#### DOCUMENT RESUME

ED 407 528 CE 073 927

TITLE School-to-Work and Economic Development. Resource Bulletin.
INSTITUTION National School-to-Work Opportunities Office, Washington,

DC.

PUB DATE Jan 97 NOTE 8p.

AVAILABLE FROM National School-to-Work Office, 400 Virginia Avenue, S.W.,

Room 210, Washington, DC 20024; 800-251-7236; fax: 202-401-6211; World Wide Web: http://www.stw.ed.gov.

PUB TYPE Information Analyses (070) EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS \*Articulation (Education); Career Education; Community

Development; \*Cooperative Programs; \*Coordination; \*Economic

Development; \*Education Work Relationship; Educational Cooperation; Job Skills; \*Labor Force Development;

Postsecondary Education; Secondary Education; Standards;

Vocational Education

#### ABSTRACT

This bulletin focuses on the integration of school-to-work systems into a comprehensive set of economic development services that can help address a critical need articulated by businesses, spur economic growth, and equip young people with the skills necessary for further learning and work. It first describes these strategies to integrate school-to-work in economic development initiatives: coordinate services with economic development organizations; encourage the development of groups of businesses with common training needs; target high-growth industries; develop a system of skill standards; and broaden economic opportunity. The next section highlights two effective practices: (1) Chem Tech, a 4-year school-to-work initiative in Pennsylvania that begins in high school and concludes with an associate degree; and (2) Oregon's Opportunity, a project designed to enable and organize business, labor, and community participation in locally based education, work force development, and economic development strategies. Contact and address information for the effective practices is provided. The bulletin lists eight organizations that can provide further information on the topic. Brief summaries describe the organizations focus and activities. Nine resource publications are listed. (YLB)

\*



0





U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

JANUARY 1997

# **School-to-Work and Economic Development**

The United States became a world economic power by utilizing mass production systems that required only a small percentage of employees to have postsecondary education or high-level occupational skills. For the front line workers, very little education and few skills were necessary to perform the repetitive tasks of mass production. Today, global economic forces and rapidly emerging technologies are dramatically changing the economic environment in which American businesses and workers compete. Success in the rapidly changing economy requires new business structures and processes characterized by flexible uses of technology and new forms of work organization that reduce hierarchy and encourage the involvement of workers in decision-making. Increasingly, the success of a business depends on the knowledge, skills and abilities of all its workers. In order for American businesses to regain a competitive advantage and to create high-skill, high-wage jobs, workers must be able to learn quickly, solve problems, work in teams, and take on many other responsibilities formerly handled by managers.

These new demands on American businesses and workers have significant implications for economic development initiatives. Over the past several years, economic development initiatives have expanded from their traditional realm of keeping the cost of doing business low through financial incentives to incorporate a market-driven approach that provides services identified by businesses to help them compete in the global economy. Instead of simply working to attract businesses and jobs, economic development initiatives are providing services businesses need to develop high-skill, high-wage jobs in their chosen locale.

The School-to-Work Opportunities Act provides a timely response to one of the primary concerns of businesses across the nation--the need for a highly skilled workforce. School-to-work initiatives provide the framework for an enhanced form of education that links learning in the classroom with learning in the workplace. School-to-work emphasizes concepts such as teamwork, critical thinking, and project-based approaches to learning that match the skills required in high-performance workplaces. The integration of school-to-work systems into a comprehensive set of economic development services can help address a critical need articulated by businesses, spur economic growth, and equip young people with the skills necessary for further learning and work.

This bulletin provides strategies to integrate school-to-work in economic development initiatives. This information is followed by a list of organizations and publications that can provide further information on school-to-work and economic development.

**BEST COPY AVAILABLE** 

## **Strategies**

Coordinate services with economic development organizations. While school-to-work initiatives offer potential benefits to both individual businesses and local economies, many economic development organizations do not consider school-to-work as a resource that can contribute to the success of their overall mission. Encouraging organizations that provide economic development and business assistance to incorporate school-to-work as an integral part of their services can greatly enhance efforts to build a skilled workforce. As a complement to management and technology assistance, and to fill the need for a highly skilled workforce, school-to-work systems can become an important part of the array of services provided by economic development organizations.

One example of an economic development initiative that is working to integrate school-to-work within the context of manufacturing modernization is the National Institute of Standards and Technology's Manufacturing Extension Partnership (MEP), an initiative of the U.S. Department of Commerce. MEP is a network of 78 extension centers across the country dedicated to helping smaller manufacturers become globally competitive. MEP centers provide a range of services to these companies, from work process redesign and plant layout to workforce development. As employers encounter difficulty in hiring skilled entry-level workers, school-to-work initiatives become a valuable resource to help companies address their workforce needs. Linking employers to school-to-work systems is one critical element of MEP's comprehensive approach to helping firms modernize and strengthen their competitive position.

MEPs have worked with school-to-work systems in collaborative planning, building awareness in the community about career opportunities available in manufacturing, aligning with targeted growth industries, arranging work-based learning opportunities, and developing electronic training provider networks and distance learning technologies. The Workforce Program also encourages the centers to develop formal partnerships with school-to-work and workforce development systems to provide businesses with seamless access to management, technology, and human resource development assistance.

Encourage the development of groups of businesses with common training needs. Many small- and medium-sized companies do not have sufficient resources to develop training programs for current or entry-level workers. An organization or association of businesses in a particular industry can serve as a facilitator for businesses to identify common member needs, establish training programs, and form partnerships with school-to-work systems.

The Corporation for Business, Work, and Learning in Massachusetts has worked with a group of plastics producers to develop a training program for current workers and students who may be interested in a career in the plastics industry. With the Corporation's assistance, the Berkshire Plastics Network Training Program combined the strengths of the Berkshire Regional Employment Board, the Berkshire Community College, the Berkshire Plastics Network, the Department of Employment and Training, and three local School-to-Work Partnerships in order to deliver an integrated, industry-driven training program for high school, entry-level and currently employed plastics workers. Their collaborative venture has placed 34 individuals in the plastics industry and advanced the skills of 180 current plastics and paper employees of local companies.



3

Target high-growth industries. Many new high-skill, high-wage jobs come from growing industries such as telecommunications, health care, and high-technology manufacturing. Targeting economic development and school-to-work initiatives in these industries helps to fulfill the demand for skilled workers and increases the chance that graduates of school-to-work will get a job in their field. Targeting high-growth industries also allows states and communities to concentrate their resources on a defined target, creating a greater chance of producing meaningful results.

**Develop a system of skill standards.** Skill standards provide a mechanism for employers to articulate the skills necessary in the workplace to educators and students, reducing the mismatch between what students are taught in the classroom and what they will need to know in the workplace. A credential associated with attainment of skill standards can provide employers with information about students' skills and abilities, reducing the cost of screening and hiring students. Skill standards can also help businesses improve their human resource management systems, and can be particularly useful in job descriptions, incentives, and compensation systems.

The National Skill Standards Board (NSSB) was established in the Goals 2000: Educate America Act to serve as a catalyst for the development and implementation of a national system of voluntary skill standards and certification. The Board has recently identified the broad occupational clusters in which skill standards and certificates will be developed, and is working to develop a mechanism to endorse the standards developed by partnerships across the nation. While the NSSB is engaged in national standards efforts, many states are progressing with independent skill standards initiatives. States are incorporating skill standards in systemic education reform by integrating standards into program and curriculum design, performance measures, and occupational licensing and regulation processes.

Broaden economic opportunity. For school-to-work practitioners in high-poverty areas there may be opportunities to coordinate with community economic development programs and resources that are channeled into those areas. These initiatives focus on building comprehensive, community-wide systems that incorporate education, economic development, and employment and training. School-to-work systems can be a key element of efforts to develop a comprehensive education and training system that can serve students, out-of-school youth, adult learners, and employees of partner businesses.

Community economic development efforts place particular emphasis on building a system that links different programs and initiatives, and the role of community-based organizations (CBOs) in these systems. CBOs are important in these systems because schools and economic development agencies often lack the time and expertise to manage the variety of programs, interests, and institutions involved in developing community partnerships. CBOs can use their experience in employment training and the established relationships with employers to help design and implement school-to-work initiatives. They can also serve as work-based learning sites and provide links to community service initiatives to help ensure the participation of at-risk youth. A new federal initiative that represents this approach is the Empowerment Zone/Enterprise Community initiative.

The Empowerment Zone and Enterprise Community (EZ/EC) initiative provides opportunities for school-to-work systems to expand their scope and serve a greater number of at-risk and out-of-school youth. The EZ/EC initiative is designed to create self-sustaining, long-term economic development in areas of

pervasive poverty, unemployment, and general distress, and to demonstrate how these communities can achieve self-sufficiency through an alliance among private, public, and nonprofit entities. The EZ/EC communities benefit from technical assistance in strategic planning, partnership building and leadership development, grants for expanded social services, tax credits to spur job creation, entrepreneurial initiatives, small business expansion, and job training. EZ/EC funds have been used to develop career awareness and job readiness programs, entrepreneurial training, mentor programs, operate alternative schools, and a variety of other school-to-work related activities.

#### **Effective Practices**

Chem Tech is a four-year school-to-work initiative in Pennsylvania that begins in high school and concludes with an associate degree, with a broad-based structural curriculum focusing on mathematics, science, technology and communications. Students prepare to continue their learning after high school in an entry-level technical career in the chemical industry. The curriculum exposes students and teachers to the work environments of chemical process companies through a variety of work-based activities, including teacher internships and job shadowing, internships, and summer jobs for students. The Southwestern Pennsylvania Industrial Resource Center (SPIRC), a NIST Manufacturing Extension Partnership site and recipient of a local school-to-work grant, the American Chemical Society, approximately 20 Southwestern Pennsylvania chemical companies, and nine secondary and four postsecondary institutions have joined together to develop and implement Chem Tech.

Chem Tech operates as part of the Southwestern Pennsylvania School-to-Work Consortium. The Consortium is a regional coordinating body that builds upon and enhances its members' existing school-to-work efforts by creating a regional school-to-work infrastructure. The Consortium provides assistance to locally organized partnerships in 13 counties that constitute a state and locally defined economic development region. The Consortium has established industry cluster committees, and supports local partnerships through technical assistance and information networks. Chem Tech is part of an effort to expand the chemical industry in the region, one of six major industry clusters targeted for economic growth. SPIRC provides staff support to Chem Tech and to the larger Consortium effort.

**Oregon's Opportunity** is a joint project of the Workforce Quality Council, which oversees the state's school-to-work activities, and the Oregon Economic Development Department. The project is designed to facilitate and organize business, labor and community participation in locally-based education, workforce development, and economic development strategies. The three-year project, which started in 1994, is funded by the Northwest Area Foundation and the Oregon Economic Development Department with Oregon lottery funds. The project works to build the capacity of business and labor to participate in initiatives such as: setting skill standards and developing curriculum, providing structured work experiences for high school students, and engaging in activities to upgrade the skills of workers and modernize work organization practices. One of its explicit aims is to communicate Oregon's workforce and economic development vision and agenda through products, messages and concrete activities. Now in its third year, the project has implemented three initiatives, one focusing on entrepreneurial initiatives, another working with labor organizations to facilitate worker involvement in school-to-work and other productivity improvement strategies, and an information brokering program for training and business assistance needs.

### FOR MORE INFORMATION ABOUT THIS TOPIC, CONSULT THE FOLLOWING RESOURCES:

#### **Effective Practices**

Chem-Tech, Southwestern Pennsylvania Industrial Resource Center: Jeanne Berdik, 4516 Henry Street, Pittsburgh, PA 15213 ★ (412) 687-0200.

Oregon's Opportunity, Oregon Economic Development Department: Mimi Maduro, 775 Summer St., NE, Salem, OR 97310 ★ (503) 235 8223.

## **Organizations**

Corporation for Business, Work, and Learning is a new organization formed from the Bay State Skills Corporation and the Industrial Services Program to provide economic and workforce development services to the Commonwealth of Massachusetts. The Corporation provides services that promote business modernization, economic growth, and opportunities for gainful and fulfilling employment. 101 Summer Street; Boston, MA 02110-1203 ★ (617) 292-5100.

National Alliance of Business (NAB) is an independent, business-led, nonprofit corporation established in 1968 to promote partnerships among business, labor, government, and education to develop and maintain a world-class American workforce. NAB is a leading force in bringing business and education together to improve the quality of the workforce. NAB's school-to-work services consist of technical assistance, product innovation, and on-site program development. 1201 New York Avenue, NW, Suite 700, Washington, DC 20005-3917 ★ (202) 289-2888.

National Association for Industry-Education Cooperation works to improve collaboration between the employment community and schools in education reform, workforce preparation, and economic development. 235 Hendricks Blvd., Buffalo, NY 14226-3304 ★ (716) 834-7047.

National Association of Manufacturers (NAM) works to enhance the future competitiveness of manufacturers by shaping a legislative and regulatory environment conducive to industrial development and economic growth, and to increase the understanding of the importance of manufacturing to America's economic strength. NAM has developed an interactive CD-ROM to introduce students to the manufacturing sector, and published study on ways that communities can encourage job creation through realization of how modern manufacturing can spur economic growth. 1331 Pennsylvania Avenue, NW, Suite 1500 - North Tower, Washington, DC 20004-1790 ★ (202) 637-3000.

National Center for Industrial Competitiveness (NCIC) was formed as an innovative non-profit corporation to respond to the economic development needs of the Great Lakes Region. The goal of NCIC is to drive long-term economic growth and job creation by leveraging new and existing businesses, technology, training, information, and funding. 3155 Research Boulevard, Suite 203, Dayton, OH 45420 ★ (513) 253-1777.

National Coalition for Advanced Manufacturing (NACFAM) is an organization whose mission includes technical and training assistance to firms and organizations seeking to bolster their high performance processes and to apply them to industrial modernization and other technology applications. NACFAM offers firms

and organizations access to a national network of information and resources which provide solutions to workforce and process problems. 1331 Pennsylvania Avenue, NW, Suite 1410 North; Washington, DC 20004-1703 ★ (202) 662-8960.

National Skill Standards Board (NSSB), created by Title V of the Goals 2000 legislation, has been charged with promoting a "national strategy to enhance workforce skills, including school-to-work transition." The mission of the NSSB is to encourage the creation and adoption of a national system of skill standards which will enhance the ability of the United States to compete effectively in the global economy. 1441 L Street, Suite 9000, Washington, DC 20005-3521 ★ (202) 254-8628.

NIST Manufacturing Extension Partnership, a U.S. Department of Commerce initiative, is providing a growing network of services to assist smaller manufacturers become globally competitive. A range of products and services is available for extension centers working with small manufacturers through the MEP's Workforce Program, Building 301, Room C121, Gaithersburg, MD 20899-0001 ★ (301) 975-5020.

#### **Publications**

Appelbaum, Eileen, and Rosemary Batt. High Performance Work Systems: American Models of Workplace Transformation. Washington, DC: Economic Policy Institute, 1994.

Berryman, Sue E., and Thomas R. Bailey. *The Double Helix of Education and the Economy*. New York: The Institute on Education and the Economy, 1992.

Committee for Economic Development. *American Workers and Economic Change*. New York: Committee for Economic Development, 1996.

Competitiveness Policy Council. A Competitiveness Strategy for America. Washington, DC: U.S. Printing Office, 1993.

Goosman, William F. Learning How to Compete: Workforce Skills and State Economic Development Policies. Denver, CO: National Conference of State Legislatures, 1995.

Jobs for the Future. School-to-Work and Community Economic Development: Identifying Common Ground. Boston, MA: Jobs for the Future, 1996.

Marshall, Ray, and Marc Tucker. *Thinking for a Living: Education and the Wealth of Nations*. New York: Basic Books, 1992.

Office of the American Workplace, U.S. Department of Labor. High Performance Workplace Practices and Firm Performance. Washington, DC: U.S. Department of Labor, 1993.

Stillman, Joseph. Making the Connection: Economic Development, Workforce Development, and Urban Poverty. New York: The Conservation Company, 1994.

### For additional information, please contact:

# The National School-To-Work Learning and Information Center

400 Virginia Avenue, Room 210 Washington, DC 20024 Phone: 1-800-251-7236

Fax: 202-401-6211

E-mail: school-to-work-lc@ed.gov Internet: http://www.stw.ed.gov



#### U.S. DEPARTMENT OF EDUCATION

Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



# **NOTICE**

# **REPRODUCTION BASIS**

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

