/services; clearinghouses; computer-based information networks; databases; and exemplary and model vocational programs. In addition, directories of resource persons are included for the following: National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE); State Vocational and Technical Education Curriculum Centers; Office of Educational Research and Improvement (OERI) Regional Educational Laboratories; State Directors of Vocational Education; State Personnel Responsible for Vocational Education for Handicapped, Disadvantaged, and Limited-English Proficient Persons; and the National Association of State Directors of Special Education.

The entries are categorized by the following headings: program administration, academic and vocational education integration, performance standards, Tech Prep, educational reform, workforce development policy initiatives, and policy studies.
This guide is not intended to be an exhaustive listing of all available resources, rather, materials are included which are representative of the field. For each entry, an annotation, the price, ordering information, and address (whenever possible) are provided. Resources should be ordered directly from the publisher listed in each annotation.

TASPP has also developed resource guides on teen parents, limited English proficiency, youth and adults at risk, the unique needs of rural and urban students with disabilities, and transition. These, as well as the Perkins resource guide, may be obtained through the National Center for Research in Vocational Education, Materials Distribution Service, Western Illinois University, 46 Horrabin Hall, Macomb, IL 61455, (800) 637-7652.

TECHNICAL ASSISTANCE FOR
SPECIAL POPULATIONS PROGRAM

Mission

The Technical Assistance for Special Populations Program (TASPP) works nationally to increase vocational program accessibility, quality, and availability for youth and adults from special populations.

Objectives

- Increase awareness and understanding of critical issues in vocational special needs education, and
- promote exemplary program activity and the adoption of model practices.

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A service program of the National Center for Research in Vocational Education, University of California at Berkeley. TASPP is located at the University of Illinois. Additional information on TASPP services, activities, and publications is available on request.
PUBLICATIONS

PROGRAM ADMINISTRATION

Administration of Vocational Education

This book presents information about the effective administration of both secondary and postsecondary vocational education programs today. Terminology, definitions, administrative theory and structure, and critical issues are covered. The authors analyze and interpret changes in the public's attitude toward vocational education and suggest ways in which new programs can be designed and implemented to meet the changing needs of society. Attention is given to the philosophic rationale for support of vocational and technical education programs, contributions of behavioral scientists, and issues pertaining to future directions in administration. (234 pages; $23.96, $17.97 school price)

AVA Audit Handbook: Avoiding Audit Liability Under the 1990 Perkins Act

The third publication in a series on the Carl D. Perkins Vocational and Applied Technology Act of 1990, this handbook provides an overview of reporting and audit-related requirements contained in the act and other pertinent federal regulations. It explains the kinds of programs Perkins' dollars may fund, the records local agencies must keep, procedures for preparing an audit, and strategies for appealing audit findings.

This handbook features extensive appendices which include the complete text of the proposed Perkins regulations. Also included are the federal regulations addressing accounting and administrative issues of interest to state and local governments. Purchasers will be mailed an update once the Perkins Act regulations are finalized. (273 pages; $49.95 member, $54.95 nonmember)

This document is designed as a reference and planning tool to help professionals understand and implement the 1990 Carl Perkins Act. The guide is divided into three main sections: (1) a synopsis of the entire Act, providing a general overview of each of the major titles; (2) an expert analysis of each element of significant change from the 1984 Carl Perkins Act to the new 1990 Act (eliminating those sections with only minor changes or changes not relevant to the field in general); and (3) the new law in its entirety, carefully integrating the sections of the 1984 Act that are simply referenced in the text of the new 1990 Act. Additionally, Appendix A contains the full transcript of Title VI, which was not included with the integration of Titles I-V. Title VI creates the Department of Correctional Education. (175 pages; $17.95 member, $21.95 nonmember)


The U.S. Department of Education, Office of Vocational and Adult Education, has developed a manual to assist states in developing the three-year plan required by the 1990 Perkins Amendments. The guide is also designed to clarify the requirements in the law addressing the State Plan. It addresses the law section by section and distinguishes three levels of required and recommended actions: (1) mandatory requirements (denoted by “shall”), (2) important and desirable detail and/or clarification (denoted by “strongly encouraged”), and (3) desirable approaches (denoted by “could”, “may,” or “might”). The Division of Vocational-Technical Education is also referenced, providing information regarding the names, titles, and telephone numbers of contact persons: fund allocation worksheets; and checklists of references by short title and by first sentence to assist administrators in verifying that each assurance in the law has been met by their state plan. (50 pages, no charge)
Components of a Good State Plan for Vocational Education Under the 1990 Perkins Act

This document is intended to help develop state plans of high-quality which will meet with the approval of the U.S. Department of Education. It includes an introduction, the key substantive areas, and special populations issues. It addresses how to involve the public in developing the state plan, as well as what to do if there are problems with the plan. jeb (13 pages, $12.00)

Promising Practices for Special Needs Youth in Career-Vocational Education

The names of vocational educators working with students who are disadvantaged, disabled, and/or limited-English proficient (LEP) were compiled into this resource guide of promising practices in career-vocational education. It is designed as a guide for users to adopt, adapt, combine, or create new practices to better serve vocational students with special needs.

Practices were identified using the nineteen components identified in a three-year exemplary program study by the NCRVE's Technical Assistance for Special Populations Program. Vocational education personnel throughout California were asked to refer programs that exhibited one or more of these components.

The nineteen program components are (1) strong administrative leadership and support, (2) sufficient financial support, (3) formative program evaluation, (4) summative program evaluation, (5) individualized instruction, (6) integration of academic and vocational curricula, (7) appropriate instructional setting, (8) cooperative learning experiences, (9) assessment of individual's interests and abilities, (10) instructional support services, (11) ongoing career guidance and counseling, (12) parental involvement and support, (13) notification of both parents and students regarding vocational opportunities, (14) vocational educator's involvement in individual education planning, (15) formalized transition planning, (16) intra-
interagency collaboration, (17) work experience opportunities, (18) job placement services, and (19) follow-up of graduates and nongraduates. Applicable programs are listed and described under each component. The descriptions list the program name, site address, contact name, phone number, audiences served, description of overall school/program setting, component description, and a cross-listing depicting the other components under which the program is listed. jeb (164 pages, $16.50)


Designed to help school administrators, teachers, state employees, community college personnel, and others concerned about vocational education, this manual contains all essential information about the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990. This manual reviews, explains, and analyzes the key provisions of the Perkins Act, as revised by Public Law 101-392.

Organized into two parts, Part One gives a general overview of the Perkins Act. In the process, it outlines the (1) significance, (2) major themes, (3) legislative history, and (4) organization and format of the Perkins Act. Part Two contains the Act's specific provisions, topic by topic. Using lay language, charts, and tables, Part Two recapitulates the law's essential provisions, explains their significance, analyzes differences from prior law, and decodes unfamiliar terms and references. Each topic is numbered for easy cross-reference and is divided into subtopics. Individual provisions are marked to show if they are new, revised from prior law, or similar to or the same as prior law. A glossary explains common acronyms, abbreviations, and terms used throughout the text. sck (104 pages, $23.50 includes shipping and handling)
VOCATIONAL AND ACADEMIC EDUCATION INTEGRATION


In response to the 1990 Perkins legislation and state law, Alabama has developed vocational education curricula in home economics, business, marketing, agribusiness, industrial arts/technology, health occupations, and trade and industrial education. The curricula provide a coherent sequence of courses that include exploration of careers, understanding of basic family concepts, and preparation for employment. The primary purpose of the course of study is to assist administrators and teachers in developing and maintaining high quality vocational programs that produce employable students with entry-level job competencies and basic family living skills. A secondary purpose is to add uniformity to vocational programs. The core courses contain outcomes that meet the five desired characteristics of any course of study: basic, appropriate, reachable, reasonable, and enforceable. The outcomes reflect the integration of vocational and academic skills. This approach supports the objectives that must be met in Individualized Education Planning (IEP) committees, students’ program of work, and student documentation of skills mastered. The outcomes dictate the content that is to be used in planning effective and comprehensive vocational programs. Local schools are encouraged to add content to accommodate varying local patterns of organization, resources, and needs.

A conceptual framework is presented for each curriculum, as are core and optional courses, module descriptions, cooperative training requirements, and information about vocational student organizations. jeb (407 pages, no charge)

Jim Kendrick
Alabama Department of Education
Gordon Persons Building
50 N. Ripley Street
Montgomery, AL 36130-3901
(205) 242-9950
Applied Basic Skills Series: Mathematics, Science, and Language Arts
Austin: University of Texas at Austin, Extension Instruction and Materials Center.

This series is designed to help motivate and encourage academically disadvantaged students to learn basic skills by using practical life skills as the vehicle for learning. Each publication focuses on real-life applications, with information on career awareness and consumer education and covers most of the essential elements for math, science, and language arts courses for seventh through ninth grades.

Each Mathematics, Science, and Language Arts publication includes eighty to one hundred modules, with student learning activities and instructor resource sheets. The administrator’s/teacher’s guide includes information on identifying, understanding, and working with academically disadvantaged students; it includes strategies for modifying the curriculum, motivating disadvantaged students, and assessing student progress.

ldi (Math, Science, Language Arts, $21.00; student learning activities, $8.00; teacher’s guide, $5.00)

Atlanta, GA: Southern Regional Education Board.

This highlights the results from the Southern Regional Education Board (SREB) State Vocational Education Consortium pilot sites assessment. Approximately thirty-one hundred high school seniors identified as vocational completers from thirty-four pilot sites participating in the SREB Consortium were assessed in reading, mathematics, and science using the National Assessment of Education Progress (NAEP) in April and May of 1988. The Consortium’s initiative is aimed at strengthening the basic competencies (communications, mathematics, science, critical thinking, and problem solving) of students enrolled in vocational programs. The sites and states involved in this initiative are seeking to implement strategies to improve the high school experiences of the students who are not enrolled in a college prep curriculum, thereby addressing the problem of changing requirements in the workplace and the increasing
dropout rate among secondary students. Some of the strategies include (1) requiring students to complete vocational and academic studies which are more rigorous and coherent, (2) increasing the amount of time vocational teachers spend explicitly reinforcing higher-level basic competencies, (3) expanding the use of applied instructional approaches in academic courses, (4) designing courses that focus on the developing specific academic skills, and (5) assisting students in the selection of courses by providing them with individualized counseling. This comprehensive curriculum also includes an assessment of student achievement.

A variety of measures are being used to evaluate the progress of pilot sites achieving the Consortium goals. These measures include (1) the assessment of student achievement in reading, mathematics, and science using portions of the NAEP results to compare their performance to that of students nationwide; (2) annual studies of the transcripts of students who complete vocational programs to determine the number and types of courses taken; (3) annual follow-up surveys to determine what career and educational decisions these students make after high school; and (4) surveys of pilot site personnel. Strategies to improve the reading, mathematics, and science achievements and for developing a vocational and academic program of study to improve course selection and planning are also included. see (35 pages, $7.50)

Basic Skills Instructor Manual

The basic skills instructor, charged with enabling special needs students to adequately meet the academic requirements of their chosen vocational education program, fulfills this role through providing individual or small group instruction in the areas of mathematics, reading, or writing skills. For each student, the instructor must (1) address the specific deficiencies which have been identified through the assessment process, (2) coordinate with the vocational education teacher, and (3) provide services on an individual basis concurrently with the student’s enrollment in a vocational program. Instruction should be offered with a maximum of flexibility in scheduling. This guide is divided into six areas of responsibility for basic skills instructors, based on the results of a 1987
survey: identification and assessment; teaching, tutoring, and testing; materials to use in basic skills programs; recordkeeping techniques; meetings and contacts; and counseling, transition, and employment. Also included is a separate section on postsecondary concerns. Each area is followed by a list of questions and answers which might arise. Along with sample forms to complement each section, the manual includes a comprehensive glossary and references. (174 pages, $12.50)

Basic Vocational Education

This manual is divided into three major sections. The first section contains the implementation plan. The second section is designed to assist the classroom teacher in the delivery of basic vocational skills to at-risk and special needs learners. It is comprised of eleven curriculum units covering the following areas: vocational awareness, vocational counseling, self-concept, vocational exploration, functional academics, vocational guidance, looking for work, employment forms, work habits and attitudes, working relationships, and money management. The curriculum is intended to be integrated with information obtained from vocational interest surveys and vocational aptitude assessments. Reference information on commercial and public resources reviewed in preparation for the development of the curriculum is found in the third section. The manual can be used with students who are enrolled in prevocational, vocational, cooperative work-study, or career education programs at the middle school and secondary school levels. All materials are designed for students who have deficiencies or who lack knowledge of basic employment skills necessary to make a successful transition from school to work. The materials can also be adapted for use in both group and individualized instructional settings. (383 pages, $19.50)
The Bottom Line: Basic Skills in the Workplace

This booklet provides guidelines for establishing workplace programs to improve the basic skills of workers. It discusses the need for improved basic skills in the changing workforce. The symptoms and sources of literacy problems and tips for performing a "literacy audit" are highlighted. In addition, several topics are addressed in relation to solving workforce literacy problems. These include designing the training program, setting goals, assessing available resources, recruiting trainees, working with partners, building the curriculum, and evaluating the program. Resources, references, suggested readings, and additional sources of information are included. mcw (50 pages, no charge)

The Bridger's Guide (Subset of Basics: Bridging Vocational and Academic Skills)
Center on Education and Training for Employment.
Columbus: Ohio State University.

This guide contains material for coordinating basic skills program resources. Basic skills including science, mathematics, communication, and problem solving are emphasized throughout the program. Individual components of the subset include the following: (1) an implementation guide describing the philosophy of the basic skills program and the role of administrators, counselors, employers, and families in basic skills improvement programs; (2) posters and brochures highlighting key research findings; (3) a primer of exemplary strategies providing teachers with examples of successful efforts and approaches for teaching basic skills in different classroom settings; (4) an administrator's guide presenting staffing structures and program approaches for improving the basic skills of vocational education students; (5) an administrator's guide providing administrative tools for effective program planning for the integration of academic and vocational-technical education; and (6) a competency-based module for career guidance counselors. Each component is available individually, as part of this subset, or as part of the complete Basics set. jeb ($75.00 subset, $198.00 complete Basics set)
Bridging Education and Employment with Basic Academic Skills

This document was developed under the Work-Education Bridge (WEB) Project, a model developed by Indiana University researchers to provide educators with a methodology for identifying academic skills that are basic to a vocational area. The report presents a compendium of papers from the research and literature review conducted for the WEB project. Each paper addresses the question “What is basic in vocational education?” by analyzing the workplace, the academic courses (mathematics, science, and communication), and computer literacy. The discussions include a review of effective programs and their characteristics; guidelines for programs, materials, and instructional development; and definitions of basic skills in each academic area, and their relation to vocational education and the workplace. Also discussed are the basic skills impact and potential of three recent Indiana Commission on Vocational-Technical Education funded projects: Principles of Technology, Applied Mathematics, and Applied Communication. ztb (97 pages, price unavailable)

The Case for Integrating Academic and Vocational Education

Commissioned by the National Assessment of Vocational Education, the principal purpose of this study is to identify, describe, and assess the potential of innovative approaches to integrating vocational and academic education as a way of helping students to understand the importance of academic learning. The report describes local educational settings where unusual efforts are being made to integrate vocational and academic curricula. The initial findings show that (1) curriculum and professional development are key activities associated with implementing integrated vocational/academic curriculums; (2) it is preferable to have both vocational and academic instructors involved in the innovation from the start; and (3) funding is needed to support professional and curriculum development activities. Five case studies are included. mcw (184 pages, no charge)
Closing the Gap Between Vocational and Academic Education

This paper examines reasons for the gap between vocational and academic courses of study in secondary schools and describes promising strategies that have been developed to close that gap. Drawing on personal experience as well as research examining the gap, the author recommends combining vocational and academic content and instructional methods in a way that improves students' proficiency and maximizes their potential for future learning and advancement. mcw (30 pages, no charge)

Coordinated Vocational Academic Education (CVAE) Related Vocational Instruction Program (RVIP) Training Manual for Special Needs Coordinators

Designed for local vocational instructors, special needs coordinators, and academic team members, this training manual provides an overview of the CVAE program and related components. It contains the following components related to the CVAE program: (1) definitions and identification methods for students who are disadvantaged, at-risk, or who have disabilities; (2) methods for teaching and counseling CVAE students; (3) key factors in program organization and planning; (4) descriptions of the intracollaboration process and team members' roles and responsibilities; (5) integrating vocational and academic education; (6) sample series of basic vocational and academic skills students need to master; (7) interrelated manuals for language arts and math teachers; (8) vocational assessment, career development, and transition; (9) CVAE curriculum; (10) remediation and basic vocational and academic skills relating to language arts and math; (11) Vocational Opportunities Clubs of America; (12) documentation of student progress; (13) and dropout prevention. Also included are sections describing how to set up a CVAE Resource Center, a list of recommended language arts and math resources, and a step-by-step outline for the special needs coordinator. sck (203 pages, $15.00)
The Coordinated Vocational Academic Education (CVAE) Program provides support for disadvantaged students in all Georgia secondary vocational programs. Disadvantaged students, including limited-English speaking populations and migrant populations unable to succeed in a regular vocational program without special support, are enrolled in both a vocational program and CVAE. The program emphasizes necessary competencies for occupational entry and relies on collaboration among math, English, CVAE, and vocational instructors to reinforce basic skills for school and work.

This curriculum guide was developed to assist local school system personnel to meet the requirements of the statewide curriculum. It promotes a unified effort to develop and utilize competency-based vocational curricula that reflect the expressed needs of business, industry, and the community. The incorporation of general employability skills and the inclusion of broad concepts of work, careers, and family into an occupational skill-building curriculum are also emphasized.

The guide provides terminal and enabling objectives, learning activities, instructional materials lists, and estimated hours for each instructional setting. The appendices include information on the identification of students who are disadvantaged, keys to working with potential dropouts and disadvantaged youth, sample teaching calendars, daily lesson plans, sample interlocking activities, information on criterion-referenced testing, student competencies required by the statewide curriculum act, quality core curriculum for CVAE, Georgia Basic Skills Tests, and suggestions for evaluating the course. sck (416 pages, $10.00)
"The Cunning Hand, the Cultured Mind": Models for Integrating Vocational and Academic Education

Based upon extensive site visits and observation, eight models of vocational-academic education integration are identified and analyzed in this report. The models differ widely in their approaches and in their degree of ambition and include the following: (1) incorporating academic competencies into vocational courses; (2) collaboration among vocational and academic teachers to incorporate academic competencies into vocational courses; (3) modifying the academic curriculum so that it is more vocationally relevant; (4) modifying and coordinating both vocational and academic courses; (5) senior projects, which replace electives; (6) the Academy model, in which academic teachers team with a vocational instructor in a vocational subject area; (7) occupational high schools and magnet schools; and (8) occupational clusters, career paths, and majors that cut across departmental lines, creating a matrix structure. This addresses the purposes and importance of integration in the framework of educational reform, clarifies the requirements for successful integration efforts, outlines resources, and addresses the need for sustained consistent reform efforts. The appendices include a list of the school visits, interviews, and curriculum materials related to the integration of vocational and academic education. jeb (MDS-141, 112 pages, $4.50)

Curriculum Development in Vocational and Technical Education: Planning, Content and Implementation (3rd ed.)

This comprehensive book provides a hands-on guide to developing effective curriculum for vocational and technical education—complete with ready-to-use guidelines, forms, checklists, and step-by-step advice. This edition covers the entire process, from pre-planning, choosing the right approach, and gathering and analyzing data, to implementing the program. It includes insights and tips from two leading experts with years of curriculum development experience.
Included is comprehensive information needed to develop effective curriculum materials, plus coverage of special needs learners, and tips on using the microcomputer in curriculum development. It is designed to be a planning tool for all vocational-technical areas at secondary and postsecondary levels. sck (324 pages, $44.95)

Developing a Curriculum in Response to Change
Columbus: Ohio State University, Center on Education and Training for Employment.

Part of the OPTIONS: Expanding Educational Services for Adults set, this book is organized in a three-ring binder and divided into two parts. Part One discusses the changing workplace, its impact on the schools, and how educational institutions can respond to these changes. Part Two details a comprehensive, systematic, six-step curriculum development process. Included are procedures for developing or adapting curricula, assessing needs, defining objectives, identifying resources, selecting and implementing solutions, and evaluating implementation. Also included is a review of inservice tasks. Information in this publication was excerpted and adapted from previously published materials and represents the contributions of thirty-five different authors. sck (218 pages, $29.95)

Dynamics of Secondary Programs Assisted under the Carl D. Perkins Act
Columbus: Ohio State University, Center on Education and Training for Employment.

This document describes results from a nationwide study of vocational and nonvocational classrooms and programs. Information is provided for planning and developing vocational programs, curricula, and instruction.

Results of this study answer twenty-six questions based on thirteen major educational policy issues: basic skills, career guidance, access and equity, adult training, articulation, at-risk students, currentness of vocational curricula, equipment and materials, economic development, institutional characteristics, JTPA/CBO-vocational education linkages, teacher education, and transferable and higher-order skills.
This study involved in-depth observations of 893 classrooms in 120 schools across the country. Thus, the publication contains brief summaries of survey data gathered from a broad range of students, schools, classrooms, school personnel. National data on the content and processes surrounding the delivery of vocational-technical education was collected for use in assessing and describing the dynamics of high school vocational programs. Topics addressed are instruction in vocational classrooms, variations in vocational classrooms/programs across different types of institutions, and needs of at-risk students in vocational classrooms. References are included. mcw (49 pages; $4.75, $29.95/10 copies)

From School to Work (Policy Information Reports)

Focused on noncollege-bound youth, this report deals with several important and current aspects of the school-to-work transition. These include the work that students do before they leave school, differences between skills acquired in the classroom and those needed at the workplace, the information processing skills of high school graduates, new efforts to integrate vocational and academic education, and the weakness of linkages between the school and the workplace.

The author highlights some innovative programs currently underway in the United States while noting that transition services are inadequate. In addition, he argues that high school graduates need to be better prepared in those academic and interpersonal skills which employers consider most important. mcw (31 pages, $3.50)

Granting Academic Credit for Vocational Education

This document offers suggestions to decision makers in Hawaii’s public education system who are trying to find strategies to achieve excellence in secondary education. One strategy suggested is the equivalent credit policy. Equivalency, or cross credit, grants full or partial graduation credit for a specific subject area
to an elective area course. Described in the publication are state procedures on equivalent credit for the states of Illinois, New York, Ohio, and Oregon, and the Principles of Technology effort involving forty states. Also discussed are the steps in developing an equivalent credit plan and related issues concerning equivalent credit. ztb (21 pages, available on loan)

Identifying and Describing the Skills Required by Work

Prepared for the Secretary's Commission on Achieving Necessary Skills, this report suggests skills needed for effective work performance. The authors recommend to the Commission the skills required for workforce readiness and propose a way to communicate these skills to the corporate and educational communities.

Presented to the Commission are the skills—functional and enabling—and a vehicle for introducing them—workplace scenarios. Twenty-seven functional skills are grouped into five classes of activity including (1) resource management, (2) information management, (3) social interaction, (4) understanding of systems behavior and performance, and (5) human and technology interaction. A discussion of the Commission's approach and other background information relevant to the inquiry is included, as well as suggested steps which the Commission may take in communicating these skills to the public. The appendix includes four workplace scenarios depicting different occupations. ztb (36 pages, price unavailable)

Improving Basic Skills of Vocational Education Students (ERIC Digest No. 69)

This digest examines the philosophy underlying the joint efforts approach to incorporating basic skills instruction into the vocational curriculum and describes selected joint efforts techniques that may be used in vocational programs based on either the integrated, nonintegrated, or combination model of providing basic skills instruction. mcw (2 pages, no charge)
Improving General and Vocational Education in the High Schools
Atlanta, GA: Southern Regional Education Board.

Sponsored by the Southern Regional Education Board (SREB) State Vocational Education Consortium, this report focuses on the need to improve the academic competencies of students enrolled in both general and vocational courses and presents recommendations and strategies to be implemented by state and local school boards. The Consortium members believe that major improvements shown by the graduates from general and vocational curriculums produce coherent and challenging high school programs of study. To achieve this goal, specific recommendations for developing and implementing programs to bolster students' communications, mathematics, and science skills are presented on policies, curriculum development and redesign, improving access to quality programs, staff development, transition, Tech Prep, guidance and counseling, 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 to express serious intent to stay the course in the task of improving vocational and general education.

The actions recommended include (1) adopting an affirmative statement of intent to improve vocational and general education; (2) upgrading high school graduation requirements for the Class of 1996; (3) establishing state teams composed of vocational and academic educators to provide technical assistance to local school divisions; (4) establishing a comprehensive system to assess student performance; and (5) providing resources to achieve the goal of improving general and vocational education. (36 pages, $6.50)

Improving Outcomes for Students with Special Needs: Integrating Academic and Vocational Education (TASPP BRIEF, 2(1))

Issues which are critical to improving the academic and economic competitiveness of youth at risk are highlighted in this brief. The potential of an integrated vocational and academic curriculum in achieving these ends is considered. (4 pages, no charge)
Improving the Basic Skills of Vocational-Technical Students: An Administrator's Guide
Athens, GA: American Association for Vocational Instructional Materials.

This guide provides background information on basic skills programs. It includes guidelines for planning, implementing, and evaluating a program in a department, institution, district, or state to improve the basic skills of students in occupational programs. Overviews and examples of program types, including compensatory, support-oriented, and institutional, are highlighted. It also emphasizes structures including integrated, nonintegrated, and combination; as well as a variety of approaches being used in existing programs. Elements of effective planning and a model planning process, including assessment, examination of alternative solutions, implementation, and evaluation, are contained. Factors to consider in program planning including students, staffing, facilities, equipment, materials, and funding are examined. Jeb (120 pages, $12.00)

Instructional Program Development (Subset of Basics: Bridging Vocational and Academic Skills)
Center on Education and Training for Employment.
Columbus: Ohio State University.

This guide provides teachers with practical and theoretical information on the development and selection of appropriate applied basic skills instructional materials. This subset includes (1) a guide discussing the prerequisites of materials development, alternative curriculum types, and guidelines for materials development and review; (2) a resource guide which identifies sources of basic skills instructional materials; and (3) five competency-based instructional assistance modules covering basic and technical reading, writing, oral communication, and math skills. Jeb ($50.00 subset, $198.00 complete Basics set)
Integrating Academic and Vocational Education: Issues in Implementing the Carl Perkins Amendments of 1990 (Paper presented at the 1990 Conference of the National Association of State Directors of Vocational Education)

Based on research sponsored by the NCRVE, this paper outlines several issues concerning integrating vocational and academic education that federal and state policymakers face in implementing the Carl Perkins Amendments of 1990. The issues discussed include vocational and academic education integration, prioritizing assistance to programs serving the highest concentrations of special populations, area vocational schools, and local applications. Each issue is presented with a brief comment outlining several alternatives.

Integrating Academic and Vocational Skills Instruction

This videotape set is designed for personnel involved with implementing the integration requirements of the 1990 Perkins Act. It features the January 1991, two-day symposium on “Integrating Academic and Vocational Skills Instruction.” The symposium featured nationally known speakers who addressed the “why” and “how” of integration. Dr. Kenneth Gray, Associate Professor of Vocational School Administration at Penn State University, moderates and provides a context for presentations. The speakers and presentations are as follows: Dr. Thomas Bailey, Associate Research Scholar at Columbia University: “The Impact of Economic Change on Employees’ Skill Needs”; Jo-Marie St. Martin, Counsel, Education and Labor Committee of the U.S. House of Representatives: “Congressional Intent in the Perkins Vocational Education Act”; Dr. Darrell Parks, Director of Vocational and Career Education in Ohio: “Ohio’s Experience in Integrating Academic and Vocational Education”; and Donald Foellner, Director of Bethlehem Area Vocational Technical School and
Richard Culver, Principal of Bethlehem Catholic High School: "One Model of Integration: Principles of Applied Engineering." The two-tape set is ideal for teacher, administrator, board and advisory committee inservice and preservice use. (four-hour videotape set; $95.00, plus $9.50 postage and handling for each set)

Integrating Academic and Vocational Studies
National Center for Research in Vocational Education. (1989).
Berkeley, CA: Author.

This two-hour videotape is of a teleconference which was broadcast in November 1989. Jack Jennings, Counsel for Education, U.S. House Committee on Education and Labor, and David Evans, Staff Director, U.S. Senate Subcommittee on Education, Arts, and Humanities, presented the congressional perspective on why the integration concept was significant. Jeannie Oakes, RAND Corporation, talked about research evidence bearing on vocational/academic integration and a panel of four educators explored ways that integration has been implemented. (MDS-108, two-hour videotape, $15.00)

Integration of Academic and Vocational-Technical Education: An Administrator's Guide
Athens, GA: American Association for Vocational Instructional Materials.

Designed to provide tools for administrators to plan effective integrated programs, this guide emphasizes the need to integrate vocational and academic education. The following aspects of integration are discussed: (1) selecting and using appropriate strategies, (2) laying the foundation for and conceptualizing the nature and parameters of the intended change, (3) preparing to implement the integration process (the change process), (4) evaluating the integration program, and (5) maintaining an ongoing program evaluation and improvement process. Selected models are described for integrating academic, math, science, artistic, and practical skills that have been successful in Arkansas, Massachusetts, Kentucky, Pennsylvania, Ohio, Oregon, and Germany. Each of these descriptions includes a program title, description, and address from which to obtain information. (112 pages, $14.00)
Introduction to Basics (Subset of Basics: Bridging Vocational and Academic Skills)
Center on Education and Training for Employment. (1987),
Columbus: Ohio State University.

This motivational videocassette serves as the introduction to Basics: Bridging Vocational and Academic Skills, a comprehensive multimedia set of resources designed to help alleviate basic skills problems with a combined vocational and academic approach. It is designed to be used in staff workshops, with school boards, parents, employers, and community supporters. It is available as part of the Basics set or sold separately. jeb (15-minute videotape; $25.00, complete Basics set, $198.00)

Kansas Employability Skills Curriculum Guide
Kansas State Department of Education, Division of Community Colleges and Vocational Education, & Kansas Competency-Based Curriculum Center, Washburn University. (1990, June).
Topeka: Washburn University, Kansas Competency-Based Curriculum Center.

In order to support teachers and administrators in their endeavor to address employability skills in the classroom, the Kansas Competency-Based Curriculum Center developed this guide to complement the Kansas Employability Skills Profile and the Kansas Employability Skills Curriculum Catalog. Included are enabling objectives, resources, teaching activities, criterion-referenced measures, and student handouts compiled and developed to address ninety-six separate tasks in the following areas: identifying employment opportunities, determining employment capabilities, applying employment-seeking skills, demonstrating work behavior attitudes, maintaining a safe and healthy environment, maintaining a business-like image, maintaining working relationships, adapting to change, performing mathematical skills, and communicating on the job.

The guide was designed for teachers at high school, area vocational-technical school, community college, and four-year college/university levels. Career counselors, special education teachers, job training personnel, transition counselors, and personnel responsible for disabled student services would also find it useful. sck (488 pages, price unavailable)
The Learning Enterprise

This publication, summarizing a portion of the research conducted under a two-year joint project of the American Society for Training and Development (ASTD) and the U.S. Department of Labor, challenges the biases spawned by recent economic history. It points out that by the year 2000, there are likely to be too few well-educated and well-trained workers to fulfill the nation's economic needs. This summary (1) explains the relationship between job-related learning, individual opportunity, and the competitiveness of employer institutions; (2) examines the dynamics that link changing skill requirements on the job to training and education; (3) lists existing and emerging institutions that provide job-related training or access to it; (4) looks at the employer-based training and development system, in general, and the differences between small and large employers, in particular; (5) and considers job-related education and training in individual occupations. The discussion concludes with suggestions for ways of improving the nation's job-related education and training system. mcw (54 pages, no charge)

Learning the New Basics Through Vocational Education (ERIC Digest No. 35)
Imel, S. (n.d.).
Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

This ERIC Digest reviews the role of vocational education in developing basic skills and suggests strategies and resources for learning basic skills through vocational education. mcw (2 pages, no charge)

Mathematics for the Mildly Handicapped

This book provides a conceptually-based model of curriculum and instruction for ensuring success in teaching mathematics to children with mild disabilities, plus over two hundred creative activities emphasizing problem solving. It puts over twenty years of research
into practice and provides instructions for succeeding with children with learning disabilities, mild retardation, and behavioral disorders. Chapters cover geometry, pre-number content, whole numbers, fractions, measurement, and problem solving. The guide includes activities for the classroom and chapters on the characteristics of children with mild disabilities, assessment, and available instructional tools and materials. (264 pages, $37.95)

New Developments in Improving the Integration of Academic and Vocational Education

This paper focuses on the need for integrating academic and vocational education. A conceptual framework to assist in identifying the factors that influence cooperation between vocational and academic teachers and the student and teacher benefits resulting from it is discussed. Effective practices in applied curricula for secondary vocational education students are overviewed. Preliminary outcomes from NCRVE's evaluation of efforts to integrate academic and vocational education are emphasized. Finally, recommendations to further the integration of vocational education and academics at the district, state, regional, and national levels and in teacher education are stated. References are included. (25 pages, $5.25)

Partnerships for Learning: School Completion and Employment Preparation in the High School Academies

As a source for educators and advocates, this book examines the success of the high school academies' school-business partnerships in light of retention of students and of their preparation for the world of work. The academies are schools-within-schools that offer students an integrated academic-vocational curriculum, career planning, counseling, extensive academic and non-academic supports and employment opportunities. Central to the academy design is the uniting of technical and academic curricula which is achieved through the involvement of industry in curriculum design, development, and revision. (55 pages, $9.00)
Proceedings for Forum on Integrating Occupational and Academic Education
National Center for Research in Vocational Education. (1989, November).
Berkeley: Author, University of California at Berkeley.

These proceedings feature papers from individuals who have lead exemplary programs integrating occupational and academic education. This forum is focused on strengthening the academic basics of the “forgotten half” of all students who do not attend college. (MDS-118, 27 pages, $2.50)

Roadsigns from Research. BASICS: Bridging Vocational and Academic Skills
Columbus: Ohio State University, Center on Education and Training for Employment. (ERIC Document Reproduction Service No. ED 288 957)

Responding to the need to integrate basic skills into vocational education, this paper provides a summary of research findings, implications, and practical suggestions for teachers. The six sections and four complementary posters are to be used as tools for staff development sessions in teaching basic skills. Sections can also be used separately as informational handouts for individual or group instruction at workshops and for mailouts to motivate participation in professional growth activities.

The sections are organized by the kinds of questions teachers have about students' basic skill difficulties and the problem in dealing with them. Topics include dropouts; an evaluation of the situation in relationship to basic skill deficiencies; the impact of personal, family, and school factors on dropout-prone youth; what happens to dropouts; the business and industry perspective on the importance of a workforce strong in basic skills; basic skill problems typical among special populations; and the implications of learning and teaching styles for basic skills acquisition. Appendices provide information on guides and modules that assist teachers, administrators, and counselors to promote efforts to strengthen basic skills. (73 pages, $14.95)
The Role of Vocational Education in the Development of Students' Academic Skills (Information Series No. 340)
Columbus: Ohio State University, Center on Education and Training for Employment.

The recent focus on the integration of vocational and academic skills as a response to educational reform movements is highlighted in this paper. It includes a position statement from the National Association of State Directors of Vocational Education with guidelines for implementation of the policies and principles of basic skills integration in vocational programs. The purpose of the monograph is to assist educational administrators and practitioners in implementing integrated programs that will help students acquire the academic skills needed in the workplace and as a basis for lifelong learning. It discusses implementation issues including developing the drive, setting goals, overcoming barriers, structural issues, preparation, and evaluation. Also included are alternative implementation strategies, curricular resources, and abstracts of model programs. sck (35 pages, $5.25)

Subject Matter of Vocational Education: In Pursuit of Foundations
Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.

This report is a product of the first phase of a multi-year research program addressing vocational education. While efforts must proceed on integrating vocational and academic education as they now exist, the focus of this research is to ask, “What should be the subject matter of vocational education?” The central, organizing purpose of vocational education needs to change with social and economic conditions, or at least be questioned and reaffirmed, if still appropriate.

This focuses on the foundations of vocational education or the subject matter which is basic to, underlying, and drawn upon the more specific study of it. The strategy selected was to form a study group on the nature of vocational education with representatives from a variety of academic disciplines and professional fields. The report contains an account of presentations made to the group, focused commentary by members of the study group, and excerpts from dialogue among study group members. sck (MDS-094, 82 pages, $6.25)
Successfully Integrating the Humanities into Associate Degree Occupational Programs: An Implementation Manual
Washington, DC: Author.

This document was developed by the Shared Vision Task Force of the Community Colleges Humanities Association and the National Council for Occupational Education and supported by the Fund for the Improvement of Postsecondary Education. It contains a list of the specific contributions that the study of the humanities can make toward the improvement of community college education; recommendations for strengthening occupational curricula; a descriptive analysis of the approaches of four model sites; and approaches, results, and recommendations for those schools wanting to make their occupational degree programs more beneficial to their schools. It contains a Humanities and Occupational Degree Programs Model flowchart and the following appendices: American Association of Community and Junior Colleges Humanities Policy Statement, Criteria for Excellence in Associate in Applied Science Degree Programs Policy Statement, Integrating the Humanities into Associate Degree Occupational Programs Final Report Summary, Evaluation Instruments (for courses and programs), and lists of the model sites and Shared Vision Task Force members. jeb (121 pages, $8.95)

Targeted Teaching Techniques (Subset of Basics: Bridging Vocational and Academic Skills)
Columbus: Ohio State University.

This guide provides vocational and academic teachers with assessment, planning, and management tools to improve students' basic skills. Its components are (1) a module and audiocassette describing teaching techniques that vocational and academic teachers can use jointly, (2) a guide providing the foundations for more effective skills instruction through a study of the use of class time, (3) a module describing a procedure for joint software evaluation process, and (4) a module which guides school staff through a systematic identification of student needs and steps to meet those needs. jeb ($50.00 subset, complete Basics set $198.00)
Teaching and Learning Generic Skills for the Workplace

This exploratory study provides an analysis of the teaching and learning of generic employability skills in several vocational classrooms. These skills include (1) group cooperation, communication, and problem solving; (2) identifying and defining problems in complex environments; (3) acquiring and synthesizing information; and (4) adapting to changes and gaps in information. This report provides a conceptual basis for defining these skills and analyzing them from the perspectives of this framework and research on learning and teaching, in order to inform the teacher training and curriculum development fields. The study sought answers to three questions: (1) What generic skills are being taught? (2) How are they taught? and (3) How does the instructional context affect instruction? Findings have implications for future research on generic skills, for educating diverse populations, and for integration of vocational and academic education.

jeb (MDS-066, 69 pages, $4.50)

Teaching Disadvantaged Students: Successful Strategies in Career-Vocational Education

The purpose of this resource guide is to disseminate strategies that can improve the success of disadvantaged students in the classroom. These strategies will assist career-vocational educators in providing students with the skills wanted by employers, and increase their effectiveness in teaching academically and economically disadvantaged students and students with LEP. Although this publication is directed toward disadvantaged students, the strategies are effective with other special populations.

Outlined is the newly-developed California Model Curriculum Standards and Program Frameworks in career-vocational education which reflects the emphasis on vocational-academic integration as mandated by the Perkins Act. The guide includes an overview of the educational problems of disadvantaged populations.
students (including LEP students) with suggestions for increasing their achievement; strategies to promote successful school to work transition through career awareness, career exploration, employability skills training, and work experience education; specific strategies to improve student performance in reading, writing, mathematics, problem solving/critical thinking, and oral and nonverbal communication skills; teaching strategies and support services to ensure the success of disadvantaged students; and descriptions of programs that show promise for providing quality vocational education to all students. A list of resources and references accompany each chapter. The information presented is very specific and designed to be of practical value to classroom teachers and their supervisors. sck (153 pages, $16.50)

Teaching Students with Mild and Moderate Learning Problems

The goal of this is to provide teachers with skills for assisting students with mild to moderate disabilities in making successful transitions in school and community environments. To this end, the book emphasizes the teaching of academic, social, and vocational skills concurrently, in both environments. The structure of the book focuses on a process approach to program development, using the principles of instructional technology for developing curricular options across a wide variety of subject areas. It also presents a process approach to curriculum development that can be applied to any situation. It demonstrates the use and development of community-based instruction and includes up-to-date summaries of behavioral methods for teaching. sck (472 pages, $33.00)

TRAC Manual
Fishersville, VA: Woodrow Wilson Rehabilitation Center.

This manual contains competencies for twenty-six occupational areas and a generic list of academic skills required in most trade areas. Task lists are designed to identify basic academics required in specific occupational areas and are helpful in planning an individualized vocational component for each student. Task lists are available for generic skills and the following areas: accounting, auto body repair, general
building maintenance, agriculture production, general secretarial, geriatric nursing, auto mechanics, health assistant, building maintenance and repair, hospital housekeeping, building trades cluster, horticulture, carpentry, hotel/motel specialist, child care worker, masonry, commercial food service, printing, cosmetology, small engine repair, drafting, tractor mechanics, electricity, welding, electronics technician, and word processing. sck (no charge)

Trade-Related Academic Competencies (TRAC)

This document is a product of an interagency initiative funded by the Department of Education and cooperatively developed through the Division of Special Education, Vocational Program Services and the Department of Rehabilitative Services at Woodrow Wilson Rehabilitation Center. Designed for use by teachers in planning and documenting a trade-related instructional program for students with disabilities, it contains math, reading, and writing competencies identified as those which are required to complete each of nineteen vocational curriculums often accessed by students with disabilities in the state of Virginia. The competency lists will assist special and vocational educators in preparing students with disabilities to succeed in vocational education. (215 pages, price unavailable)

Training America: Strategies for the Nation

Completed as a joint project by the National Center on Education and the Economy and the American Society for Training and Development (ASTD), this document provides background on, and recommendations for, the development of a comprehensive strategy for improving job-related learning in the United States. It begins with an introduction that discusses the relationship between human resource development, the earnings of individuals, and the productivity of institutions. A summary of the major recommendations for employers, educators, and government members is included. The main text is organized into two principal
parts: a discussion of the preparation of workers by institutions outside the workplace and a discussion of learning that is either provided or paid for by employers and employees once they are on the job.

Many of the recommendations in this document result from an analysis of the relative strengths and weaknesses of American and foreign human capital strategies. The recommendations reflect in part the beliefs that (1) learning ought to have a higher standing in the American economy, (2) the United States ought to pay more attention to noncollege-bound youth, (3) American schooling ought to focus on applied learning, and (4) partnerships between public and private entities ought to be encouraged and strengthened. mcw (74 pages, $4.00)

Training and Educating the Work Force in the Nineties: The Rationale for Public-Private Collaboration

This paper discusses the cooperative training efforts of both public and private sectors necessary to overcome the growing gap between the skills that workers possess and those skills that employers need.

The authors explain that there are two ways of coping with shortages in the labor supply. The first is deskilling, breaking tasks down into simple subunits that low-skilled workers can handle or through restructuring and reorganizing the workplace so that workers learn more on the job, understand the whole system in which they are working, and take greater responsibility for their work. Although the latter way is preferable, it demands a workforce possessing higher-order thinking skills and adaptive abilities. And that, according to the authors, is currently missing. Training should be a collaborative effort. Federal vocational programs should permit greater flexibility, more service to the disadvantaged, and more private sector participation; incentives in JTPA should foster longer-term investments in education and training; the federal government should support more public-private training; and greater effort should go into developing and using ways to teach higher-order and cognitive skills and that focus on preparing workers for high/tech growth industries. sck (56 pages, $6.00 prepaid)
Training the Technical Work Force

This fourth volume in the American Society for Training and Development (ASTD) Best Practices Series represents the findings of a three-year ASTD/U.S. Department of Labor study addressing the training needs of America’s enormous technical workforce. This population includes such technical professionals as scientists, doctors, and engineers; technicians such as hygienists and draftsmen; and skilled trade or blue-collar workers. The authors describe the nature and role of technical training within today’s competitive and technologically shifting workplace and set forth specific guidelines for conducting effective technical training programs inside employer institutions.

The authors survey how successful technical training programs are structured, organized, and implemented within the workplace and provide case studies from ten Fortune 500 companies, illustrating each organization’s best training approach. Each case study focuses on the organization’s strategic goals and training structure, and explains how training supports the strategic goals. This format helps employers and educators to build technical training programs that are best suited to their organizational needs and responsive to the demands of their workforce. (210 pages; $23.00 members, $25.00 nonmembers, plus $1.75 shipping and handling)

Vocational Education and the At-Risk Student (TASPP Brief)

The economic and social costs of dropping out of high school are highlighted in this brief. The projected impact of high dropout rates among economically and educationally disadvantaged youth is discussed. In addition, the effect of the School Reform Movement upon the availability of vocational education programs and the quality of academic curricula is considered. Quality vocational education, which integrates basic and academic skills into the curricula, is recommended as an important means of improving the postschool outcomes of at-risk youth. (4 pages, no charge)
Vocational Technical Education: Developing Academic Skills
Washington, DC: Author.

This paper promotes (1) a prism of opportunity, (2) an integrated vision, (3) a united focus, and (4) a better-prepared workforce. It also describes the current gap between workplace needs and vocational education, suggesting that school become more like a simulated workplace, that learning be integrated between school and work, and that apprenticeships and internships be instituted. Successful dropout prevention initiatives also incorporate these ideas. It promotes professional development for teachers and administrators, enabling them to integrate vocational and academic education, concluding with an appeal for national and local support and commitment from vocational technical education to reinforce academic skills acquisition. jeb (13 pages, no charge)

Woodland High School Career Infusion Activities
Rohnert Park: California Institute on Human Services, Vocational Education Resource System.

Woodland High School, a model site for California's Educational Excellence Through Career-Vocational Education Project, has demonstrated the effectiveness of integrating vocational and academic education. This document is a compendium of lesson plans for integrating career path activities both in vocational and core academic courses. ldi (300 pages, $24.50)

Woodland High School Vocational Education Courses of Study
Rohnert Park: California Institute on Human Services, Vocational Education Resource System.

As a model site for California's Educational Excellence Through Career-Vocational Education Project, Woodland High School has demonstrated effective integration of vocational and academic education. This book lists 1988-1989 Woodland High School courses in Agriculture, Business, Industrial Arts, and Home Economics, including graduation requirements met with each lesson plan. ldi (300 pages, $24.50)
There is a growing national awareness that the competitiveness of American industry depends on a skilled workforce capable of meeting today’s business requirements. This second volume in the *American Society for Training and Development (ASTD) Best Practices Series* details the findings of the three-year ASTD/U.S. Department of Labor nationwide study on developing essential skills to the changing workforce.

The authors reveal that along with reading, writing, and computation, there is another set of skills that workers must have in order to perform effectively. Because of increased global competition, shifting technologies, leaner management systems, and emphasis on quality and service, workers have to be skilled in a much broader range of competencies. The authors indicate that for many American employers, the basic skills repertoire has expanded substantially to include such skills as adaptability, creativity, group effectiveness, and the most fundamental of all, learning how to learn. These skills, as well as reading, writing, computation, and other specific competencies, now constitute workplace basics.

In this comprehensive book, the authors specify sixteen basic workplace skills and detail how each skill affects job performance in various occupations. For each skill, the authors provide its definition and essential elements, the theories supporting current training methods for the skill, examples of successful training programs for developing the skill, and what should be included in a curriculum for teaching the skill.

The book provides a foundation for revising curricula or developing new instructional materials for teaching workplace basics. It also offers guidelines for establishing effective training programs around these essential workplace skills. (480 pages, $34.95)
the U.S. Department of Labor. It represents a brief overview of the findings from their basic workplace skills research. The three sections of this publication address the following: the growing need for basic skills training, the skills employers want, and the steps involved in developing programs to deliver workplace basics. The authors recommend a systematic approach to training, design, development, and delivery. They also assert that such programs are most successful when they incorporate an applied learning method that uses a functional context approach to job-specific training. References and suggestions for additional reading are included. mcw (33 pages, no charge)

Workplace Basics Training Manual

This third volume in the American Society for Training and Development (ASTD) Best Practice Series is a companion publication to the Workplace Basics book. Based on the three-year ASTD/U.S. Department of Labor nationwide study on the essential skills required for the changing workforce, this manual provides guidelines for developing and implementing effective training programs of all kinds and, in particular, workplace basics training programs. As its companion book details, workplace basics include competencies such as learning how to learn, oral communication, and group effectiveness, as well as basic reading, writing, and computation skills.

This practical manual provides a variety of resources for building successful workplace basics training, including checklists for designing and implementing training programs, sample worksheets for analyzing training budgets, evaluation/test instruments to monitor the training programs, sample questionnaires for information gathering, illustrated models for forecasting financial benefits of training, and examples of corporate training programs in workplace basics.

The book also describes the key elements of a training action plan, strategies for gaining commitment and support from management and unions, selections of facilitators, and more. Together, these resources provide trainers with the techniques for establishing successful workplace basics training programs and, in turn, building a competent workforce. sck (280 pages, $34.95)
The Workplace Literacy Primer: An Action Manual for Training and Development Professionals

This book provides information and strategies for developing an effective workplace literacy program. Upon completing this book, the reader will be able to (1) describe the scope of the so-called "literacy crisis" in the United States and explain why it is important; (2) distinguish between employee performance problems stemming from basic skills deficiencies and problems stemming from other causes; (3) assess how much support exists in an organization to address employees' basic skills problems; (4) consider various performance improvement strategies to address employees' basic problems and describe when in-house training is—and is not—an appropriate performance improvement strategy; (5) establish the policy, purpose, goals and objectives of an in-house basic training skills training program; (6) develop long-term instructional plans for an in-house basic skills training programs; (7) assess short-term basic skills training needs within the framework of long-term instructional plans; (8) select, modify, or prepare training materials for in-house use; (9) select appropriate learning methods for basic skills training; (10) select and educate the trainers and recruit participants for in-house basic skills training; (11) manage the basic skills training program; and (12) evaluate in-house basic skills training experiences, individually and collectively. There are many useful charts, graphs, and forms which can be adapted.

The book addresses a central concern which is now out in the open: Before we can train the workforce in modern quality control or higher-order teamwork, or most new technologies, twenty-five percent of that workforce will need remediating in basic skills such as reading, writing, computation, critical thinking, and problem-solving skills. This book is a solid step in the direction of redressing this undemocratic and unproductive imbalance between the skills of the managers and those of the workers. sck (400 pages, $49.95)
PERFORMANCE STANDARDS

1990 State of the Art Report on Statewide Student Competency Testing in Vocational and Technical Education

Findings are reported on the status of competency testing throughout the United States. It is a follow-up study of the 1988 State of the Art Report. Among the findings: (1) fourteen states or territories conduct competency testing in vocational and technical education, (2) six states or territories are in the process of developing competency tests for vocational students, (3) ten states or territories are considering development and implementation of competency testing, (4) twenty-one states or territories do not anticipate becoming involved in statewide vocational competency testing, (5) fifteen states require competency testing for secondary vocational-technical instructors, and (6) nine states require occupational testing for postsecondary vocational-technical instructors. (47 pages, no charge)

Accountability: Implications for State and Local Policymakers (Policy Perspectives Series)

Commissioned by OERI as one of the papers in the Policy Perspectives series, this paper examines six accountability strategies and argues that they work best when they are used in combinations adapted to local and state needs. The strategies include accountability through (1) performance reporting, (2) monitoring and compliance with standards or regulations, (3) incentive systems, (4) reliance on the market, (5) changing the locus of control of schools, and (6) changing professional roles. Important trends that have implications for policymakers are highlighted. Local accountability systems for the states of California, Georgia, Pennsylvania, Minnesota, and Florida, as well as the California Model School Accountability Report Card are described in the appendix. (64 pages, $3.25)
Assessment of Students with Handicaps in Vocational Education: A Curriculum-Based Approach

Developed in response to the comprehensive assessment and service mandates for learners with special needs contained in federal legislation for vocational education, this training system is designed to be used in both preservice and inservice settings. It consists of a trainer’s manual and a series of seven training modules on the use of Curriculum-Based Vocational Assessment (CBVA) procedures for students with disabilities in vocational education programs.

The trainer’s manual is organized in a question/answer format and contains additional information and materials for trainer use in supplementing the content within the modules.

The training modules are designed to give specific information to the trainees to help them implement assessment activities in their schools and classrooms. The modules focus on the various assessment stages and purposes that dictate what type of assessment activities to conduct, when they should be done, and by whom. Topics addressed in separate modules include understanding CBVA, establishing a CBVA process placing students in vocational education programs, planning a student’s vocational education program, monitoring a student’s progress, planning transitional services, and evaluating the CBVA process.

sck (Trainer’s Manual—$20.95 member, $23.50 nonmember; Seven Modules—$47.50 member, $51.50 nonmember)

Career Portfolio

The objective of the Career Portfolio is to assist vocational education and special education personnel in delivering the vocationally-related competencies needed by students with mild disabilities to obtain and retain employment upon graduation. The competencies listed in the profile were identified through an extensive literature search and a review of materials. All vocationally-related competencies identified through this process were organized into five skill groups: (1) job specific, (2) employability, (3) independent living/
self-help, (4) generalizable (mathematics and communications), and (5) work-related social. Competencies which had an eighty percent or higher response from field test reviewers are included.

Competency-Based Testing for Occupational Students: A Resource Guide
Athens, GA: American Association for Vocational Instructional Materials.

This guide is intended to provide general information concerning the current state of competency-based test development as well as specific information on selected products and services that are available or under development. General information addresses types of test products and services available, access options, criteria for selecting tests, and how to find information about products not included in this guide. Specific information is presented in the form of source abstracts for currently available products and services and an occupation index that cross-references test titles with sources.

The guide contains a checklist for the evaluation of competency tests, an index of more than four hundred occupation-specific tests, information about test-item banks, and the names and addresses of eleven major test suppliers. The test types include cognitive, performance, and affective measures in all vocational areas.

Improving the Communications, Mathematics, and Science Competencies of Students Enrolled in Vocational Courses. A Report on the 2nd Annual Staff Development Conference of the SREB-State Vocational Education Consortium
Atlanta, GA: Southern Regional Education Board.

This report of the Southern Regional Education Board (SREB) State Vocational Education Consortium's Second Annual Staff Development Conference is intended to assist educators at state and local levels as they develop and implement new activities to raise the communication, mathematics, and science competency levels of students who complete a secondary vocational curriculum designed to prepare them for continued learning in a changing work environment. The report...
covers the following topics: raising student expectations, increasing student participation in higher level academic courses, vocational-academic integration, advancing basic competencies, staff development, and evaluation and assessment. It also includes a summary on linking vocational and academic education. jeb (33 pages, $5.00)

National Career Development Guidelines
Portland, OR: Northwest Regional Educational Laboratory.

This comprehensive set of career development guidelines for career guidance professionals has been created by the National Occupational Information Coordinating Committee in a nationwide initiative to foster excellence in career development programs, kindergarten through adult. The guidelines use a competency-based approach to identify desired outcomes of comprehensive career guidance programs for participants at each developmental level. They also identify personal competencies needed by counselors to deliver quality programs and outline organizational capabilities necessary for state and local organizations to strengthen and improve career development programs. The guidelines focus on building students’ and adults’ career competencies—their ability to understand the world of work and to find their place in that world. These competencies are organized around three categories: (1) self-knowledge, (2) educational and occupational exploration, and (3) career planning. The complete set includes a Trainer's Manual; State Resource Handbook; and local handbooks for the following: Community and Business Organizations, Postsecondary Institutions, High Schools, Middle/Junior High Schools, and Elementary Schools. sck ($10.90 each; $68.80 for entire set of seven handbooks)

Performance-Based Policy Options for Postsecondary Vocational Education and Employment Training Programs
Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.

This paper discusses performance-based measurements in terms of both labor market outcomes (placement,
time to placement, duration of placement, earnings, and employer/employee satisfaction), and learning outcomes (program completion, benchmark mastery, value-added indicators, and program improvement). It explores issues surrounding the adoption of performance-based policies in postsecondary vocational education and employment training programs. Performance-based policy has two major goals: (1) increase the basic and job specific skills needed by program participants to perform effectively in occupations related to their training, and (2) stimulate debate over the appropriate outcomes for vocational education and employment training programs. The paper explores the following requirements of successful performance-based policy: (1) it must be possible to define appropriate, multiple measures of performance for vocational education and employment training; (2) accurate, timely data must be available for these measures at reasonable cost; (3) performance on these measures must be tied to funding; and (4) information on the performance of various providers must be available to consumers and policymakers.

It also examines in some detail the issue of tying performance to funding in the case of JTPA-funded performance contracts with outside agencies. It lists the following as critical factors in the success of performance contracting: clear goals and measurable outcomes, involvement of employers, nature of population served, focus on short programs, emphasis on retraining, and commitment of resources to placement and support services. It includes a case study of a Tennessee program, as well as implications for policy, a discussion on how to improve state-level information on performance, conclusions, and a list of references. jeb (MDS-020, 41 pages, $3.00)

Performance Standards for Secondary School Vocational Education: Background Paper

To assist Congress in the reauthorization of the Perkins Act, the House Committee on Education and Labor asked the Office of Technology Assessment (OTA) to examine the relative merits of alternative performance measures for secondary vocational education. In particular, the Committee was concerned with two key issues: (1) the technical feasibility of such measures, including questions of data availability, accessibility, and commensurability; and (2) the appropriateness of various measures such as the extent
to which they could provide valid information without distorting the goals of vocational programs or the behavior of program participants and personnel.

The central question addressed is if Congress wanted to mandate performance measurement for the purpose of diagnosing problems in specific vocational programs and/or as criteria for Federal funding, what would be the strengths and weaknesses of the two most frequently-mentioned strategies?

The use of economic indicators to measure secondary vocational program performance is examined. OTA explored the available data that shows the relationship between vocational education and subsequent labor market performance, and then considered the possible uses of state-collected wage records data as a basis for outcome measurement. To gain some preliminary insight into the technical problems associated with using the wage records, OTA applied the method in a Midwestern school district. In addition, state efforts at data collection and analysis, based on responses to an OTA telephone survey conducted in December 1988, are included.

OTA’s occupational competency testing analysis concentrated on two key questions: (1) Do tests of occupational aptitude and competency predict future labor market performance? and (2) Do these tests provide reliable indications of program performance? The state’s role in measuring ability is also highlighted. While OTA did not examine formal methods of measuring other plausible outcomes of vocational education, these do warrant further attention. Some of the basic issues surrounding these measures are outlined. mcv (80 pages, no charge)
Secondary Vocational Training in Technologically Intensive Industries in Arizona: New Directions in Rural Education
Flagstaff: Northern Arizona University, Arizona Center for Vocational Education. (ERIC Document Reproduction Service No. ED 302 641)

This paper describes the Model Programs for Rural Vocational Education Project which was conducted in 1987-1988 to provide research and recommendations for the direction of rural education in Arizona. The model is designed for students in grades seven through twelve and is based on the principle that it is no longer adequate to view vocational-technical education as an alternative to skill development in other areas. It revolves around a skill pyramid, according to which students proceed from mastering basic skills to mastering employability, occupational, and job-specific skills. The proposed curriculum is a developmental and sequential one that is designed to begin in the seventh and eighth grades (where the focus would be on basic and employability skills) and continue through the high school years (where the focus would gradually evolve from employability skills through the more general occupational skills and eventually culminate in job- and employer-specific skills). The model outline includes a listing of the skills and specific courses to be taught at each grade level along with specific recommendations concerning appropriate school-industry relationships and guidelines for using the concept of magnet schools. References are included. 51 (45 pages, $6.40)

STRETCH: A Life Skills Curriculum
Comprehensive Adult Student Assessment System.
San Diego, CA: Author.

As the assessment and curriculum component of a life skills training model developed by the California State Department of Development Services, this resource is linked to the Comprehensive Adult Student Assessment System (CASAS) competencies for individuals with special learning needs. It is a collection of task analyses and training activities that focus on the right of all persons to be involved; abilities rather than disabilities; skills that improve the individual’s independence, productivity, and positive sense of self worth; and integration into life’s normal rhythm and activities.

Dawn Stoll
CASAS
2725 Congress Street, Suite 1-M
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The curriculum is divided into five learning areas: (1) domestic self care, (2) domestic home care, (3) vocational, (4) recreation/leisure, and (5) community resources. The set of seven volumes consists of a narrative volume which includes a description of the life skills training model, a section on assessment, instructions, and an index of activities. An appendix includes forms that may be used in program planning and information about CASAS. STRETCH is intended to be used as a resource for programs and trainers. The complete set includes one training guide, binders for each domain, a competency-based approach, linkage to the comprehensive adult student assessment system including the CASAS competency list, a system for program and lesson plan development, hundreds of training activities developed by field-based educators, and references to resource materials. sck (six 3" - 3-ring binders, $300.00)


Brief answers are provided in this document to the following seven questions concerning systems of performance standards and accountability for vocational education: (1) What are performance measures and standards? (2) What types of performance measures and standards should be developed? (3) How many measures and standards should be developed? (4) Why is it necessary to measure changes over time? (5) What constitutes good performance measures and standards? (6) What kinds of statistical controls need to be incorporated into a system of performance standards and measures? and (7) How might one proceed with developing a system of standards and measures? mcw (Working Papers Series, MDS-232, 3 pages, $2.00)
Requested by the Subcommittee on Education and Health and the Subcommittee on Education and Labor from the U.S. General Accounting Office, this report contains information on (1) the weaknesses in the U.S. education and training system for preparing noncollege youth for employment, and (2) foreign strategies that appear relevant to the U.S. shortcomings. It also includes policy actions that might be considered by the federal government and by state and local governments.

Researchers found that insufficient attention is devoted to preparing noncollege youth in the United States. Approaches used by foreign countries that may be relevant for the United States are identified and include (1) expectation that students will do well in school, (2) assistance provided by schools and the employment community in the students' transition from school to work, (3) use of competency-based national training standards to certify skill competency, and (4) extensive investment in jobless out-of-school youth to assure them a job or further education and training. ztb (68 pages, no charge)

The Vocational Education Assessment Plan (Vol. 2)
Educational Service District 121 Pierce County Vocational/ Special Education Cooperative. (1987, April).
Tacoma, WA: Author.

This plan provides a compilation of recommended prevocational competencies for the entry and involvement of special education learners in vocational education programs, together with performance samples in the areas of child care, graphic arts, sheet metal and welding, and commercial foods. The recommended prevocational competencies describe the mathematical, communication, thinking, social, safety, and general work-related attitudes necessary for successful entry and participation across all occupational areas of vocational education at the secondary level. The performance samples contained in the document are intended to isolate and assess basic skills or aptitudes inherent in the programs of vocational education that are represented. While not a screening device, these samples indicate areas of
student strength, areas of potential remediation, and benchmarks for successful placement. Readers are encouraged to modify, adapt, or utilize the performance standards as they see fit. sck (75 pages, $6.00)

Vocational Education Effectiveness Indicators

Some of the issues involved in developing and implementing vocational education effectiveness indicators and indicator systems are highlighted in this document. It was developed in response to the mandate for the development of performance standards and measures set forth in the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. Outcome-based measures are evaluated. Examples of comprehensive labor market outcome assessments are included for the following states: Missouri, Kansas, South Carolina, Florida, and Kentucky. Student learning outcomes as indicators of program performance are also discussed with examples included for: Ohio, New York, Arkansas, and North Carolina. The author argues that while effectiveness measures based on labor market indicators or competency attainment scores are useful, neither fully captures the complex goal of vocational education. Several cautions concerning the use of effectiveness indicators are listed. An argument for effectiveness indicator systems, which capitalize on the potential benefits to be derived from effectiveness indicators and minimize the potential liabilities to programs and students, is presented. State efforts to develop and/or implement indicator systems for vocational education in Illinois, Oklahoma, Minnesota, Tennessee, and California are highlighted. Finally, an approach to effectiveness indicator development, recommended by Virginia vocational education leaders, is profiled. mcw (35 pages, available for loan)
This examines some vocational education experiences with outcome measures, describes proposed approaches, and enumerates potential challenges in establishing performance standards for vocational education. It describes three specific outcome measures and discusses the assets and drawbacks of each: (1) labor market outcomes (placement, earnings, and employment duration); (2) learning outcomes (measures of occupational competency); and (3) access outcomes (access to vocational programs by women, minorities, and special needs students). It recommends using a combined set of indicators that address each of these issues, and refers to two such programs in Iowa and Minnesota. Issues, challenges, and potential problems in implementing performance standards are described, including the impact on learners, the influence of program type, and the difficulty of setting minimum standards. A list of references is included.

Youth Job Training: Problems Measuring Attainment of Employment Competencies

This describes the youth employment competency training systems and assesses the adequacy of competency attainment data available to states to evaluate the effectiveness of local programs. Competency-based training includes defining the skills to be learned, determining the skills the learner already has, providing training in the deficient skills, and evaluating whether the learner attained the desired skills. Employment competencies are grouped into three areas: (1) pre-employment and work maturity skills needed to find and hold a job, (2) basic education skills, and (3) job-specific skills. Local programs have had wide discretion in defining employment competencies and in designing and operating competency systems. If a competency standard is established, GAO recommends that the standard apply to all youths who attain competencies and that the act be amended to enable the Department of Labor to collect the data necessary to set and implement such a standard. (89 pages, no charge)
TECH PREP

Apprenticeship for Adulthood: Preparing Youth for the Future

This book draws upon successful systems in West Germany and the United States in explaining how apprenticeships for youth aged sixteen through twenty-one 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) explores 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 college-bound youth as well as noncollege-bound youth, offering more support services to disadvantaged youth to ensure their success.

This includes an overview of the future of youth and work; a discussion of the issues surrounding transition from school to work; the history, current state, and future of vocational and academic education; recommendations for restructuring, and a model American apprenticeship program. jeb (223 pages, $22.95)

Articulated Counseling, Guidance, Advising Model: To Accompany Articulated Instructional Programs

During the 1987-1988 academic year, Chabot College received a grant from the Chancellor’s Office, California Community Colleges to develop a model for the articulation of 2+2 instructional programs. In partnership with the Hayward-New Haven Regional Occupational Center, the model was created and applied
to the area of Drafting Technology. A second grant was awarded, extending the articulation model to other instructional areas. The articulation process is introduced including the basic principles, criteria, and patterns of articulation, as well as twenty-one steps for articulation. The document states a rationale for an articulation model using future-, competency-, and sequence-based curricula. The model, presented in its entirety in the document, was developed by participants in a counseling articulation workshop guided by five tasks: (1) develop a common frame of reference; (2) develop a description of the characteristics of those students expected to elect entry into an articulated program and to successfully complete the chosen sequence; (3) develop a statement regarding the role of high school and college counseling guidance and advising services in support of articulated instructional programs; (4) relate the outcomes of Tasks 1, 2, and 3 to the model (2+1), (2+1+1), and (2+2) sequence of the articulated drafting technology program and develop a model sequence for articulated 2+2(2+2) counseling, guidance, and advising services; and (5) provide a final draft copy of the work produced. Explanatory notes and sample forms are provided for the processes of application for admission, certificate of admission, and credit by articulation. This guide may be of help to others implementing articulation programs. jeb (18 pages, available for loan)

Combining School and Work: Options in High Schools and Two-Year Colleges

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)

**Compendium of Models: Tech Prep (rev. ed.)**
Dover: Delaware Consortium on Technical Preparation Programs.

The Delaware Consortium on Technical Preparation Programs is a statewide cooperative consortium whose mission is to assist school districts and postsecondary institutions in the development and implementation of the 2 + 2 Tech Prep programs. This is accomplished through developing programs, coordinating articulation efforts, and conducting workshops and seminars for staff in the development of curriculum competencies. The manual includes information on program organization, student progress, evaluation procedures, data collection, and a school and community model. jeb (50 pages, no charge while quantities last)

**Illinois Tech Prep Planning Strategies**
Springfield: 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 book 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)

Program Description: Tech Prep (rev. ed.)
Dover: Delaware Consortium on Technical Preparation Programs.

This booklet serves as the annual report for Delaware’s Tech Prep initiative. It lists participating schools and colleges and identifies each program according to Classification of Instructional Programs codes, location, instructor, enrollment, projected number of advanced credits students will earn, and the basic course content. The programs are identified by five major impact areas indicated in the 1990 Perkins Act. Additional activities and programs planned for Delaware’s initiative are listed along with advisory committee members and supporters. jeb (45 pages, no charge while quantities last)

Tech Prep Associate Degree: A Win/Win Experience
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 developing, implementing, or initiating a Tech Prep/Associate Degree. The book also provides useful information for employers, parents, students, community and business leaders, and economic development organizations.

Delaware Consortium on Technical Preparation Programs
Polytech High School
Dover Campus
Kent County Vo-Tech School District
100 Dennys Road
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(302) 739-6164

Center for Occupational Research and Development
601C Lake Air Drive
Waco, TX 76710
(817) 772-8756 (in TX)
(800) 231-3015
Characteristics of the TPAD program include, but are not limited to, beginning with a solid foundation of applied academics and building around career clusters and a technical system of study, encouraging students to stay in high school to complete their high school education, and helping 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. (408 pages, $32.50)

Tech Prep in Illinois: Resources for Program Planners
Springfield: Author.

This 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. (25 pages, no charge)
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 at Berkeley. Each issue is presented with a brief comment outlining several alternatives. Since it was intended to stimulate discussion, this does not present any recommendations.

(Working Papers Series, MDS-233, 4 pages, $2.00)

This report examines the benefits and characteristics of high-quality cooperative education programs—those most likely to exhibit the potential for facilitating transition to work—and barriers to program expansion.

The United States provides noncollege youth little assistance for workforce preparation. Apprenticeships are not widely used. However, apprenticeship-type programs, notably cooperative education, do provide U.S. youth a formal bridge from school to work. Offered in high schools and two- and four-year colleges, cooperative education combines classroom instruction with work experience and on-the-job training related to a student's career goals. Efforts to expand participation in cooperative education must overcome two major barriers: lack of awareness about programs and a negative perception of cooperative education at the high school level.

(Idi (52 pages, no charge/single copy)
EDUCATIONAL REFORM

America's Shame, America's Hope: Twelve Million Youth at Risk

This report studies the education reform movement of the 1980s with at-risk youth as the frame of reference. The authors define an at-risk youth as one who has left school or is predictably in danger of leaving school without the skills to be a productive citizen and to succeed in today's workplace and, hence, in society. It presents an overview of the federal role in education reform during the 1980s and the findings of a survey on how the states, which assume primary responsibility for education, have performed. It is estimated that only five percent of state education funds are being used for service to at-risk youth. Furthermore, evidence is presented in this report that some educational reforms actually are harming at-risk youth. The report underlines a belief that the most formidable barriers to assisting at-risk youth do not concern lack of money but failure to perceive them as in need of specific long-term attention, resistance to institutional change at the state and local levels, and an absence of genuine leadership at the federal level. Recommendations aimed at program improvement for at-risk youth are provided for federal and state levels. (65 pages, no charge while supplies last)

Business/School Partnerships: A Path to Effective School Restructuring

This report is part of a new series on school reform issues and corporate support of precollege education. It attempts to help companies already engaged in partnerships to better link their support to the restructuring efforts of schools and school districts. The report reviews the nature and various types of partnerships, examines partnerships within the context of restructuring outcomes, and identifies some essential components for moving into a reform-model partnership. It cites three examples of corporate reform-model partnerships and poses relevant questions. Finally, it presents suggestions to help companies develop partnerships that promote restructuring. jeb (52 pages, $15.00 prepaid)
California High School Investment Plan:
An Approach for Planning School Improvement
Rohnert Park: California Institute on Human Services, Vocational Education Resource System.

This publication is intended to facilitate the efforts of secondary schools and Regional Occupational Centers/Programs to plan improvements in their programs consistent with the California High School Investment initiative of the California Department of Education, and the Perkins Act of 1990. This document includes a self-assessment checklist, quality indicators for the checklist, and other information necessary to plan school improvement activities. ldi (33 pages, $12.50)

Collaborating with High Schools (Volume XVI).
(New Directions for Community Colleges, No. 63)

Educators present ideas and model collaborative programs designed to encompass multiple perspectives and varied orientations in this book. The history of educational reform and the effect on present and future educational needs is presented. The editor shows how to set up a range of collaborative programs with high schools—programs that can enhance student learning, facilitate the transfer process, and improve faculty professionalism. sck (118 pages, $14.95)

Counselors and Career Development—a Topic in Education Reform Proposals. A Selected Review of National Education Reform Documents
Bloomington, IL: Meridian Education Corporation.

This study of the contents of currently popular national calls for educational reform that center around (1) the K-12 system structure, organization, and function; (2) the goals of education as preparation for work; and (3) the needs of one or more specific segments of the K-12 student population. The brief descriptions of the twenty-nine key reports give the reader a quick insight into how guidance is valued nationwide. It highlights those reports which have and have not demonstrated an understanding of or support for guidance and counseling as a needed component for any major educational reform. sck (15 pages, $1.50)

The third of five follow-up reports to Time for Results: The Governors' 1991 Report on Education, this fifty-state survey of education initiatives summarizes each state's education reform initiatives enacted or proposed during the previous year with particular emphasis on eight areas: (1) school organization and accountability, (2) school leadership, (3) teaching, (4) parent involvement and choice, (5) readiness, (6) technology, (7) school facilities, and (8) college quality. This year a new category, school organization and accountability, has been added on.

The report discusses how states differ with respect to socioeconomic and fiscal conditions, economic systems, educational governance structures, traditions of state or local control, and historic patterns of investment in education. These differences are reflected in the education reform activities underway in states, and translate into differences in the focus, timing, and breadth of state initiatives. Despite these differences, there are striking similarities among states.

Higher Graduation Standards and Their Effect on the Course-Taking Patterns of College- and Non-College-Bound High School Graduates, 1969 to 1987

This study examines the course-taking patterns of high school graduates and evaluates the impact of increased graduation requirements in mathematics, science, and English on educational excellence. Data for the analysis were taken from four national studies of high school students and span the two decades between 1969 and 1987. The data sets are the Educational Testing Service's Study of Academic Prediction and Growth (1969), the National Longitudinal Survey of Labor Force Experience—Youth Cohort (1975-82), High School and Beyond (1982), and the National Assessment of Educational Progress Transcript Study (1987).

The first part of this paper describes the effects of higher graduation requirements on patterns of participation in secondary education among high school...
graduates. In particular, it focuses on the different patterns of coursetaking among college- and noncollege-bound students from 1969 to 1987. The second part explores the implications of changes in coursetaking among college- and noncollege-bound students in light of the instrumental emphasis of reform. The authors conclude that the observed changes in course taking among student with different plans after high school are not likely to yield the benefits sought by advocates of increased graduation standards. mcw (#318767, 30 pages, $6.40)

How to Shape Up Our Nation's Schools: Three Crucial Steps for Renewing American Education
Salt Lake City, UT: Terrel Bell and Associates.

Former U.S. Secretary of Education, Terrel Bell, and veteran teacher, Donna Elmquist, outline a vision for improving the nation's schools in this book. While the authors support President Bush's "Project 2000" program, they question living with the status quo for a decade while a new system is being created. Instead, they propose that the nation needs to progress down two tracks simultaneously: (1) renewing today's schools for today's generation of students, and (2) developing the President's long range proposal of the "New American Schools" by the year 2000.

Blaming the failure of past reform efforts on their limited focus, the authors argue that the condition of American education is caused as much by lack of parent commitment to learning and by society's reinforcement of anti-intellectual attitudes as by deficiencies in the schools. They propose to take the system as it is now and make changes sufficiently bold to transform the public educational system in a short time. Their three-step plan of action describes activities designed to increase student motivation, parent commitment, and the use of technology in the classroom. mcw (117 pages; $15.95, plus $2.00 shipping; five or more copies, $11.95 each, plus $1.00 shipping per copy)
The Implementation and Effects of High School Graduation Requirements: First Steps Toward Curricular Reform (CPRE Research Report Series RR-011)
New Brunswick: Rutgers, State University of New Jersey, Center for Policy Research in Education.

This report summarizes interview data on the intent and effects of increased graduation requirements in six states. The effects of the requirements on course offerings and respondent views of effects are discussed. The authors identify two deficiencies of the increased graduation requirements. First, they point out that it is unclear if academic courses increase achievement scores and workplace skills. Secondly, they observed a lack of attention to instruction for different kinds of students. Policy recommendations for further educational reform include streamlining the core curriculum by emphasizing learning objectives rather than course labels, paying special attention to instruction for middle and low-achieving students, using different policy instruments for different purposes and groups of students, investigating cognitively demanding vocational education, designing technical assistance to schools for improved content, building an indicator system to track content and course-related achievement, researching curriculum improvements, and evaluating changes in the policy making process. (77 pages, $5.00)

Investing in Our Future: The Imperatives of Education Reform and the Role of Business
Queenstown, MD: The Aspen Institute.

This report includes an overview of education reform history, a well as discussions and recommendations on the following reform aspects: administration and governance, personnel, curriculum, social context, technology, and partnership. One process mentioned to help clarify the curriculum is the promotion of collaboration between education leaders, legislators, and business groups to face the issues in vocational education. The question was asked of how vocational education is serving its current students and what transformations of curriculum should be fostered to train workers adequately for the year 2010. A logical educational sequence of school completion and community college is needed for the forgotten half, those students who do not go on to college.
The report lists contributions businesses can make to educational improvement. They include helping school districts establish and finance merit school programs, using its expertise in furthering the development of school-based management programs, offering assistance in the use of technology for a wide range of educational functions, and fostering alliances between the private and public sectors to improve schools over the long run. sck (35 pages, $4.00)

National Education Goals: Can They Lead Schools to Real Reform?
Mid-Continent Regional Educational Laboratory. (1990, Fall).
Aurora, CO: Author.

This issue features observations and recommendations by the Mid-Continent Regional Educational Laboratory staff members for each of the six National Education Goals: (1) readiness; (2) school completion; (3) student achievement and citizenship; (4) mathematics and science; (5) adult literacy and lifelong learning; and (6) safe, disciplined, and drug-free schools. The concluding chapter discusses fundamental educational restructuring issues. jeb (48 pages, no charge)

The Next Wave: A Synopsis of Recent Educational Reform Reports
Green, J. (1987, February).
Denver, CO: Education Commission of the States.

Nine reports which address educational reform are reviewed in this publication. A summary of each report, an analysis of major points of agreement, and a discussion of unresolved issues are included. Among the points of agreement identified is a call for a second round of reforms in order to continue to prepare students better for a changing society and to address omissions in earlier reform efforts. (Publication No. TR-87, 38 pages, $8.50)
Restructuring in Progress: Lessons from Pioneering Districts

The National Governors' Association commissioned the Center for Policy Research in Education to conduct case studies of several local school districts that were experimenting with new structural arrangements to offer a variety of strategies on ways to restructure districts. Restructuring involves several aspects of the current organization and structure of American schooling, including curriculum and instruction, authority and decision making, new staff roles, and accountability systems. This paper presents case studies of four school districts experimenting with substantial structural changes: (1) Jefferson County (Louisville, Kentucky), (2) Dade County (Miami, Florida), (3) Poway Unified (Poway, California), and (4) New Orleans (Louisiana). It describes each district's approach, based upon visits to one exemplary school in each district. Following this account is an analysis of some common problems, how some districts have overcome barriers, and implications for other districts and states hoping to restructure successfully. It emphasizes three basic areas: leadership, support and assistance, and creation of new structures. The publication also includes brief descriptions of five additional districts and a bibliography of works consulted in its preparation. jeb (46 pages, $7.50)

School Restructuring: Designing Schools for Better Student Learning

This report provides a summary and analysis of the goals of restructuring, pros and cons of different restructuring strategies, and selected reform experiments already underway. It also includes suggestions to "help business leaders choose entry-points into the education problem that are consonant with their corporation's own interests and resources." sck (52 pages, $20.00)
New York, NY: Teachers College, Columbia University, Institute on Education and the Economy.

This describes changes in skill requirements in the economy, shows the relationship between these changes and the current wave of educational reforms, and discusses a reform that is "waiting in the wings." (Presented at the Education Policy Forum, sponsored by the American Educational Research Association and the Institute for Educational Leadership. Washington, DC. March 13, 1987). (10 pages, $3.50)

Trends and Issues in Vocational Education 1988
(Information Series No. 334)
Columbus: Center on Education and Training for Employment, Ohio State University.

This sketches the origins of the vocational education and training enterprise and reviews the social, economic, and technological forces that are changing the context in which it operates. It describes three trends: (1) an impetus for reform, (2) changing administrative and institutional roles, and (3) access. Within the framework of these trends, specific issues confronting vocational educators are discussed: at-risk populations, teacher preparation, basic skills improvement, dropout prevention, partnerships, program articulation, academic credit, higher-order thinking skills, technology, and elementary-level vocational education. (32 pages, $4.75)

Voices from the Field: 30 Expert Opinions on America 2000, the Bush Administration Strategy to "Reinvent" America's Schools
Washington, DC: Author.

Education leaders critique the reform plans set forth in America 2000: An Education Strategy. The essays reflect views on problems in the American schooling system and the administration's proposals for confronting these problems. Authors examine the education reform agenda, with particular attention to the choice issue and to the social/cultural settings in which education takes place. ztb (60 pages, $3.00)
A comprehensive framework for examining the relationship between sweeping demographic changes and the world of work is presented. It establishes important linkages among the many economic and social issues that relate to demographic change and sets priorities as the nation adjusts to changing circumstances.

The report clearly identifies the changes taking place in the work force and the workplace, the problems of poor basic education and work readiness, the need to expand the pool of available workers, and the challenges these issues pose for U.S. global competitiveness. It also offers positive, constructive, and specific actions that the private and public sectors can take so that our nation and our citizens can benefit and prosper from these changes.

Achieving the competitive advantage will require new approaches to education and human resource management that emphasize learning, flexibility, and productive participation in work and society throughout the entire life of an individual. The committee believes that through a life-cycle approach, policies can be implemented that will help children reach school healthy and ready to learn, prepare young people for rewarding work and community participation, enable adults to be self-sufficient, and help older citizens remain active and independent. This approach recognizes that investments made at earlier stages of life pay dividends at later stages, and that policies helping older workers readjust help younger workers as well. A two-pronged approach is detailed: (1) make the existing work force more productive and flexible, and (2) augment the size of that work force by creating opportunities for underutilized groups of potential workers. (164 pages, $15.00)
America’s Choice: High Skills or Low Wages!

This report documents some disturbing discoveries about the low skills that many of our workers possess, that our employers seek, and that our schools teach. The report argues that the United States is at a crossroads. We can choose to maintain an economy that relies upon low wages rather than high skills, or we can create high performance work organizations and the high skill levels needed to sustain them. With seventy percent of American jobs expected to require less than a college education by the year 2000, the report calls the development of a high quality American education and training system, closely linked to skilled and productive work, an economic necessity.

Based on intensive research, five broad problems and corresponding recommendations are forwarded to achieve this goal. The problems include (1) the lack of clear standards of achievement and motivation to work hard in school, (2) the high percentage of dropouts, (3) a very small segment of noncollege bound students are prepared for work, (4) the lack of employer investment into high performance work organizations, and (5) a passive public policy on worker training and inefficient training systems (147 pages, $18.00).

American Potential: The Human Dimension
Washington, DC: Author.

Prepared by a twenty-eight member Task Force on Human Capital established by the Business-Higher Education Forum in 1987, this report advances three basic recommendations for a stronger U.S. education and training system: (1) adequately prepare young people to enter adult life with the basic education and skills essential in the modern world, (2) help workers adapt to a changing world by making it possible for them to take advantage of continuous training and retraining opportunities, and (3) nurture the American people’s latent talent for inventiveness and creativity by improving the foundation for scientific and technological excellence. The Task Force addresses the education issue in its entirety—from early childhood development through job training—through its belief that the educational reform movement has lacked a...
framework in which to consider specific improvements. The report lays out a strategy of sustained leadership from the White House as well as long-term constructive assistance from the business and higher education communities. sck (32 pages, $8.00)

**Briefings Given at the Conference for the Education and the Economy: Hard Questions, Hard Answers**

These six briefings were presented at the Education and the Economy: Hard Questions, Hard Answers Conference, sponsored by the Institute on Education and the Economy in September 1989. The following topics of the briefings focus on educational reform: human capital in changing labor markets; the educational and skill implications of the changes in technology and work; reforming education for work; what, when, how, and to whom do we need to teach; restructuring American schools; and community-based strategic planning for work-related education. jeb (59 pages, $10.00)

**Business Strategies that Work: A Planning Guide for Education Restructuring**

This publication gives business people two detailed planning guides for corporate involvement in educational restructuring. The internal guide ensures that the company's efforts are effective. The external guide is for coalitions at the state and local level. The report also contains a series of case studies describing corporate efforts to restructure education. sck (46 pages, $15.00)

**First Jobs: Young Workers in a Changing Economy**
Washington, DC: Author.

This report contains information on how young workers fare in their first jobs; how they found their jobs; the support they received from family, friends, and the community; and their views of the future.

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Salinas, California; Detroit, Michigan; Birmingham, Alabama; Lawrence, Massachusetts; and small towns in Iowa, the report also reviews state and community indicators of youth employment and spotlights a wide range of job barriers facing new school-age workers which include changing job networks, low-paying growth jobs, and tight job markets where the good jobs go to the best-educated youth.

Other points of interest included in the report are (1) educators, job trainers, and government officials face gaping holes in employment and training assistance for young workers; (2) schools and governments are failing to educate youth about rapidly changing local job markets; (3) youth are entering the labor market without knowing the new requirements; and (4) schools, the most logical support program, are viewed as a system that values only college-bound youth and one in which general and vocational classes alike often offer unsatisfactory links to the world of work. (42 pages, $10.00)

Investing in People: A Strategy to Address America's Workforce Crisis

This report from the Commission on Workforce Quality and Labor Market Efficiency discusses three themes: (1) creating incentives to improve student motivation and achievement, (2) improving workforce quality through public and private investments in lifetime education and training, and (3) improving the workers' efficiency in utilizing existing skills. Included are the results of the Commission's deliberations on each of these themes, as well as specific recommendations for action by the educational community, the private sector, and all levels of government. Also included are recommendations for improving the data gathering and research activities of the federal government. (61 pages, $3.75)
Jobs of the Future and the Skills They Will Require: New Thinking on an Old Debate
Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.

The following factors which are pushing job skills upwards are discussed in this article, reprinted from the American Educator (Spring, 1990): increasing international competition, changing consumer demand, and the accelerating pace of change. In addition, the author reports on how firms are responding to these factors and considers what the effect of these changes will be on job skills. mcw (Reprint Series, MDS-213, 12 pages, $1.00)

A More Productive Workforce: Challenge for Post-Secondary Education and Its Partners
Washington, DC: Author.

Six policy papers were prepared as part of a yearlong project on the education and training of the workforce jointly sponsored by the American Council on Education, the Council for Adult and Experiential Learning, The College Board, and the National Governors' Association. The project focused on how state policy can promote fundamental changes in the way workers, firms, and postsecondary institutions deal with the education and training demands of a rapidly changing international labor market. Three broad clusters of issues are addressed in the policy papers: (1) content and quality of education and training, (2) removing barriers for individual participation in workplace education and training, and (3) removing barriers to the expanded involvement of postsecondary educational institutions in worker education and training. The policy papers contain suggested strategies that state policy makers can embrace as they search for solutions to the economic and educational challenges they face. ztb (192 pages, $20.00)
Recognizing the importance of productivity improvements to our national economic vitality and the special role that two-year colleges play in the effort to enhance workforce productivity, the National Council for Occupational Education (NCOE) and the American Association of Community and Junior Colleges completed this study which gives suggestions for policymakers and program administrators. The first of two reports, "Issues and Strategies," examines the special populations comprising the workforce of tomorrow and proposes alternative structural and program models for two-year colleges to meet special population needs. Understanding these needs, the Workforce Productivity Model is introduced which is specifically designed to overcome these barriers to success. The model embraces the following proactive strategy: recruitment, assessment, five educational modalities, monitoring, personal counseling at every step, and ongoing placement activities from internships through full-time employment. Recommendations are provided that should assist two-year college programs toward reshaping the perception of education and training.

"Federal Workforce Program Policy Issues," the second report, reviews current federal legislated and funded programs affecting workforce training, vocational education, worksite literacy and basic skills, against the backdrop of human resource productivity. Major federal programs which are summarized include Job Training Partnership Act (JTPA), Carl D. Perkins Vocational and Applied Technology Education Act, Job Opportunities and Basic Skills Program of the Family Support Act of 1988, Hawkins-Stafford Elementary and Secondary Education Act, as well as Titles IV and VIII of the Higher Education Act. The second report presents recommendations for amending current programs or laws to facilitate increased use of the two-year college delivery system. (144 pages, $15.00)
Reforming Education for Work: A Cognitive Science Perspective

Over the past decade, research by cognitive scientists has been building toward a clearer understanding of how people learn, in school and out. This paper attempts to bring together the various streams of cognitive research and to explore implications for vocational education. It focuses on the following findings: (1) people learn the basics more effectively in context rather than in isolation, (2) appropriate application of knowledge and skills requires an understanding of conditions and procedures for their use, (3) separating "learning to know" and "learning to do" is dysfunctional, and (4) people need to learn how to manage and evaluate their own performance. Discussed are consequent reform suggestions such as upgrading apprenticeship opportunities, freeing students from compulsory full-time attendance by age sixteen, forging strong links between schools and industry, and organizing training opportunities so that they are compatible with everyday life. sck (MDS-024, 76 pages, $6.25)

SCANS Blueprint for Action: Building Community Coalitions

The first report of the Secretary's Commission on Achieving Necessary Skills (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 develop local plans to implement SCANS initiatives. 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 using the SCANS initiative. jeb (44 pages, no charge)
The School-to-Work Connection

The proceedings of "The Quality Connection: Linking Education and Work," a national conference sponsored jointly by the Secretary of Labor and the Secretary of Education in Washington, DC, on May 15-18, 1990, are summarized in this report. The following topics are addressed: the need to link business and education, the need for applied academic programs, the need for Tech Prep associate degree programs, the U.S. system of school-to-work transition, the human capital crisis, the need to improve educational assessments, and integrating academic and vocational education. A variety of model programs which are successfully assisting youth in making the school-to-work connection are profiled. mcw (15 pages, no charge)

States and Communities on the Move: Policy Initiatives to Create a World-Class Workforce

Over fifty examples of workforce development policy initiatives in the Nation's schools are described in this publication. Planning structures for human investment policies, statewide school-to-work transition policies, student apprenticeship, Tech Prep and other experience-based learning initiatives, dropout recovery programs, school-business partnerships, pathways to postsecondary education, and creative financing mechanisms are discussed and chosen to represent a sample of policies and programs nationwide. The document is intended to stimulate more informed debate in legislatures, policy councils, and among citizens. jeb (47 pages, $5.00)

Training in America: The Organization and Strategic Role of Training

This first volume in the American Society for Training and Development (ASTD) Best Practices Series presents the overall findings of a three-year ASTD/U.S. Department of Labor nationwide study on how training for today's workplace is structured, managed,
financed, and linked to organizational strategy. The book catalogues who gets training and how much, and shows what employer-based training systems look like. It also spells out how to select and contract outside training providers or consultants and how to build lasting partnerships with these groups.

The authors demonstrate the importance of linking training to organizational strategy, and detail specific techniques for building training programs that are responsive to an organization's most critical needs. They explain how to gain access to decision makers and specifically what questions to ask and what approach to take in gaining a commitment for training. They describe the role of training in different business settings, providing examples from organizations that are experiencing internal and external growth or reductions. And they present policy recommendations for educators, employers, and government officials that will ensure the commitment of resources and support that effective training requires. (260 pages, $26.95)

What Work Requires of Schools: A SCANS Report for America 2000

The first product of SCANS, this report defines the skills needed for employment and contains proposals for acceptable levels of proficiency. Fundamental changes in the nature of work and the implications those changes hold for the kinds of workers and workplaces the nation must create are described. Five competencies, a three-part foundation of skills, and personal qualities that define effective job performance today are identified. (31 pages, no charge)

Workforce 2000: Work and Workers for the Twenty-First Century
Indianapolis, IN: Hudson Institute.

The purpose of this research study is to furnish information on the job market that can be used in evaluating the adequacy of current public policies and, where needed, undertaking new policy initiatives. Four key trends will shape the last years of the twentieth century: (1) the American economy should grow at a
relatively healthy pace; (2) U.S. manufacturing will be a much smaller share of the economy in the year 2000; (3) the workforce will grow slowly, becoming older, more female, and more disadvantaged; and (4) the new jobs in service industries will demand much higher skill levels than the jobs of today.

If the United States is to continue to prosper, policymakers must find ways to stimulate balanced world growth; accelerate productivity increases in service industries; maintain the dynamism of an aging workforce; reconcile the conflicting needs of women, work and families; integrate African American and Hispanic workers fully into the economy; and improve the educational preparation of all workers. While these are not the only items on the nation's agenda between now and the year 2000, they are certainly among the most important. More critically, they are issues that will not go away by themselves. If nothing unusual is done to focus national attention and action on these challenges, they are likely to be still unresolved at the beginning of the next century. By addressing them now, the nation's decisionmakers can help to assure the goal of an economically competitive America that fully utilizes the talents and skills of all its citizens. (117 pages, $4.25)


The objective of these proceedings was to identify the principles upon which new, more relevant labor market policies might be launched to improve the skills of both today's and tomorrow's labor force. Issues such as discrimination of educational programs and the delivery system for employment policy are addressed. The speakers point to some of our competitor nations as evidence that human investment programs make a critical contribution to a nation's competitiveness and productivity. Yet they differ in their choice of strategic priorities and in their answer to the question of how the next generation of labor market progress should be structured. The authors provide an overview of the systems, institutions, and programs of human resource investment. Endnotes and discussions are included. (Papers Presented to an Economic Policy Institute Seminar on Labor Market Policy, April 29, 1988.) sck (78 pages, $5.00)
Workplace Competencies: The Need to Improve Literacy and Employment Readiness (Policy Perspectives Series)

To help education policymakers sort through the sea of uncollated and frequently conflicting information about the urgent issues they face, OERI’s Information Services commissioned a series of policy papers. These papers address those issues most needing attention, as identified by several major policymaking organizations.

In order to better inform this important group of decisionmakers, this paper was developed in response to the concerns identified by policymakers about improving literacy levels and graduating young people who are prepared to function effectively in the modern workplace. It points out that, despite national demands to improve the weak literacy skills of young adults, educators and policymakers lack the diverse types of data needed to make changes. The authors put into perspective recent criticisms of U.S. literacy levels and related workplace competencies. They conclude that all citizens need a broad base of literacy skills transferable to all settings. The challenge is to understand how such skills and knowledge in these several contexts are similar, and how they are different, as part of a critical effort to find ways to promote their development. Recommendations on addressing inadequate literacy, expanding measures of proficiency in literacy tasks beyond classroom reading, improving literacy skills in the schools, and improving measures and tools for evaluation are included. (35 pages, $2.25)
POLICY STUDIES

Final Report, Volume I: Summary of Findings and Recommendations

This report is the first of five volumes summarizing a series of studies commissioned by the National Assessment of Vocational Education (NAVE). The purpose of this assessment was to provide information that would help Congress in reauthorizing federal vocational education legislation. The study was also designed to inform educators and policymakers at all levels about the size, scope, organization, and effectiveness of vocational training and the relationship between federal vocational education policy and local practice. The status of vocational education at the secondary and postsecondary level is examined. The federal role in vocational education and policy recommendations are discussed.

Based on the analysis of the status of secondary vocational education, NAVE has identified six primary objectives for federal policy: (1) revise and rebuild the high school vocational curriculum to upgrade skill levels, (2) integrate high school vocational and academic curricula, (3) accelerate the education of at-risk students, (4) expand efforts to place students in good jobs, (5) improve linkages between secondary and postsecondary training, and (6) raise the quality of vocational programs in schools with high concentrations of poor and low achieving students.

With regard to postsecondary vocational education, NAVE recommends that states use the Perkins Act funds to develop performance-based incentives keyed to three areas of performance: educational attainment, occupational competencies, and labor market outcomes. They recommend that performance incentives replace the current emphasis in inputs and process in the Perkins Act with financial incentives based on student outcomes. (145 pages, no charge)
The primary goals of the Carl D. Perkins Act are to improve and modernize vocational education to meet the needs of the work force, promote economic growth, and to assure that students have access to quality vocational education programs. This report examines the implementation of the Perkins Act in states and localities, seeking to determine how well legislative goals have been translated into practice and describing the actual results of funds distribution. Through a set of secondary and postsecondary case studies in eighteen communities conducted during the 1986-1987 school year, a set of nine state-level and three community-level case studies during the 1987-1988 school year, and a survey of local vocational education practices conducted in eighteen states during 1986-1987, potential problems in the Act's implementation are identified. Actual results of the funds distribution are examined—how the resources have been used, by whom, in what settings. Along with summarizing the findings and assessing the services provided, a set of policy recommendations designed to strengthen the provisions of the current Act is provided. (162 pages, no charge)
achieve these goals, NAVE recommends utilizing resources provided by the Perkins Act for state-level development of indicators to measure the performance of postsecondary vocational institutions in the area of learning outcomes, labor market outcomes, and educational attainment, with federal funds to be allocated on the basis of performance, including creation of extra incentives to improve outcomes for students at-risk. (129 pages, no charge)

Final Report, Volume V: Handicapped and Disadvantaged Students: Access to Quality Vocational Education

This report describes the access of high school students who are disabled and academically disadvantaged to vocational education and analyzes the quality of the programs in which these students participate. Questions addressed include whether disabled and academically disadvantaged students have access to a full range of high-quality vocational programs, how demographic characteristics affect such access, to what extent vocational programs and course-taking options differ across schools, and what the findings imply for the targeting of federal resources. Recommendations include the following: expansion of female disabled and disadvantaged students' enrollments in nontraditional programs, increased participation in cooperative education, emphasis on expanding placement activities, targeting of funds for schools with high concentrations of special needs students, and availability of occupationally specific programs in area vocational schools, particularly for female and minority students. (100 pages, no charge)

First Interim Report from the National Assessment of Vocational Education

This is the first of three reports by NAVE on the state of vocational education. Mandated by Congress in preparation for the reauthorization of the Carl D. Perkins Vocational Education Act, the purposes of this report are to provide Congress with information that has emerged from some of the research conducted to date and describe all the research projects underway.
The intent is to begin constructing a framework for the discussion of federal policy in vocational education that lies ahead. Divided into two parts, the first part discusses trends in vocational education and issues concerning vocational education for disadvantaged persons. The second part contains profiles of the studies being conducted in each area of the study plan. This document is a progress report intended only to further define the issues and present some basic descriptive data. No findings or recommendations of NAVE are included. Findings and recommendations will be presented in the final (third) report to Congress, due January 1989. An appendix containing a synopsis of the provisions of the Carl D. Perkins Vocational Education Act is included. (100 pages, no charge)

The ICD Survey III: A Report Card on Special Education (Study No. 864009)

This nationwide survey, conducted by Louis Harris and Associates for the International Center for the Disabled (ICD) in cooperation with the National Council on Disability, presents a comprehensive study of special education to date, including evaluations of the special education system by educators, parents, and students themselves. It is the first nationwide survey focusing on how the special education systems serve the needs of students with disabilities to include evaluations of educators, parents, and students. The survey identifies key areas in need of improvement in order to guide policymakers, educators, parents, disability advocates, and students with disabilities in focusing their efforts towards improving the system. Although substantial progress has been made over the past fifteen years in furthering the education of youth with disabilities, much work lies ahead, particularly in the areas of teacher training, identification processes and delivery of services, parental knowledge and involvement, individualized education plans, postsecondary transition plans, and supplementing related services. The survey points out that the public school system is still not adequately preparing most students with disabilities for employment, for further education or for independent living, and suggests specific improvements. sck (196 pages; $15.00, plus $2.00 postage)
The Impact of High School Vocational Education: A Review with Recommendations for Improvement
Philadelphia: Research for Better Schools.

The first part is a review of research on the effectiveness of alternate vocational education programs and occupationally specific courses in influencing dropout rates, probabilities of employment, wage levels, productivity, access to additional education and training, job satisfaction, basic skills, citizenship, and other positive traits of character. The policy implications of these findings are also discussed. (50 pages, $15.95)

On Integrating Academic and Vocational Education: Testimony Before the Senate Subcommittee on Education, Arts, and Humanities

This testimony by Charles Benson, Director of the National Center for Research in Vocational Education (NCRVE), before the Senate Subcommittee on Education, Arts, and Humanities addresses the following topics: (1) why it is appropriate to work toward the integration of vocational and academic education, (2) the different forms that integration may take, (3) possible problems of implementing the integration of vocational and academic education, (4) proposals to improve the implementation process, and (5) research and service activities to support implementation by NCRVE. (28 pages, no charge)

Second Interim Report from the National Assessment of Vocational Education
National Assessment of Vocational Education. (1988, September).

This is the second report of three by NAVE on the state of vocational education. Mandated by Congress in preparation for the reauthorization of the Perkins Act, this report presents results from research on the outcomes of vocational education at the secondary and postsecondary levels, together with additional information beyond what is included in the first report on the extent of participation in vocational education, trends in enrollment, and services provided to special
populations. The report discusses two important topics:
(1) the rates at which students initially enroll in
postsecondary vocational education, accumulate
credits, and complete a certificate or degree; and (2)
the state allocation of federal funds to secondary and
postsecondary levels. (70 pages, no charge)

Vocational Education and Human Resource
Development
Denver, CO: Author.

Policymakers have long been aware of the importance
of the public education system and related human
resource programs for the nation’s economic well-
being. This videotape is designed to provide state
legislators with an overview of the vocational education
system. The strategies used by two state legislatures,
Florida and Wisconsin, to conduct oversight and
improve vocational education programs are examined.
In addition, the videotape contains interviews regarding
vocational education policy and research. It provides
ideas on what other policy options may improve the
quality, relevance, and efficiency of vocational
education programs. Key findings of NAVE are also
examined. The video concludes with a brief look at the
Job Training Partnership Act of 1983. A set of ten
copies of a resource guide, containing key points and
supplemental reading lists, is included with the
videotape. jeb (23 minute videotape, $65.00)

Vocational Education for Special Populations:
Recommendations for Improving State Policy
Berkeley: National Center for Research in
Vocational Education, University of California at
Berkeley.

Three aspects of equity embedded in the Perkins Act
are examined in this paper: (1) the extent of access
which special needs youth and adults have to programs
and services, (2) the effectiveness of programs and
services locally received, and (3) outcomes realized
by special students participating in vocational
education. This is done through summaries of recent
studies, related evaluative and empirical literature,
and data from longitudinal studies. The paper gives
primary attention to youth who are disabled,
disadvantaged, or LEP in secondary vocational
education programs.
Recommendations for improving stale policy are presented. These recommendations should be of interest to policymakers at both the federal and state level as they examine alternatives for implementing the 1990 Amendments to the Perkins Act (P.L. 101-392). The appendix contains brief summaries of major studies of vocational education programs effectively serving students with special needs. sck (MDS-031, 66 pages, $3.25)

Vocational Education in the 1990s: Major Issues
Ann Arbor, MI: Prakken Publications.

Designed to present issues which face vocational education today and in the immediate future, this book serves as a potential agenda for confronting those issues and assisting in responsible and responsive policy development, financing, research, and operation of vocational education programs in the 1990s. Three primary objectives guided the authors: (1) major issues which face vocational education at the present time, (2) suggestions on how best to deal with those issues, and (3) topics for ongoing research that will best address and resolve the issues at hand.

The chapters include a historical background of the field, philosophy and policy perspectives, an examination of the secondary vocational program, a description of postsecondary occupational education, a review of vocational teacher preparation, the organizational structure of vocational education, issues of administrative leadership in the field, an examination of the vocational curriculum, a discussion of programs for students with special needs, an examination of the relationship between the history and the future of vocational education, issues for research in vocational education, a vision for vocational education for the next ten years, and an examination of the role of vocational education in preparing students for the future. A bibliography is included. sck (302 pages; $16.95, $13.56 school price)
NEWSLETTERS

CenterWork
Information about the National Center for Research in Vocational Education's activities, research, products, upcoming conferences, and available technical assistance is provided in this newsletter. Past issues focused on topics such as performance standards, integrating vocational and academic education, Tech Prep, professional development of beginning vocational education teachers, and the changing occupational structure. (no charge)

Change Agent
Articles in this newsletter highlight current best practices, applied research, and resources on topics such as integrating vocational and academic education, Tech Prep, serving learners with special needs, accountability, performance standards, special needs, and administration and teacher preparation. Published three times a year, this newsletter would be of interest to practitioners, administrators, researchers, and policymakers concerned with issues in vocational education. ($35.00/year)

Clipboard
Written for teachers, principals, researchers, district administrators, state education agency personnel, and staff in institutions of higher education, this quarterly publication contains information on twenty-eight to thirty-six products available from regional educational laboratories, research and development centers, and other major organizations across the country. The information covered in the publication includes administration; assessment; evaluation; testing; at-risk students; dropout prevention; curriculum; early childhood education and care; learning; parents, community, business involvement; policy; social programs; rural education; school improvement; school reform; restructuring; special education; staff development; teacher preparation; teaching; technology; and vocational education. In addition to an abstract on each product, complete ordering information is included. (Available free through the Clipboard Dissemination Program to such agencies as state education agencies and intermediate service agencies that work with NCREL as partners in the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin.) ($15.00 to non-area members/year)

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The Community, Technical, and Junior College Times
Articles in this biweekly newsletter provide the latest statistical research and data, effective programs and practices, legislation updates, resources, and funding opportunities for professionals involved in programs at community, technical, and junior colleges. Included in the articles are topics such as workplace literacy, Tech Prep, college-industry partnerships, and job training programs. A calendar of events is provided with announcements of professional job vacancies. sck ($46.00/year, $2.00 single issue)

Education Daily
Regular features in this newsletter include education policy, funding, legislative updates, and the latest resources. Published every business day, this newsletter covers education issues including vocational and adult education, school administration, court cases and rulings, student aid proposals, Chapters 1 and 2 funding, education research appropriations, special education initiatives, workplace literacy programs, education reform, education leadership, and state initiatives on teacher retention. sck ($524.00/year)

NAIEC Newsletter
Published six times a year, this newsletter provides updates on the activities of the National Association for Industry-Education Cooperation (NAIEC) legislation, industry-education councils, conferences, educational policy, and resources. Each issue contains information on the most recent developments in industry-education collaboration in school improvement for public, private, and postsecondary levels; career education; and programs related to work/education. sck ($18.00 nonmembership/year)

National Center on Effective Secondary Schools Newsletter
Published in the fall and spring, this newsletter provides analyses on research topics such as higher order thinking in the curriculum, programs for students at-risk, the stratification of learning opportunities, the quality of teachers' work life, and non-instructional influences on adolescent achievement. sck (no charge)
Newsnotes
This newsletter contains articles about education advocacy, including an update on legislative and federal agency activities, noteworthy advocacy efforts, and resources. Each issue emphasizes education topics on low-income students and parents and covers key areas of concern including bilingual/bicultural education, disciplinary action, educational reform, racial discrimination, special education, and vocational education. sck (no charge)

Northwest Connections: Exchanging Ideas on Applied Academics
Formerly known as Applied Academics Exchange, this newsletter from the Education and Work Program of the Northwest Regional Educational Laboratory (NWREL) is published on an occasional basis. It provides an opportunity for schools and colleges in Alaska, Idaho, Montana, Oregon, and Washington to exchange ideas on applied academics and other approaches to integration of vocational and academic instruction. Featured in each issue are the articulation activities between institutions in areas such as Tech Prep, 2+2 models, and the latest resources, as well as a calendar of events for training opportunities and workshops. sck (available free of charge to educators in the NWREL region)

OERI Bulletin
Published by the Office of Educational Research and Improvement (OERI), this bulletin is designed to help keep recipients informed about what is happening in education. The latest information on education practice, research, statistics, and important events sponsored by OERI is released through this bulletin. sck (no charge)

Open Entries: A Competency-Based Education Information Exchange
Aimed at providing educators with an information system for exchange of competency-based instructional materials and methodology, this publication is a participatory periodical—subscribers are also contributors and may therefore submit for publication materials and methodology they have developed. sck ($8.00/year)
Report on Education Research
Covering programs and research from around the country, this biweekly newsletter provides information that can be used to improve the programs in schools or districts. It helps track findings on issues of concern including student assessment, minority education, enrollment trends, learning disabilities, curriculum development, education reform, teacher training, and more.

In addition to covering the latest in education research news, every issue contains useful synopses of education research reported in obscure journals that might not otherwise be read and the latest findings on computer use, testing, reading and writing skills, bilingual education, effective math and science programs, activities in the research community, federal policy announcements and priorities, and current funding opportunities. Included are contact names, addresses, and phone numbers for follow-up on issues of special interest. sck ($216.00/year)

State Education Leader
Articles in this quarterly newsletter report on key educational issues such as choice, restructuring schools, literacy skills, minority achievement, higher education, school finance, and youth-at-risk. The newsletter monitors policymakers on education issues and highlights emerging trends. sck ($15.00/year)

TASPP Bulletin
The focus of this biannual newsletter from Technical Assistance for Special Populations Program (TASPP) concerns serving learners with special needs in vocational education. Featured articles address current issues and topics, research, resources, legislation, conferences, and other information of interest to professionals involved in serving students with special needs in programs and agencies at the local, state, national, and international level. sck (no charge)

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)

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Vocational Education Weekly
Published forty-four times a year, this newsletter (formerly the Legislative Brief) provides regular updates on federal funding, initiatives relating to the Carl D. Perkins Vocational and Applied Technology Act, state activities, insights into expanded opportunities for vocational education resulting from new legislation, reviews of new reports on education reform and workforce preparation, and other pertinent information concerning vocational education. Four Issue Papers a year on critical topics affecting the field are included in the subscription. sck ($125.00/year)

Vocational Training News
This weekly newsletter provides timely, useful reports on the federal JTPA and the Carl D. Perkins Vocational and Applied Technology Act. Other areas of coverage include education reform, literacy, private industry councils, and state education and training initiatives. sck ($264.00/year)

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, successful programs and practices, training trends by specific industries, latest research, legislation updates, and upcoming conferences. Past issues have covered topics such as skills and the new economy, youth apprenticeship, Tech Prep, integrating vocational and academic education, workplace literacy, and research priorities for vocational education. sck ($135.00/year)
The Disability Accommodation Digest
Published quarterly, the Digest contains information and articles of interest to persons concerned with the implementation and enforcement of Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Regular columns include “Ask the Experts,” responding to readers’ questions and concerns; “Significant Cases and OCR Findings,” providing brief discussions of those rulings that are significant to postsecondary institutions; and “On the Horizons,” presenting developing issues and trends as well as new products and services. (sck, $30.00/year, members; $60.00/year, nonmembers)

The ERIC Review
This journal, published three times a year, is designed to help the education community keep informed of recent research findings, critical trends and issues in education. It is also a tool for announcing important ERIC system developments, programs, new products, and services. Topics have included drug-free schools, literacy, parental involvement, and school readiness. (sck, no charge)

Journal for Vocational Special Needs Education
Published in January, May, and October by the National Association of Vocational Education Special Needs Personnel (NAVESNP), this journal focuses on the vocational education of students with special needs as well as state departments of vocational education and special education. It contains articles pertaining to vocational preparation for students with special needs, including teacher preparation, program design, student characteristics, materials and methods modification, community resource development, prevocational experiences, and cooperative work arrangements. (sck, included in NAVESNP membership; $18.00 library/year, $6.50 single copy)

Journal of Postsecondary Education and Disability
Of interest to professionals who provide education and services to postsecondary students with learning disabilities, this quarterly publication provides in-depth examinations of research, issues, policies, and programs in postsecondary education. (sck, $30.00 individual/year)
Occupational Outlook Quarterly
Articles concerning occupational and career information, including topics such as current labor statistics, trends in occupations, job searching, and resources are provided in this quarterly publication. sck ($6.50 individual/year, $2.50 single copy)

Phi Delta KAPPAN
Published September through June by Phi Delta Kappa (the professional fraternity in education), the Kappan's articles, news, and reviews are concerned with educational research, service, and leadership with an emphasis on issues, trends, and policies. Past issues have covered topics such as the rebirth of vocational education, teen pregnancy prevention, youth-at-risk, educational reform, and Chapter 1 programs. sck (included in membership; $30.00 individual, $3.50 single copy/year)

Vocational Education Journal
Published eight times during the school year, the journal includes articles on current issues in vocational education and on major employment, technological, and social trends. It also provides information on promising practices, programs, and products. sck (AVA members, including student members, no charge; $24.00 nonmembers/year, $3.00 single copy)
SPECIAL ISSUES


This issue focuses on the integration of basic academic skills into the vocational curricula. Four articles are devoted to the integration of basic academic, math, communication, and science skills into vocational education programs. A project, located at the University of North Texas, which uses a team approach to writing a curriculum that would integrate academic subjects into vocational curricula, is described. The method encourages cooperation between teachers and directs student attention to the interrelationship of their coursework.

The development, training, and coordination practices for teams who will design accommodation strategies that integrate the teaching of vocational and academic curricula in postsecondary vocational education programs are discussed. Eight widely differing models for integrating vocational and academic programs are also presented. ztb (single copy $6.50)


The integration of basic academic skills into a vocational curriculum is the focus of this issue. Issues culminating in the demand for the basics are discussed. Promising developments to improve preparation in two kinds of basic skills, job-specific and common core, are highlighted. Also included are four articles about schools that are pioneering different approaches to the integration of basic skills. Two articles focus on reading skills. mcw ($3.00/single copy)


Jennings presents his opinion on what Congress intends the law to accomplish. Gareth Hoachlander offers suggestions for developing accountability systems to meet Perkins requirements. Norton Grubb discusses three of the most viable models for successfully integrating vocational and academic education. An article about Tech Prep is also included. ztb (66 pages; included with membership dues, $3.50/single copy)

The Rebirth of Vocational Education (Special issue). Phi Delta KAPPAN, 71(6)

This special issue includes important discussions, in-depth analyses, and suggested strategies for resolving issues related to vocational education. Written by experts in their fields, the articles discuss critical issues in vocational education including (1) major changes in the Perkins Act and their implications, (2) restructuring vocational education, (3) why vocational education is in trouble and how to reform it, (4) why and how vocational education can meet the need for skilled labor, (5) strategies for bringing education and work closer, (6) the integrated curriculum and its benefits, and (7) the value of developing practical skills. ztb ($30.00/year, $3.50/single copy)
AGENCIES, ASSOCIATIONS, AND ORGANIZATIONS

The following agencies, associations, and organizations generally act as an information exchange to interested individuals concerned with educational issues. Technical assistance, professional support, publications, and other pertinent information is available from these groups.

Agency for Instructional Technology (AIT)
AIT is a nonprofit U.S.-Canadian organization established in 1973 to improve education through technology. AIT provides leadership and service to the education community through cooperative development, acquisition, and distribution of technology-based instructional materials. AIT’s free, quarterly newsletter provides up-to-date information about video and activities.

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 vocational and academic instruction with physics, math, and communication are also available. mcw

American Association for Vocational Instructional Materials (AAVIM)
AAVIM, a consortium of state departments of education representatives, is a nonprofit educational association. AAVIM produces vocational training materials, including texts, manuals, workbooks, computer software, and videos. Sales are made by catalog or through contractual arrangement. Available upon request, AAVIM’s catalogs offer educational materials and resources in a variety of areas including agriculture, home economics, trade and industrial education, performance-based teacher education, and competency-based staff development/administrator education. Also available for sale through AAVIM is a set of modules designed to assist vocational educators in the process of helping persons with limited-English proficiency in occupational programs. mcw

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American Vocational Association (AVA)
AVA is a national, professional organization for teachers, supervisors, administrators, and others interested in the development and improvement of vocational education. AVA's mission is to provide educational leadership for the development of a competitive workforce. Association news, legislative information, and issues and trends in vocational education are covered in the Vocational Education Journal, provided to all members as part of their membership dues. The Vocational Education Weekly newsletter covers legislative and other national news of interest to the field and is available on a subscription basis. mcw

American Vocational Association/Special Needs Division (AVA/SND)
The general purposes of the AVA/SND are to (1) develop professional attitudes and standards among all personnel interested in or responsible for the development or operation of vocational programs for learners with special needs; (2) offer services to members of SND which will provide, maintain, extend, and expand quality vocational programs and services to prepare learners with special needs for employment in all occupations; (3) help members of SND keep informed about trends, plans, policies, and current happenings of the AVA and their implications for the development and welfare of vocational education programs and services; (4) act as a clearinghouse for the dissemination of new ideas, research, and other items which will aid in upgrading the vocational programs for learners with special needs; and (5) promote professional relationships with other agencies, organizations, and institutions concerned with learners with special needs. Members receive the Journal for Vocational Special Needs Education. sck

Center for Occupational Research and Development (CORD)
A variety of products and services are available from CORD, a nonprofit, public-service organization dedicated to the advancement of vocational/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.

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CORD
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(800) 231-3015
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 which uses 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

National Association of Vocational Education Special Needs Personnel (NAVESNP)
Members of NAVESNP serve individuals who are disabled, disadvantaged, and/or limited-English proficient. Its objectives are to (1) serve as a unifying association for all personnel in the United States interested in or responsible for the development or operation of vocational education programs for learners with special needs; (2) unite related state and regional units and other organizations dedicated to vocational education special needs into a national professional organization; (3) promote and maintain active leadership in vocational, career, and occupational education; and (4) provide service to members of the Association. Members receive Newsnotes and the Journal for Vocational Special Needs Education newsletters. sck

National Commission for Cooperative Education (NCCE)
NCCE defines cooperative education as a process of education which formally integrates a student’s academic and/or career interests with productive work experiences in cooperating employer organizations. Through this interaction, students strengthen their academic knowledge, persist in the continuation of their education, and improve their personal and professional development. The teaching faculty, cooperative education coordinators, and the employing supervisors all share in the intellectual and personal development of the student. The resulting effect is remarkably synergistic, with all of the parties benefiting from the collaborative effort. NCCE states this form of education is advantageous to the student as well as society, employers, and institutions. sck

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The centers and offices listed below provide a variety of information, resources, and referral services concerning issues relating to the 1990 Perkins Act.

ACCESS ERIC
ACCESS ERIC acts as a gateway to the Educational Resources Information Center (ERIC). As the outreach component of the system, it promotes services and products and acts as a referral service between the system and its users. This toll free service helps education practitioners, librarians, policymakers, researchers, and students keep abreast of information offered by ERIC and other education information service providers. The staff answers questions, refers callers to subject-specific information sources, and provides ERIC System publications. In addition, it maintains education-related databases available online and in hard copy.

Center for Applied Academics
The Center for Applied Academics provides technical assistance primarily in the Northwest region. Its goals are to network with states and programs in the Northwest (1) to identify and overcome barriers to implementing applied academics in K-12 and postsecondary settings; (2) to build technical assistance capability in states; (3) to share training and ideas for teachers, administrators, business leaders, and teacher educators; (4) to encourage businesses to establish partnerships to support applied academics; and (5) to conduct research, evaluation, and policy studies to support the development of applied academics in both rural and urban areas of the region. It also provides telephone support, an annual survey, conference and workshop presentations, and publications that address this issue. The Center publishes a quarterly newsletter.

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CETE has produced a variety of products and provides a range of services designed for professionals at all levels of employment-related education and training. Centergram is CETE's monthly newsletter.

Center for Law and Education, Inc.
This organization provides technical assistance on education issues to advocates working on behalf of low-income students and parents. It is part of the national network of support centers funded by the Legal Services Corporation to provide specialized aid to legal services program staff members who represent eligible clients. Their resources are also available to private attorneys representing eligible clients. The Center provides assistance on a wide variety of school-related matters and activities including advice and collaboration on cases, publications, training, federal program advocacy, litigation, and assisting parent and student involvement in education. Key areas of concern include bilingual/bicultural education, disciplinary action, educational reform, racial discrimination, special education, and vocational education. The Washington, DC office monitors legislative and federal agency activities related to education and acts as an advocate on behalf of low-income students and communities. In 1988, the Center began a Vocational Education Project to implement and enforce certain key provisions of the Carl D. Perkins Vocational Education Act now known as the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. Numerous publications are available from the Center, including Newsnotes, Education Law Bulletin, and various training materials. jeb

Institute on Education and the Economy (IEE)
IEE conducts and distributes research on how changes in the economy, the workplace, the workforce itself, and patterns of work-related learning affect the development and transformation of human capital in this country. IEE builds knowledge that will inform public and corporate decisions about who should teach which work-related skills to whom, when, and how. Established by the Trustees of Teachers College, Columbia University in 1986, IEE has mobilized a broad range of research talents and disciplinary perspectives including anthropology, economics, political science, sociology, and cognitive science. It conveys the results and implications of the research through technical papers, briefs for nontechnical audiences, presentations, testimony, and briefings to educational policy and business audiences. cdb

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Institute on Education and Training
The mission of the Institute is to improve policy, public understanding of American education and training, and to conduct the research and analyses needed to address problems in these areas. In accord with this mission, the Institute supports three objectives: (1) examine the delivery and performance of education and training components individually and as parts of a system, as well as related national and international economic, demographic, and security issues; (2) help public and private sector decisionmakers at the federal, state, and local levels to develop and implement effective policies and programs; and (3) train policy analysts in education and training.

Instructional Materials Laboratory (IML)

National Assessment of Educational Progress (NAEP)
Mandated by Congress, funded by the National Center for Education Statistics, and currently administered by Educational Testing Service, NAEP has monitored eleven areas of knowledge and literacy skills held by America's elementary, middle, and high school students and young adults on an ongoing basis since 1969. Its objective is to make education performance results more accessible to policymakers and the general public. It utilizes scientific random sampling procedures to ensure reliable national, regional, and education-specific results, and does not provide student-specific or school-specific results. States participate on a voluntary basis. NAEP publishes The Nation's Report Card, disseminating the results of their research.
National Center on the Educational Quality of the Workforce (EQW)
The threefold mission of EQW is the renewal of American competitiveness through investment in the nation’s workforce to make (1) American firms more adaptive and competitive, (2) American workers more aware of the skills needed and the opportunities for acquiring them, and (3) American schools at every level more successful in meeting the learning needs of both employers and employees. A joint venture of the Wharton School, the Institute for Research on Higher Education at the University of Pennsylvania, and the New York State School of Industrial and Labor Relations at Cornell University, EQW’s efforts are directed toward three major activities: (1) research into cost-benefit analyses of investments in human resources, relationship of education requirements to skill supply and demand, and workforce lifecycles; (2) focused discussions to be convened in panels, conferences, and colloquia, connecting the research on educational quality and worker productivity with actual educational and employment practices; and (3) outreach efforts communicating the Center’s findings through publication of EQW Issues.

National Center on Effective Secondary Schools
The Center conducts research on how high schools can use their resources to enhance student engagement and boost student achievement. Its primary studies involve higher order thinking in the curriculum, programs for students at risk, the stratification of learning opportunities, the quality of teachers’ work life, and the non-instructional influences on adolescents’ achievement. The Center includes a clearinghouse which provides a bibliography, research syntheses, and, as resources permit, searches of the Center’s bibliographic database. The general bibliography contains about three hundred-fifty references on topics such as organizational remedies, class size, governance and organizational reform, curriculum remedies, at-risk students, and higher order thinking. Single copies are available upon request. Research syntheses are available at cost. The Center publishes a newsletter twice a year, offering analyses of substantive issues. It also publishes a resource bulletin on practical topics.
National Diffusion Network (NDN)
NDN sponsors over one hundred exemplary programs that can be used to achieve the National Goals for Education issued by the President and the nation's governors in February 1990. Administered by the U.S. Department of Education, NDN provides funds to disseminate information about exemplary programs to schools, colleges, and other institutions throughout the country. These programs and their sponsoring schools and organizations, the NDN State Facilitators, and the Private School Facilitator form a resource network that helps other schools adopt programs for their own use to improve the education of their students. NDN programs have been field-tested with students and are proven effective. Every program has been evaluated locally and approved by a panel of the U.S. Department of Education. Types of projects include Developer Demonstrator Projects, developed by local schools; Dissemination Process Projects, large scale programs run by national organizations; and State Facilitator Projects, which serve as in-state links between NDN programs and local schools interested in implementing the programs. Subjects covered include communication, programs for people who are disabled, educational reform, career and vocational education, and dropout prevention programs. jeb

National Occupational Competency Testing Institute (NOCTI)
NOCTI is a nonprofit consortium of states and U.S. territories involved in the development of occupational competency assessment serving business, education, and the government since 1969. Services include written and performance examinations, standard and custom assessments, scoring services, entry level and journey equivalent evaluations, and job and task analysis workshops.

Categories of tests developed and administered by NOCTI include Teacher Occupational Competency Testing (TOCT), more than fifty exams used to certify vocational/technical education teachers; Student Occupational Competency Achievement Testing (SOCAT), a battery of sixty-nine job-ready tests used to assess the competency of secondary and postsecondary program completers; and Industrial Occupational Competency Testing (IOCT), used in employee selection and job and task analysis. Annual statistical reports on TOCT and SOCAT norms are available upon request. jeb
Office of Work-Based Learning

In January 1990, the Office of Work-Based Learning was created within the Employment and Training Administration of the U.S. Department of Labor. Its purpose is to pursue national initiatives related to improving the skill levels of American workers. Key initiatives involve assisting youth in the transition from school to work and enhancing the skills of employed workers.

Six individual project grants are being awarded to (1) the Pennsylvania Department of Commerce for a program to integrate classroom and worksite learning in the metalworking industry; (2) WorkforceLA Youth Academy for high schools and three employers to prepare students for careers in telecommunications, banking services, and public service; (3) the Private Industry Council of Boston for Project Protech, in which students preparing for healthcare careers will combine hospital work experience with educational/vocational training during the last two years of public high school and two years of community college; (4) Maryland Department of Economic and Employment Development for three varied programs; (5) the National Alliance of Business for an appliance repair program in DuPage County, Illinois, and a banking program in San Francisco; and (6) Electronic Industries Foundation for an electronics technician training program and curriculum for math/science high school students in northern New Jersey.

Southern Regional Education Board-State Vocational Education Consortium

Improving the education of students enrolled in high school vocational programs in the Southern Regional Education Board (SREB) states is the guiding principle of the Consortium. The Consortium (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia, and West Virginia) develops, applies, evaluates, and promotes approaches to strengthen students’ basic competencies in communications, mathematics, and science, and their critical thinking and problem-solving skills. Today over three dozen pilot sites in these fourteen states, working with state vocational, governmental, and business leaders, are committed to this goal. SREB’s recommendations for developing high school vocational education programs are to design a coherent and challenging program of vocational and academic courses that will teach students in a vocational education program essential content from college preparatory courses.
courses in mathematics, science, and the language arts through an applied process. These recommendations are intended to revise vocational education programs to place a high priority on developing basic academic skills that can help produce high school graduates with the necessary skills for further learning on the job or in formal educational programs.

Directly related to work of the Consortium is a dropout prevention project funded by the U.S. Department of Education. SREB is working with pilot site junior high schools and high schools in six states—Arkansas, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. These states are assessing the effectiveness of various combinations of vocational and academic instruction aimed both at improving the basic competencies of potential dropouts in science, communications, and mathematics and at creating a school environment successful in keeping these students in school. A variety of publications are available related to Consortium and other SREB initiatives.

Technical Assistance for Special Populations Program (TASPP)
TASPP works nationally to increase vocational program accessibility, quality, and availability for youth and adults with special needs. These populations include teen parents; individuals who are at-risk, limited English proficient, or who have physical or mental disabilities; and participants in programs to eliminate gender bias. TASPP maintains a database accessible free of charge and operates a free resource and referral service for practitioners, policymakers, and researchers. It distributes a free newsletter and topical papers; develops publications highlighting resources, exemplary programs, and other topics of interest to the field; and conducts an annual search for exemplary vocational programs serving special populations. TASPP conducts workshops and provides networking opportunities for professionals serving special populations.

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Vocational-Technical Education Consortium of States (V-TECS)

V-TECS promotes the systematic development and implementation of the concept of competency-based vocational-technical education. Through V-TECS, states share the work and cost of identifying competencies and developing competency-based curriculum materials. V-TECS produces three major products and provides two important services in the fields of agricultural/agriculture business occupations; business, marketing, and management; health occupations; home economics; and technical/trade and industrial occupations. V-TECS products, suitable for use in all public and private sector education and training programs, are catalogs of performance objectives and performance guides, curriculum guides, and criterion-referenced test item banks. Services include seminars, technical assistance, Automated Cross Referencing Occupational System (ACROS) and customized inservice programs, and workshops. V-TECS curriculum guides translate duties, tasks, standards, and performance steps from a catalogue into instructional activities and resources.

The state agencies responsible for the administration of programs defined in the Carl D. Perkins Vocational and Applied Technology Act may participate as full members of the Consortium. Currently, there are twenty-four full member states: Alabama, Arkansas, Arizona, Colorado, Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, and Virginia. Associate membership in V-TECS is open to the military services and other agencies or organizations.

V-TECS products and services are available at a discount in member states. Resources may be applicable to the following requirements of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act: (1) developing a core set of outcomes and measures of performance against which learning, competency gains, and competency attainment are compared; (2) developing students' individualized education programs; (3) implementing articulation agreements for Tech Prep programs; and (4) developing sequential courses of study. mcw

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Southern Association of Colleges and Schools
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Work Keys

Work Keys, a program still in development, is intended to be a national system for teaching and assessing employability skills. It has four essential, interactive components: (1) a systematic process for profiling individual jobs according to specific skills they require, (2) tests and assessment procedures for measuring a person's job-related skills, (3) innovative formats for recording and reporting assessment results, and (4) instructional materials and resources directly related to skills that are profiled and assessed. The program will be especially useful in addressing the needs of high school students who are neither college bound nor in traditional vocational programs, in postsecondary institutions, employer-sponsored training programs, and second-chance training programs such as JTPA. It is designed to ease transitions from one environment to another and help eliminate barriers that discourage individual growth and development.

In addition to reading, writing, and computation skills, Work Keys will assess such general employability skills as problem solving (critical reasoning); scientific reasoning; organizational effectiveness (leadership); interpersonal, negotiation, and teamwork; listening and oral communication; self-development and motivation; and ability to learn. It will also help individuals develop needed skills in all of these areas.

When completed, Work Keys may be used to determine a person's levels of competency in a broad array of skill areas and then match them with the requirements for specific jobs. The system as envisioned will be implemented mainly through state departments of education and state postsecondary education agencies and institutions, as well as in employee training.

American College Testing is developing Work Keys in cooperation with employers, state education agencies, and the American Association of Community and Junior Colleges. The system will be ready for pilot testing within a couple of years. It will be field tested in the workplace; designated community, junior, and technical colleges; and other postsecondary institutions before it is introduced more widely. mcw

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Work Keys
ACT National Headquarters
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Iowa City, IA 52243
(313) 337-1409
The following clearinghouses provide specialized information and technical assistance to teachers, administrators, counselors, policymakers, parents, students, and others interested in the issues of serving special populations in vocational education programs. Available services may include information responses by letter, telephone, or electronic interaction; access to a computer-based information network; individualized computer searches; specialized projects; conference presentations; and telephone consultations. Publications may include the following: newsletters, bibliographies, monographs, journal columns and articles, fact sheets and resource papers, resource directories, and referral lists.

**ERIC Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE)**
The ERIC Clearinghouse provides comprehensive information services in adult and continuing education; career education, childhood through adult; and vocational and technical education. Publications include in-depth reviews, *Digests* that summarize information on selected topics; *Trends and Issues Alerts* that provide information on emerging trends and issues; and *Practice Application Briefs* that are based on research findings. Services include computer searches and referrals. Judy Wagner, Assistant Director for Dissemination
ERIC/ACVE
Ohio State University
1900 Kenny Road
Columbus, OH 43210-1090
(614) 292-4353
(800) 848-4815
FAX: (614) 292-1260

**ERIC Clearinghouse for Science, Mathematics and Environmental Education (ERIC/SMEE)**
ERIC/SMEE gathers literature on mathematics, science, and environmental education at all levels, and within these three subject areas on the following topics: development of curriculum and instructional materials; teachers and teacher education; educational programs; learning theory/outcomes (including the impact of parameters such as interest level, intelligence, values, and concept development upon learning in these fields); research and evaluative studies; media applications; and computer applications. Robert W. Howe, Director
ERIC/SMEE
Ohio State University
1200 Chambers Road, Room 316
Columbus, OH 43212-1792
(614) 292-6717

**ERIC Clearinghouse on Reading and Communication Skills (ERIC/RCS)**
The focus of this ERIC/RCS is to collect and process information regarding reading, English, and communication skills, pre-school through college; educational research and instruction development in reading, writing, speaking, and listening; identification, diagnosis, and remediation of reading problems; speech communication, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, speech sciences, and theater; and the preparation of instructional staff and related personnel in these areas. Also included are Carl Smith, Director
ERIC/RCS
Indiana University
Smith Research Center
2805 E. 10th Street, Suite 150
Bloomington, IN 47405-2373
(812) 335-5847
diagnostics and remedial reading services in schools and clinical settings and the preparation of reading teachers and specialists. The RCS Newsletter is free of charge. A list of publications is available upon request.

The Foundation Center
The Foundation Center is an independent, nonprofit clearinghouse established in 1956 to provide the general public with comprehensive information on foundation and corporate grant resources. Free access to its resources and services are offered through four Center-operated libraries in New York; Washington, DC; San Francisco; and Cleveland; and more than one-hundred seventy-five Cooperating Collections nationwide. Information is systematically categorized, allowing users to identify potential grant sources with a record of giving or a stated interest in a particular field. As well as maintaining current information on over thirty-thousand foundations, their philanthropic histories and sample grant awards, the Center also maintains a publications program featuring over one-hundred titles on issues related to philanthropy and other nonprofit concerns. Contact the New York office for an updated list of the Center-operated libraries and a current publications list. jeb

National Dropout Prevention Center (NDPC)
NDPC gathers, analyzes, and distributes information to individuals and groups involved in school dropout prevention efforts. NDPC's intention is to significantly diminish the dropout rate in schools by helping to develop public-private partnerships between schools, businesses, and communities to meet the needs of at-risk youth. NDPC publishes the quarterly National Dropout Prevention Newsletter, A Series of Solutions and Strategies serial, and numerous topical publications. It maintains the FOCUS database on dropout prevention. NDPC also manages the National Dropout Prevention Network, a membership-based organization of over twenty-five thousand professionals involved in school dropout prevention efforts. The annual National Dropout Prevention Conference is a major activity of the Network. jeb
National Tech Prep Clearinghouse of Resources
Committed to sharing information, curriculum, and resources to assist in implementing Tech Prep programs defined in the Carl D. Perkins Vocational Education and Applied Technology Act, the Clearinghouse provides promotional samples, orientation videotapes, state definitions and guidelines, speeches and presentations, curricular planning models, 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 at Berkeley; Center for Occupational Research and Development; Tech Prep Consortium; and U.S. Department of Labor. jeb

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NNCCVTE, East Central Region
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Computer-based information networks provide immediate online communication, electronic bulletin boards, and database services. These networks are an efficient method of communicating with other school districts, agencies, clearinghouses, and institutions of higher education and keeping abreast of the latest legislation, programs, funding, resources, and other pertinent information concerning relevant issues in education.

ADVOCNET
The National Center for Research in Vocational Education (NCRVE), University of California at Berkeley, manages ADVOCNET, a national electronic mail system linking adult, vocational, and technical educators, administrators, and others. The service features teleconferencing, message exchanges, and bulletin boards. The network serves to inform the vocational community nationwide about meetings, workshops, conferences, new products, and other information of special interest.

ADVOCNET provides access to people and information throughout the nation in a variety of ways including communicating with other users effectively; sending messages to many users at once by using mail distribution lists; composing messages on your personal computer and uploading them, or composing messages online; sending data files or formatted documents, even spreadsheets and word processing documents, to other users; accessing news and information services and online database services, including VECM, RIVE, and ERIC; and posting and reading ADVOCNEWS bulletin board items on a variety of subjects. ADVOCNEWS is an electronic bulletin board to be used by ADVOCNET members. Announcements and requests can be posted in many categories, including meetings, jobs, special needs, new products, legislation, and requests.

All that is needed to access ADVOCNET is a personal computer or terminal, modem, phone line, and subscription through BT North America Inc., the vendor. Technical assistance is available toll free from NCRVE and from the vendor. Online help, an interactive online tutorial, and printed documentation is also available to users. For subscription information, contact BT North America, Inc., 2560 N. First Street, P.O. Box 49019, San Jose, CA 95161-9019, (800) 872-7654. sck

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NCRVE
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SpecialNet

The world's largest computer-based information network for education professionals, SpecialNet consists of three parts: electronic mail, bulletin boards, and databases. It provides easy communication for classroom teachers to administrators in county, state, and federal offices of education. More than forty national bulletin boards including Independent Living, Litigation, LRE, Program Eval, and Voced. Transition are available, along with over fifty active state bulletin boards. SpecialNet's databases consist of several types, including specialized databases such as Program Evaluation and topical databases which include archived information taken from many SpecialNet bulletin boards and stored so users can locate information on a specific topic. SpecialNet is available twenty-four hours a day, seven days a week, through virtually any telephone in the United States and Canada, as well as seventy additional countries worldwide.
Databases, which are generally offered as separate online information retrieval services, provide a wealth of pertinent information regarding special needs populations to interested parties.

**EdLINC**
Through EdLINC (a national network offering free services to professionals in resource media, information, library and service centers), teachers, administrators, students, and allied educational professionals are able to find current information on instructional materials and school products such as tests, software, books, multimedia, computer and audiovisual equipment and school supplies.

It provides up-to-date information through the EdLINC Database, an electronic catalog information service that helps educators find the most appropriate materials to match their needs quickly and easily. It provides a membership directory to encourage interaction, a monthly newsletter, and a national annual convention as well. The professional goal of EdLINC is to further better education through better information. jeb

**ERIC**
Sponsored by the Office of Educational Research and Improvement (OERI), ERIC is designed to provide users with ready access to primarily English language literature dealing with education. It does so through a variety of products and services that include databases, computer searches, abstract journals, microfiche, document reproduction, and analyses and syntheses. This database maintains the world's largest education database that covers all aspects of education and is accessible in most state, university, and large city libraries in at least one of four formats: (1) manual indexes, (2) microfiche collection, (3) online service, and (4) CD-ROM retrieval system. jeb

**National Information Center for Educational Media (NICEM)**
NICEM covers the entire spectrum of non-print media intended for use in the educational field from preschool to graduate and professional school levels and for vocational training. Librarians, curriculum planners, media specialists, educators, and trainers, researchers can select from among thousands of programs available through a variety of producers and distributors.

---

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EdLINC
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NICEM
Publishing Division, Access Innovations, Inc.
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All subject areas that apply to learning are included in the database. Heavily covered subject areas include vocational and technical education, special education, and guidance and counseling. NICEM continues to acquire and collate information from a number of sources, including producer and distributor catalogs for nonprint materials, the Library of Congress media centers, colleges, universities, and libraries.

**Research in Vocational Education (RIVE)**

RIVE is a specialized database covering ongoing and recently completed projects in the field of vocational education. It also indexes the products and reports resulting from those projects. Special emphasis is given to the research, personnel development, and curriculum development activities funded under the Carl D. Perkins Vocational and Applied Technology Education Act.

RIVE includes descriptive abstracts of most project proposals. Projects in all fields of vocational education are covered including adult education, basic skills education, bilingual vocational education, gifted and talented programs, curriculum development, personnel development, job placement, and rural education.

Researchers may avoid duplication of effort by looking through RIVE before applying for federal or state funds. It may be used to study trends in funding such as amount or duration of study. RIVE may also be used by vocational education professionals to identify new developments and projects.

The database is available through BRS Information Technologies. Many larger libraries subscribe to BRS and conduct searches on request. NCRVE also conducts searches for clients. NCRVE works with state program improvement officers and the federal Office of Vocational and Adult Education to maintain the content of the database. BRS and NCRVE also provide technical support to database users. For subscription information, contact BRS Information Technologies, Inc., 8000 Westpark Drive, McLean, VA 22102, (800) 289-4277. sck
TASPP Computerized Information Base
TASPP has designed a computerized information base for practitioners, researchers, and policymakers regarding vocational education programs for special needs populations. Custom designed information searches are made available at no charge on topics such as transition, at-risk youth and adults, limited English proficient students and immigrants, students with disabilities, teen pregnancy, rural and urban education, and integrating vocational and academic education.

Entries contained in the base include the following: reference materials including the most recent research reports, monographs, state reports, organizational initiatives, program development manuals, journals, and newsletters; organizations, associations, and agencies; centers for educational information/services including curriculum centers, clearinghouses, computer-based information networks, and databases; names and addresses of contact persons in state and national agencies, associations, and organizations; and exemplary programs/practices identified by the TASPP staff. This computerized information base is accessible by writing or calling the TASPP staff at the above address and telephone number.

Vocational Education Curriculum Materials (VECM)
VECM is a comprehensive, centralized database of information on curriculum materials. Its development was the result of a cooperative effort by the six Curriculum Coordination Centers (CCCs) of the National Network for Curriculum Coordination in Vocational Technical Education (NNCCVTE) and NCRVE.

Only current vocational and technical curriculum materials with national availability appear in VECM. About 6,000 records of both print and nonprint materials (including about 1,100 microcomputer courseware entries) are now in the database, and the number is continually increasing. An important recent emphasis has been on the entry of information on curriculum materials for special needs populations.

Each VECM entry includes title, date, sponsoring agency, developer, subject matter classification, educational level, intended user, student target population, description of the print or nonprint materials, copyright restrictions, and availability.
The database is available through BRS Information Technologies. Many larger libraries as well as the NNCCVTE subscribe to BRS and conduct searches on request. NCRVE also conducts searches for clients. The CCCs and NCRVE continue to build and maintain the VECM database. All vocational and technical educators are encouraged to contribute information about curriculum materials. For subscription information, contact BRS Information Technologies, Inc., 8000 Westpark Drive, McLean, VA 22102, (800) 289-4277.
TASPP receives frequent requests for model programs serving special populations. This listing contains a selection of those models and/or practices which are related to issues in the 1990 Perkins Act and are designed to assist educational personnel to better serve students with special needs.

**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 finish thirty-two 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 Falls and the University of North Dakota. It stresses hard science, computer skills, and the human side of management. It is designed primarily to prepare graduates for entry level positions in the Federal Aviation Administration and the aviation industry. This aviation program has a stated goal of achieving the highest concentration of females in any aviation program in the nation.

**California Compact**
A strategy designed to promote academic achievement and career readiness with an emphasis on reaching minority and at-risk students, the California Compact establishes joint selection of measurable K-12 educational improvement goals by local school, business, and higher education representatives. It is cosponsored on the state level by the California State Department of Education, the California Chamber of Commerce, and the California Business Roundtable. These cosponsors provide school districts or county offices of education with necessary training, technical assistance, and materials. The long range goal of the Compact is to provide incentives and support so that every student in the state is prepared to enter a career or postsecondary institution upon graduation from high school.
The Compact is based upon clearly stated, measurable goals and unites existing partnerships by giving them the purpose of preparing students to meet established standards. Successful implementation includes a focus on employability, basic, academic, and vocational skills; individualized student attention; adequate financial aid; and personnel development. Components of the Compact are (1) high academic standards, (2) higher education opportunities, (3) program assessment (4) job preparation, (5) job development, and (6) staff training and incentives.

Creating Dropout Alternatives (Project C.D.A.)

Project C.D.A. provides Coeur d'Alene, Idaho, students who cannot succeed in the traditional high school a fully accredited alternative to the regular school system. Once enrolled, the at-risk students who have been referred by school district counselors, health and welfare agents, or the judicial system, choose from a varied curriculum which includes Applied Technology, Math, Science, and Communications; vocational education; and a hands-on approach to learning.

The program's low student/teacher ratio, innovative teaching styles, individual instruction, and day-care facilities help create a nurturing, caring atmosphere. Additionally, students are an integral part of all facets of the school's operation, including hiring new staff. The program's success is evidenced by an average dropout rate of thirteen percent (many of whom return to the school later) and follow-up data on graduates indicating that on the average, only about six percent were unemployed or on public assistance.

The program was identified as exemplary in the 1990 National Recognition Program for Exemplary Vocational Education Programs Serving Special Needs Populations.

Educational Excellence Through Career-Vocational Education

Disadvantaged youth comprise the highest proportion of California high school dropouts. Integrating vocational and academic education is a promising technique for addressing the reading, communications, and math deficits that affect the academic success of this group. This technique also fosters closer working relationships among teachers. The Educational Excellence Through Career-Vocational Education Project, active at eight high school sites, has integrated vocational and academic subject matter while also...
instituting business and industry partnerships, supplying employability skills development training, and offering support services.

The project facilitated unique approaches to improving schools and the programs and services available to all students. Those schools incorporating more of the forty-two project objectives saw the most dramatic results. Dropout rates decreased by five percent at a comprehensive school and by 9.7% at a vocational magnet school. One comprehensive school that instituted Accelerated Learning for high-risk students saw referrals to continuation schools drop from 200 per year to 20, and out of 500 students enrolled in the new program, only seven dropped out. Another school observed that attendance rates increased by 1.8%, teen pregnancies decreased by 50%, and suspension days decreased by 84%. 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 express an interest in a technical curriculum both at the high school and postsecondary level. Sandhills Community College provides thirty scholarships annually for Tech Prep students. sck

Lifelong Options Program
Lifelong Options is a comprehensive program designed primarily for students in grades eleven and twelve that maximizes students’ chances of success in school and beyond. Six components comprise the program: (1) applied academic instruction offered in small classes, with accelerated instruction in reading, writing, and math through computer-assisted programs and tutoring; (2) innovative occupational instruction options allowing students to acquire skills in an occupational interest area in a community-based education program, a school-based business, or an on-the-job training program; (3) intensive counseling to provide personal and career guidance, both one-on-one and in group settings; (4) employability instruction delivered through teacher-student interactions and computer-assisted programs, along with school-community-business partnerships; (5) life-coping skill instruction.
to help students develop abilities in decision making, communication, conflict resolution, and goal setting; and (6) physical education and recreational team activities to enhance self-esteem and appreciation of leisure activities.

The program has been successfully implemented in a suburban career center, a rural alternative school, and an urban school-within-a-school. It uses a nationally validated, cost-effective, self-report instrument that identifies students who are truly at risk of not gaining the occupational and academic skills necessary to contribute to the global economy. Staff development is provided in student identification, affective behavior, learning styles, stress management, and program evaluation.

Planning and Integrating Basic Academic Skills into Vocational Teacher and Counselor Education Curricula

The goal of this federally-funded project is to develop, field-test, and disseminate two sets of preservice curricula to assist educators and counselors in integrating basic academic skills into vocational education. One set of materials will be designed for use by vocational teacher educators; the other will be for vocational counselor educators.

A four-step process will be used. First, two Working Groups (teams of national experts) will assist project staff in all phases of materials development. The second step will involve the development of two reviews of theoretical and empirical literature—one in vocational teacher education and one in vocational counselor education. The third step will be a series of eighteen on-site reviews. Each will undergo a nomination and assessment process to ensure that basic academic skills are being integrated into the preservice curriculum. Finally, a comprehensive analysis of the literature review and on-site research data will be used to develop draft sets of preservice curricula. These will be competency-based and organized for individualized instruction with adults and at-risk groups, as well as with mainstream vocational and counselor education students.

To field-test the draft curricula, an additional eighteen sites will be selected. The final stage of this project will be a national distribution of these curricula through publications and conference presentations.

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Nancy Hartley, Project Coordinator
Planning and Integrating Basic Academic Skills into Vocational Teacher and Counselor Education Curricula
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School of Occupational and Educational Studies
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(303) 491-1124
Skills and Academics Grant Education (SAGE)
A joint venture since 1981 between the Metro Area Vocational-Technical School District and Oklahoma City Schools, SAGE has served as an alternative high school for students classified as at-risk of not graduating from high school. In 1990, this cooperative effort was given the Governor’s Excellence Award. The program is designed to integrate general education and vocational training to assist students in recognizing the relationship between academics and the world of work.

This unique school offers both vocational and academic programs. The seven vocational programs are (1) Auto Service Technology, (2) Business Technology, (3) Building Maintenance, (4) Carpentry, (5) Distributive Education/Marketing, (6) Motorcycle Technology, and (7) Welding. Academic programs offered include Mathematics, Language Arts, Science, and Social Studies. In addition, a Learning Resource Center is available for remedial support in reading and math. All classes use individualized instructional methods with maximum student-to-teacher ratios of fourteen to one. Students are referred to SAVE from the seven Oklahoma City district high schools. Support services available include a non-traditional career counseling.

Statewide Workshop on Strengthening Secondary (6-12) Programs—Challenge 2000: Focus on Student Performance
Designed by the Virginia Department of Education, Challenge 2000 is a three-year initiative focusing on integrating vocational and academic skills in the secondary program. The objective is to assist school divisions in developing a plan for implementing an interdisciplinary-team approach to improve the delivery of career guidance, counseling, and instruction to students in grades 6-12 that will motivate students to higher achievement levels and promote appropriate career decisions.

Each school division involved in the process sent a six- to eight-member team which included a guidance counselor, principal, academic teacher, vocational teacher, division superintendent, director of vocational education, key instructional leader, and/or guidance supervisor. Upon submitting a plan and budget for activities, school divisions were given a minigrant of $2,000 for planning and implementing activities. Three workshops were held with assistance given to one hundred school divisions on the implementation and
development of a plan to integrate vocational and academic skills. Integration strategies used in Virginia pilot sites and in sites at other southern states served as a basis for the workshop. The workshop sessions focused on such strategies as developing programs of study, counseling students, setting higher expectations for students in vocational and academic courses, offering applied academic courses, assessing students needs, and relating student needs to occupational needs in the future. jeb

**Vocational Education Project**

The Center for Law and Education’s Vocational Education Project is a nationwide effort to help low-income students and communities by redirecting vocational education programs to better meet the long-term needs for education, employment, and community development. It is based on a belief that vocational programs should provide broad, long-term skills which enable students to exercise more control over their lives and participate actively in running their communities. The project seeks to provide not only solid academic and other transferrable skills to students, but also opportunities for students and community organizations to participate in diversifying and changing the local economy and creating jobs.

The project involves a mix of local, state, and federal strategies to achieve these goals. A major strategy is to seek comprehensive implementation and enforcement of certain key provisions of the Carl D. Perkins Vocational and Applied Technology Education Act which are designed to assure that vocational programs give students extensive and transferable knowledge and experience in all aspects of the industry they are preparing to enter, and enhance their academic and problem-solving skills in the vocational setting.

The project offers support to students, parents, and community organizations in several demonstration sites around the country, to help them work with other parties to reshape their local and state vocational programs. The project will also conduct monitoring and advocacy at the federal level, and prepare publications and research.

**Center for Law and Education**

Paul Weckstein, Director
Lauren Jacobs, Project Attorney
Vocational Education Project
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Washington, DC 20002
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Work, Achievement, and Values in Education (WAVE)
The WAVE program is a four-level, competency-based curriculum designed to help at-risk youth in grades 9-12 to improve their prospects for academic and personal success. Specifically, WAVE endeavors to reduce absenteeism, improve grades, and enhance self-esteem for at-risk youth including dropouts, pregnant and parenting teens, and adjudicated youth. WAVE students learn about the world of work and the connections between school and work in a variety of classroom and experiential activities. WAVE consists of a comprehensive curriculum, a teacher-training package, and motivational and leadership activities for students. It is designed to be effective as a separate program and/or operate in conjunction with existing dropout prevention programs. Ongoing technical assistance is provided by the Work, Achievement, Values, and Education staff (formerly known as 70001 Training and Employment Institute). mcw

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501 School Street, SW, Suite 600
Washington, DC 20024-2754
(202) 484-0103
(800) 274-2005
FAX: (202) 488-7595
NNCCVTE is a nationwide network of six curriculum coordination centers sponsored by the U.S. Department of Education, Office of Vocational and Adult Education. The network promotes sharing of curriculum, professional development of state and local educators, research in curriculum design methodology, and coordination of development among states.

East Central Curriculum Coordination Center
Rebecca Douglass, Director
Sangamon State University, F-2
Springfield, IL 62794-9243
(217) 786-6173 (Secretary to the Director)
(217) 786-6375 (Library Services)
(800) 252-IVCC (in IL)

States served are Delaware, District of Columbia, Illinois, Indiana, Maryland, Michigan, Minnesota, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin.

Midwest Curriculum Coordination Center
Richard Makin, Contact Person
Oklahoma Department of Vocational and Technical Education
1500 W. 7th Avenue
Stillwater, OK 74074-4364
(405) 743-5192
FAX: (405) 743-5142

States served are Arkansas, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, and Texas.

Northeast Curriculum Coordination Center
Martha J. Pocsi, Director
Catherine R. Liapes, Assistant Director
New Jersey State Department of Education
Division of Vocational Education
Crest Way
Aberdeen, NJ 07747
(908) 290-1900
FAX: (908) 290-9678

States served are Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Puerto Rico, Rhode Island, Vermont, and the Virgin Islands.
Northwest Curriculum Coordination Center
Bill Daniels, Director
Judy Noll, Coordinator
Saint Martin's College
Old Main, Room 478
Lacey, WA 98503
(206) 438-4456
FAX: (206) 459-4124


Southeast Curriculum Coordination Center
Rebecca Love-Wilkes, Director
Ronda Cummings, Librarian
Mississippi State University
Research and Curriculum Unit
P.O. Drawer DX
Mississippi State, MS 39762
(601) 325-2510
FAX: (601) 325-3296

States served are Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Western Curriculum Coordination Center
Lawrence F. H. Zane, Director
Barbara Luckner-Loveless, Associate Director
University of Hawaii at Manoa
College of Education
1776 University Avenue, Wist 216
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(808) 956-6496
FAX: (808) 956-3374

States and regions served are American Samoa, Arizona, California, Commonwealth of the Northern Marianas, Federated States of Micronesia, Guam, Hawaii, Nevada, Republic of the Marshall Islands, and the Republic of Palau.
STATE VOCATIONAL AND TECHNICAL EDUCATION CURRICULUM CENTERS

The curriculum centers identified in this section generally act as research, referral, and resource centers by providing free services to the vocational educators and administrators of each state. The resource center’s staff responds to requests in all vocational subject areas including agriculture, business/distributive education, health, home economics, special needs, cooperative education, and industrial arts, plus the vocational education concerns of gender equity and guidance. Bilingual and Native American resources are also being added to the resource collection. Specific services available from each center vary, but generally include workshops in curriculum development and use, reprinting/production and dissemination of curriculum and instructional materials.

ALABAMA
Vocational Curriculum Research, Evaluation Center
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Ten regional educational laboratories were established by the Office of Educational Research and Improvement (OERI), U.S. Department of Education, to focus on school improvement throughout the United States. The labs are responsible for applied research; development; and technical assistance for educators, parents, and decisionmakers. The educational improvement mission of the labs is facilitated through five functions: (1) working with other regional organizations to apply research and improve schools; (2) assisting state-level policymakers on the implications of education research and practice for policies and programs; (3) conducting applied research and developing materials, programs, and publications that support the mission of school and classroom improvement; (4) collaborating with other laboratories, research centers, and national associations to extend and enhance related research and development; and (5) developing effective internal management, governance, planning, and self-evaluation, as well as reviewing regional needs and developments.

Appalachia Educational Laboratory (AEL)
AEL serves as the regional educational lab for Kentucky, Tennessee, Virginia, and West Virginia. AEL operates the following eight projects: (1) Classroom Instruction program (teachers), (2) School Governance and Administration program (school administrators and school board members), (3) Colleges and Schools program (colleges for teacher education), (4) State Policy program (policymakers), (5) Information Services program (direct services to educators), (6) Community Liaison to Urban Education program (underrepresented groups), (7) Rural, Small Schools program (rural citizens and educators), and (8) Rural Excel program (with State Education Agency and Local Education Agency personnel).

Under the Community Liaison to Urban Education program, the concerns, interests, and special needs of underrepresented groups are assessed and addressed in AEL's program and activities. The Rural, Small Schools program provides information about promising current practices and seeks to set up technology-based networks of local schools with college libraries. The Rural Excel program works with state and local educators to develop, test, and produce appropriate new learning materials and processes for rural schools. AEL also operates the ERIC Clearinghouse on Rural Education and Small Schools, and publishes The Link newsletter. A publications catalog is available upon request. jeb
Far West Laboratory for Educational Research and Development (FWL)
The main focus of this lab is on school improvement throughout the United States. Services include instructional development, staff training analysis and design, organizational design, evaluation, research, technical writing, and information dissemination. Products include program guidelines, handbooks, manuals, resource directories, information catalogs, audiovisual materials, curriculum models and materials, institutional designs, conference proceedings, and evaluation and research reports. FWL also participates in research, development, and technical assistance projects on such topics as essential skills, experience-based career education, staff development, and initiatives to improve opportunities for minority and female students. jeb

Mid-Continent Regional Educational Laboratory (McREL)
McREL serves as the regional educational laboratory for Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming. Its purpose is to create a community of interest among those individuals and organizations interested in learning how to help schools meet the needs of an ever-changing society. The key strategy McREL uses is to identify and encourage the use of knowledge that improves education.

Examples of activities include studies of special populations, such as, urban dropouts, students in small schools, and Native Americans and Hispanic youth, to identify potential educational problems; networks of people with common interests in urban schools, equity, and higher education; a state policy and trends database which provides basic information on education issues; and strategies for improving services to small, rural schools. McREL’s Equity Center works to increase access to quality education for all students and spreads information to increase awareness of equity issues and identify successful programs for reducing bias and stereotyping. Acting as a clearinghouse, the Equity Center links a computerized database on twenty major equity issues to potential users.

Publications include the McREL Update newsletter; Noteworthy, an annual magazine; Heartland, the newsletter of McREL’s Equity Center; and Policy Notes, a bimonthly summary of issues relevant to educational policymakers. sck
North Central Regional Educational Laboratory (NCREL)
NCREL designs its work to meet needs related to educational research and development and provides information and services to a region that includes Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Assessment of the needs of educators and policymakers in the region have revealed issues in the following three program areas: (1) improving curriculum and instruction to ensure that all elementary and secondary students acquire capabilities necessary for functioning in the twenty-first century; (2) enhancing educational professions to attract, develop, and reward excellence among classroom teachers, school administrators, and other education professionals; and (3) strengthening school partnerships to broaden participation in educational improvement efforts by parents, policymakers, and community leaders.

NCREL’s activities work toward the improvement of education for students in elementary and secondary schools by networking specific groups of educators and policymakers, promoting conferences, and providing specific staff development information and assistance. Activities have addressed rural issues, school restructuring, reading improvement, educational improvement, literacy, policy study and analysis, at-risk students, and rural education. The Clipboard newsletter is published for NCREL’s service area.

Northwest Regional Educational Laboratory (NWREL)
Servicing the states of Alaska, Idaho, Montana, Oregon, and Washington, NWREL conducts applied research and provides development and technical assistance to educators, parents, and decisionmakers, designed to improve outcomes for children, youth, and adults. The Northwest Report newsletter serves NWREL’s service area.

Pacific Region Educational Laboratory (PREL)
The purpose of PREL is to help schools improve educational outcomes for children, youth, and adults. This purpose is carried out by assisting educators, families, government, community agencies, business, and labor in maintaining cultural literacy and improving quality and equality in educational programs and processes. This is accomplished through forums, research, technical assistance, evaluation, training, information resource activities, and product and...
procedure development and/or dissemination. PREL serves Pacific children and educators in American Samoa, Commonwealth of the North Mariana Islands, Federated States of Micronesia, Guam, Hawaii, Republic of the Marshall Islands, and Republic of Palau. jeb

**Regional Laboratory for Educational Improvement of the Northeast and Islands**

The Regional Laboratory for Educational Improvement of the Northeast and Islands serves the area of Connecticut, Maine, Massachusetts, New Hampshire, New York, Puerto Rico, Rhode Island, Vermont, and the Virgin Islands. A variety of programs and activities in three broad initiatives support a unifying theme. Designing Schools for Enhanced Learning is a multifaceted technical assistance and action research initiative designed to promote a fundamental reconceptualization of student and school success. A Regional Policy initiative supports policy development and implementation activities in areas related to maintaining a quality educator workforce in the region. School Improvement Services offers information, training, consultation, and other services to a wide variety of clients. The *Regional Lab Reports* is a topical newsletter published three to four times per year about some aspect of making schools work for the success of all students. jeb

**Research for Better Schools (RBS)**

RBS serves Delaware, District of Columbia, Maryland, Pennsylvania, and New Jersey. RBS conducts research and policy studies on key education issues including assessment, at-risk youth, school-to-work transition, and critical thinking; develops improvement approaches and services for schools; provides consultant services to state leaders; develops products for special populations; and participates in national networking activities with other regional laboratories to enhance the use of products and knowledge. RBS publishes a newsletter, *RBS Project Brief*, which is disseminated nationally. sck

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SouthEastern Regional Vision for Education
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The mission of SERVE is to provide leadership, support, and research to assist state and local efforts in improving educational outcomes in the Southeast region, especially for students at risk and rural students. SERVE represents a coalition of business leaders, governors, policymakers, and educators who are seeking systemic, lasting improvement in education. The states involved in the consortium are Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina.

SERVE proposes to address critical issues that are shared throughout the region, work as a leader and catalyst to promote systemic educational improvement, serve as a broker of exemplary practices and state-of-the-art research, and become an invaluable source of information for existing organizations working to promote educational improvement. To improve educational outcomes, especially for at-risk students, SERVE has scheduled the following five annual areas of emphasis: (Year 1) improve math, science, and computer education; (Year 2) provide safe, drug-free schools; (Year 3) increase the graduate rate; (Year 4) improve student achievement and citizenship; and (Year 5) expand adult literacy and lifelong learning.

Examples of research/development activities SERVE will conduct include developing and field-testing a rural school-business partnership model and network; developing site-based accountability models and local measures of effectiveness; studying the effects of incentive programs on reducing dropout rates and on improving school conduct, academic achievement, and attendance of identified at-risk students; and evaluating the impact of videocommunications and other telecommunications technology on rural school education. SERVE will conduct and disseminate topical research, technical assistance, and other products via teleconferences, videotapes, satellite downlinks, public broadcasting, interactive videodisc technology, and through a network of rural education professionals.
Southwest Educational Development Laboratory (SEDL) serves the states of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. This OERI lab exists to challenge, support, and enrich educational systems in providing quality education for all learners.

SEDL has identified a series of six goals: (1) promote effective home-school-community connections that foster success for at-risk students, (2) improve transition from early childhood education to elementary school, (3) promote leadership and facilitate change for education professionals, (4) ensure that state-level policy is informed by research on best practices, (5) support rural school technology and initiatives for rural students at risk, and (6) improve the achievement of at-risk students in math and science. SEDL also administers a minority internship program; functions as a Center for Language Minority Population Projects and as Texas' Title VII Multi-Functional Resource Center; conducts Paso Partners, a staff development program for LEP instructors; and operates a Regional Rehabilitation Exchange, providing information and technical assistance on exemplary vocational rehabilitation programs for adults in transition to employment and independent living. jeb
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