

# From Michigan's School-to-Work to Career Preparation System: How do we know it's working?

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system is currently funded at a level of \$24 million a year. These funds have been used to develop an array of programs and services, as well as to support regional coordination through the state's Education Advisory Groups. After five years of funding, it is useful to take stock, asking what we know about the impact of these investments, and in particular what we have learned about the effectiveness of Michigan's career preparation programs.<sup>2</sup>

The Career Preparation System was sparked by the state's involvement in the Federal School-to-Work Opportunities Act (STWOA) of 1994. The STWOA provided more than \$1.5 billion nationwide and aimed to help young people develop the skills needed in the workforce and make better connections to careers through school-to-work transition systems, which fostered partnerships among schools, employers, and others.

The State of Michigan developed its Career Preparation System in 1997 to improve the school-to-work transitions of its residents, striving to ensure that the educational system prepares students for higher education and successful competition in the job market. The system is designed to give students opportunities to explore a variety of careers throughout their K-12 education. Specific goals of the Career Preparation System as outlined in the state's Career Preparation System Overview <sup>1</sup> are: 1) To ensure that career preparation is fully integrated into the Michigan education system; 2) To ensure that all students, with their parents, will be prepared to make informed choices about their careers; and 3) To ensure that all students have the types and levels of skills, knowledge, and performance valued and required in their education and career choices.

Under the School Public Aid Act, this

<sup>&</sup>lt;sup>1</sup> Michigan Department of Career Development (February 2001). Career Preparation System Overview. Lansing, MI.



<sup>&</sup>lt;sup>2</sup>For a more complete look at school-to-work evaluation in Michigan, go to www.epc.msu.edu.

Michigan was one of the first eight states to receive federal money from the STWOA in 1994. From 1994 to 2001, Michigan received more than \$50 million

of federal STWOA funds to develop and support local and statewide school-to-work initiatives.

#### Challenges of School-to-Work

School-to-work initiatives in Michigan struggled to find broad-based support. State representatives and educators alike reported one struggle of the early school-to-work initiative was communicating the mission of the initiative to parents and to some educators who feared that school-to-work was an occupational program and did not promote or support college-bound programs, high academic achievement, or professional careers. In addition, funds for school-to-work in Michigan were funneled through the local Workforce Development Boards, former Private Industry Councils reorganized by the state in 1996 to oversee the planning and delivery of service for the state's workforce development programs. In their initial phase, the state's 25 Workforce Development Boards were made up primarily of business and community people, and educators were accountable to those boards for the use of the school-to-work funds. In areas of the state where school and business relationships were strong, such as Macomb and Kalamazoo counties, these initiatives had more support. In other areas, educators and employers struggled to find common ground, and educators saw the initiative as a work-based program.

How local districts implemented school-to-work systems was largely left up to the districts themselves. As a way to share the best practices that came out of local districts, the state hosted an annual school-to-work conference. These best practices were used by the state in the implementation of the current Career Preparation System.

# A New System of Career Preparation

In 1997, Governor John Engler articulated the design of a state-wide Career Preparation System and the legislature supported the system with a revision to the School Public Aid Act. The Career Preparation System incorporated the aims of the school-to-work initiative, but broadened the scope of activities, participants, and goals. Figure 1 provides a schematic description of Michigan's Career Preparation System. The diagram represents the flow of resources and processes that serve customers of the Career Preparation System, resulting in student achievement in academics, workplace readiness, career competency, college and career placement, and employer satisfaction.

Michigan's Career Preparation System calls for schools to provide curriculum that emphasizes application of academics, opportunities to provide all students with career exploration and guidance, and general employability and technology skills. The system also calls for the majority of high school programs to coordinate with postsecondary programs at community colleges and four-year institutions across the state. The voluntary system sets out guidelines for schools to follow in order to have access to state Career Preparation funds.

Figure 1: Michigan's Career Preparation System

#### Resource

#### Collaboration

Workforce Development Boards/Education Advisory Groups **Education Agencies** Business/Industry/Labor Parents State/Federal Government Community Agencies

Articulation Agreements

#### **Financial**

Local State Federal Private Sources

# **Physical**

Facilities Equipment Materials

# **Delivery System**

School Districts Area Career Centers Trade Academies Community Colleges Colleges/Universities Private/Proprietary Schools Distance Learning **Dual Enrollment** 

# **Data/Information**

Labor Market Information Standards Assessment data Placement data Curriculum materials **Education Research** 

# Customers

- ♦ Learners
- Parents
- ♦ Business/Industry
- ♦ Others Identified Locally

#### **Process**

# **Academic Preparation**

♦ Career Contextual Learning

# Career Development

- Career Pathways
- ◆ Comprehensive Guidance and Counseling
- ♦ Career Awareness/Exploration
- ♦ Career Assessment
- ♦ Educational Development Plans

# Workplace Readiness

- ♦ Career & Technical Education
- ◆ Tech Prep
- ♦ Community College
- ♦ College/University
- ♦ Military
- ♦ Technical/Trade/Proprietary School

#### **Work-Based Learning**

♦ Work-Based Learning Techniques

# Accountability

♦ Data/Evaluation/Accountability

# **School Improvement**

◆ School Improvement Planning

#### **Customer Needs**

#### Learners

- ♦ Knowledge
- ♦ Skills
- Positive Attitudes
- ♦ Certification/Diplomas
- ♦ Advanced Education
- ♦ Employment

#### **Parents**

- ◆ Learner Achievement
- ♦ Program Operations
- ♦ Responsive System

# **Business/Industry** Needs

- ♦ Competent Employees
- ◆ Positive Work Ethic/ Attitudes
- ◆ Teamwork Skills
- Communication Skills
- ♦ Industry-Based Credentials
- ♦ Willing Learners
- ♦ Receptive to Change ♦ Self Management

# **Results Indicators**

# **Credentials**

- ♦ Academic Endorsements
- Passports/Certificates
- ♦ Licensure
- ♦ Degrees
- Associates
- ♦ Baccalaureate

# **Results**

- ♦ Student Achievement
- Academics
- Workplace Readiness
- ◆ College/Career Placement







◆ Career Competency

**Employer Satisfaction** 



Two of the major elements in the state's Career Preparation System that developed from elements of the school-to-work initiative are Career Pathways Programs and Education Development Plans for secondary students. The Career Preparation System defines Career Pathways as "broad groupings of careers that share similar characteristics and whose employment requirements call for many common interests, strengths, and competencies." Each Career Pathways curriculum area covers state academic standards, but does so within the context of career areas, in an effort to increase the relevance of material to individual student interests. The state has defined six Career Pathways in the Career Preparation System. They include: Arts and Communication; Business Management, Marketing, and Technology;

Engineering/Manufacturing and Industrial Technology; Health Sciences; Human Services; and Natural Resources and Agriculture.

The Career Preparation System also calls for Education Development Plans (EDPs)

#### Is it Working?

In terms of participation, the state's efforts to build a Career Preparation System are succeeding, based on figures reported in the 1999-2000 Michigan Department of Career Development Progress report. In 1998-99, 90 percent of Michigan school districts participated in voluntary Career Preparation programs. In addition, more than 60 of the state's high schools during the

for every secondary student in the district. These plans must include: personal information; career pathway goals; educational/training goals; career assessment results; plan of action; and parent/family consultation and endorsement for students under the age of 18.

As the development of the Career Preparation System was underway, there was an effort by the state to address the concerns of educators who saw past and current school-to-work efforts as work-based. In 1998, the state redesigned its system of Workforce Development Boards to include Education Advisory Groups (EAGs). EAGs are advisory committees made up of academic and career technical educators from intermediate and local school districts as well as representatives from business and industry. Money for career preparation activities is now funneled through the state's 25 EAGs, which require a plan from school districts as to how money will be used and how the local efforts will support the regional vision for career preparation.

2000-2001 school year were in the process of implementing Career Pathway programs. Finally, according to the district educational plans reported to the State of Michigan, 88 percent of the state's school districts have committed to implementing Education Development Plans for each secondary student and developing a Career Pathways curriculum by 2004.

However, less is known about the effects career preparation initiatives have on students. Michigan, along with the other initial seven states, took part in a Mathematica Research, Inc. study of the STWOA initiatives. The study indicated students in school-to-work programs receive more training and are employed in a broader range of industries than other students in paid positions. However, as Neumark and Joyce <sup>3</sup> point out, because the Mathematica study relied on non-random selection of students, it could be that students who gravitate toward school-to-work experiences are the most likely to pursue the kind of training and jobs reported in the study, regardless of their participation in school-to-work initiatives. Other than the information provided to the national study, Michigan did little evaluation of its school-to-work system.

The state does collect annual surveys of its Career and Technical Education students, but these surveys do not tie outcomes directly back to K-12 career awareness and career training activities as defined in the Career Preparation System or the school-to-work initiative. A few local initiatives, however, have attempted to assess the effect of career preparation activity on student outcomes. For example, a report distributed by the Berrien County

Intermediate School District<sup>4</sup> indicates that the district's adoption of the Career Pathways model led to a large increase in student enrollments in math and science courses and career and technical education. Reported data also indicate significant increases in the number of students enrolling in postsecondary education either as high school students through dual enrollment or as graduates. These data, which coincide with the implementation of Career Pathways and Education Development Plans, suggest that the career preparation activities have had a positive effect on students' post-secondary enrollment and career preparation. However, without further study to isolate the cause of these increases, it is difficult to attribute these increases solely to the implementation of Career Pathways and Educational Development Plans.

Likewise, research collected on the impact of the Education for Employment programs in Kalamazoo County indicates that K-12 career preparation activities affect students' career and education decisions.<sup>5</sup> Data on education and employment, and qualitative interviews with students, indicate the EFE programs help students

<sup>&</sup>lt;sup>3</sup> Neumark, David and Mary Joyce (2001). Evaluating School-to-Work Programs Using the New NLSY. *The Journal of Human Resources*, vol. 36, no. 4, pp. 667-702.

<sup>&</sup>lt;sup>4</sup> Rudy, Dennis W. (2001). Career Pathways, A Reform Model for K-12 Education. New Buffalo, MI: Lakehouse Evaluation.

<sup>&</sup>lt;sup>5</sup> Hollenbeck, Kevin, and Noyna DeBurman (August 2001). Assessment of Kalamazoo County's Education for Employment (EFE) Programs, Using 2001 Survey Data. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

make postsecondary and career decisions. However, without any data on students who are not in EFE, it is impossible to say whether these students are better off than those not in the career preparation program.

Nevertheless, Berrien County, Kalamazoo County and Macomb County are areas where data are being collected to try to determine the effectiveness of K-12 career preparation activities. However, most areas in Michigan have not invested much if any money in tracking the effects of these efforts. While reports from Berrien and Kalamazoo county present promise of the effectiveness of career preparation activities on students, an investment of \$24 million a year into the Career Preparation System - in an increasingly constrained budget - requires more systemic evaluation.

The need for more evaluation of the Career Preparation System does not come as a surprise to the staff at the Michigan Department of Career Development, which oversees the Career Preparation System. The MDCD recognized the need for more evaluation and recently developed an accountability committee for the Career Preparation System. In order to assess the effectiveness of the career preparation activities on Michigan students, it is important that the accountability committee move toward formal, systemic evaluation of the

Career Preparation System, including Career Pathways and Educational Development Plans.

#### Recommendations

To effectively determine whether the state's Career Preparation System is producing better-prepared students who are making better career decisions and experiencing better career outcomes, evaluation studies should compare outcomes for students who have participated in these activities with outcomes for comparable students who have not participated in these activities. If, for example, youth labor markets are improving at the same time that career preparation activities in schools are expanding, it may be that it is the improvement in labor markets, not the career preparation activities, that is making a difference to youth employment. Using control groups to determine the cause of the effect will help educators and state policy makers understand the true impact of the Career Preparation System.

Michigan has moved aggressively to create an impressive structure for the implementation of school-to-work, and one that is apparently reaching many students. However, our state of knowledge regarding the causal impact of the Career Preparation System-that is, assessing the extent to which school-to-work transitions are improved relative to what would have occurred in the absence of this system-is lacking.

The state is on the right track with the reported development of a career preparation accountability committee. But given the amount the state invests annually in the Career Preparation

System, Michigan should not delay efforts to formally evaluate its efforts, including the development of more rigorous evaluations of career preparation activities in Michigan.



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