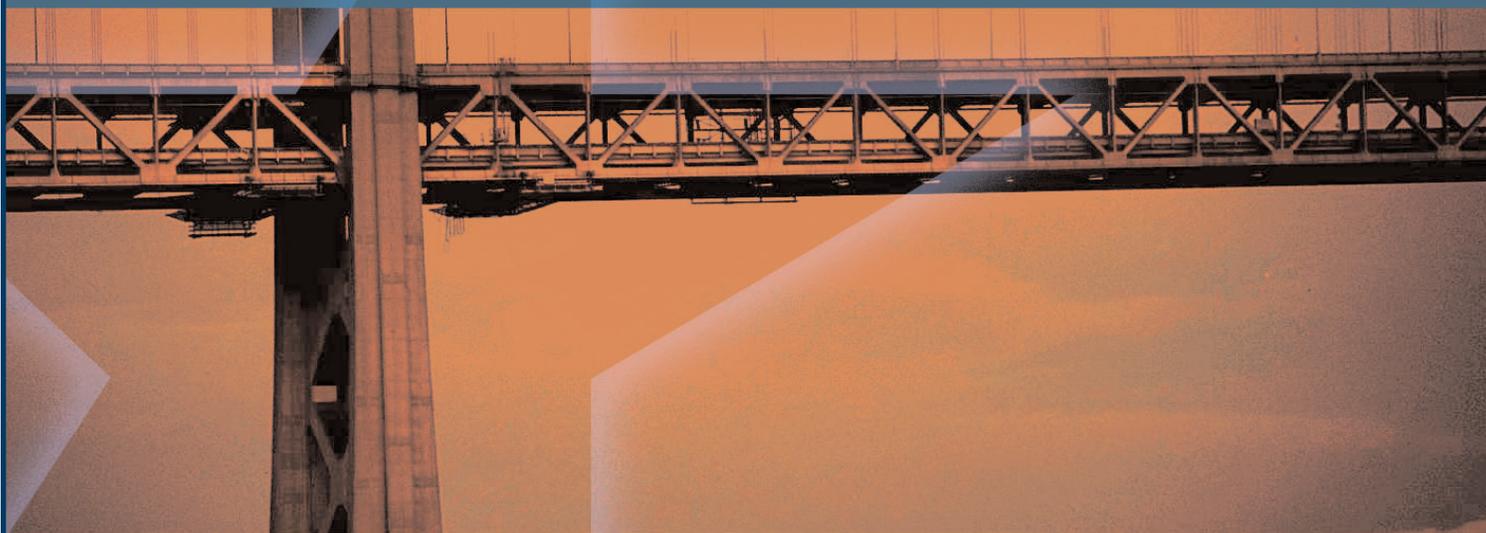


# Career Pathways Toolkit

A new resource for state and local leaders working to expand education, training and learning opportunities for America's current and emerging workforce



*Community College  
Bridges to Opportunity*





# Table of Contents

## **Making the Case for Career Pathways . . . . . 5**

An overview of the function and defining features of career pathways, and why they have emerged as a key economic and workforce development strategy

## **Planning, Building and Fine-Tuning Career Pathways . . . . . 11**

Useful information, ideas and lessons learned about the five critical stages of career pathways development: gap analysis, partnership building, implementation, continuous improvement and expansion

## **Strengthening Leadership and Support for Career Pathways . . . . . 21**

Highlights of policy approaches that have served to advance career pathways development in several states, and guidelines for designing and staging a state or regional Career Pathways Institute

## **Spreading the Message . . . . . 29**

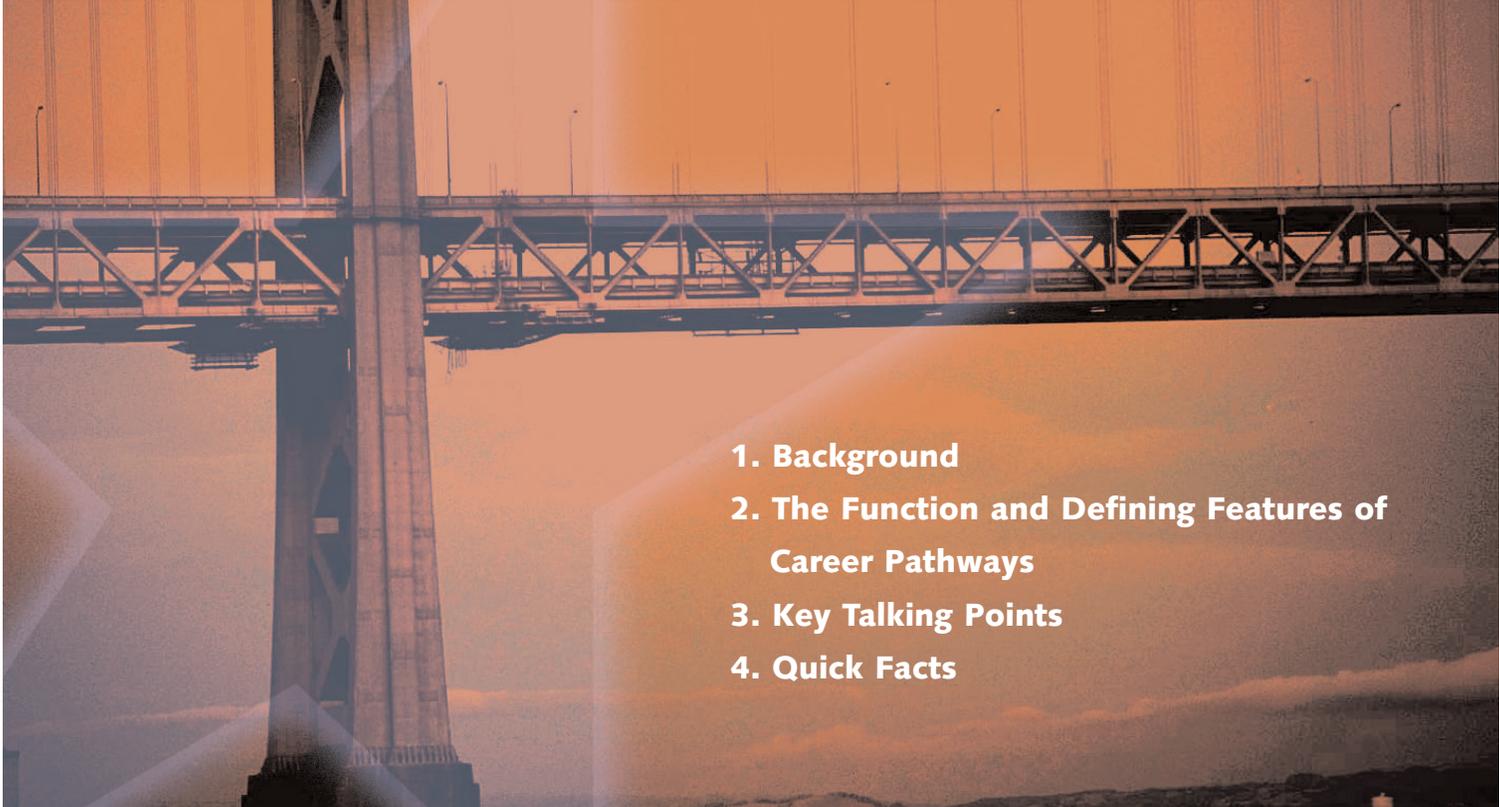
Strategies and tips for using three essential communication/outreach tools: press releases, opinion editorials and PowerPoint presentations

## **Resources . . . . . 37**

A glossary of terms, plus links to useful Web sites, reports and sources of technical assistance



# Making the Case for Career Pathways

- 
1. Background
  2. The Function and Defining Features of Career Pathways
  3. Key Talking Points
  4. Quick Facts



Community College  
Bridges to Opportunity

# Making the Case for Career Pathways

## Background

Today, our nation is competing in a dynamic global economy in which two assets—a skilled, versatile and highly adaptable workforce, and the capacity to nurture creativity, research and innovation – provide the decisive edge.

Technology is transforming the workplace and, in many ways, the nature of work itself. The transition to a knowledge-based economy is fueling demand for well-educated, technically proficient workers—in all sectors, across a wide range of occupations, and even for entry-level positions.

At the same time, potent and converging demographic trends will profoundly affect the size and composition of the U.S. labor force over the next 10 to 15 years—slower overall growth, the retirement of baby-boomers, and the expansion of populations in the workforce that tend to have significant educational and economic disadvantages. Within little more than a decade, then, the United States will find itself with a smaller, less experienced and increasingly under-educated labor force—a major liability in the increasingly competitive global economic race.

Just as worrisome, America has begun losing ground in what the National Center on Education and the Economy's Anthony P. Carnevale calls the “global education race”. Among economically advanced countries, nine now boast a better high-school completion rate. The United States has slipped from No. 1 to No. 4 in postsecondary attainment, and from No. 3 to No. 17 in the percentage of students pursuing science and engineering degrees.

Today, millions of American adults lack the education and skills needed to compete in a postindustrial economy—relegating them to low-wage, low-opportunity jobs with little access to training and retraining programs. The same fate awaits hundreds of thousands of young people who leave school each year without a diploma or ill-prepared for college and the workplace.

In the face of these challenges, career pathways have emerged as a key strategy for enlarging education, training and learning opportunities for America's current and emerging workforce.



## Making the Case for Career Pathways

### The Function and Defining Features of Career Pathways

Career pathways typically comprise an integrated, articulated continuum of programs and services designed to prepare high school students and/or working adults for employment and advancement in targeted industry sectors, fields and occupations.

Unlike short-term job training or “pipeline” programs, career pathways provide opportunities for:

- Development of core academic, technical and employability skills
- Continuing education and training
- Placement in high-demand/high-opportunity jobs
- Vertical and horizontal movement in a career field.

Pathways programs may also include “wrap-around” support services based on the needs of participants: tutoring, career counseling, case management, child care, transportation, financial aid and job placement.

Career pathways specifically target jobs in industries of importance to local or regional economies. The goal is to create avenues of advancement for current workers, jobseekers and future labor market entrants while also meeting local employers’ needs for qualified workers.

Community colleges often play a central role in career pathways because they are uniquely equipped to coordinate occupational training, remediation, academic credentialing and transfer preparation. In an effective career pathway, community colleges work in partnership with other educational entities, workforce and economic development agencies, employers, labor groups and social service providers.

Federal and state agencies and a variety of national organizations are actively supporting the efforts of career pathways partnerships. The U.S. Departments of Education and Labor have framed national institutes around the career pathways model. The Department of Education has funded two major projects over the past several years: Career Clusters and the College and Career Transitions Initiative (CCTI).

States including Arkansas, Kentucky, Ohio, Oregon and Washington have robust career pathways systems with strong gubernatorial and legislative support. Other states such as Florida, New Mexico and Utah have recently featured career pathways at statewide education and workforce system conferences. National organizations including the National Council for Workforce Education, the Association of Community College Trustees, the League for Innovation in the Community College, the American Association of Community Colleges and the Workforce Strategy Center have featured career pathways in much of their work over the last several years.



## Making the Case for Career Pathways

### Talking Points

The following are a set of talking points and quick facts that state and local leaders can use to better explain and make the case for career pathways:

- It makes good sense to tie the available public resources for education and workforce training to the local labor market. Traditional primary and secondary schooling is still critically important, but to succeed educators at all levels should prepare students to compete in the sectors, fields and occupations most critical to local and regional economic vitality.
- The focus of most publicly funded workforce development programs is getting disadvantaged workers a job—usually at the entry level. But these efforts usually stop once workers start working. Employers focus most of their training resources on those who have already advanced beyond the entry level. This leaves a gap in training available for workers who remain at the entry-level.
- Lots of public and private agencies and systems currently train workers, but they rarely work together. By working on parallel tracks rather than together, they limit their reach. Mistakenly many workforce development programs develop their own training strategies, often with private, proprietary schools and bypass community colleges.
- The career pathways approach seeks to bridge the gaps in our education system, and forge stronger connections with employers and industry associations, community-based partners, and economic development, workforce training and social service agencies.



## Making the Case for Career Pathways

### Quick Facts

- While the share of American workers with some education and training beyond high school increased by 20% between 1980 and 2000, it is projected to increase by less than 4% between now and 2020.<sup>1</sup>
- Nearly one-third of the nation's 9th graders leave school without a regular high school diploma. In some urban districts, up to 60% of high school freshmen drop out before the 12th grade. The high school graduation rate has dropped since its 1970 high of 77% and has not improved in 20 years.<sup>2</sup>
- Twenty-eight percent of first-time college freshmen in fall 2000 took at least one remedial course.<sup>3</sup> At community colleges, 42% took at least one remedial course.
- Earnings of workers with a high school diploma or less have declined since the 1970s, while the earnings of those with bachelor degrees have increased.<sup>4</sup> Today, a bachelor-degree holder earns on average 60% more than a high school degree holder.
- Jobs that require education and training beyond high school are the fastest-growing segment of the labor market, expected to account for nearly two-thirds of all new jobs between 2004 and 2014.<sup>5</sup>

<sup>1</sup> Anthony P. Carnevale, "Education and the Economy: If We're So Dumb, Why Are We So Rich?" Education Week, February 2, 2005.

<sup>2</sup> Warford (2006), p.5.

<sup>3</sup> Parsad, B. and Lewis, L. "Remedial Education At Degree-Granting Postsecondary Institutions In Fall 2000," NCES 2004-010, (Washington, DC: Institute for Education Sciences, U.S. Dept of Education, November 2003).

<sup>4</sup> Day and Newburger, "The Big Payoff: Educational Attainment And Synthetic Estimates Of Work-Life Earnings" (Washington, D.C., U.S. Census Bureau, July 2002), 3.

<sup>5</sup> Author's calculations based on U.S Department of Labor, Bureau of Labor Statistics "Occupational Employment Projections to 2014."



# Planning, Building and Fine-Tuning Career Pathways

- 
1. Gap Analysis
  2. Partnership Development and Planning
  3. Implementation
  4. Continuous Improvement
  5. Expansion
  6. Additional Online Resources



# Planning, Building and Fine-Tuning Career Pathways

Career-pathway development partners have come to rely on a five-stage, regionally based process that begins with information gathering, plateaus with the laying of a solid foundation of programs and, when successful, leads to growth and diversification.

Successful design and development of career pathways requires asking the right questions at every stage of the process, and addressing them as systematically and strategically as possible. This section of the toolkit provides useful information, ideas and lessons learned in each of five critical areas: **gap analysis**, **partnership planning and development**, **implementation**, **continuous improvement** and **expansion**.

## Stage 1: Gap Analysis

### Key Question, and How to Address It

*What specific education/training opportunities, options and enhancements are most likely to produce benefits for individuals, employers and communities?*

- Conduct a systematic labor market analysis, identifying industries and fields that offer jobs with family-supporting wages and opportunities for advancement. Broadly collected statistics, such as those from state labor departments, must be supplemented with direct input from employers regarding specific occupational and skill needs.
- Assess the extent to which existing education programs and services are supporting student/worker access and advancement in high-demand fields.
- Identify state, regional, community and partner resources that can be leveraged to fill unmet education and training needs.
- Build customer-oriented relationships with employers, meeting regularly with them to stay abreast of current and emerging market trends.

### Resources and Tools

**Gap Analysis Template:** This Workforce Strategy Center tool guides users through a comprehensive set of questions that, once answered, will enable informed planning efforts.

<http://www.workforcestrategy.org/toolkit/bysection/26>

**Strategic Advantage:** This tool developed by Economic Modeling Specialists Inc. can be used to analyze regional labor-market dynamics. It has the capability to project ripple effects from declining/growing industries, and estimate skill compatibilities between dislocated workers and jobs in growing industries.

<http://www.economicmodeling.com/Default.asp>



## Planning, Building and Fine-Tuning Career Pathways

**Career Pathways Self-Assessment Tool:** Developed by the League for Innovation in the Community College, this tool can be used to analyze institutional capacity among education and training providers. It is found in Appendix B of “Pathways to Student Success: Case Studies from the CCTI.”  
<http://www.league.org/league/projects/CCTI/publications.cfm>

**Employer Interview Protocol:** This tool developed by the Workforce Strategy Center is useful in gathering information from employers. <http://www.workforcestrategy.org/toolkit/bysection/27>

---

### Case Study: Denver, CO<sup>6</sup>

Colorado's success in attracting professional and technical workers from other states masks the educational underachievement of its own young people, particularly Hispanic students. Recognizing the problem, leaders at the Metro Denver Economic Development Corporation (EDC) and numerous partners conducted a series of analyses focused on a few growth industries, seeking to forecast the availability of qualified labor in comparison to demand in target industries; estimating the availability of workers with skills nearly transferable into target industry jobs; and assessing the potential for enhancing regional comparative advantage. The EDC also estimated multiplier effects<sup>7</sup> associated with growth in the four industries.

---

<sup>6</sup> The case studies in this section are drawn from Davis Jenkins and Christopher Spence, “The Career Pathways How-To Guide” (New York: Workforce Strategy Center, 2006).

<sup>7</sup> A multiplier effect occurs when employment growth in one industry impacts growth in other industries. Some industries have larger multiplier effects than others meaning that they impact larger measures of growth in other industries than those with smaller multiplier effects.



## Planning, Building and Fine-Tuning Career Pathways

### Stage 2: Partnership Development and Planning

#### Key Question, and How to Address It

*What partners are needed to build the pathway, and what will be their roles and responsibilities?*

- Identify and engage potential partners, including employers; civic and philanthropic organizations; public and private providers of education, training and social services; and economic and workforce development agencies.
- Develop an agreed-upon goal based on the gap-analysis findings, and clearly define the expected role and contributions of each partner.
- Identify costs and develop a funding strategy.
- Build and broaden support by bringing partners together regularly, and promoting communication and collaboration.
- Establish measurable goals and create a methodology for tracking educational and career outcomes for individuals over time.

#### Resources and Tools

**Career Pathways Template:** This tool enables planners to chart overlaps and transition areas between educational programs at the high school and two-year college levels.

<http://www.league.org/league/projects/CCTI/cp/templates.html>

**Team Self-Assessment Tool:** Career pathways planning teams can use this tool to assess whether, and how, their current practices will be effective in reaching potential career pathways goals.

<http://www.workforcestrategy.org/toolkit/bysection/26>

**Career Pathways: Sustainability Options for Framework Integration and Expansion:** This tool developed by the Workforce Strategy Center outlines potential roles for partners and describes key components of sustainable career pathways. <http://www.workforcestrategy.org/toolkit/bysection/27>

**Career Pathways Strategic Improvement Coalition Self-Evaluation Tool:** This tool was developed by the Center for Occupational Research and Development to help groups of planners assess the status of their continuing and technical education partnerships and programs, and overall readiness to accomplish career pathways objectives. <http://www.cord.org/cpsic15010/>



## Planning, Building and Fine-Tuning Career Pathways

---

### Case Study: Houston, TX

The *Gulf Coast Workforce Board* approaches workforce and economic development efforts with a strong emphasis on employer involvement. The board has identified nine high-growth, high-skill industries including health care, aerospace and energy. In collaboration with the Greater Houston Partnership, the American Petroleum Institute and other business groups, the board brings together employers to identify skills gaps and other workforce needs. Once employers have identified their needs, the board brings in local schools and colleges, workforce providers, economic development agencies, nonprofit agencies and foundations to help craft solutions.

---

### Case Study: Columbus, IN

Pathways work at *Ivy Tech Community College*, one of the 15 College and Career Transitions Initiative (CCTI) sites, began after staff conducted a thorough survey of local employers' workforce needs. Based on the results, the college targeted health care jobs, and leveraged strong pre-existing relationships with health care industry employers to create a pathway in conjunction with local high schools, Columbus Area Career Connection (a group of career and technical schools) and Indiana University Purdue University Columbus (IUPUC). The survey had revealed demand for central service technicians, who sterilize and prepare surgical equipment—a job for which there was no formal training available in the region. In response, the Surgical Technology program was developed in 2000. Over the past several years, the pathways effort has spurred additional partnerships that create opportunities for students and workers from the high school through baccalaureate degree levels.

---

### Case Study: Corning, NY

The Tech Prep office at Corning Community College, another of the CCTI sites, seeded the *Central Southern Tier Tech Prep Consortium*. The consortium has expanded beyond the traditional scope of Tech Prep by bringing together regional career and technical education providers, the New York State Department of Education Career and Technical Education Office, the community college and tech prep program, local school districts, Alfred State College and employers. Cooperation among the partners has broken down institutional barriers that hindered students' mobility from one educational system or institution to another. The partnership enables students to advance more easily by ensuring that educational systems have synchronized standards and goals.

---

### Case Study: Lima, OH

*Rhodes State College in Lima, Ohio*, initiated its pathways work by conducting a survey with nearly 50 manufacturing employers to learn about their hiring and workforce development needs. The college then convened a consortium of employers interested in addressing those needs through a pathways approach. While secondary, postsecondary, vocational and workforce organizations contribute to the consortium, its day-to-day work, including a staff and meeting space, is funded directly by employers' membership fees. Through the discussions facilitated by the consortium, employers and providers have jointly designed a pathway leading from entry-level, semi-skilled jobs to initial skilled positions and ultimately to skilled trades and technician opportunities.



## Planning, Building and Fine-Tuning Career Pathways

### Stage 3: Implementation

#### Key Question, and How to Address It

*How will the various roles and responsibilities of the partners be defined and coordinated?*

- Clearly articulate the roles, commitments and contributions of each partner—including employers—through written memoranda of understanding.
- Make sure partners hold up their end of the bargain. Often, this means dedicating staff to coordinating the work of the partners, including program development, marketing, recruiting, tracking outcomes, and educational delivery and support services.

#### Resources and Tools

**CCTI Implementation Strategy:** Each school in the College and Career Transitions Initiative (CCTI) develops an implementation strategy document that explains major strategies and lessons learned about each strategy.

<http://www.league.org/league/projects/CCTI/projects/summary.cfm?key=scc>

**CCTI Case Studies:** These case studies provide a detailed description of the evolution of each CCTI site's career pathway initiative.

<http://www.league.org/league/projects/CCTI/projects/summary.cfm?key=mdcc>

**Partner Agreement:** This sample agreement details key elements to be included in a memorandum of understanding among career pathways partners.

[http://www.workforcestrategy.org/toolkit/Partner\\_Agreement\\_May\\_06.pdf](http://www.workforcestrategy.org/toolkit/Partner_Agreement_May_06.pdf)

**Employer Engagement Tool: Towards a Memo of Understanding with Employer Partners:** This tool

created by the Workforce Strategy Center is designed to assist groups in developing interest among employers in career pathways efforts.

<http://www.workforcestrategy.org/toolkit/bysection/27>

**Mt. Hood and Portland Community Colleges Career Pathways Road Maps:** The “road maps” developed by these two schools depict the advancement of students and workers along several career pathways.

<http://www.pcc.edu/continuing-education/career-pathways/>

---

#### Case Study: Kirtland, OH

Leadership at *Lakeland Community College* has been one of the most important factors in getting the career pathways efforts started. With survey data in hand showing that employers had strong demand for health care workers, college leaders drove the effort forward despite budget constraints. Lakeland has assumed the role of both leader and intermediary—setting the agenda for the partnership, managing the development process, calling the meetings and championing the work.

---



## Planning, Building and Fine-Tuning Career Pathways

### Stage 4: Continuous Improvement

#### Key Question, and How to Address It

*How will program performance be measured and tracked, and the need for fine-tuning identified and addressed?*

- Conduct regular in-process reviews of performance, as measured by the criteria set during the implementation phase.
- Track employment and educational advancement outcomes of participants at each level.
- Make adjustments based on evidence of program impact and effectiveness. Alter programs that are failing, and set a timeline for terminating them if they continue to fall short. Adjustments could include redrawing funding plans, redesigning instructional methods and course material, and/or shifting partners' roles and responsibilities.
- Regularly reevaluate mission, goals and priorities.

#### Resources and Tools

**CCTI Improvement Plan:** Each site in the College and Career Transitions Initiative (CCTI) develops improvement plans based on past performance and lessons learned. Plans include actions, steps and dates for proposed actions.

<http://www.league.org/league/projects/CCTI/projects/summary.cfm?key=lcc>

**Steps for Evaluating (And Continuously Improving) Career Pathways Programs:** This Workforce Strategy Center guide for benchmarking, collecting data and evaluating career pathways, written by Davis Jenkins, provides step-by-step instructions for planners seeking to establish frameworks for evaluating career pathways.

<http://www.workforcestrategy.org/publications/bysection/all>

---

#### Case Study: St. Louis, MO

*The Metropolitan Education and Training (MET) Center* in St. Louis implemented a process for improving the quality of their life-sciences career pathways. Exit interviews with students, follow-up with graduates and regular contact with employers provide feedback to supplement in-house assessments by instructors and staff. These efforts have led to numerous adjustments including changes in recruitment and assessment practices, several evolutions of program curricula, and an expanded role for employers in the delivery of training. For example, feedback from employers led to additional laboratory modules delivered in the course of classroom training.

---



## Planning, Building and Fine-Tuning Career Pathways

### Stage 5: Expansion

#### Key Question, and How to Address It

*What can be done to broaden the scope and reach of career pathways efforts?*

- Identify ways to expand successful pathways models to additional populations or geographic areas within the same industry, bringing in new partners as necessary.
- Identify ways to incorporate successful strategies to efforts in other industry sectors important to the local economy.

#### Resources and Tools

**The Five-Step Cycle Diagram:** This piece from the Workforce Strategy Center illustrates the cyclical nature of the career pathways process, outlining the ongoing repetition of each stage as groups assess the needs of their communities and develop and implement plans to address them.

<http://www.workforcestrategy.org/toolkit/bysection/30>

---

#### Case Study: Boone, KY

The area around *Gateway Community and Technical College* in Kentucky expects to see rising demand for manufacturing workers due to industry growth and impending retirements. College leaders have spearheaded the development of a manufacturing pathway involving partners from the K-12 system, a local university and the state's Workforce Investment Board. Initially offering only a credential in applied science in manufacturing engineering technology, the program now includes three additional manufacturing certificates, an evening program and a dedicated recruitment program. After a successful inaugural year in 2005, administrators have been able to expand the program, and it is now serving twice as many students.

---



## Planning, Building and Fine-Tuning Career Pathways

### Additional Online Resources

**Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy:** This Workforce Strategy Center white paper sets out the basic premises of the approach and describes the process of designing and implementing a career pathways system.

<http://www.workforcestrategy.org/publications/bysection/all>

**Challenge to Lead:** This set of goals created by the Southern Regional Education Board (SREB) calls for states to encourage coordination among early childhood programs, K-12 schools, community and technical colleges, two- and four-year colleges and universities, and adult education to improve educational outcomes for students.

<http://www.sreb.org/main/Goals/goals.asp>

**The Career Pathways How-To Guide:** This step-by-step plan by the Workforce Strategy Center helps cities, regions and states realign and invest more strategically in their public systems, with the active engagement of key stakeholders from the worlds of business, education and government.

<http://www.workforcestrategy.org/publications/bysection/all>

**Pathways to Student Success: Case Studies from CCTI:** This valuable tool by the League for Innovation in the Community College summarizes background and case studies from the League's College and Career Transitions Initiative, which seeks to facilitate high school students' transition to college and to careers by improving and better aligning secondary and postsecondary programs in high-demand careers.

<http://www.league.org/league/projects/CCTI/publications.cfm>

**Career Pathways as a Systemic Framework: Re-Thinking Education for Student Success in College and Careers:** This paper makes the case for moving beyond existing models of career pathways to a single systemic framework capable of meeting the education and training needs of students of all ages.

<http://www.league.org/league/projects/ccti/publications.cfm>

**Career Pathways: Education with a Purpose:** This Center for Occupational Research and Development (CORD) book details the importance of building on the traditions of Tech Prep and other career and technical education programs for high school-age students in creating career pathways.

<http://www.cord.org/tech-prep-and-career-pathways/>

**College and Career Transitions Initiative (CCTI) Toolkit:** The purpose of this toolkit is to share information that has been generated by each of the 15 CCTI sites. The toolkit includes summaries, detailed case studies, project improvement plans, lists of strategies and career pathways planning templates for each site.

<http://www.league.org/league/projects/CCTI/projects/>

**States' Career Clusters: The 16 Career Clusters:** This Web site provides information, ideas and resources for schools seeking to organize instruction and student experiences around 16 broad occupational categories, or "career clusters."

<http://www.careerclusters.org/16clusters.htm>



# **Strengthening Leadership and Support for Career Pathways**

- 
- 1. Setting Forth a Guiding Vision**
  - 2. Engaging and Supporting Local Partners**
  - 3. Promoting Cross-System Communication Collaboration**
  - 4. Reallocating Funding to Support Career Pathways**
  - 5. Establishing a Performance Measurement System**
  - 6. Designing and Staging a Career Pathways Institute**



## Strengthening Leadership and Support for Career Pathways

This section of the toolkit:

- Spotlights policy approaches that have served to advance career pathways development in four states—Oregon, Kentucky, California and Washington<sup>8</sup>
- Provides guidelines for designing and staging a state or regional Career Pathways Institute.

### Setting Forth a Guiding Vision

Oregon provides an excellent example of how a governor's vision and leadership can promote the development of career pathways models across a state. In spring 2004, Governor Ted Kulongoski challenged the state's education and workforce systems to enable "all Oregonians, residents and businesses to have the skills and resources to achieve economic prosperity."<sup>9</sup> In response, top administrators from the Oregon Department of Community Colleges and Workforce Development and the Oregon Workforce Investment Board, together with staff from the governor's office, launched the Oregon Pathways to Advancement initiative with the aim of increasing:

- Awareness of the benefits of postsecondary certification and credentials
- Accessibility and affordability for part-time, low-income working adults
- Resources for essential support services to help students, including adults, achieve their postsecondary goals
- Alignment between the state's education and workforce systems
- Postsecondary degrees, certificates of completion and industry certifications earned through articulated pathways.

The Oregon initiative emphasizes the need to "transform education and workforce delivery systems to be customer-focused and responsive to changing student, worker and business demands—customized, just in time, just enough, just for me."<sup>10</sup>

8 The vignettes are drawn from Davis Jenkins and Christopher Spence, "The Career Pathways How-To Guide," (New York: Workforce Strategy Center, October 2006) and Christopher Mazzeo, Brandon Roberts, Christopher Spence, and Julie Strawn, "Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity," (New York: Workforce Strategy Center, December 2006).

9 "Oregon's Pathways to Advancement: Pathways Foundation Message," (Oregon Department of Community Colleges and Workforce Development, 2005).

10 Ibid.



## Strengthening Leadership and Support for Career Pathways

### Engaging and Supporting Local Partners

In September 2003, the **Kentucky Community and Technical College System (KCTCS)** invited proposals from KCTCS districts for grants of up to two years to “create regional partnerships to implement career pathways in their respective communities.” The projects were to:

- Involve regional partnerships of community and technical colleges, adult education providers, employers, economic development and workforce investment boards, one-stop partners, human service agencies and other stakeholder groups
- Focus on employment and educational advancement opportunities for low-income adults while also meeting employer needs
- Build a career pathways system focused on high-demand, high-wage employment sectors, and incorporate a seamless structure of skills training, work experience and upgrade training
- Build on existing state-supported initiatives such as WIA One-Stop Career Centers, the Kentucky Employability Certificate, Kentucky Manufacturing Skills Standards, Kentucky Workforce Investment Network System (KY WINS) and the Kentucky Workforce Alliance
- Leverage existing resources to support program operation without relying on increased levels of funding or new funding streams
- Seek to bring about systemic change within and across institutions, don't just implement demonstration projects that serve small numbers and disappear when dedicated funding ends.

The grant program is funded through KY WINS, which draws from a workforce development trust fund originally established to support short-term, noncredit customized training, but the KCTCS leadership pushed to expand coverage to college-credit programs. This emphasis on supporting job-connected education and training, both noncredit and credit, makes KY WINS an ideal source of funding for career pathways.

In developing the RFP for the initiative, the KCTCS staff consulted with the staff of the KnowledgeWorks Foundation, which was planning to issue its own RFP for piloting career pathways in specific industries or occupations of importance to local regions in neighboring Ohio. In October 2003, KCTCS and KnowledgeWorks co-sponsored a planning conference in Cincinnati that brought together teams from both Kentucky and Ohio, along with state agency representatives, to develop plans for building career pathways programs in their respective regions.

Following the conference, every district in Kentucky submitted proposals. Over the next several months, KCTCS staff worked with each college to refine its plan and has since funded projects at all 16 colleges. Twelve of the 16 are focused on health care, three are creating pathways in manufacturing and one is targeting construction. Some colleges have since created additional pathways in other fields.



## Strengthening Leadership and Support for Career Pathways

### Promoting Cross-System Communication and Collaboration

In January 2006, the [California Community Colleges](#) developed a new strategic plan, “Education and the Economy: Shaping California’s Future Today,” that includes a commitment to “build on partnerships with workforce, social service and adult education systems to expand the reach, scope and funding of college-centered, industry-driven career pathways programs.”<sup>11</sup>

At the same time, state officials in education, labor and workforce and the community college system have called for a new program to address issues facing low-skill youth and adults who are disconnected from higher education, but could help meet the state’s current workforce needs if given opportunities for education and training. This approach draws on the guiding principles behind the state’s Gateway bridge programs, which have been piloted as part of the six-year-old Career Ladders Project—an initiative backed by the California Workforce Investment Board.

Called Career Advancement Academies, these programs will be offered by community colleges in partnership with local workforce boards, regional occupational career centers, adult basic education programs and employers, and foundation partners. In 2006-07, between three and five large-scale demonstrations will be launched using funds from Governor Schwarzenegger’s Career Technical Education Initiative, which is designed to encourage high schools and community colleges to work together to facilitate advancement of youth into postsecondary education and careers.

### Reallocating Funding to Support Career Pathways

In the early part of the decade, the [Washington State Board for Community and Technical Colleges](#) (SBCTC) conducted research showing that few adult basic education students go on to college-level occupational programs. At the same time, other researchers found that adults learn basic skills best when they are taught in the context of training for employment. With that in mind, the SBCTC funded pilot projects at 10 colleges in spring 2004, under the program name I-Best, to test the efficacy of integrating basic adult education with skills training.

The approach pairs teachers from the fields of adult basic education and professional-technical instruction, who work together to integrate basic-skills instruction with the teaching of occupational skills. In an October 2005 evaluation report on the pilots, which focused on English-as-Second-Language (ESL) students, the SBCTC reported that “I-BEST students were five times more likely to earn college credits on average and were 15 times more likely to complete workforce training than were traditional ESL students [at similar levels of literacy] during the same amount of time.”<sup>12</sup> The evaluation also said that “the two critical

<sup>11</sup> *Ibid.*, p. 47.

<sup>12</sup> “I-BEST: A Program Integrating Adult Basic Education and Workforce Training, Research Report No. 05-2 (Olympia, WA: Washington State Board for Community and Technical Colleges, October, 2005).



## Strengthening Leadership and Support for Career Pathways

components identified in the cost structure of these programs were the presence of two faculty members in the classroom and the cost of coordination.”

Based on these findings, the SBCTC staff persuaded the board and the presidents of the colleges in the system to fund I-BEST programs at a rate of 1.75 full-time equivalency (FTE)<sup>13</sup> to cover the cost of joint development and teaching by two instructors (.75 FTE + .75 FTE) and the added cost of coordinating an integrated program (.25 FTE). To qualify for the funds, which are drawn from the state’s existing pool of resources for colleges’ FTE allocation, colleges will have to meet a strict set of program requirements and undergo a rigorous evaluation.

### Establishing a Performance Measurement System

The *Kentucky Community and Technical College System (KCTCS)* recently began using the data system it administers for all colleges in the state to evaluate its career pathways initiative. Students who are participating in pathways programs will be tracked through the KCTCS system and into the labor market, using unemployment insurance records for the latter. This will be the most extensive effort to evaluate career pathways to date, and should yield valuable findings.

### Designing and Staging a Career Pathways Institute

A one-or two-day state or regional “institute” providing information, technical assistance and coaching can be particularly useful in the early stages of career pathways development. The following are a few guidelines for designing and staging a productive Career Pathways Institute.

#### Participants

**Invitees:** The institute should bring together representatives of public- and private-sector providers of education, training and social services; business, civic and political leaders; and state, regional and local economic and workforce development officials.

**Experts:** Policymakers, practitioners and researchers with experience in building career pathways partnerships, goal setting and practical problem solving should be engaged to both participate in and help plan the institute. Their primary function is to provide technical assistance based on the needs and interests of the various groups attending the institute. In addition to working directly with teams, experts may participate on panels, make presentations and lead discussions. To be most effective, experts should have all institute materials and group descriptions in advance of the event, and be included in planning conference calls.

<sup>13</sup>1.75 FTE (“full-time equivalent”) means that I-BEST programs are funded at a rate of 1.75 times the rate of a full-time enrollment in a regular course.



## Strengthening Leadership and Support for Career Pathways

**Facilitators:** A facilitator should be assigned to each team to guide it through the agenda, explain tools and introduce exercises, and coordinate interaction with technical assistance providers as well as other teams.

### Format and Activities

The institute should consist of plenary sessions, panel discussions and ample time for each team to meet and plan, work with experts/technical assistance providers and interact with other teams.

The opening plenary should provide participants with an overview of (1) the concepts, processes and challenges of career pathways development; and (2) the purpose, format and objectives of the institute. At (or in advance of) this session, participants should be encouraged to do one or both of the following:

- Complete a self-assessment to pinpoint strengths, weaknesses and needs
- Write a one-page description of their situation and outlook to share with other participants, facilitators and experts.

Sample Agenda for a Two-Day Career Pathways Institute on the following page



## Sample agenda for a Two-Day Career Pathways Institute

Community College *Bridges to Opportunity* Initiative is supported by the Ford Foundation and is part of the Community College Leadership Program at The University of Texas at Austin. For more information visit: [www.communitycollegecentral.org](http://www.communitycollegecentral.org)

Date

### Day 1

8:00 – 10:00	Opening Plenary Session
8:00 – 8:20	Welcome
8:20 – 9:00	Why This Work Matters
9:00 – 9:15	Career Pathways
9:15 – 9:45	Meet the Experts
9:45 – 10:00	Charge to the Teams
10:00 – 10:15	Break
10:15 – 11:45	Introductory Team Time (Each team meets to plan its expert consultations.)
11:45 – Noon	Break
Noon – 1:00	Lunch
1:00 – 2:00	Plenary Session: A Framework for Regional Sectoral Partnerships
2:00 – 2:15	Break
2:15 – 3:45	First Expert Consultation: Creating Strategic Partnerships
3:45 – 4:15	Wrap-Up
4:15 – 5:45	Networking Reception

### Day 2

8:30 – 8:45	Recap and Charge for the day
8:45 – 9:45	Plenary Session: How to Sustain Partnerships and Pathways
9:45 – 10:00	Break
10:00 – 11:30	Second Expert Consultation: Gap Analysis
11:30 – 1:00	Lunch
1:15 – 2:45	Third Expert Consultation: Elective Topic
2:45 – 3:15	Team Break-Out (Facilitators work with teams to develop a strategic plan outline.)
3:15 – 4:00	Closing Plenary: Team Report Out/Wrap-Up



# Spreading the Message

- 
1. Press Releases
  2. Opinion Editorials
  3. PowerPoint Presentations



## Spreading the Message

Promoting a career pathways effort requires getting the message out to diverse audiences in a variety of formats and settings. This section of the toolkit focuses on the effective use of three critical tools for communications and outreach: press releases, opinion editorials and PowerPoint presentations.

### Press Releases

Establish working relationships with education-beat reporters at local newspapers and television stations, and the editors of nonprofit organization/government agency newsletters. Familiarize yourself with their deadline, space and style requirements, and the issues and angles most likely to interest them.

Press releases should be sent at least two weeks in advance of the desired publication date, followed up with a phone call or e-mail reminder, and include contact information. In addition to pertinent details of the event, program or issue you're seeking to publicize, the press release should contain:

- A brief description of what career pathways are, look like and do
- Background on the local initiative—what gave rise to it, what it's designed to accomplish, who the partners are and what they are contributing to the effort
- Facts and figures shedding light on the nature and urgency of the problem that the initiative seeks to address.



Community College  
Bridges to Opportunity

## Sample News Release 1 Lakeland Community College, Kirtland OH

Community College *Bridges to Opportunity* Initiative is supported by the Ford Foundation and is part of the Community College Leadership Program at The University of Texas at Austin. For more information visit: [www.communitycollegecentral.org](http://www.communitycollegecentral.org)

Press Release: For Immediate Release

Contact: Morris W. Beverage, Jr., E.D.M.

Date

Lakeland Community College. 440.525.7000

### **Governor Taft Launches New State Initiative to Provide Career Pathways Opportunities in Health Care to Ohio Workers**

Ohio Governor Bob Taft will be on hand for the official launch, on Thursday, April 6, at Lakeland Community College, of a \$900,000 state-funded initiative aimed at expanding access to postsecondary education opportunities in the health care field to low-income Ohioans.

Joining Governor Taft for the kick-off of the Career Pathways health care initiative will be representatives of the three partnering institutions—Lakeland Community College, Youngstown State University/Metro Campus and Pickaway-Ross Career and Technology Center—and the KnowledgeWorks Foundation, which will manage technical assistance.

“Studies consistently show that Ohio needs, and will continue to need, more nurses and other health care practitioners,” Governor Taft said. “The Career Pathways initiative can help the state address this growing challenge and provide Ohioans with skills to realize job and career opportunities in the health care field.”

The initiative, which is supported by the Governor’s Workforce Policy Board, aims to provide 1,500 working Ohioans with training and development in the health care field over the next several years.

“This is an employer-driven model designed to educate workers for a job sector projected to have significant job growth over the next ten years,” said Dr. Morris W. Beverage Jr., president of Lakeland Community College.

An effective Career Pathway provides a map for career development as well as reshapes education and training to advance the entry and incumbent workforce. Institutions such as community and technical colleges, workforce development systems, adult basic and career technical schools, social service providers, and government agencies collaborate to provide the steps necessary in the structure to build a career pathway. The most effective career pathways models will be designed to help the low-wage workers of Ohio earn postsecondary credentials that enable them to earn at self-sufficient income levels.

According to Alliance for Excellent Education Fact Sheet, jobs requiring only a high school degree will grow by only 9 percent by 2008, while jobs requiring a bachelor’s or associate’s degree will grow by 25 and 31 percent, respectively.

KnowledgeWorks Foundation provides funding and leadership for education initiatives throughout Ohio and is focused on creating and improving educational opportunities. Learn more about KnowledgeWorks at [www.kwfdn.org](http://www.kwfdn.org).

For more information about Lakeland Community College, visit [www.lakelandcc.edu](http://www.lakelandcc.edu).



Community College  
Bridges to Opportunity

## Sample News Release 2 Central Southern Tier Regional Math-Science-Technology Pipeline Initiative, Corning, NY

Community College Bridges to Opportunity Initiative is supported by the Ford Foundation and is part of the Community College Leadership Program at The University of Texas at Austin. For more information visit: [www.communitycollegecentral.org](http://www.communitycollegecentral.org)

date

### **Building Excitement for Math, Science & Technology Studies: New Community Network Invites Kids and Adults to Explore MST Opportunities**

Are K-12 and college students acquiring—and using—the math, science and technology (MST) skills they will need to succeed both in life and the workplace? A growing list of Southern Tier educators, business leaders and economic developers wants to ensure students do just that.

To that end, entities ranging from Alfred University and Hardinge Inc. to Schweizer Aircraft Corp. and Wings of Eagles Discovery Center are part of a collaborative network formed to:

Reintroduce students in all grades to the inherent excitement in math, science and technology

Create curricula that connect MST teaching and learning to real-world applications

Spread the word about the wealth of opportunities that math, science and technology offer individuals, companies and communities.

Laying groundwork since its inception in September 2005, the Central Southern Tier Regional Math-Science-Technology Pipeline Initiative went public for the first time this week. Its Web site, [www.techprepcst.com](http://www.techprepcst.com), offers an overview of efforts so far and, more important, invites the community to “get involved.”

Dr. Mark Vaughn, Manager of Diversity Recruiting & Technical Talent Pipelining at Corning Incorporated, serves as convener of a core MST team drawn from 36 entities representing education, business, industry, economic development and nonprofits. To provide feedback and support, the core team has recruited eight chief executives from among constituent groups to a “board of champions” that will convene its inaugural session February 1 in Corning.

The core team has submitted a proposal for an \$800,000 grant to the National Science Foundation for “Project Flying Start” to promote in-school and community-based MST learning. It also has applied to the New York State Department of Education to fund instructor training at Teacher Summer Institutes.

“Communities across the country recognize the need to increase student interest and skills in math, science and technology in preparation for today’s global, high-tech, competitive economy,” Vaughn said. “We in the Southern Tier are ahead of the curve as we actively address this emerging challenge. Now we need ‘all hands on deck’ to achieve our vision, which is making our region a model in generating math, science and technology interest, excitement and marketable skills.”



## Spreading the Message

### Opinion Editorials

Another way to communicate the career pathways message is through writing and placing an opinion editorial. The op-ed will be most effective if it is:

- **Clear and concise.** Keep the piece to 750 words or less. Avoid jargon. Focus on one idea or issue that is described at the beginning and defended throughout the piece. Conclude with a restatement of your position.
- **Factual.** Use economic data, examples or anecdotal evidence to enlarge the reader's understanding of the issue, and make the case for your position.

### PowerPoint Presentations

PowerPoint presentations are a useful tool for enlarging awareness of, interest in and support for career pathways initiatives. Following are three PowerPoint presentations designed variously for:

- Engaging employers, funders and other potential partners
- Recruiting students and workers
- Building visibility and support for the initiative.

#### Sample PowerPoint 1

*Used by the City College of San Francisco's Biotech Workforce Education program to engage employers, funders and other potential partners*

**Slide 1:** Title slide with graphic showing major partners.

**Slide 2:** History of the initiative.

**Slide 3:** Overview of the initiative, including a description of the problem it is designed to address, the target industry and the target student population.

**Slide 4:** Overview of the pathway itself, including the levels of training and education (and the credential earned at the end of each level) as well as the levels of employment in the target industry.

**Slide 5:** (if necessary) A description of the partners involved, including employers, and their respective roles.

**Slides 6-10:** Description of the duration and content for each level of education and training, and job descriptions for each level of employment in the target industry. Explain how the career pathways initiative assists participants in moving from level to level.

**Slide 11:** Description of wraparound services such as child care, tuition assistance and career counseling.

**Slide 12:** Linkages to organizations and institutions not included in the formal partnership.

**Slide 13:** Future plans for the initiative. This is a good slide to make "the ask" if the purpose of the presentation is to engage partners or attract funding.

**Slide 14:** Final slide showing "next steps" for those interested in getting involved in the initiative. Be sure to include contact information.



## Spreading the Message

### Sample PowerPoint 2

*Used by the program staff of the Life Sciences Career Pathways at the Metropolitan Education and Training Center in St. Louis, MO, as a tool for recruiting students and workers*

**Slide 1:** Title slide with graphic showing major partners.

**Slide 2:** History of the program and description of the organizations involved in the effort.

**Slide 3:** Description of the target industry, including the kinds of products made and growth trends.

**Slide 4:** Description of the pathway itself, including the levels of training and education (and the credential earned at the end of each level) as well as the levels of employment in the target industry (and the wages for each job level).

**Slides 5-8:** Description of the duration and content for each level of education and training and job descriptions for each level of employment in the target industry. Include an explanation of how the program assists participants in moving from level to level.

**Slide 9:** Description of wraparound services such as child care, tuition assistance, and career counseling.

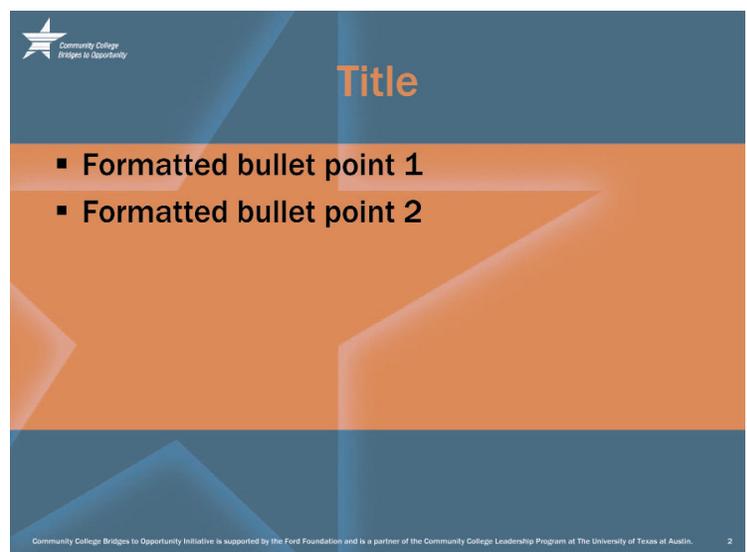
**Slide 10:** Linkages to organizations and institutions not included in the formal partnership.

**Slide 11:** Description of employer commitment and involvement.

**Slide 12:** Final slide showing “next steps” for those interested in participating in the program. Be sure to include contact information.



Above is the PowerPoint template cover slide that is included on the Career Pathway Toolkit CD. Using PowerPoint you will be able to add your content as described on pages 33, 34 and 35 to the templates.



Above is the PowerPoint template interior slide that is included on the Career Pathway Toolkit CD. Using PowerPoint you will be able to add your content as described on pages 33, 34 and 35 to the templates.



## Spreading the Message

### Sample PowerPoint 3

*Used by leaders of the Central Southern Tier Tech Prep Consortium in Corning, NY, to promote and build support for the program, both locally and outside the region*

**Slide 1:** Title slide showing the name and location of the initiative, and the partners involved.

**Slides 2–3:** Describe the problem using data depicting the need to facilitate upward educational mobility for students and/or upward career mobility for workers. Make clear why career pathways are the chosen strategy, and the importance of establishing linkages among previously disconnected systems.

**Slides 4-6:** Describe the goals and objectives of the program.

**Slides 7-10:** Describe the career clusters or plans of study that will lead students upward along designated career pathways. Include specifics about courses, articulation of credits between systems, certificate and degree opportunities, career opportunities and so on.

**Slides 11–12:** Describe support services and other factors that will be important in promoting student success.

**Slide 13:** Describe expected outcomes in terms of higher graduation rates, higher educational attainment, higher wages for program participants, higher retention rates and so on.

**Slide 14:** Provide contact information.



# Resources

- 
1. Glossary
  2. Supporting Documents, Reports and White Papers
  3. Technical Assistance/Consulting Resources
  4. Useful Web sites



## Glossary

### Adult Basic Skills

Basic skills are foundational proficiencies in mathematics, reading, writing and language. Programs, such as Adult Basic Education (ABE), Adult Secondary Education, English for Speakers of Other Languages, and other state, federal and private programs, assist undereducated and/or disadvantaged adults in raising their basic proficiencies.

### Bridge Programs

Bridge programs are designed to teach educationally disadvantaged youths and adults the basic skills necessary to advance to postsecondary education and training leading to career-path employment. Bridge programs teach a mix of hard skills, such as communication, math and problem solving, as well as softer skills related to job readiness.

### Career Pathways

“Career pathways” is a term used to describe an integrated continuum of education, training and support programs that enable individuals to succeed educationally, to secure employment in a specific industry or occupational sector of importance to local economies, and advance over time to successively higher levels of education and employment in that sector. Each step on a career pathway is designed explicitly to prepare students and workers for the next level of employment and education.

### Carl D. Perkins Vocational and Technical Education Act (VTEA)

VTEA is a federal act providing funding for programs that prepare students for both postsecondary education and the careers of their choice.

### Developmental Education

Sometimes called remedial education, developmental education supports the academic and personal growth of individuals who need to improve their basic skills to meet college entrance standards. Offered to both students entering college directly from high school and those returning to school after substantial time away from the classroom, developmental education helps students via a blend of teaching, counseling, advising and tutoring.

### Entrepreneurial Approach to Employment

This term describes workers who are able to manage careers in which lifelong learning and job mobility are necessary to keep skills current. The entrepreneurial approach refers to workers who pursue learning opportunities, both on and off the job, and build a bundle of skills that remains marketable to employers as technology advances and industries change.



## Resources

### Full Time Equivalent (FTE)

Used in determining education funding, FTE is a measurement equal to a student taking a full course of studies for a specified period no longer than one year. It is based on an analysis of credits, total course registrations, student contact hours or course-hour equivalents. Students enrolled in noncredit programs can be considered FTEs as well.

### Knowledge Economy/Knowledge Workers

A knowledge economy is one in which firms are able to rapidly apply knowledge and use technology to improve existing products and services or otherwise gain competitive advantage. Knowledge economy jobs require workers to solve problems, generate new ideas and pursue lifelong learning to attain new knowledge over time.

### Occupational Programs

Occupational or vocational education programs prepare students for work in a specific occupation or cluster of occupations, such as agriculture, business, marketing, health care and protective services. They are also referred to as “occupationally specific education” or “specific labor market preparation.”

### Office of Vocational and Adult Education (OVAE)

Part of the U.S. Department of Education, OVAE is responsible for federal programs and policies related to vocational education in high schools and community colleges, as well as career, technical and adult education programs. OVAE helps prepare students for postsecondary education and careers through strong high school programs; works to improve educational and career opportunities for low-skill adults; and seeks to link such programs to workforce and economic development systems.

### Temporary Assistance for Needy Families (TANF)

Administered by the U.S. Department of Health and Human Services, TANF provides cash assistance to needy families on the condition of work. By granting states both the money and the flexibility to develop and implement their own welfare programs, TANF represents a source of funding for career pathways programs targeted to disadvantaged populations.

### Tuition Advancement

Tuition advancement is an arrangement in which an employer pays some or all of a worker’s education or training expenses in advance. It is a permutation of “tuition assistance” and “tuition reimbursement” programs, in which workers pay for their courses up front, and later recover some or all of the costs from their employers.



## Resources

### Workforce Investment Act (WIA)

WIA, the country's largest workforce development effort, was signed into law in 1998, replacing the 1982 Job Training Partnership Act (JTPA). WIA coordinates programs at the federal, state and local levels to develop a system that provides workers with job search assistance, training and career advice. In addition, local providers of WIA services work with employers to address their specific needs.

### Supporting Documents, Reports and White Papers

Allsidd et al. "Building a Career Pathways System: Promising Practices in Community College-Centered Workforce Development." (New York: Workforce Strategy Center, 2003).

Baider, A. and Frank, A. "Transitional Jobs: Helping TANF Recipients with Barriers to Employment Succeed in the Labor Market." (Washington, D.C.: Center for Law and Social Policy, 2006).

Boswell, K. "Building Bridges Not Barriers: Public Policies that Support Seamless K-16 Education." (Denver: Education Commission of the States, 2000).

Boswell, K. and Wilson, C. (editors). "Keeping America's Promise: A Report on the Future of the Community College." (Denver: Education Commission of the States, 2004).

Brock, T. LeBlanc, A. and MacGregor, C. "Promoting Student Success in Community College and Beyond: The Opening Doors Demonstration." (New York: Manpower Demonstration Research Corporation, 2005).

"Career Pathways as a Systemic Framework: Re-Thinking Education for Student Success in College & Careers." (Phoenix: League for Innovation in the Community College, forthcoming).

Frank, A., Greenberg, M., and Zdenek, R. "Getting Connected: Employer Engagement in Work Supports." (Washington, D.C.: Center for Law and Social Policy, 2006).

Duke, A., Martinson, K. and Strawn, J. "Wising Up: How Government Can Partner with Business to Increase Skills and Advance Low Wage Workers." (Washington, D.C.: Center for Law and Social Policy, 2006).

Gittleman, J. "The New England ABE-to-College Transition Project Evaluation Report." (Boston: Nellie Mae Education Foundation, 2005).

Grubb, W. "Learning to Work: The Case for Reintegrating Job Training and Education." (New York: Russell Sage Foundation, 1996).



## Resources

Henle, T., Jenkins, D., and Smith, W. "Bridges to Careers for Low-Skilled Adults. A Program Development Guide." (Chicago, IL: Women Employed Institute, 2005).

Hughes, K. & Karp, M. "Strengthening Transitions by Encouraging Career Pathways: A Look at State Policies and Practices." (New York: Columbia University, Community College Research Center, 2006).

Jacobs, J. and Voorhees, R. "The Community College as a Nexus for Workforce Transitions: A Critical Essay." (New York: Columbia University, Community College Research Center, 2006).

Jenkins, D. "Career Pathways: Aligning Public Resources to Support Individual and Regional Advancement in the Knowledge Economy." (New York: Workforce Strategy Center, 2006).

Jenkins, D. "What Community College Policies and Practices Are Effective in Promoting Student Success? A Study of High- and Low-Impact Institutions." (New York: Columbia University, Community College Research Center, 2006).

Jenkins, D. and Spence, C. "The Career Pathways How-To Guide." (New York: Workforce Strategy Center, 2006).

Mazzeo, C., Roberts, B., Spence, C. and Strawn, J. "Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity." (New York: Workforce Strategy Center, 2006).

Mazzeo, C., Rab, S., and Alssid, J. "Building Bridges to College and Careers: Contextualized Basic Skill Programs at Community Colleges." (New York: Workforce Strategy Center, 2003).

Nielsen, N., Baird, D., Browning, B., and Milliron, M. "Building a Workforce System Through Partnering." (Phoenix: League for Innovation in the Community College, 2003).

Ruppert, S. "Closing the College Participation Gap." (Denver: Education Commission of the States, 2004).

Warford, L. "Pathways to Student Success." (Phoenix: League for Innovation in the Community College, 2006).



## Resources

### Technical Assistance/Consulting Resources

Center for Community College Policy ([www.communitycollegepolicy.org](http://www.communitycollegepolicy.org))

Center for Law and Social Policy ([www.clasp.org](http://www.clasp.org))

Community College *Bridges to Opportunity* Initiative ([www.communitycollegecentral.org](http://www.communitycollegecentral.org))

Community College Research Center, Teachers College/Columbia University ([ccrc.tc.columbia.edu](http://ccrc.tc.columbia.edu))

Council for Adult and Experiential Learning ([www.cael.org](http://www.cael.org))

Center for Occupational Research and Development ([www.cord.org](http://www.cord.org))

Economic Modeling Specialists Inc. ([www.economicmodeling.com](http://www.economicmodeling.com))

Education Commission of the States ([www.ecs.org](http://www.ecs.org))

High Schools That Work ([www.sreb.org/Programs/hstw/hstwindex.asp](http://www.sreb.org/Programs/hstw/hstwindex.asp))

Jobs for the Future ([www.jff.org](http://www.jff.org))

Nellie Mae Education Foundation ([www.nmefdn.org](http://www.nmefdn.org))

League for Innovation in the Community College, College and Career Transitions Initiative ([www.league.org/league/projects/CCTI/index.html](http://www.league.org/league/projects/CCTI/index.html))

Lumina Foundation, Achieving the Dream Initiative ([www.luminafoundation.org](http://www.luminafoundation.org))

Manpower Development and Research Corporation, Opening Doors Demonstration ([www.mdrc.org](http://www.mdrc.org))

National Association of State Directors of Career Technical Education Consortium ([www.careertech.org](http://www.careertech.org))

Office of Community College Research and Leadership, University of Illinois, Urbana-Champaign (<http://occr.ed.uiuc.edu/>)

Southern Regional Education Board ([www.sreb.org](http://www.sreb.org))

States' Career Clusters ([www.careerclusters.org](http://www.careerclusters.org))

U.S. Department of Education, Office of Vocational and Adult Education ([www.ed.gov/about/offices/list/ovae/index.html](http://www.ed.gov/about/offices/list/ovae/index.html))

Workforce Strategy Center ([www.workforcestrategy.org](http://www.workforcestrategy.org))



## Resources

### Useful Web Sites

- American Association of Community Colleges ([www.aacc.nche.edu](http://www.aacc.nche.edu))
- Annie E. Casey Foundation—search for the Jobs Initiative ([www.aecf.org/initiatives/fes/jobs](http://www.aecf.org/initiatives/fes/jobs))
- Council for Advancement of Adult Literacy ([www.cael.org](http://www.cael.org))
- Council on Competitiveness ([www.compete.org](http://www.compete.org))
- The Joyce Foundation ([www.joycefdn.org](http://www.joycefdn.org))
- KnowledgeWorks Foundation—search for Career Pathways and *Bridges to Opportunity* initiative ([www.kwfdn.org/adult\\_learning](http://www.kwfdn.org/adult_learning))
- National Association of State Workforce Agencies ([www.workforceatm.org](http://www.workforceatm.org))
- National Association of Workforce Boards ([www.nawb.org](http://www.nawb.org))
- National Council for Workforce Education ([www.ncwe.org](http://www.ncwe.org))
- National Governors Association ([www.nga.org](http://www.nga.org))
- National League of Cities ([www.nlc.org/home](http://www.nlc.org/home))
- National Youth Employment Coalition ([www.nyec.org](http://www.nyec.org))
- U.S. Chamber of Commerce ([www.uschamber.com/issues/index/education/default](http://www.uschamber.com/issues/index/education/default))
- U.S. Conference of Mayors  
([usmayors.org/uscm/uscm\\_projects\\_services/employment\\_training/council.html](http://usmayors.org/uscm/uscm_projects_services/employment_training/council.html))
- Workforce3 One ([www.workforce3one.org](http://www.workforce3one.org))

