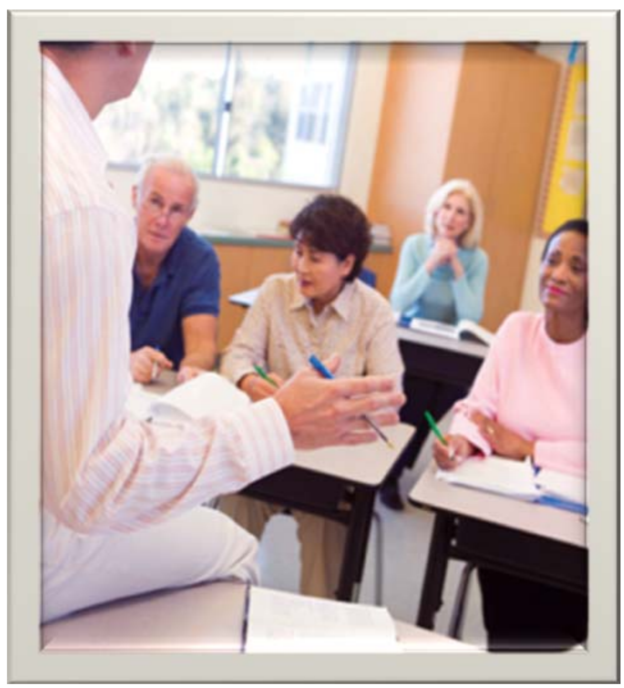
BUILDING BRIDGES FOR CAREER PATHWAYS IN MICHIGAN

6

2011

EVALUATION, CONTINUOUS IMPROVEMENT, AND EXPANSION OF CAREER PATHWAYS

MICHIGAN DEPARTMENT OF ENERGY, LABOR, AND ECONOMIC GROWTH



THESE MATERIALS WERE DEVELOPED UNDER A FEDERAL GRANT AWARDED BY THE MICHIGAN DEPARTMENT OF ENERGY, LABOR & ECONOMIC GROWTH.

TABLE OF CONTENTS

Overview

As mentioned in previous toolkits, evaluation of your career pathways system and the bridge courses within it is an ongoing process. If your region is in the early stages of career pathways development, it is critical that you have a thorough evaluation plan developed from the onset. It is similar to "beginning with the end in mind." You need to know your intended destination so that you can properly plan your journey and identify the critical junctures you need to evaluate along the way.

Evaluation of a career pathways system is informed through qualitative and quantitative data. It includes both formative and summative processes. It is similar to evaluation processes you are currently doing. However, the uniqueness of career pathways also includes specific data elements and evaluation processes that you will need to consider.

The purpose of this toolkit is to provide strategies and tools for critical partners to collectively conduct a formative and summative evaluation process and plan for future improvements. It outlines the basic steps for the data needed to assess the performance of students at each program level and track their outcomes when they leave. It also offers guidance on how to assess program effectiveness and how to use the findings to improve program operation and outcomes. This toolkit builds upon the concepts provided in the previous five toolkits. **It is highly recommended that you review these toolkits before proceeding with this one.**

THE IMPORTANCE OF DATA-DRIVEN DECISION MAKING

Identifying Data Needs

Building and evaluating career pathways is heavily reliant on the collection of data that can be used to inform the decision-making process throughout the entire planning, development, implementation, and evaluation phases. The identification of data you will need should be determined at the onset to ensure that you have sufficient information on which to evaluate the effectiveness of your efforts.

Throughout the previous five toolkits, we have suggested a variety of data sources that can be used to guide your development process. The Workforce Strategy Center summarized some of the critical questions to ask at each stage of the development process and possible data sources. These are listed in Tool 6.1 on page 14.

Tracking Student Performance and Outcomes

Obviously, one important component of your evaluation process will involve data collection for tracking student performance and outcomes. The good news is that you are already collecting the majority of the data elements you will need to do this through MAERS or a similar management information system. However, there are a few additional data elements that will be necessary to fully evaluate the impact of your career pathways system on student outcomes.

Demographics: Data elements listed on the next page include the minimum characteristics you will want to collect for each student upon entry into the career pathway. You may also want or need to collect other participant information based on state and/or funding requirements.

Performance: You will want to collect data on performance and participant outcomes, very similar to what you are already doing. However, the table on page 7 lists a few additional items you will want to consider.

Consent Forms: If your program does not already have a process in place, you will want to make sure that students are given the option for signing a consent form to allow you to collect the information you will need to evaluate their participation in the career pathway.

Tool 6.2 on page 17 presents a sample consent form that you can adapt for your use.

DATA ELEMENTS TO COLLECT ON PARTICIPANTS UPON ENROLLMENT

Extracted from *Bridges to Career for Low-Skilled Adults*

Measure	Data Elements
Personal Identifier	• Social security number
Age	• Date of birth
Gender	• Male or female
Race/Ethnicity	• White, African-American, Hispanic/Latino, Asian, or other
Education	• Earned high school diploma? (y/n) • Earned GED? (y/n) • Previously enrolled in job training program? (y/n) - If yes, name of provider, program name, and date enrolled • Previously enrolled in at least one college-level class (y/n) - If yes, college name, program (or course) name, and date enrolled
Recent Work History	• Currently employed? (y/n) - If yes, name of current employer, job title, and one-sentence job - If yes, hourly wage - If yes,hours per week currently working - Receive health benefits from employer? (y/n) • Number of months employed in the past 12 months
Native Language	• Native language is English? (y/n)
Disability	• Disability that would require special support during the program (y/n) - If yes, nature of disability
Education and Career Goals	• Main reason for enrolling in program • Main goal for employment in the next 12 months • Main goal for further education (beyond this program) in the next 12 months
Tested Basic Skills at Entry	• Test reading and math levels

DATA ELEMENTS TO COLLECT ON PARTICIPANT PERFORMANCE AND INITIAL OUTCOMES

Extracted from *Bridges to Career for Low-Skilled Adults*

Measure	Data Elements
Personal Identifier	• Social security number
Start Date	• Date participant started in program
Retention	• Participant successfully completed the program (y/n) - If no, reason for leaving the program
Tested Basic Skills at Completion	• Test reading and math levels, using the same instrument used upon enrollment
Job Placement	• Employed for at least 30 days within 12 months of program completion? (y/n) - If yes, new job held during the program? (y/n) - If yes, start date - If yes, name and address of employer - If yes, job title and one-sentence job description - If yes, hourly wage - If yes, hours worked per week - If yes, receive health benefits? (y/n)
GED Completion	• Completed GED? (y/n/NA)
Certification(s)	• Earned a certification recognized by employers and/or educational institutions? (y/n/NA) - If yes, name of certification and issuing agency
Further Education and Training	• Enrolled in further education and training within 12 months of program completion? (y/n) - If yes, date enrolled - If yes, name of college or school - If yes, name of program and one-sentence description - If yes, participant's goal for the program

HOW WELL IS THE PROGRAM BEING IMPLEMENTED?

As you launch your first bridge courses within your career pathways system, you will obviously want to know how well the program is being implemented. During this **formative evaluation** process, there are three important questions that you will want to address:

1. How well are the courses being taught?
2. How well is the program serving participants after completion?
3. How does the program perform over time compared to similar programs?

How well are courses being taught?

To address this question, your evaluation timeline will include two critical points: (1) half way through the semester or course and (2) the conclusion of the course. By interviewing participants, instructors, and staff, you can identify what is working well and what needs improvement. Make sure that you also interview students who exited the program before completion to find out why they left and what can be done to prevent future attrition.

By adapting questionnaires that you are probably currently using to obtain student and instructor feedback, you can gain helpful information on course content, instructional materials, teaching methods, course scheduling, advising and other support services, etc.

Don't forget to continually examine student attendance and performance data during the course. For example, answering questions such as these will help you to track how well the courses are being taught:

- What percent of the students are attending a minimum of 80% of class sessions?
- What percent of students are still enrolled half way through the course? At the end of the course?
- What percent of students are making progress within the course as evidenced by class assignments, assessments, and projects?

How well is the program serving students after completion?

You will want to learn as much as you can about participants after they complete the program. To do this, you will need a system that involves communication with the students, faculty, and employers. For example,

- Interview course completers who continued to the next step of the academic ladder to gain their perspective on their readiness level for success as they moved forward.
- Interview faculty and support staff at the next level of the academic ladder to identify the strengths and weaknesses they are observing with your bridge course completers.
- Talk with employers who are hiring bridge course completers to gain their recommendations on knowledge and skill competencies that could be improved.

How well does the program perform over time compared to similar programs?

Examine the performance of each bridge course over time. If you are beginning new bridge courses, compare the performance with similar bridge courses you have offered in the past. If you are beginning new bridge courses and have no other similar courses to use, compare the performance, enrollment, and attendance patterns with your existing stand-alone adult education classes. This comparison usually provides very powerful data on the impact of bridge courses compared to traditional adult education classes.

IS THE PROGRAM EFFECTIVE?

At the conclusion of your bridge courses, you will want to conduct a thorough summative evaluation that examines implementation design, costs, and the employment and further education outcomes of the students.

Implementation Design

As you first embarked in your planning process, you designated the main components of the program that you would be evaluating, such as recruitment, program content, duration, support services, employer relationships, etc. During the summative evaluation, you will describe any major changes in program design made during the course of each bridge cycle. Your interviews with faculty and staff will help you to better understand the reasons for these changes. This will also make it possible for you to more accurately compare and contrast outcomes with "before" and "after" courses that have been redesigned.

Costs of the Program

Analyzing the cost effectiveness and return on investment of your bridge courses is an important component of your evaluation design. You will want to analyze the full costs of the program to all partners, including costs for staff, materials, supplies, technology, and administration. While the initial costs of your bridge courses within the career pathway system may be higher at first, they will decrease somewhat over time. Even then, however, the costs may still be higher than some of your traditional adult education classes. Therefore, we highly recommend that you analyze the costs in light of return on investment. In other words, how do the costs compare to such costs as:

- Increased wages as a result of employment
- Increased taxes being paid as a result of employment
- Public assistance savings as a result of students being removed from welfare
- Potential for increased wages as a result of GED completion (compared to high school drop outs)
- Increased earning potential of students continuing with the career pathway for further education and training

By comparing the costs invested in the program with the cost savings and/or increased economic benefits to your region, the return on investment can be substantial.

Participation Outcomes: Further Education

You will need to have a system in place to track further education participation outcomes of leavers (completers and non-completers) from each bridge course or program within the career pathway. This will more than likely involve using data from partner institutions, the state, or the National Student Clearinghouse (for a fee) which collects data on enrollment in undergraduate programs across the country. Obviously, an electronic data-matching mechanism is ideal since it saves valuable time and resources. If such a mechanism is not available to you, you will need to make sure that your memorandum of understanding with your partnering institutions includes access to the data you need to document student movement along the academic ladder. Also, don't forget that this is one of the reasons why the student consent forms are so important.

Participant Outcomes: Employment

Additionally, you will want to collect data on employment and earnings of program leavers (completers and non-completers) for at least eight quarters prior to and eight quarters following program participation. This can be done through unemployment insurance wage records. However, remember that this process will require coordination and cooperation with your local employment security office. This process will also require the matching of social security numbers, an area still being resolved in the state of Michigan.

HOW CAN THE PROGRAM BE IMPROVED?

Continuous improvement of a career pathways system requires a significant ongoing effort on the part of all members of the Adult Learning Collaborative Board and Steering Committee. One of the most important differences in addressing continuous improvement within a career pathways system compared to a traditional adult education system is that improvement is dependent on a larger number of critical partners. Continuous improvement can not and should not be directed by one agency or institution in isolation.

Leadership at all levels and with all partners is essential to sustain this effort and realize the many benefits of creating quality, sustainable career pathways. A true spirit of teamwork is needed to accomplish improvements identified through the evaluation process. Working through teams brings a shared expertise and understanding of career pathways and a mutual commitment to ongoing improvement. Empowering team members to identify improvements enhances the opportunity for professional development and accomplishment.

As you and your partners examine the evaluation data, you will have several questions to address, such as:

- How do we address the changes that need to be made based on the evaluation?
- Are we ready to expand our pilot to additional sites? To additional occupational sectors?
- Do we have sufficient funding and resources to move forward?
- What structures do we need to set in place to continually evaluate our work and make necessary improvements?

As you move forward, here are three points you may want to consider.

Continue to work as a team.

Bring together faculty, staff, and partners to study and discuss the data from the formative and summative evaluation, diagnose the causes of the problems that prevent students from progressing, and decide on ways to modify programs and services to promote student achievement. Make sure that all of the individuals who were closely involved in program implementation (faculty, support services, employers, etc.) have a voice in the direction the program needs to take. Remember: *People don't usually argue with what they help to create!*

Evaluate program modifications.

Evaluation does not end with your initial or pilot projects. Make sure that an ongoing evaluation plan is developed to measure the impact of modifications made as a result of the initial evaluation. Program staff and partners should meet minimally on a quarterly basis to examine data and progress as the career pathways initiative moves forward.

Be willing to shift and re-prioritize.

Funding and resources are limited everywhere. Each of your partners is probably facing budget cuts. Therefore, if additional funding is not available to sustain and expand your career pathways system, you must be willing to examine existing funds and re-prioritize their use. By shifting resources (people, money, facilities) to support bridge programs that prove effective in promoting educational and labor market advancement, you help to ensure that innovations that improve program performance are sustained.

Tool #6.1 Questions and Data Sources

Extracted from *Using Data to Design, Manage and Improve Career Pathways* from the Workforce Strategy Center

SELECTING TARGET INDUSTRY SECTORS:

QUESTIONS

- Which existing or emerging industries are important to the economic future of your region?
- What is the current and projected demand for labor in these sectors? To what extent do the jobs in demand pay wages sufficient to support a family?
- What problems do employers in each sector have hiring, retaining and advancing workers?
- What barriers do residents of your region face to securing the good jobs in demand or advancing to better positions in these industries?
- What education and employment programs related to each sector currently exist in the region? How well are they meeting the demand from employers and enabling residents to enter and advance in these fields?

DATA SOURCES

- State labor market information, including projections, by region
- Industry labor market studies (e.g., employer association hiring studies)
- Census data on workforce demographics (employment by industry, occupation, educational attainment, age, race/ethnicity, and residence)
- Local economic development studies and plans
- Data from state education agencies on test scores and graduation numbers and rates by high school and student race/ethnicity and gender.
- Data from state or federal agencies or local institutions on postsecondary enrollment and rates of remediation by institution and student characteristics
- Data from state or federal higher education agencies on the number of credentials by institution, degree level, field and student characteristics.

MAPPING CAREER PATHWAYS:

QUESTIONS

- What are the requirements for entry and advancement in jobs at different levels in the given industry?
- What changes or additions are needed to existing programs and services to enable residents to enter and advance in jobs in the target sector?

DATA SOURCES

- Interviews/surveys with employers in the target industry
- Task or competency analyses of jobs in the sector
- Interviews/surveys with alumni who are employed in the sector on trends in job demand and requirements, recommendations for program improvement, etc.
- Interviews/surveys with admissions staff and faculty at each level of education and training on requirements for entry and success
- Analysis of placement exams and entry and outcome competencies of education and training programs at each level

IMPROVING RECRUITMENT:

QUESTIONS

- What are the characteristics of students/participants in existing programs in the target sector by age, ethnicity, and place of residence?
- Where do these individuals come from (e.g., directly from high schools, community organizations, employers (incumbent workers), etc.)? What motivated them to enter the given program and what barriers did they face? In general, what are the barriers to access into these programs?
- Are there other sources of students for these programs that are not being tapped? What would it take to recruit students/participants from these sources and prepare them for success in programs in the target sector?

DATA SOURCES

- Student/participant information systems (for data on characteristics)
- Interviews/surveys with current students/participants (for information on barriers and recruitment methods)
- Market studies, including interviews/surveys with prospective students and staff and faculty from “feeder” institutions/programs
- Data sharing with feeder programs (to allow longitudinal tracking from high school to college; adult education to college; non-credit to credit; community college to four-year college; etc.)

INCREASING RETENTION:

QUESTIONS

- What is the rate at which students/participants successfully complete education and training and other preparation for employment in the given sector by program?
- What are the characteristics of completers compared to non-completers?

- What are the course-taking patterns of students/participants from the time they enter the institution? What are the barriers that prevent students from advancing?
- Why do some students/participants not complete? How can barriers to completion be overcome and completion rates increased?

DATA SOURCES

• Student/participant information systems (for data on course-taking patterns and completion rates of longitudinal cohorts)
• Interviews/surveys with current students/participants, dropouts and completers
• Interviews/focus groups with faculty and student support staff

Tool #6.2 Sample Consent Form

Extracted from *Using Data to Design, Manage and Improve Career Pathways* from the Workforce Strategy Center

PERMISSION TO PARTICIPATE IN AN EVALUATION
OF THIS TRAINING PROGRAM

The training program you are in is provided by [NAME OF PROVIDER] with funding from [NAME OF FUNDER(S)]. Both [SHORT NAME OF PROVIDER] and the funding agency(ies) would like to see how effective this program is in helping you and other participants get better jobs and pursue further education and training.

We would like to have your permission to access information on your employment, wages and participation in education and training for use in evaluating this training program. This information is available from state agencies such as the [UNEMPLOYMENT DEPARTMENT AND HIGHER EDUCATION BOARD]. None of the information we collect on you from these agencies will be shared with anyone else, and no one will ever be able to connect this information with you personally.

You do not have to participate in this evaluation. If you choose not to participate, [NAME OF PROVIDER] cannot use information on you to evaluate the program.

Please read the following statement and then sign and date below if you agree to give [NAME OF PROVIDER] access to information needed to evaluate the program.

I hereby give [NAME OF PROVIDER] permission to use the information I have provided and information collected by state agencies on my employment and further education once I leave this training program. I understand that this information will be used to improve the quality of this program for future students, and that I will not benefit directly. All information about me and my job and education outcomes will be kept strictly confidential and will be used for evaluation purposes only. I understand that I do not have to give this information if I do not want to.

SIGNED:

____ ________________________

SIGNATURE **DATE**

____

PRINT FULL NAME

Sources

Women Employed, Chicago Jobs Council, and UIC Great Cities Institute, "Bridges to Careers for Low Skilled Adults," 2005. http://www.womenemployed.org/docs/BridgeGuideFinal.pdf

Workforce Strategy Center Toolkit, "Five Steps to Career Pathways," 2008. http://workforcestrategy.org/images/pdfs/publications/Five_Steps_to_Career_Pathways.pdf

Workforce Strategy Center Toolkit, "Using Data to Design, Manage, and Improve Career Pathways," 2008. http://www.workforcestrategy.info/workforcestrategy.org/images/pdfs/publications/Using_Data.pdf

Workforce Strategy Center Toolkit, "Steps for Evaluating (and Continuously Improving) Career Pathways Programs," 2008. http://www.workforcestrategy.org/images/pdfs/publications/Evaluate_Career_Pathways.pdf