

I. INTRODUCTION

Over the last decade, career pathways has emerged as a strategy to increase access to postsecondary training and education as well as improve educational attainment for low-income and low-skill adults. Defined as a framework, career pathways are “a series of connected education and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment in that sector.”¹ Blending multiple elements that range from redesigning curricula and programs that lead to an industry-recognized credential to aligning the various missions of a community college and providing case management and wrap-around support services, career pathways are an important vehicle for the economic advancement of adults living at the economic margins.

Seattle Jobs Initiative (SJI) has sought to advance career pathways in its own work and believes that a broader adoption of this framework within the community colleges would be of significant benefit to low-income, low-skill adults. Accordingly, with support and guidance from The Working Poor Families Project,² SJI set out to explore how other states, in addition to Washington, are implementing this approach statewide. SJI hopes that this research will help to further the development of career pathways in Washington State as we seek to collaborate with Washington’s State Board for Community and Technical Colleges on ways to further expand the integration of this framework across all community colleges.

While a great deal of research on career pathways currently exists, SJI and The Working Poor Families Project saw an opportunity to add to this body of work by focusing exclusively on statewide efforts. The principal question we wanted to answer was what role could a state play in instituting career pathways, and what strategies could it employ to bring colleges, workforce development and economic development agencies, community organizations and employers to the table to accomplish this? To answer this question, the paper explores the efforts underway in Arkansas, Kentucky, Oregon, Washington and Wisconsin, which represent three different stages of career pathways implementation: 1) mature – the fully implemented efforts underway in Arkansas, Kentucky, and Oregon; 2) intermediate – the growing effort in Washington to develop critical tools to support the framework and enable students to access career pathways; and 3) emergent – Wisconsin’s burgeoning career pathways effort.

What follows is a documentation of the strategies, challenges, and lessons learned from these states. It should be seen as a complementary piece to the career pathways toolkits put forth by experts in the field such as The Workforce Strategy Center, the College and Career Transition Initiative, Jobs for the Future, and the League for Innovation in the Community College, among others. It is our hope that this paper will serve as a resource for other states that are interested in utilizing a career pathways framework.

Spurred by changing demographics and an aging workforce, the influx of non-traditional students (employed and unemployed adults with limited basic skills and educational attainment) and the need for a better skilled workforce, each of the five states examined had state leaders who viewed career pathways as a strategy that could best meet the needs of its residents and local and regional employers. To increase access to local community colleges, key leaders in the states knew that a different approach to delivering education and training to adults was needed: a holistic approach that blends skills training with comprehensive support and student services to help low-income and/or low-skill adults persist in completing a certificate or degree program and earn a credential that has value in the labor market.

As a framework, career pathways are multi-layered and encompass several components that address both the academic and human services needs of low-income and/or low-skill adults with limited educational attainment. At one level, working across the silos between colleges' adult basic education, workforce education, professional/technical education and academic transfer departments is a critical ingredient for ensuring that students can transition and successfully advance to higher level coursework and secure employment in family supporting jobs. At another level, partnerships with a variety of stakeholders beyond the college are a foundational element that can bring in resources such as case management and access to support services, employer participation in curriculum and pathway design, and political support that can lead to necessary policy changes and funding. Also woven into the framework is an emphasis on designing curricula that are delivered in manageable "chunks" to help people not only gain skills but also earn recognized credentials, some of which may be short-term and build to the next educational and career level, boosting persistence and employability. Finally, support and student services must also be in the mix to help students address any barriers or issues that may adversely affect their ability to focus on and stay in school.

Creating a statewide plan for career pathways is not an easy feat and requires time and patience, particularly in developing a broad base of support. This report encapsulates the journeys taken by Arkansas, Kentucky, Oregon, Washington and Wisconsin in establishing career pathways. It begins with an exploration of the vision and framework guiding career pathways in each state and then details who is being served (both students and employers), the support services available to aid with persistence and completion of pathways programs, and the outcomes being measured and achieved.

Next, state strategies for building support for career pathways among a variety of stakeholders and funding sources are described. This section also includes a look at creating momentum among colleges across the state to adopt a career pathways framework and is followed by an account of the challenges the states experienced in promoting this approach. Finally, the report concludes with a series of recommendations derived from the lessons learned from the states examined.

THE CAREER PATHWAY CONTINUUM

Education and Training

Workplace and Career

Advanced/Graduate Degree

Technical Professionals, Management

Baccalaureate Degree

Technical Professionals, Management

Skilled Technician

Associate Degree

Skilled Technician

One or Two Year Certificate or Degree

Skilled Technician

Entry-level skilled technicians

Entry-level skilled jobs

Short-Term Training Certificate Program

Entry-level skilled jobs

Sector-Based Bridge Programs

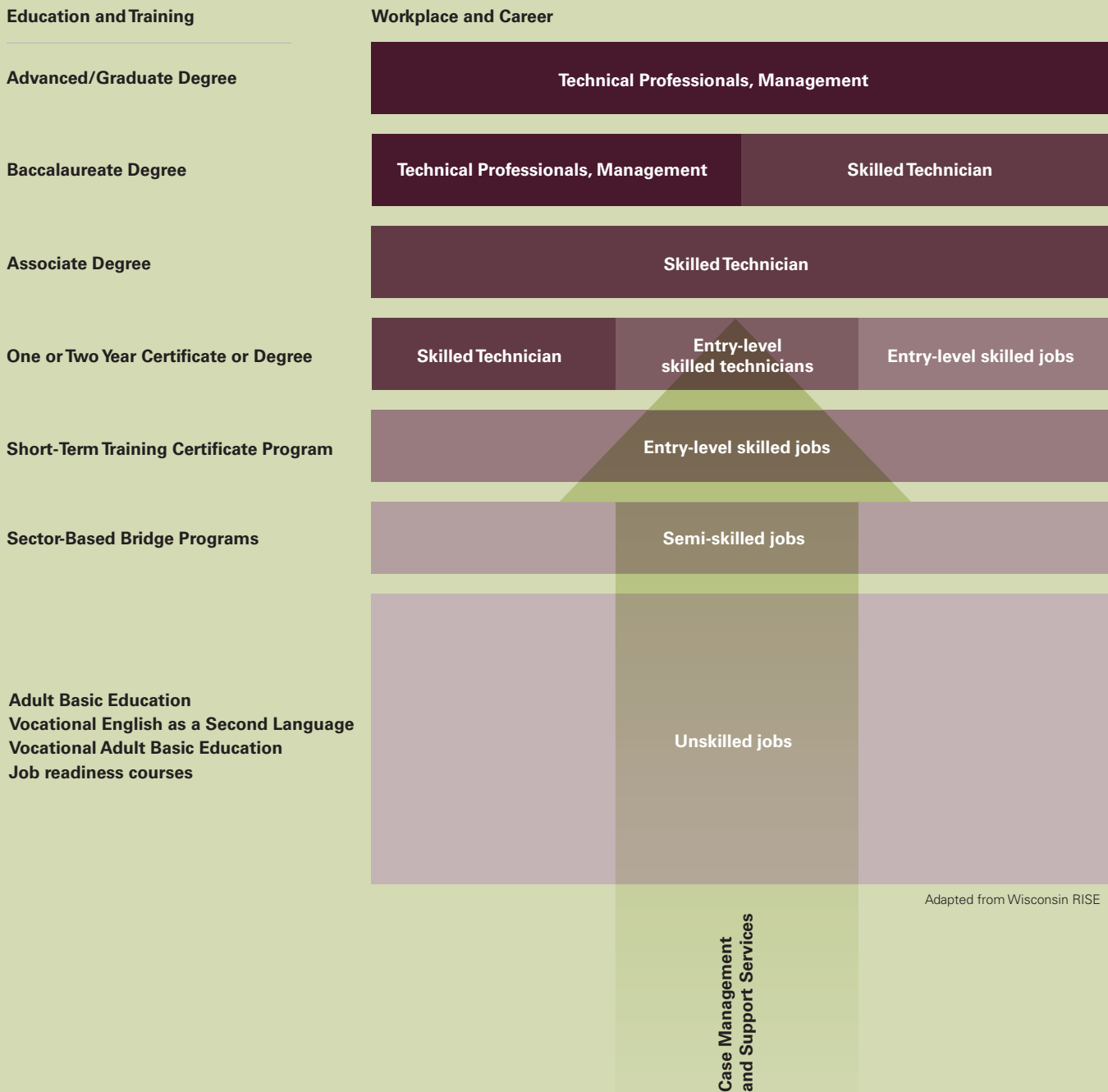
Semi-skilled jobs

Adult Basic Education
Vocational English as a Second Language
Vocational Adult Basic Education
Job readiness courses

Unskilled jobs

Case Management
and Support Services

Adapted from Wisconsin RISE



II. DEFINING THE CAREER PATHWAYS FRAMEWORK

Career pathways is best viewed as a framework that can span multiple systems and link a variety of stakeholders, many of which need to be at the table to initiate a statewide effort. With community colleges at the center, career pathways can drive change among and foster collaboration between employers, economic development groups, community-based organizations, workforce providers, and state agencies.

The two key definitions that have shaped the career pathways work in Arkansas, Kentucky, Oregon, Washington and Wisconsin are:

“ A framework for connecting a series of educational programs with integrated work experience and support services, thereby enabling students and workers to combine school and work and advance over time to better jobs and higher levels of education and training.”³

League for Innovation in the Community College and The National Council of Workforce Education

“ A series of connected education and training programs and support services that enable individuals to get jobs in specific industries, and to advance over time to successively higher levels of education and work in that industry. Each step on a career pathway is designed to prepare the participant for the next level of work and education. Career pathways serve to strengthen the systems that produce and keep a region’s workforce competitive.”⁴

Workforce Strategy Center

Each of these definitions describes pathways as a set of connected educational steps that help people gain skills and move up a career ladder. With multiple entry and exit points that build to the next level, coupled with the availability of support services, low-income and low-skill adults can move along a training and employment pathway.

CAREER PATHWAYS EFFORTS: STATE SNAPSHOTS

	ARKANSAS	KENTUCKY
		
Year Started:	2005	2002
Target Population:	Adults eligible for Temporary Assistance for Needy Families	Underprepared and underemployed adults with limited basic skills and educational attainment, many of whom are low-income
State Lead:	Arkansas Department of Higher Education	Kentucky Community College and Technical System
Partners:	Southern Good Faith Fund, Arkansas Department of Workforce Services, Arkansas Association of Two-Year Colleges, Arkansas Department of Workforce Education, Arkansas Workforce Investment Board	State and Local Workforce Investment Boards, Kentucky Council on Postsecondary Education, The Ford Foundation, Microsoft, Cisco, Toyota, among others
Sectors:	Manufacturing, Health Care & Social Assistance, Transportation & Warehousing, Professional & Technical Services	Health Care, Manufacturing, Construction, Transportation, Information Technology, Utilities
Funding:	\$39.2 million (2005 – present)	\$6.2 million (2002 – present) in KCTCS Workforce Development Incentive Funds Over \$9 million in both cash and in-kind contributions



OREGON

2004

Adults with limited skills

Statewide Pathways Director and Oregon Pathways Alliance

Oregon Department of Community Colleges and Workforce Development, Career & Technical Education Network, Department of Education, Employment Department, Department of Human Services, State and Local Workforce Investment Boards

Health Care, Manufacturing, Business Management

\$6.2 Million (2004 - present)



WASHINGTON

2002

Low-income and underprepared adults, with limited skills

State Board for Community and Technical Colleges

Workforce Education and Training Coordinating Board, Local Workforce Development Councils, Local Employers, Community-Based Organizations, Office of the Superintendent of Public Instruction

Accounting, Aircraft Mechanics and Technicians, Auto Diesel Mechanics, Early Childhood Education, Health Care, Transportation, Construction

\$4.9 Million (I-BEST, 2007-2009)

Complementary Resources: \$23 Million (Opportunity Grants, 2007 – 2009)

\$1.75 Million (Student Achievement Initiative, 2007 – 2009)



WISCONSIN

2007

Adults with low earnings and low formal education

Wisconsin Technical College System and Wisconsin Department of Workforce Development

Center on Wisconsin Strategy, The Joyce Foundation, Wisconsin Association of Job Training Executives (Workforce Boards) & Local Technical College Campuses, in particular Madison Area Technical College

Manufacturing, Health Care, Construction, Transportation & Logistics, Professional/Technical Services

\$1 Million (2007 – 2009)

All of the states operate with a set of guiding principles - a mission or vision - that shape the pathway work and mirror the career pathway components prescribed by the League for Innovation and the Workforce Strategy Center, as described below:



League for Innovation and The National Council of Workforce Education ⁵	Workforce Strategy Center ⁶
<ul style="list-style-type: none"> • Institutional and instructional transformation • Mission integration • Curriculum and instructional transformation • Visual roadmaps and templates • Articulation and transition • Supports and tools to help students succeed • Career planning and counseling • Internships • College and workforce readiness preparation • Case management • Credit for prior and experiential learning • Partnerships that drive planning and implementation • Inclusive involvement • Collaboration and trust • Demand-driven economic development strategy • Employer involvement in all phases of the process • Employer validation of career pathways • Employer involvement in the determination of relevant skills and competencies • Ongoing oversight of pathway relevance and content • Employer input and support for incumbent worker pathways • Employer support of pathway graduates • Commitment to continuous improvement • Planning • Accountability • Commitment to sustainability • Leadership at all levels and across sectors • Replicable models • Reallocating and blending multiple funding sources • Alignment of state and federal policy 	<ul style="list-style-type: none"> • Reliance on data to select target sectors, identify education and training gaps, and measure the effectiveness of strategies to improve educational attainment and economic advancement. • Road maps that show the connection between each training and educational step and employment opportunities at different levels within selected sectors or industries. • Clear linkages between remedial, academic and occupational programs and articulation of credits across institutions. • Curricula defined by the competencies required for jobs and education at the next level. • Emphasis on "learning by doing" for students through class projects, internships, etc. • Flexible class schedules that meet the needs of low-income working adults and structured in smaller, more manageable "chunks." • Multiple entry and exit points that provide flexibility for students to participate as circumstances permit. • "Wrap-around" support services such as career assessment and counseling, case management, child care, financial aid, and job placement. • Bridge programs for adults in need of basic skills, taught in a contextualized way to prepare for postsecondary education and employment. • Blended funding.



ARKANSAS

Codified by state law in 2005 (Act 1705) and renamed the Career Pathways Initiative (CPI) in 2007 (Act 514), the primary goal of this initiative is to increase the completion of college credentials among adults by refining, replicating, and institutionalizing an alternative postsecondary training service delivery model that better meets the unique needs of adult students, particularly low-income adults.

Key components of the model are clear pathways of continuing education and employment; innovative instructional strategies aimed at improving student retention and completion; comprehensive student support services; and strategic partnerships.⁷



OREGON

The guiding vision of the Career Pathways Initiative is to ensure that all Oregonians can obtain the skills to enter and advance in demand occupations leading to higher learning and higher earnings. The goals of the statewide initiative are: a) to increase the number of Oregonians with certificates, credentials and degrees in demand occupations; and b) to articulate and ease student transitions across the education continuum from high school to community college; from pre-college (ABE/GED/ESL) to credit postsecondary; and from community college to university or employment. Career Pathways implementation through Oregon's 17 community colleges and their partners is guided by the League of Innovation/ National Council for Workforce Education's systemic framework. To achieve this mission, Oregon's framework is built upon six main elements: 1) institutional and instructional innovation; 2) student supports and tools; 3) partnerships; 4) employer involvement; 5) continuous improvement; and 6) sustainability.¹⁰



KENTUCKY

Nine key principles guide the career pathways work: 1) career pathways is not a "program"; it is a systemic framework for a new way of doing business; 2) career pathways are a strategic tool for institutional transformation; 3) career pathways are policy and funding levers; 4) career pathways are a transition tool from secondary to postsecondary to lifelong learning; 5) career pathways are an economic development tool; 6) career pathways are a tool to strengthen and formalize connections to business; 7) career pathways are a tool to enhance community strategic partnerships, with particular focus on the public workforce investment system; 8) career pathways are an upward mobility tool for individuals; and 9) career pathways are an accountability tool.⁸

Kentucky, through the Kentucky Community and Technical College System (KCTCS), puts these principles in practice through: increased entry/exit points in the form of embedded certificates and new degrees; modularized curriculum, remedial bridges, alignment with secondary education and articulation to four-year institutions, credited customized and short-term training; integrated work experience and industry-recognized credentials; employer engagement; support services and career counseling, improved assessments, and non-traditional and flexible delivery of courses (time, place, technology).⁹



WASHINGTON

The system vision for the Washington State Board for Community and Technical Colleges (SBCTC) is to “build strong communities, individuals and families, and achieve greater global competitiveness and prosperity for the state and its economy by raising the knowledge and skills of the state’s residents.”¹¹ Career pathways is a framework that helps make this vision a reality and – while not specifically mentioned – is embedded within the three strategic goals that guide the work of Washington’s community college system: 1) Economic Demand – strengthen state and local economies by meeting the demands for a well-educated and skilled workforce; 2) Student Success – achieve increased educational attainment for all residents across the state; and 3) Innovation – use technology, collaboration and innovation to meet the demands of the economy and improve student success.

The SBCTC adheres to the League for Innovation career pathways framework and promotes this approach through the following: 1) I-BEST, Integrated Basic Education and Skills Training that blends adult basic education or English as a second language with skills training; 2) Opportunity Grants, funding that provides low-income students with tuition, books and support services to help them reach the “tipping point” of 45 credits and a credential; 3) the new Student Achievement Initiative (SAI), an incentive system that rewards colleges for the gains students make in increasing their basic skills to attaining a certificate or degree; and 4) new Applied Baccalaureate degrees that allow students to continue their education and attain a Bachelor’s degree in a field that previously did not extend beyond the Associate’s degree.

Additionally, the SBCTC’s Centers of Excellence and the Workforce Training and Education Coordinating Board’s (WTECB) Industry Skill Panels complement Washington’s career pathways work. The Centers of Excellence represent a sector-based approach to coordinating education and training programs to develop a competitive workforce. The Industry Skills Panels are “public/private partnerships of business, labor and education – alliances working together to improve the skills of workers in industries vital to Washington’s economy.”¹²



WISCONSIN

The career pathways effort in Wisconsin, Regional Industry Skills Education (RISE), is working toward a vision in which “educational, workforce development and economic development institutions, employers, and labor are supporting an array of career pathways and bridge programs that benefit working adults, employers and workforce training and education.”

The operational elements promoted by RISE focus on industry engagement, instructional design, pathway support for lifelong learning and systems and partnerships.

At the helm of each of these initiatives is a state lead – generally an appointed individual or governing body – who works in partnership with multiple stakeholders. The table below lists the key partners and state leads responsible for and involved with the career pathways efforts in Arkansas, Kentucky, Oregon, Washington and Wisconsin:

State Lead	Partners	
Arkansas Department of Higher Education - Career Pathways Division	Arkansas Department of Workforce Services, Southern Good Faith Fund, Arkansas Association of Two-Year Colleges, Arkansas Department of Workforce Education, Arkansas Department of Human Services, Arkansas Workforce Investment Board	
Kentucky Community College and Technical System	State and Local Workforce Investment Boards, Kentucky Council on Postsecondary Education, Employers (Microsoft, Cisco, Toyota), The Ford Foundation	
Pathways Initiative Statewide Director and Oregon Pathways Alliance¹³	Oregon Department of Community Colleges and Workforce Development, Career & Technical Education Network, Oregon University System, Oregon Pathways Alliance, Department of Education, Employment Department, Department of Human Services, State and Local Workforce Investment Boards	
State Board for Community and Technical Colleges	State Board for Community and Technical Colleges, Workforce Training and Education Coordinating Board, Local Workforce Development Councils, Local Employers, Community-Based Organizations, Office of the Superintendent of Public Instruction	
Wisconsin Technical College System and Wisconsin Department of Workforce Development	Center on Wisconsin Strategy, The Joyce Foundation, Wisconsin Association of Job Training Executives (Workforce Boards), and Technical College Campuses	

In addition to being grounded in strong partnerships with designated leads, career pathways have become part of a larger state vision for workforce development and higher education in these states. In Arkansas, a legislative task force, the Arkansas Task Force on Higher Education, examined retention and graduation rates in college programs and cited the career pathways framework as a best practice for improving retention and persistence with college courses. The report, *Access to Success: Increasing Arkansas’s College Graduates Promotes Economic Development*, recommends using the CPI as a benchmark for creating strategies to decrease remediation and as the rationale for improving student success services.

For Kentucky, the career pathways work is built into the KCTCS strategic plan, *Plan for a Competitive Commonwealth 2008 – 2020*, which focuses on ensuring that Kentucky has a “highly skilled workforce with the education and training necessary for the state’s businesses and industries to successfully compete in the global economy and to provide every citizen with prosperity and a standard of living that exceeds the national average by the year 2020.”¹⁴ One of the outgrowths of the plan is the Workforce Competitiveness Initiative (WCI), a targeted effort to establish deeper partnerships with business and industry and to enhance the community college system’s responsiveness to their needs. The goal of the WCI is to strengthen the colleges’ workforce training programs sector-based approach and more effectively align them with the needs and competitive strategies of the Kentucky business community. These efforts place the community colleges at the center of Kentucky’s workforce development strategy, which is designed to increase the state’s global competitiveness while addressing the “threats to Kentucky’s competitiveness: underprepared students, low educational attainment, widening skills gap, demand for middle skill jobs, and an aging workforce.”¹⁵

Launched in 2007, Wisconsin's career pathway effort is relatively new, but is gaining steady ground. Prior to RISE, key steps involved in developing the statewide pathways framework included developing a common definition of career pathways; building the field, i.e., providing Adult Basic Education providers with training focused on integrating bridge models; and researching on the target population and promising sectors. The RISE effort also issued two RFPs to explore the following concepts: 1) curriculum development, specifically modularizing diploma or degree programs or developing bridge curricula for Adult Basic Education or English Language students that contextualized the learning to strengthen the transition to postsecondary education; and 2) the development of industry partnerships in high-demand sectors for a given region. Each of the grants will be used to inform the development of two new initiatives of Governor Jim Doyle's GROW Wisconsin plan – The Opportunity Grants and the Skills Jump Start program, each of which has been championed by RISE.¹⁶ Both efforts target low-skill working adults and provide access to postsecondary education to increase skills and gain a stronger foothold in the labor market.

For Oregon and Washington, career pathways serve as an important underpinning in broader state efforts focused on workforce and economic development and higher education. Although career pathways are not explicitly described as a strategy in the Oregon State Business Plan or the SBCTC's Ten Year Strategic Plan for Washington, the career pathway framework is recognized by key stakeholders as being an important approach to achieving the goals laid out in these plans.¹⁷ Furthermore, Oregon's Student Success Plan identifies career pathways as a best practice and the Student Success Steering Committee, appointed by the Department of Community Colleges and Workforce Development, informs the work of the Career Pathways Initiative.

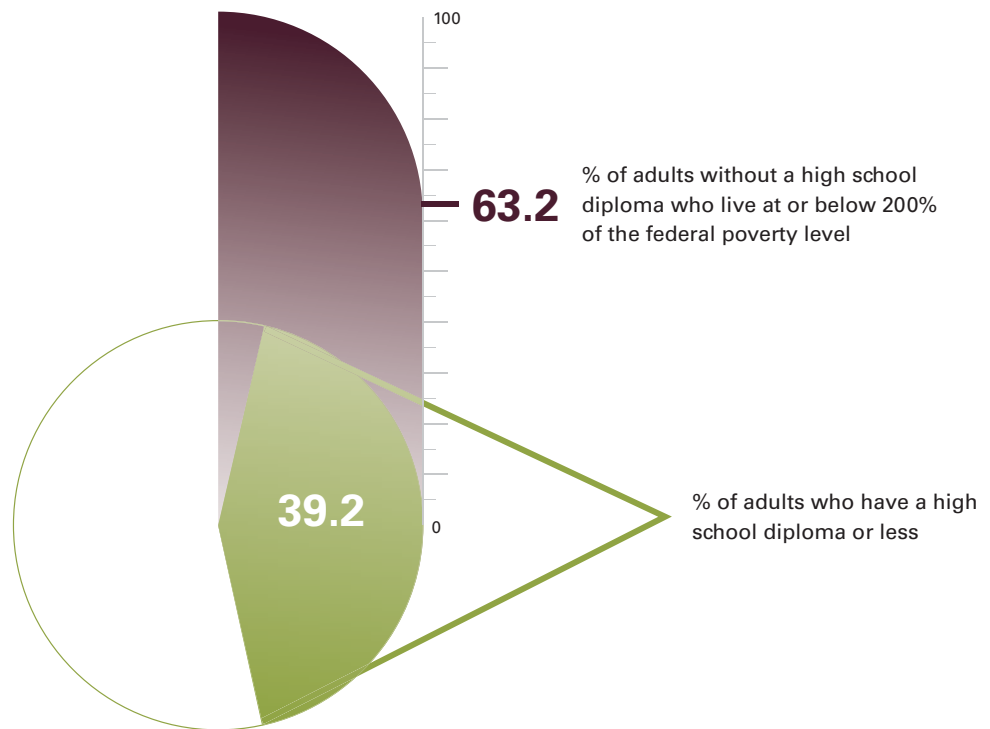
TARGET POPULATION

According to *America's Perfect Storm: Three Forces Changing Our Nation's Future*, a report produced by the Educational Testing Service, increased earning potential is linked to higher levels of educational attainment.¹⁸ Thus, access to postsecondary education and training can yield employment in higher paying, higher quality jobs. However, 1 in 5 (20.6%) American adults between the ages of 25 – 54 have reached some level of postsecondary education but have not earned a degree and nearly twice as many (39.2%) have a high school diploma or less.¹⁹ Of the adults living at or below 200% of the federal poverty level (FPL), 63.2% have a high school diploma or less. With regard to student success, "longitudinal studies of postsecondary student populations indicate that 46 percent of those who begin at community colleges do not complete a degree or enroll elsewhere within a six-year timeframe."²⁰ In addition, low-income individuals face multiple barriers, including financial hardship, limited basic skills, and scarce resources for childcare and transportation, that impact persistence and completion of postsecondary programs.

These stark statistics are an important indicator of why a new approach is needed to help those who exist at the margins of educational and economic opportunity. Serving those who are underprepared and underemployed is a common denominator among the states, with each targeting their efforts to adults with limited skills and income.

Increasing educational attainment and linking low-income, low-skilled adults to employment in high-demand, high-wage sectors is a critical goal of the CPI in Arkansas. This effort is funded by Temporary Assistance for Needy Families (TANF) funds, federal grants used to implement state welfare programs. As a result, the target population for CPI is TANF-eligible adults: 1) current or former recipients of Transitional Employment Assistance (TEA) cash support; 2) current recipients of Food Stamps, ARKids or Medicaid; and 3) others with earnings at or below 250% of the federal poverty level.²¹

Kentucky's career pathways effort targets underprepared and underemployed adults – individuals with limited basic skills and educational attainment, many of whom are low-income. The pathways work also benefits high school students making the shift to postsecondary education or work, and incumbent or dislocated workers in need of a skills upgrade. As the largest workforce training provider in the state of Kentucky, KCTCS strives to meet the needs of low-skill adults and business and industry to provide greater access to education that leads to economic advancement.



Described as a “student-centered” and demand-driven innovation, career pathways in Oregon are designed to adapt to the changing needs of students and employers.²² Career pathways serve students across the educational spectrum and provide multiple access points to serve people at all skill levels. To address the needs of low-skilled adults, the Oregon Pathways for Adult Basic Skills (OPABS) program has developed and piloted five “bridge” courses addressing reading, writing and math skills contextualized for healthcare and manufacturing industries, as well as “bridge” courses for career planning and coordination with WorkSource Centers (local One-Stop Centers).

Washington State is also focused on increasing access to and success in postsecondary education and building the skills of low-income, underprepared adults. The career pathways strategies of I-BEST and Opportunity Grants specifically meet the needs of adult learners with limited language and/or basic skills and provide funding to those with incomes at or below 200% FPL, respectively. The SAI, through its use of achievement points (milestones on progress), allows colleges to track progress of their students in these and other programs.

RISE in Wisconsin, like efforts within the other states, is designed to boost educational attainment and economic opportunities for low-income adults. In particular, RISE is focused on adult workers with low earnings and low formal education beyond high school.

TARGET SECTORS

Career pathways are intended to not only increase educational attainment but also meet the need for a skilled workforce in high-demand occupations. For Arkansas, Kentucky, Washington, and Wisconsin, target sectors are determined at two levels. A state agency, using labor market data, identifies high-demand sectors across the state, and community colleges are then charged with developing pathways that align with this demand. There is usually flexibility, however, and colleges can make a case for pursuing additional pathways based on input from employer partners, local economic development agencies and local workforce investment boards. Oregon expects colleges to use state labor market data to determine which pathways to pursue that address the employment needs in their locale. The specific process for each state is briefly described below.

ARKANSAS

Target sectors by state:



Manufacturing, Health Care & Social Assistance, Transportation & Warehousing, Professional & Technical Services, and Management of Companies and Enterprises

The Arkansas Department of Workforce Services provides the labor market information for the state and has created a tool that identifies the growth industries that align with those targeted by the Arkansas Economic Development Commission or the U.S. Department of Labor High Growth Employment Initiatives. According to the CPI Act 514, colleges are expected to target high-growth and high-demand sectors in consultation with local employers and workforce boards. The Arkansas Department of Higher Education (ADHE) follows up with each school to ensure that training pathways meet the high-growth/high-demand criteria. Each college completes a worksheet and includes occupational data to make the case for selected pathways. Additionally, Economic Modeling Specialists, Inc. (EMSI) produced local reports for the colleges that outlined key sectors to consider when developing pathways. It is important to note that while each school has primary pathways, students can pursue other areas of interest. The industries most critical to Arkansas' economy are: Manufacturing, Health Care & Social-Assistance, Transportation & Warehousing, Professional & Technical Services, and Management of Companies and Enterprises.

KENTUCKY



Health Care, Manufacturing, Information Technology, Construction, Utilities, and Transportation

Prior to 2006, the Office of Commercialization and Innovation in Kentucky's Economic Development Cabinet identified a number of high-wage/high-demand sectors. With the launch of the WCI in 2006, KCTCS is working with the community and technical colleges to "reengineer workforce training programs to align more closely with the needs and competitive strategies of Kentucky's businesses and industries."²³ At the state level, KCTCS met with local CEOs and business executives to determine how it could better prepare the workforce to meet the needs of business and industry. As a result of these dialogues, KCTCS has identified target sectors across the state and helps colleges develop partnerships with local employers within these sectors. For the colleges, employer engagement is critical for identifying labor market needs within their localities and creating pathways that mesh with needs of local employers. To ascertain demand sectors, colleges, in the same vein as the System Office, host forums with employers to discuss how to address their skill needs. Target sectors currently include: Health Care, Manufacturing, Information Technology, Construction, Utilities, and Transportation.

OREGON



Health Care, Manufacturing, and Business Management

Identifying target sectors is a local control decision for the community colleges in Oregon and pathways are developed for demand occupations within the colleges' locales. The Oregon Employment Department publishes statewide and local labor market information and colleges, in conjunction with their employer advisory committees for career/technical programs, use this data to develop career pathways. Colleges also work with local economic development agencies and local workforce investment boards to determine the target sectors for the community colleges. Target sectors primarily include Health Care, Manufacturing, and Business Management.

WASHINGTON

Defining sectors and sectoral strategies falls within the purview of the Workforce Training and Education Coordinating Board (WTECB), which oversees Industry Skills Panels and the Statewide Cluster Analysis Initiative. It has also noted the importance of sectoral strategies in its workforce development strategic plan, *High Skills, High Wages*. The SBCTC expects colleges to align with high-demand sectors and provide “evidence of local and regional labor market demand in the industry through a variety of resources including traditional labor market data, industry data, trade association data, and other transactional data.”²⁴ To meet the criterion of high-demand, colleges must also show the gap between the number of program graduates/completers and the number of job openings locally and regionally, with employer demand for workers exceeding the supply of qualified job applicants.

In Washington, each community college uses local labor market data produced by the Labor Market and Analysis division within the Employment Security Department of Washington State (ESD) to demonstrate how its pathways respond to the local labor market and fall within high-demand sectors. ESD also produces a statewide list of “in demand” occupations. Both Opportunity Grants and I-BEST require colleges to provide evidence of local demand to receive funding associated with these programs. At the state level, the high-demand, target sectors for Washington include: Accounting; Aircraft Mechanics & Technicians; Auto Diesel Mechanics; Early Childhood Education; Healthcare Practitioners; Installation, Maintenance, Repair; Science Technology; Transportation & Construction Trades. Colleges do have some flexibility and are able to provide evidence of local “in demand” occupations when submitting applications for Opportunity Grants and I-BEST.



Accounting; Aircraft Mechanics & Technicians; Auto Diesel Mechanics; Early Childhood Education; Healthcare Practitioners; Installation, Maintenance, Repair; Science Technology; Transportation & Construction Trades

WISCONSIN

At the state level, Wisconsin is participating in a National Governor’s Association Policy Academy to advance regional sector strategies in the state.²⁵ Connected to this effort is the work of the RISE partnership steering committee, which includes representatives from the Governor’s office and the Department of Commerce. The committee is also examining sectors by looking at each region’s competitive strengths. The Center on Wisconsin Strategy (COWS) has analyzed job opportunities in each region, focusing on jobs that pay at least \$10 per hour, project more than twenty openings and don’t require a Bachelor’s degree. While colleges are encouraged to develop pathways for the sectors identified by COWS, there is reciprocity - colleges can employ their own findings about the labor market demands within their region. To reinforce the sector approach, colleges applying for the curriculum development grants from the RISE partnership are expected to demonstrate partnerships with local workforce boards and are given extra consideration if the selected sectors align with those identified by COWS. Applicants for the industry engagement RFP must identify sectors that are “appropriate for pathway development... those that need skilled workers, contribute to economic growth of a region, and offer workers opportunities to build careers and improve earnings.”²⁶ Proposed sectors currently include Manufacturing, Health Care, Construction, and Transportation & Logistics.



Manufacturing, Health Care, Construction, and Transportation & Logistics

EMPLOYER ENGAGEMENT

Partnerships with employers is a critical element in implementing career pathways. From providing guidance on curriculum development and target sectors to identifying requisite skill sets and providing jobs to program completers, employer partners play an essential role in the career pathways framework, particularly in ensuring the relevance of the pathways created. In each of the five states, colleges are expected to develop employer partners as part of pathway development and, in some cases, a state lead for the career pathways effort plays a direct role in facilitating these partnerships as well. While employers are an important feature of the career pathways framework, in reality, the level of their involvement in pathway development ranges from formal to ad hoc, with the latter case often requiring a new look at how employers can most effectively invest their time and expertise.

Examples of employer engagement strategies utilized by the five states are set forth below:

In Arkansas, employer engagement is locally driven and primarily left to the colleges. Efforts range from robust on the part of some schools to lackluster at others. Employer partners participate in the pathways work as members of consortia to assist colleges in developing pre-employment training that allows people to begin on an educational path and as members of technical advisory committees that provide guidance on curricula and industry standards. Employer partners may also provide their employees time off to participate in training that will help them to move up a career ladder. The Arkansas Association of Two-Year Colleges (AATYC) also coordinates with the Business and Industry Deans and Vice Presidents on the campuses to ensure that there is collaboration and support for career pathways from employers.

Kentucky's employer engagement strategy occurs on two fronts. At the system level, the System Office convened dialogues across the state with business and industry leaders to assess their needs, the results of which are documented in the report, *In the Eye of the Storm: Confronting Kentucky's Looming Workforce Crisis*.²⁷ KCTCS began the conversation at a high level and helped the colleges to connect with employers through regional and local forums to determine what is required to meet their needs. All of the pathways require intensive employer engagement and colleges were required to show the in-kind and cash donations that employers would be contributing when submitting applications for funding to develop career pathways. Employers provide curriculum assistance, facilities for work site learning, scholarships for students, equipment, and faculty. For one campus, an employer partner paid for the development of a lab. Additionally, as part of the WCI, KCTCS is working to elevate the profiles of the colleges' workforce departments among employers so that they can develop long-term relationships and correct the misconception among many employers that the workforce office focuses solely on customized job training.

Employer engagement in Oregon occurs at the local level through employer advisory committees that have provided guidance on developing career pathway roadmaps, curriculum development, course offerings and marketing. Employers also play a role in certifying the classes for certificates and in making the "labor market case" for selected sectors. Employers have helped shift the needle with regard to credentials and moved from a focus on two- and four-year degrees to recognizing the value of shorter-term certificates.

Colleges are mandated by the Revised Code of Washington to have an advisory committee for every technical program in the community college system, which are monitored for performance under the Carl D. Perkins Act. These committees provide input on curriculum design and help ensure that training complies with industry standards. Like Oregon, employer engagement occurs at the college level. To be competitive for Opportunity Grant, I-BEST, and High Demand funding, the SBCTC requires colleges to demonstrate employer partnerships and uses employer and labor engagement as a criteria in reviewing proposals. While employer engagement primarily takes place at the college level in Washington, the SBCTC does work directly with employers and labor representatives. At the state level, employer and labor stakeholders participated in the development of the Opportunity Grant program and continue to sit on the review panels for program funding requests as a way to hold the system accountable.

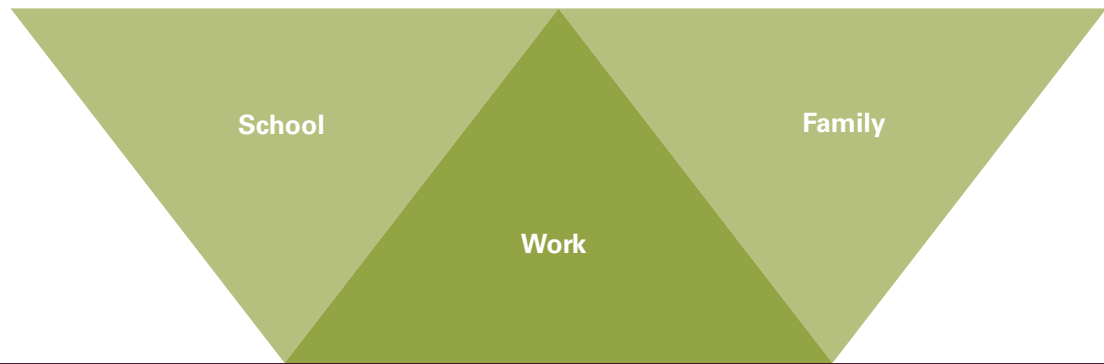
As previously discussed, partnership between businesses, community colleges, and workforce development is a core component of Wisconsin's RISE effort. Engagement with industry is promoted at the state level and executed through regional teams to spur pathway development in sectors tied to economic growth. The RISE partnership, through an RFP, is requiring an intensive partnership building process that leads to the creation of regional teams, composed of workforce development boards, technical colleges and employers, that are responsible for identifying sectors and framing the development of pathways critical to a region's economy. As with the curriculum development grants described earlier, the work of selected grantees will inform the planning for the Opportunity Grants and the Skills Jump Start programs, which aim to provide funding and innovative training to low-income adults, respectively.

SUPPORT SERVICES

Support services, a key element of a career pathways framework, are critical for students who are trying to maintain the delicate balance between school, work and family. Colleges do provide various types of support for students, ranging from student success courses that focus on effective study skills to developing learning communities in which students take multiple courses together and, in some cases, receive counseling to address barriers and help improve student success. Some colleges offer TRIO, a federal program designed to “help students overcome class, social and cultural barriers to higher education” which has been successful in improving persistence; participating students are “more than twice as likely to remain in college than those students from similar backgrounds who did not participate in the program.”²⁸ Other supports from the colleges include providing assistance to address childcare and transportation issues, career counseling, tutoring, and mentoring.

In Arkansas, student support services are provided by college staff on each of the 25 campuses and, as part of the CPI, are funded by TANF dollars. A dedicated counselor for CPI students coordinates all of the support services and also interfaces with the traditional student service staff on campus to ensure that students are getting their needs addressed.²⁹ Support services include: community outreach and orientation to recruit prospective students; assessment of career interests, skill level, childcare and transportation needs, and financial aid assistance; vouchers for childcare and transportation; tuition and, on some campuses, assistance with paying for books or other supplies.

Additionally, seminars on college survival and life skills that include topics such as time management, budgeting, test strategies, note-taking strategies, and others are available on some college campuses for CPI students. The CPI counselor is also charged with collaborating with other college staff on academic advising, monitoring and supporting students in selecting classes and regularly checking in on student performance and attendance so that a student who may be struggling can be quickly identified and assisted as a problem occurs. A final component of student support services that is provided is job placement assistance. This is coordinated by the CPI counselor among school staff in the career center or those in the workforce development or business and industry departments.



Services by state:

	AK	Community outreach, orientation, career/skill assessment, childcare, transportation, financial aid
	KY	Job skills, life skills, academic success training, counseling, referrals
	OR	Career planning, internships, job placement, workforce readiness preparation
	WA	Childcare, transportation, financial aid, workforce readiness
	WI	Case management, childcare, financial aid, mentoring, job placement and referrals

Kentucky is using a case management format for support services. Colleges were encouraged to adapt the “Ready to Work” TANF model that includes assistance with job skills, life skills, academic success training, counseling, advising, mentoring, referrals to other agencies for needed services, and securing and retaining employment. The service delivery may differ across campuses with some allocating a portion of their career pathways funding to a Career Pathways Coordinator who functions much like a case manager or counselor and provides wrap-around services to clients. Other campuses may collaborate with community partners to ensure that students are getting the services they need. For TANF students, case management and support services are funded by a federal TANF contract held with Kentucky Cabinet for Health and Family Services, Department of Community-Based Services. While the framework calls for the inclusion of support services, colleges have flexibility in how they incorporate these into their career pathways.

Student supports and tools in Oregon vary across the 17 colleges and include: career planning, internships, job placement, and workforce readiness preparation. Career Pathways “roadmaps” developed through an online webtool have been developed by the colleges as visual planning tools for students and advisors/counselors. The Oregon Pathways Alliance collaborated on the development of a Career Pathways Roadmap Webtool to develop roadmaps with a similar “look and feel” across the community college system. More than 200 roadmaps have been developed by the colleges. Many colleges are also focused on including career pathways in their college catalog. For example, four colleges have included pathways sections in their catalog and one college has reorganized its catalog to be a career planning tool and provides pathway roadmaps for all programs. Unlike Arkansas and Kentucky, which collaborate with community organizations to assist with support services, Oregon’s community colleges bear responsibility for ensuring that students are receiving the services they need to manage issues as they arise and make progress on their educational track.

The SBCTC in Washington recognized that intensive wrap-around support services were essential for low-income students’ success in college programs. One of the key supporters of the Opportunity Grant legislation, Representative Phyllis Gutierrez Kenney (D), understood that students couldn’t focus on getting a certificate or degree if they were concerned about the multitude of other pressing issues in their lives, such as childcare and transportation. As a result, support services are funded as part of the Opportunity Grant program at \$1,500 per student. Both I-BEST and Opportunity Grant programs have coordinators that work directly with the students to provide support, which has been a critical component to each of these efforts. In addition, colleges, through their workforce development departments, are able to utilize other forms of funding, specifically, Basic Food Employment and Training (formerly Food Stamp Employment and Training – FSET), to provide support services to low-income students.

Although Wisconsin’s RISE partnership is a more recent entrant to the career pathways arena, support services are built into the operational elements that form the foundation for this statewide effort. Colleges and workforce development entities that respond to RISE RFPs are expected to include “pathway support for lifelong learning” such as: 1) career planning services, including assessment and the development of a lifelong individual education plan; 2) coordination across multiple agencies and employers to ensure the provision of wrap-around support services such as case management, childcare, financial aid, coaching and mentoring, job placement and referral to community resources to help students manage school and work; 3) assistance with soft skills such as expectations in the workplace and interpersonal skills; and 4) employer support of an individual’s learning plan and inclusion of the career pathway concept in their employee development plans.³⁰

Support services are a foundational element to any career pathways effort and help students persist and succeed in achieving both their educational and employment goals. Such supports serve as a lifeline to students and help them manage the bumps they may encounter on their pathway. Placing student needs at the core of this work is intrinsic to the community college system’s ability to develop a skilled workforce and meet the needs of employers.

OUTCOMES

Measuring outcomes and using the findings to refine and improve strategies is a foundational element of career pathways. Outcomes are also important for maintaining partnerships, political and financial support, and securing additional resources for career pathways efforts by demonstrating the results achieved. Adopting a career pathways framework requires the development of a data plan and, in many cases, data sharing agreements. Based on the experiences of the states, there are several key steps to consider in crafting a data plan:³¹

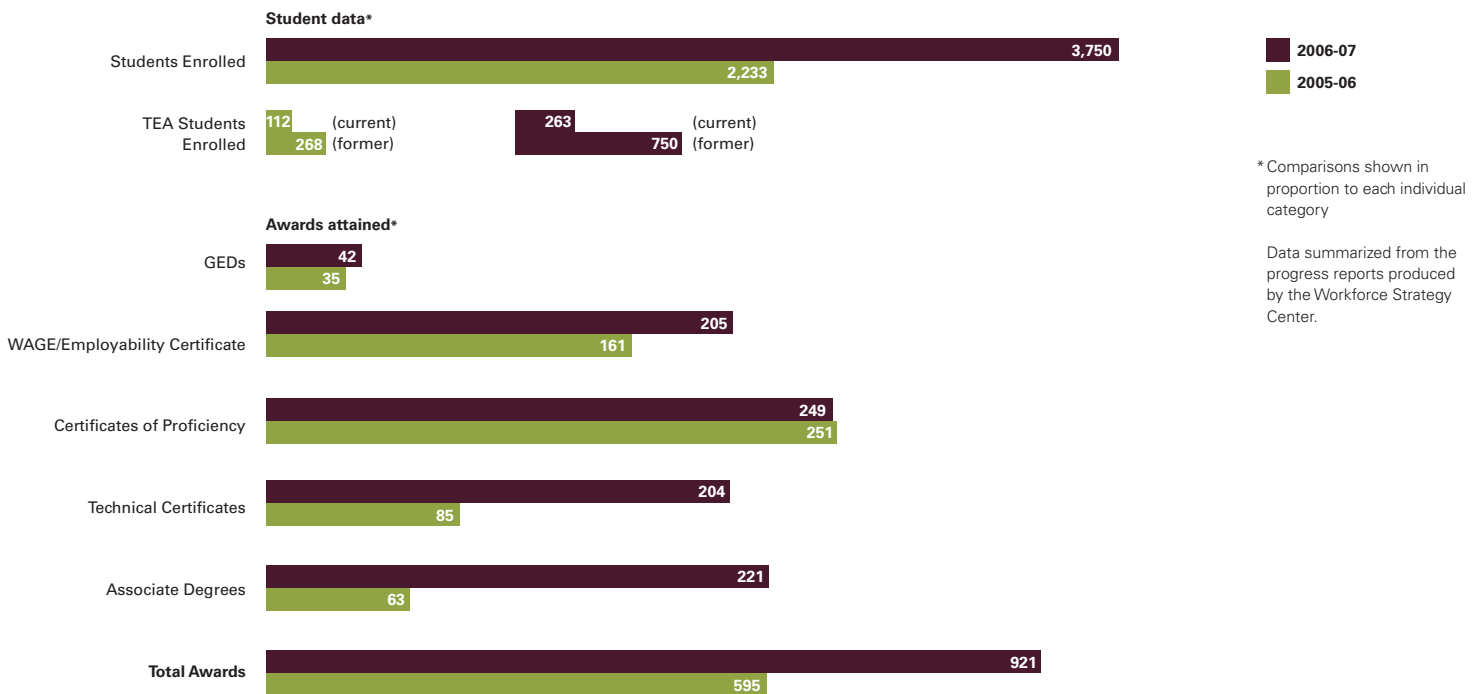
- Defining the outcomes to be measured
- Identifying data sources and the capacity of existing systems to track selected outcomes
- Developing data sharing agreements between partner agencies
- Establishing a reporting schedule and using outcomes to inform ongoing implementation

ARKANSAS

The CPI in Arkansas is required to measure performance in the following areas:³²

- Transitional Employment Assistance (TEA) enrollment
- Certificates/degrees
- Employment rates
- Employment retention rates – measure to be defined

Since the CPI's inception in 2005, 9,974 students have enrolled in career pathways and 4,286 certificates and degrees have been awarded. In addition, 56% of those completing a certificate or degree gained employment based on Unemployment Insurance records. The following table breaks down the results from the CPI's first two program years, Fall 2005 – Fall 2006 and Fall 2006 – Summer 2007:³³



Arkansas' career pathways effort is experiencing significant growth and is producing notable certificate and degree completion outcomes for participants. Measuring employment outcomes presents more of a challenge given the limits of Unemployment Insurance data, which does not include full-time or part-time employment status or information about the benefits included with the job. Colleges are being asked to track job placement data to determine how many people secure employment upon completing a certificate or degree as well as whether or not people are going into the fields for which they train.

To help drive performance, \$1 million in incentive funds has been set aside to provide awards to colleges that achieve certain benchmarks. As described in the Workforce Strategy Center's progress report for year two of the CPI, "incentive funds are distributed on a per capita basis for each benchmark that is reached. Once a site meets its minimum performance benchmark, incentive funding is awarded. Additional funding is awarded for performance exceeding the minimum benchmark." In addition, colleges receive larger payments for higher levels of certificates/degrees that are attained "to encourage sites to advance students up the academic ladder":

- TEA client enrollment - \$100
- GED diploma or WAGE or employability certificate - \$100
- Certificate of Completion/Proficiency - \$200
- Technical Certificate - \$300
- Associate Degree - \$500
- Employment upon program completion - \$500

KENTUCKY

Kentucky also tracks outcomes from enrollment in pathway programs to job placement and retention. To measure outcomes, KCTCS asked colleges to track career pathways students with a "flag" – a code that assigns students to a specialized group. Students are also tracked as a group by their academic code.³⁴ Using the PeopleSoft Information System, KCTCS collects and analyzes data in two key areas: headcount and academic success. Headcount refers to the number of students within the following categories: program track status (associate degree, certificate, diploma, non-credential), full-time versus part-time, age, ethnicity, and gender. Academic success includes average GPA, retention rate, number of credentials awarded, and number of graduates. Outcomes for career pathways students are compared against the entire KCTCS college population.

Overall, 5,333 career pathways students were served between Fall 2004 and Spring 2007, with 573 credentials earned: 155 Associate Degrees, 91 diplomas, and 327 certificates.³⁵

The career pathways effort in Kentucky has made significant progress over the last four years as shown in the table below:³⁶

Performance Measure		2004-2005		2005-2006		2006-2007		2007-2008	
		Number	%	Number	%	Number	%	Number	%
Status	Associate degree seeking	682	53.8	990	55	1458	59	1573	70.3
	Certificate seeking	29	2.3	71	3.9	105	4.3	100	4.5
	Diploma seeking	165	13	347	19.3	459	18.6	349	15.6
	Non-credential	392	30.9	391	21.7	448	18.1	214	9.6
	Full-time	524	41.3	812	45.1	1168	47.3	1116	49.9
	Part-time	744	58.7	987	54.9	1302	52.7	1120	50.1
Gender	Female	1077	84.9	1472	81.8	1933	78.3	1781	79.7
	Male	191	15.1	387	18.2	537	21.7	454	20.3
	Unknown	0	0	0	0	0	0	1	0
Total number of students		1268		1799		2470		2236	
Success	Fall to Fall Retention Rate (%)	N/A		77.0		72.8		76.7	

The number of career pathways students is consistently growing with an increasing majority of students pursuing Associate degrees. While students seeking certificates and diplomas comprise a smaller group of students, these populations are also increasing in size while the number of students in non-credential courses is undergoing a steep decline. Not only is the career pathways student body growing, but it has consistently better retention rates from one academic year to the next compared to the entire KCTCS student body, which ranged from 39.3% in 2005/2006 to 52.69% in 2007/2008.

Job placement, retention and wages will also be tracked using Unemployment Insurance data. KCTCS developed a Memorandum of Agreement to share data with the Kentucky Cabinet for Workforce Development to match student records with UI wage data and expects to run matches to assess employment outcomes.

While the career pathways continuum begins with basic skills and continues to higher levels of study, Kentucky faces a challenge in assessing how students are faring along each step of the pathway. At this time, KCTCS can collect data related to students participating in community college programs; however, capturing data for Adult Basic Education students and aligning it with the information available at the community college is difficult. Adult Basic Education is provided outside of the community college system and this bifurcation makes it difficult to see how many people have been engaged across the state in career pathways.³⁷ Currently, a snapshot of the data is available at the community college level.

OREGON

Launched in 2004, the Career Pathways Initiative has focused on building the capacity and infrastructure of community colleges to adopt and implement a career pathways framework. With a sound foundation in place, data collection, an area that has been under-resourced in the past, is a primary area of focus. Oregon's performance measures will be used to evaluate student achievement and the capacity building efforts underway at each college.

To measure the effectiveness of the Career Pathways Initiative, the Oregon Pathways Alliance developed an "Accountability and Improvement Framework" for assessing the goals set forth by the initiative.³⁸

- Increase the number of Oregonians entering postsecondary education prepared for college-level work;
- Increase the number of Oregonians who attain degrees, certificates and other credentials;
- Decrease the need for remediation at the postsecondary level;
- Increase entry into employment and further education in fields of economic importance to localities and the state; and
- Increase wage gains over time for graduates.

In July 2007, the State Board of Education approved a new credential, the Career Pathways Certificate, in which students earn 12-44 credits of an Associate of Applied Science degree. The skills and competencies for the courses included for this certificate are tied to a job in the local labor market. To date more than 130 new Career Pathways Certificates have been developed by 11 colleges. As students complete the Career Pathways Certificate these completers are included as a "key performance measure".

WASHINGTON

The outcomes for the career pathways strategies in Washington State - I-BEST and Opportunity Grants – are being measured in the context of the Student Achievement Initiative (SAI). The SAI was launched in 2007 and measures the incremental educational milestones achieved by students to help them reach the "tipping point" of completing 45 credits and earning a one-year certificate.³⁹ Colleges receive achievement points as students transition from one step on an educational path to the next.

The points are awarded in four categories:

- Improving preparation for college-level courses
- Building towards a year of college credit
- Completing college math
- Completing certificates, degrees, apprenticeships

In the first full program year of the Opportunity Grants (2007 – 2008), the following outcomes were achieved:⁴⁰

- 3,871 students were awarded Opportunity Grants, exceeding the target of 3000 students.
- 81% of students who began programs in Fall 2007 were retained through Spring 2008 or reached the completion threshold of 45 credits and a certificate. The retention rate during the pilot year (2006 – 2007) was 73%.
- 5,986 achievement points were earned by Opportunity Grant students across the state’s 34 colleges, indicating notable gains in student achievement.
- Generally, students receiving Opportunity Grants were more likely than students receiving Pell Grants or those with low socio-economic to earn achievement points.

Performance Measure	Points	
Increase Basic Skills	1,790	(multiple points per student for each gain in math, listening or reading on CASAS test or earning a GED/high school diploma)
Become College Ready	1,274	(multiple points per student for completing pre-college English and/or math with a minimum passing grade to advance)
Earn first 15 college credits	1,156	(one point per student as milestone is achieved)
Earn first 30 college credits	873	(one point per student as milestone is achieved)
Earn 5 college credits in college level computation or quantitative reasoning	385	(one point per student as milestone is achieved)
Advancement to tipping point and beyond (certificates and degrees)	508	(single count for earning a degree, certificate or completing an apprenticeship; certificates counted if 45 or more credits are earned.)

Employment outcomes were also measured using UI wagematch and reported on in Fall 2009.

The point distribution of the 5,986 achievement points is broken down above. The majority of the points earned resulted from increases in basic skills, completions of pre-college English and math courses, and earning the first 15 college credits. Colleges will receive payment in October 2009. The value of each point will be determined by the SBCTC prior to the start of each academic year and based on the funds available.

The I-BEST program, for which student skills gains are also being evaluated using SAI, is yielding favorable results as well. Key findings for I-BEST include:⁴¹

- 900 enrolled in I-BEST programs across 24 colleges: 273 ESL and 627 ABE/GED
- I-BEST students are more likely than students in standard ABE/GED and ESL classes to earn their first 15 college credits: 53% compared to 11% for ESL students and 61% compared to 23% for ABE/GED students.
- I-BEST students complete 30 or more credits at a higher rate than ABE/GED and ESL students enrolled in college-level courses: 32% versus 11%.
- I-BEST students had the highest percentage of demonstrated skill gains: 59% versus 48% for students enrolled in courses beyond basic skills and 38% for students taking ABE/GED courses exclusively.

- The same holds true for I-BEST ESL students in which 71% demonstrated skill gains compared to 58% for students taking courses outside of basic skills and 46% for students solely taking ESL classes.
- On average I-BEST ABE/GED and ESL students earned four achievement points per student for increasing their basic skills compared to three points earned by students taking only ESL or ABE/GED classes. However, students in standard ESL classes that combined their basic skills classes with other instruction also garnered 4 points, demonstrating that contextualized basic education can increase the rate at which students gain skills and move to the next educational level.

At this time, it is too early to assess the progress I-BEST students are making toward the tipping point given the newness of the program. Furthermore, with multiple entry and exit points in some educational tracks, Washington faces the same challenge as Oregon in tracking the milestones achieved by students who complete an initial training step, exit for employment, and then return for additional training and education – a journey that can take several years.

WISCONSIN

Wisconsin's burgeoning RISE initiative is too emergent for demonstrated student outcomes. A data plan for 2009 – 2011 is in development and data sharing agreements are also under consideration. Furthermore, as noted in the *First Year Highlights* for RISE, a research tool is being tested that can access multiple data sources and this tool will be used to establish a baseline and track future outcomes.⁴² Outcomes to be measured are:

- The number of low-income working adults enrolling in postsecondary education
- The proportion of low-income working adults attaining degrees, technical diplomas, and/or certificates
- The proportion of Adult Basic Education (ABE), English Language Learners (ELL), development and remedial adult learners transitioning into and completing associates degrees, technical diplomas, and/or certificates.
- Increases in earnings and job quality for low-income adults engaged in career pathways work.

Based on the experiences of Arkansas, Kentucky, Oregon, Washington and Wisconsin, key outcome measures to consider include:

- Enrollment and retention of students participating in career pathways programs;
- Completion rates and the number and type of certificates or degrees attained;
- Transition rates from basic skills to progressively higher levels of coursework;
- Employment outcomes, including wages, benefits, retention, upgrades in pay, promotions;
- Whether graduates secure jobs related to their field of study.

III. IMPLEMENTING A STATEWIDE MODEL

Statewide implementation of the career pathways framework can be challenging and requires a great deal of work on multiple fronts: demonstrating the value of career pathways to achieve a shared vision; motivating colleges to participate; developing partnerships and obtaining support from political leaders, employers, community colleges, state agencies and community-based organizations; securing investments from the state to financially support the endeavor; and building the capacity of community colleges to shift the way they do business. As described in this section, the state leads were instrumental in bringing career pathways to fruition in each of the states examined.

Implementation of career pathways in each of the states commenced with a catalyst that set the process in motion. This impetus varied across the states. For Arkansas and Oregon, pilot projects served as an incubator for the career pathway framework and opened the door to new opportunities to broaden the effort. In Kentucky and Wisconsin, participation in initiatives sponsored by private foundations to improve the effectiveness of community colleges, particularly in serving under-prepared, low-income adults – the Ford Foundation’s “Bridges to Opportunity Project”⁴³ (Bridges) and The Joyce Foundation’s Shifting Gears⁴⁴ effort, respectively – helped spur statewide action. Washington also participated in the Ford Foundation’s Bridges project and was influenced by two other factors: industry-based strategies taking place throughout the state and the SBCTC’s aspiration to connect people to better economic opportunities. The spark that led each of these states to adopt the career pathways approach is briefly described below:

- In Arkansas, Oregon, and Wisconsin, career pathways grew out of long-standing relationships and a convergence of mutual interests between colleges and other stakeholders to better meet student needs and employer demand. This convergence coupled with successful small-scale pilots, in the case of Arkansas and Oregon, helped build the case and create momentum for career pathways and served as the impetus for a statewide movement. In Wisconsin, COWS and the South Central Workforce Development Board, two key RISE partners, had been building industry partnerships and laying the foundation for career pathways for over a decade.
- The interest of private foundations served as a launch pad for career pathways in Kentucky and Wisconsin. The Ford Foundation and The Joyce Foundation provided vital support for defining a vision for the career pathways framework and for exploring key concepts in these states, including: curriculum development that includes bridge programs that prepare people for higher level coursework and modules that can be completed in shorter amounts of time that build to certificates and degrees; employer engagement strategies; integration between the various departments within the community college; and shaping policies that help low-income students access and persist in community college programs.

- Washington’s work was shaped in part by the state’s regional cluster initiative and the industry skills panels, both of which aim to build the skills of Washington residents to be responsive to the needs of business and industry. Both of these efforts prompted a review of the required skill sets and the pathways needed to attain such skills. Emphasis on skill standards and skills attainment, coupled with a desire to help people move up a career ladder, inspired the SBCTC to take a close look at the career pathways framework in answer to its question, “what do we need to do to make education inclusive for all?” Further, Washington, like Kentucky, participated in the Bridges program and was able to develop a critical communications strategy that helped in delivering key messages about the importance of Opportunity Grants, I-BEST and Applied Baccalaureates. I-BEST, an important educational innovation for the state, was also a part of Washington’s Bridges work.

MOTIVATING STAKEHOLDERS: DEVELOPING PARTNERSHIPS AND COMMUNICATING THE VALUE OF CAREER PATHWAYS

Partnership among multiple stakeholders and a designated state lead is a necessity for career pathways to take hold at a statewide level. Each of the states examined has invested significant time cultivating relationships with key agencies – community college systems, employers, workforce and economic development agencies, and community organizations. By developing partnerships, the states were able to create a base of support for career pathways, move the agenda forward, and garner political champions. A powerful message, one that captured the attention of multiple audiences with varying perspectives and goals, was vital to establishing strong partnerships and gaining political support. Describing career pathways as a systemic framework promoted its universality. It is an approach that can provide solutions for both low-income, low-skill adults *and* employers by aligning stakeholders in key systems – workforce development, economic development, community colleges, business and industry.

Developing an understanding of the key messages that resonate with each audience is fundamental to this work. Identifying the phrases and words that have meaning can bring people on board. For example, is it the words “career pathways” that have meaning for the audience or is it the end product, the outcomes, of the pathways concept that connects people to the work? Similarly, is the audience to which one is trying to appeal interested in business responsiveness and a skilled workforce or are they interested in providing educational opportunities that help low-income and low-skill adults move out of poverty? Perhaps it is a combination of both. Further, what do the colleges need to hear – an emphasis on the student-centered nature of career pathways or how this framework builds on existing programs at the college? In most cases, the message will encompass many facets; the task at hand is to determine what target audiences want and need to hear.

COLLEGES

Translating the value of career pathways to the individual colleges required a careful look at messaging in each of the states. Colleges were most responsive when career pathways were described as being driven by student needs. Highlighting the student-centeredness of the work—the idea that career pathways could move people along an educational continuum while providing support services to help balance family, school and work—helped to bring faculty and administrative staff on board. Also important to the messaging with colleges was the point that career pathways reach beyond the academic realm and lead to new employment opportunities and career ladders that provide family supporting wages.

Oregon found that focusing on the student experience across the educational spectrum made sense to people and helped college staff to see beyond individual silos. Oregon’s Pathway Alliance also developed a Pathways Statewide Marketing Committee to increase awareness and understanding of career pathways. The team has developed a communications plan with four main objectives: 1) increase awareness of Career Pathways; 2) create and promote a common language to be used when talking about or promoting Career Pathways; 3) create Career Pathways promotional tools to be used throughout the state; and 4) take advantage of efficiencies of scale to lower the cost of creating promotional tools for Career Pathways-related efforts.⁴⁵ In addition, a 30-second TV/radio Career Pathways announcement was developed to be aired on Oregon TV and radio stations statewide in collaboration with the Oregon Association of Broadcasters.

Wisconsin understood the challenge of asking people to do more with limited resources and has identified a message for developing champions of career pathways within community colleges. To gain support from faculty and staff, RISE explained how the framework connected the various departments within the college and how it built on work already taking place so that college staff could see how they fit in the pathways framework and the value of their work. It helped to evolve the conversation from a myopic “here’s one more thing I have to do” to “this is what I am already doing” that contributes to a larger strategy and vision. Language was key to promoting the work related to curriculum development as well. Using a lens of business responsiveness was a more effective way to position the need for curriculum redesign than talking about “chunking” curriculum in shorter modules.

Beyond communicating the value of career pathways, colleges also needed financial support to be able to undertake the work that could change the system. Each state, through a variety of mechanisms, has provided colleges with the financial support needed to develop the infrastructure called for by the career pathways framework. Such financial support helped the colleges in taking real action beyond affirming the theoretical foundation of career pathways.

POLITICAL SUPPORT

Political backing that leads to legislative action should be a goal when creating a network of support for career pathways. Such action can institutionalize funding streams as it did in the case of Arkansas, Kentucky, Oregon and Washington. Political support can also lead to state-recognized pathways or employability credentials, which have been accepted in Arkansas, Kentucky and Oregon. And, it can result in codifying the framework as a key strategic initiative of the state, demonstrated by the CPI in Arkansas. For Washington and Wisconsin, political backing led to funding for projects of particular import to promoting career pathways – I-BEST, Opportunity Grants and Applied Baccalaureates in Washington and Opportunity Grants and Skills Jump Start in Wisconsin.

Early adopters of career pathways in Arkansas and Oregon positioned their states to apply to participate in the National Governors Association’s (NGA) Pathways to Advancement Initiative, an effort focused expanding postsecondary educational opportunities for low-income, low-skill adults, which ultimately led to a commitment to implementing a career pathways framework statewide.⁴⁶ The career pathways concept, with its emphasis on increasing educational attainment for low-income adults to prepare them for good paying, high-demand jobs, dovetailed with the workforce development priorities of both Governor Mike Beebe (AR) and Governor Ted Kulongoski (OR) and thus was not a hard sell at the highest level of state office. Participation in the NGA Academy secured representation and support from the Governor’s office to promote the career pathways framework.

The SBCTC in Washington recognized the value of communications as an advocacy tool to promote the value of career pathways. The communications strategy, developed through the Bridges project and employed by SBCTC staff and college leadership, underscored the goal of increasing access to postsecondary education for low-income adults. A key outcome of this strategy was being able to support Rep. Kenney’s Opportunity Grant legislation by demonstrating how the SBCTC could play an effective role in economic development. Creating a message about the dual benefits for students and business that would result from investments in training and education resonated with the state legislature. The term “career pathways” made sense as a concept, but the appeal was the result of the pathways framework – a competitive, skilled workforce to meet business and industry demand in key sectors of the state’s economy. Framing the conversation around access and opportunity helped in building a base of support for the Opportunity Grant legislation to fund low-income students in reaching the “tipping point” of 45 credits and a credential. Another key strategy for getting support for this critical piece of legislation was the development of a coalition of business, labor and advocacy groups. This coalition delivered a powerful message about the need for a skilled workforce that connects people to jobs with high wages and strengthens the competitiveness of Washington’s businesses in the global economy.

Though not codified by state law, Wisconsin’s RISE effort is a fundamental element of the state’s workforce development plan and has strong gubernatorial support. The motivating factors for career pathways – a need to be more responsive to low-income working people and businesses – connected with the interests of the Governor, the Wisconsin Technical College System, and the Department of Workforce Development and led to support for statewide adoption as key strategy for both workforce and economic development. Further, the Governor has funded two related

career pathways strategies – Opportunity Grants and Skills Jump Start Training – as part of his GROW Wisconsin Strategic Plan, which lays out the vision for workforce development in Wisconsin. Specifically, these initiatives will support training for part-time students in key demand areas (Opportunity Grants) and promote curriculum development that blends basic education with skills training (Skills Jump Start). Wisconsin's RISE effort is also connected to the state's participation in a NGA Policy Academy, a new effort in which the RISE steering committee is one of five work teams and will focus specifically on "building the skills of the current workforce." The goal of the NGA work is to "ensure that educational, workforce development and economic development institutions, employers, and labor are supporting an array of career pathways and bridge programs."⁴⁷ Recently, Governor Doyle announced significant investment in the Wisconsin Sector Strategies Initiative, which will be funded by \$3 million in federal funds over the next two years.⁴⁸ Both the RISE effort and the work of the NGA Policy Academy will fall within the purview of this new initiative.

EMPLOYER SUPPORT

To engage business leaders, both Kentucky and Wisconsin framed pathways in an economic development context and emphasized responsiveness to business needs. Kentucky has also begun to re-engineer the colleges' workforce offices to be the main point of contact for business and industry through the WCI, the next iteration of the pathways effort in the state. Kentucky's strong community college system office, KCTCS, which has been spearheading the career pathways work in the state, has worked to build relationships with business and industry leaders and the state and local workforce investment boards. For career pathways to be successful, the framework must address the needs of local employers, so KCTCS set out to develop a clear understanding of where the unmet needs were in the business community through a series of CEO dialogues that took place throughout the state. The dialogues were followed up with regional forums that delved deeper into how these needs could be addressed.

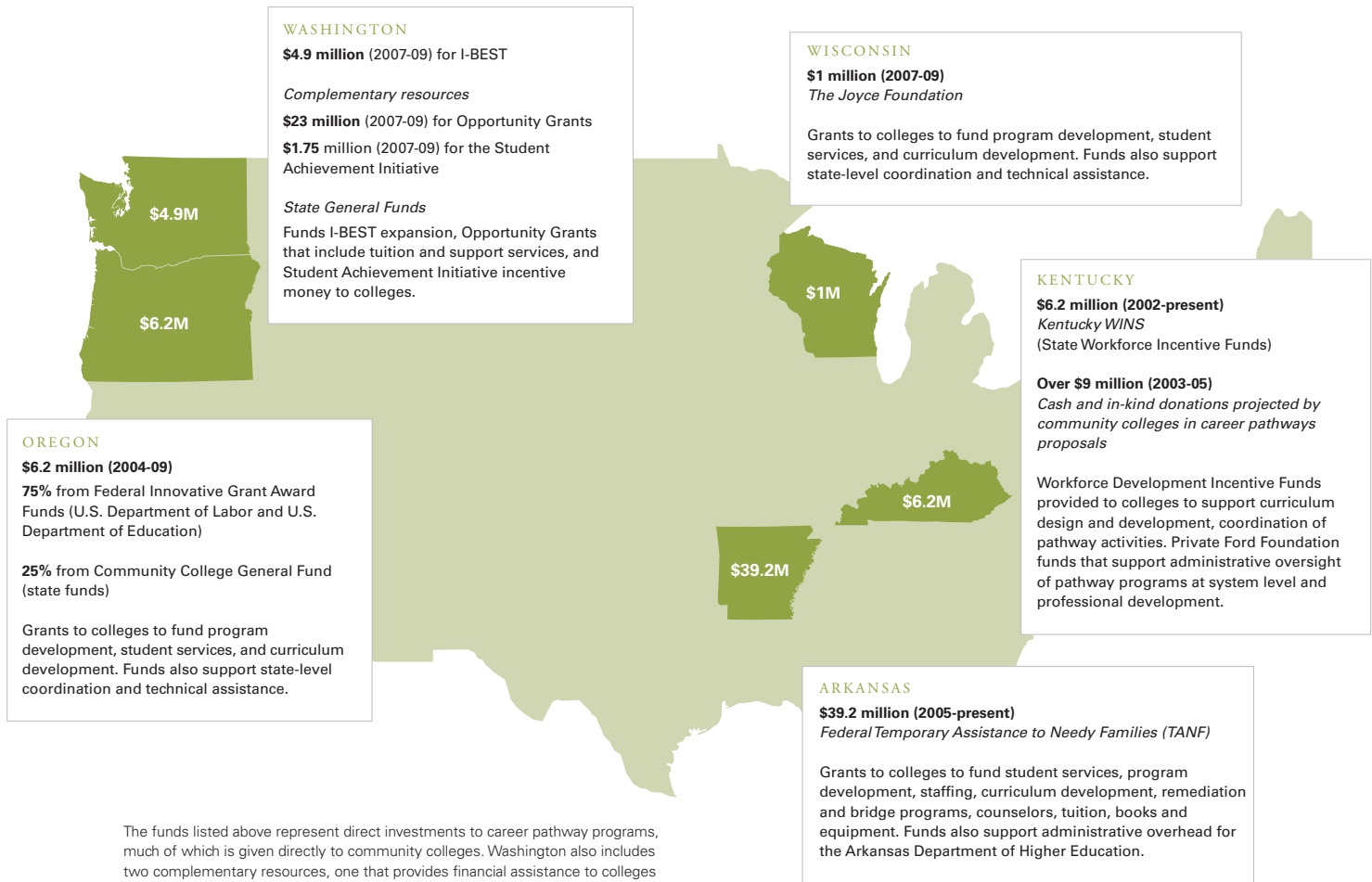
Gaining support from business and industry is a core element of the career pathways effort in Wisconsin. RISE has issued a RFP focused on industry engagement, in which colleges or workforce development boards are supported to create teams that include robust industry partnerships. Grantees are expected to develop an approach and tool for industry partnership and identify and provide evidence for proposed pathway sectors. In addition, grant recipients will develop partnerships with employers, employer groups or labor and develop next steps for career pathway development. There are also expectations related to project assessment, sharing best practices, and participating in professional development meetings as well as meetings focused on policy and process analysis.

FUNDING CAREER PATHWAYS

Career pathways require a significant amount of investment from state, federal and private funds. While private dollars are an important source of funding to launch the development of a career pathways framework, buy-in at the state level is critical to implementing this framework across multiple systems that include community and technical colleges, workforce development agencies, economic development agencies, business and industry and departments of higher education.

Each of the states has made significant investments in the career pathways framework. Financial support is derived from a mix of sources that include state general funds, federal funds targeting workforce development and higher education, and private dollars from foundations. The funding can be viewed in three distinct categories: 1) funding set aside to support formalized career pathways efforts at community colleges, which is the case in Arkansas, Kentucky and Oregon; 2) funding for career pathway components and complementary efforts, specifically Washington's I-BEST program, a direct pathways investment, and the Opportunity Grants and SAI, which augment it; and 3) funding for the developmental phase of work as illustrated by The Joyce Foundation's investment in Wisconsin's RISE partnership.

The table below illustrates the scale and source of funding for each state as well as how those funds are used:



The funds listed above represent direct investments to career pathway programs, much of which is given directly to community colleges. Washington also includes two complementary resources, one that provides financial assistance to colleges (Opportunity Grants) and another that pays colleges for the academic milestones achieved by students as they progress along the educational continuum (Student Achievement Initiative).

Whether utilizing state general funds or federal grant funds to support the development and implementation of career pathways, states are investing a significant amount of resources in this framework, which they are typically allocating through grants made directly to the community and technical colleges. These grants are used for a variety of purposes including program development, curriculum design, industry engagement, support services such as childcare and transportation vouchers for students and, in some cases, tuition, books and equipment.

Career pathways efforts in Arkansas and Oregon are primarily funded by federal grants. In the case of Arkansas, the legislature codified the use of TANF funds specifically for the CPI. The State Department of Workforce Services administers the TANF funds and currently allocates \$11.2 million annually to support CPI; there is no funding limit requirement. Approximately \$500,000 to \$600,000 is used for administrative overhead at the Arkansas Department of Higher Education, which manages the CPI through its Career Pathways Division, provides leadership and training to staff at each community college, and collects data. The remaining funds are provided directly to the colleges through a RFP process. Funds are awarded based on institutional performance, the annual operations plan to address gaps and issues, and the number of students the colleges expect to serve. In 2005 - 2006, the first program year of the CPI, colleges received \$500,000 to establish career pathways programs; colleges approved in January 2007 received a grant award of \$150,000.⁴⁹ Currently, colleges receive between \$250,000 - \$700,000.

The colleges in Arkansas are required to use their CPI funds for eligible TANF students. Funds are primarily used to support student services, including vouchers for transportation and child-care, and counseling services. The funds can also be used to staff a career pathways coordinator or job placement coordinator, curriculum development related to remediation and bridge programs, book loan programs, equipment, licensing exam fees, and tuition, though other funding sources are accessed first to cover tuition, such as Pell grants. All services funded as part of the CPI must be tied to serving the TANF eligible student population.

In Oregon, state-controlled federal resources over which the state has control provided the majority of funding for career pathways between 2004-2006. Designated specifically to build capacity for the Career Pathways Initiative, these funds were granted for meeting performance standards of the Workforce Investment Act (WIA) Title I, Carl D. Perkins Act, and WIA Title II.⁵⁰ For 2007 through 2009, the State Board of Education approved Strategic Reserve general funds to continue to advance career pathways implementation statewide. Additional state funding is provided by a community college general fund.⁵¹ Each college also leverages state support and secures additional funding from multiple sources including local workforce investment boards, TANF, Carl D. Perkins Vocational and Technical Education Act, and local college general funds. Prior to the 2007-2009 biennium, the colleges were awarded grants on a competitive basis, which has since shifted to formula funding. Colleges use these funds for student services, program development, curriculum development and systems development (efforts to work across silos within the college and effect systemic change). Additionally, the federal and state dollars fund the Statewide Pathway Director position as well as technical assistance and capacity building activities provided to all the colleges.

The career pathways efforts in Kentucky and Washington are supported by state funds. Over the last five years in Kentucky, \$6.2 million in state general funds have been invested in career pathways. Prior to adopting the pathways framework, the legislature designated Workforce Development Trust Fund dollars to KCTCS to fund short-term and customized training, known as the Kentucky Workforce Investment Network System (KY WINS). Upon adopting the pathways framework as a strategy to improve service delivery within the community college system and to “promote economic and academic advancement for disadvantaged students,”⁵² Chancellor Keith Bird was able to include the career pathways effort within the funding purview of KY WINS. At the college level, KY WINS funded two-year programs of \$250,000 - \$300,000 awarded to each of Kentucky’s sixteen community and technical colleges (2004–06). Funds were used for coordination activities and staffing to support the development of pathways as well as the curriculum design and development work needed to respond to the effort’s emphasis on modularizing curriculum to include multiple entry and exit points. The awards did not fund tuition expenses for students. As part of the RFP process, colleges were expected to identify additional cash and in-kind donations, including tuition revenue, that would result from the career pathways work. Currently, KCTCS responds to funding requests from the colleges on an ongoing basis and is integrating the career pathways framework into the larger scale WCI.

In Washington, the legislature has appropriated funds for three important work areas managed by the SBCTC: I-BEST, a component of career pathways, and two efforts that help to promote pathways, Opportunity Grants and the SAI. Colleges receive funding for I-BEST and Opportunity Grants based on proposals submitted to the SBCTC which must demonstrate how students will move along a pathway - for example, from basic skills to higher levels of coursework and completion of a certificate or degree. In addition, colleges receive payments for achievement points that “measure student progress for the incremental gains students make that lead to college success increasing academic achievement.”⁵³ In the last biennium (2007–09), the Legislature designated funds for the following:

Funds directly supporting colleges:

- \$4.9 million to support the growth and expansion of I-BEST, which provides an enhanced full-time equivalent (FTE) of 1.75 to support an integrated instructional model that combines basic skills and professional technical education in one class.

Complementary resources that encourage pathways:

- \$23 million for Opportunity Grants (\$11.5 million per year) that includes tuition and fees for up to 45 credits, a maximum of \$1000 for books and supplies per academic year, and \$1500 for individualized support services.

- \$1,750,000 for the SAI distributed as both start-up funds for the colleges and as achievement points payments.

Wisconsin's RISE partnership has received a two-year, \$1 million grant from The Joyce Foundation's Shifting Gears Initiative. As described in the previous section, two RFPs have been issued: 1) to support curriculum development, and 2) to develop an industry engagement strategy. To promote industry engagement, seven grants, totaling \$250,000, were awarded for developing tools and protocols for engaging industries in the career pathways work. Additionally, \$240,000 of Joyce Foundation funds have been used to support the first step in creating the Skills Jump Start Program, an effort that is part of Governor Jim Doyle's (D-WI) Grow Wisconsin plan. These funds provided grants to technical colleges for curriculum development that allows low-income adults to meet their adult basic education needs while getting technical training in a high demand occupation.⁵⁴

In addition, Governor Doyle, using WIA discretionary funds, has invested in two programs that have the potential to push the career pathways agenda forward in Wisconsin: 1) \$1.5 million for the Opportunity Grant program focused on training low-income workers who are not eligible for financial aid with up to \$1000 per year; and 2) \$300,000 for the Skills Jump Start Pilot Training Grants to further support the Adult Basic Education Bridge and career pathway work.⁵⁵ As noted earlier, the Governor is also investing \$3 million in the new Sector Strategies Initiative in Wisconsin, which will encompass the RISE effort.

MOVING FROM PLANNING TO IMPLEMENTATION

The states fall within different stages of implementation – from mature efforts that have been integrated across the state to burgeoning efforts that are working to build the capacity of community colleges and are fostering the partnerships needed for the career pathways framework to take hold:

- Arkansas, Kentucky, and Oregon represent states with mature career pathways efforts that are working directly with the colleges to apply the framework to their local settings.
- Washington is at an intermediate stage and has been successful in launching a key piece of the pathways framework – I-BEST, a critical starting point for some students on a career pathway. Washington has also put in place elements that support pathways, specifically Opportunity Grants and the SAI. The SBCTC has begun to build the capacity of community colleges by conducting a Career Pathways Institute, which promoted the framework developed by the League for Innovation and the National Council for Workforce Education and focused on helping the colleges to effectively utilize I-BEST and Opportunity Grants.
- Wisconsin is in a developmental stage but has laid a strong foundation by developing a vision and framework for its career pathways effort and by focusing attention on two key concepts, curriculum design and industry engagement, through the issuance of two RFPs. Wisconsin is also working to build the field of community colleges and workforce development providers. It has put forth guidelines and operational elements for career pathways, provided data on the target population and key middle skill job opportunities, and conducted a leadership conference and policy forum.

In working with community colleges, it is important to note that every college has its own priorities and challenges. As a result, each college will have a different capacity level to implement career pathways. To incent colleges to embrace the career pathways framework, each state has offered additional funds, either through an RFP (Arkansas, Kentucky, Oregon and Wisconsin), or through enhanced FTEs, grants, and professional development opportunities (Washington). Additionally, technical assistance has been provided to help colleges build the infrastructure necessary to develop and implement selected pathways. Despite the stage of development, it is clear that a combination of financial support and technical assistance are powerful mechanisms for bringing colleges on board with career pathways.

The ADHE in Arkansas provides leadership and training for all career pathways sites. In addition, technical assistance occurs through monthly conference calls, in-person training, and annual retreats. Arkansas' community colleges each receive at least \$250,000 annually to support career pathways. Grants are distributed based on the number of students the colleges expect to serve, the campus plan for the upcoming year, and institutional performance. As described in the funding section, colleges also receive incentive payments based on their performance against specific

benchmarks from enrolling students to degree completion. Given the target population, new staff members with experience in serving low-income individuals were hired to provide counseling to CPI students. In addition, the CPI partners have invested a significant amount of time over the last two years assisting college staff to deepen their understanding of working with low-income adults. Philip DeVol, a consultant who specializes in poverty issues, provided training to college staff working with students who live in poverty and placed their experiences in the context of education. Currently, three ADHE staff members are certified trainers for "Bridges Out of Poverty" workshops and provide these professional development sessions to campus staff whose daily work connects them to students in poverty.

Kentucky also provided grant funds to each college, which averaged between \$250,000 and \$300,000 per college, per pathway and asked colleges to consider these funds as seed money for system transformation. Technical assistance is provided by KCTCS through the career pathways coordinator and the Director of College and Career Transitions. Colleges are brought together for networking opportunities and outside experts are brought in to build the capacity of the colleges. For example, Davis Jenkins, a senior research associate at the Community College Research Center at Teachers College, Columbia University, led an institute focused on data collection. Kentucky also uses the "Bridges Out of Poverty" training, based on the work of poverty experts, Ruby K. Payne and Philip DeVol, to provide the additional resources to the colleges as they work with individuals in poverty.

In Oregon, colleges also receive grants to implement career pathways. Additional funding was allocated to support the hiring of a Statewide Director for the Career Pathways Initiative. Charged with overseeing the integration of the career pathways framework in all of Oregon's community colleges, the Statewide Director, in conjunction with the Oregon Pathways Alliance, provides technical assistance to all the campuses in a variety of ways: individual consultation with a college; quarterly meetings to promote cross-college learning; regional meetings in which colleges form learning cohorts, based on geography, to facilitate stronger relationships between colleges and to develop a regional perspective about career pathways; and academies focused on developing strategies for implementing career pathways. The Career Pathways Initiative sponsored two statewide Oregon Pathways Academies in 2005 and 2007. These Academies included teams of community college leaders and their partners from each of Oregon's 17 community colleges as well as a state team. In 2008, the Healthcare Career Pathways Summit was held with teams from the 17 colleges and their healthcare employer partners locally. As demonstrated by the types of assistance provided in Oregon, peer support and learning exchanges are vital aspects of the technical assistance provided to the community colleges.

For Washington, the SAI is an effort that is expected to prompt colleges to view their work within a career pathways framework. The SBCTC has chosen to promote career pathways through strategic opportunities, technical assistance, and professional development. To incent colleges to infuse career pathways into their operations, the SBCTC uses Opportunity Grants and I-BEST as the primary levers, along with the SAI, which awards incentive payment points to colleges for the educational milestones achieved by students. Through these efforts, colleges are confronted with the question of whether or not they are providing pathways for students. Do their programs align and allow students to make a seamless progression to successively higher levels of learning that lead to a good economic payoff in the labor market? Does an exit point lead to a dead end or another entry point? Colleges received technical assistance regarding the career pathways framework through a Career Pathways Institute and also receive technical assistance on the administration of I-BEST and Opportunity Grants.

Washington's I-BEST program is designed to allow low-skilled individuals to attain a first tier of learning. To receive the enhanced funding for I-BEST, colleges must demonstrate how the program fits within a certificate and degree pathway and also show how it meets employer demand. Opportunity Grants also carry an expectation that a career pathway is built into the eligible programs that respond to local labor market needs. To measure the success of these efforts, the SAI awards colleges with additional funding as students achieve various educational milestones from basic skills to a certificate or degree. The overlay of the SAI further emphasizes the need for implementing a pathways approach to increase educational attainment and strengthen the colleges' ability to meet the employment needs of local employers.

At the start of Wisconsin's RISE effort, six regional meetings were held in which participants, education and workforce leaders, were asked to explore their region's capacity for adopting career pathways and to conduct a gap analysis to identify the pieces in place and those missing.

Each group produced a pictorial representation of how their regional system was “equipped to support career pathways.”⁵⁶To build the capacity of community colleges to integrate career pathways, RISE has issued RFPs that support concept and curriculum development and industry engagement. Grantees will receive technical assistance and professional development as part of the grant related to best practices and state and national policies that can support career pathways. Participating colleges will also have an opportunity to share their lessons learned along with the tools and materials they created in pursuing a pathways approach.

IV. CHALLENGES

Undertaking career pathways at a statewide level can be a complicated process with several moving parts and multiple priorities to balance on a regular basis. The challenges identified by the leaders of the career pathways efforts in Arkansas, Kentucky, Oregon, Washington and Wisconsin can be grouped into the following categories:

- Adopting a Shared Vision and New Framework
- Accessing Resources to Support Students
- Building Stakeholder Support
- Addressing Student Needs and Promoting Persistence
- Developing a Data Collection Plan

ADOPTING A SHARED VISION AND NEW FRAMEWORK

At the start, some community colleges in states with ongoing career pathways efforts – Arkansas, Oregon, and Washington – were hesitant to change and adopt the new framework, citing that it was work that was already taking place on their campuses. Financial incentives were needed to bring about change. Bringing in outside funds and allocating state and/or federal funds to career pathways provided colleges with the financial support needed to redesign curriculum, develop infrastructure, and provide support services to students.

Combating the view held by many colleges that career pathways is “yet one more program to administer” or is “that high school thing” also frustrated efforts to implement career pathways. Across the board, states noted that in many cases it was initially difficult for colleges to grasp the larger vision of career pathways and promote the effort. With multiple priorities, colleges may feel taxed to keep existing initiatives going. Building college capacity and developing messages that resonate with the colleges and other stakeholders, as detailed previously, is vital to shifting the thinking from administering a program to adopting a framework – a new way to do business that capitalizes on existing strengths and successes. Despite these efforts, state leads still find that some colleges continue to view career pathways as a program and have yet to see the potential of the framework and the impact it can have on the student experience and student outcomes.

Implementing a new framework requires buy-in at all levels of the college. College presidents need to visibly demonstrate their support for career pathways. In Oregon, all of the college presidents signed a resolution committing to sustain the Career Pathways Initiative. But leadership at the highest levels of the college is not enough: all the states agreed that early faculty adopters are also needed to move the conversation forward. It was common among the states when discussing career pathways as a strategic direction for the college staff to respond, “we do that already.” Feeling overextended, faculty and administrators were concerned about adding to their full workloads. Another complicating factor was the fear that modularizing curriculum would lessen its effectiveness and that the pedagogy of accelerating coursework was questionable.

For Kentucky and Oregon, working across the silos that exist between college departments to integrate the career pathways framework across the entire college presented a challenge because each division operates with a separate institutional mission. Communication and sharing accountability across departments was also complicated by internal and local politics and the traditional boundaries between departments. In addition, not all colleges were equally positioned to embrace a career pathways framework, with some operating at a higher capacity than others (an experience shared by Arkansas, Kentucky, and Oregon). Under these circumstances, more intensive technical assistance is required and raises the question of whether all recognized components of a career pathways framework can be instituted across an entire system of community and technical colleges.



ACCESSING RESOURCES TO SUPPORT STUDENTS

Supporting students financially is a struggle facing each of the states. The structure of traditional financial aid such as Pell Grants makes it difficult to apply to career pathways students who are building to certificates or degrees in incremental, condensed steps. Financial aid is often designed for full-time students, and does not apply to students in short-term training programs. As a result, there are limited funds to support those students typically targeted by career pathways efforts because they have longer-term educational trajectories. Thus, a complex funding cocktail may be required for students who stop in and out of training, completing short-term modules that build to both the next educational and employment step.

BUILDING STAKEHOLDER SUPPORT

Relationship-building can be difficult work and requires persistence, trust, and commitment to shared outcomes when implementing career pathways. Further, gaining political support for this work also requires constant nurturing, particularly among elected officials. A change in administration can stall the implementation of career pathways as the new governing team sets its own agenda and gets up to speed on existing initiatives, which happened in Kentucky when a new governor took office.

Given the current economic crisis, states are cutting budgets and there is no guarantee that current levels of support will be maintained for the career pathways efforts in Arkansas, Kentucky, Oregon, Washington and Wisconsin. Pushing forward a career pathways agenda amid scarce resources is a reality facing each of these efforts.

While employers play a critical role in developing and implementing a career pathways agenda, Wisconsin noted that business engagement can be an obstacle and requires a different conversation that is responsive to their interests and needs. A robust relationship with business in which employers directly participate in multiple aspects of the career pathways framework is a slow process and calls for constant attention.



ADDRESSING STUDENTS NEEDS AND PROMOTING PERSISTENCE

Changing demographics and an economy in recession are bringing in greater numbers of nontraditional students to community colleges. Low-income adults with limited skills are looking to the colleges to provide training and educational opportunities that increase their competitiveness in the job market and produce a pay-off through better jobs with higher wages. Addressing the needs of low-income adults often brings colleges outside of the academic purview as nontraditional students juggle the multiple priorities of family, work and school and often need services that colleges cannot directly provide. Modularizing curriculum, teaching basic skills in a contextualized format and partnering with community agencies are important strategies that all of the states are incorporating into their pathways work. Creating an accessible educational continuum is only one part of the equation; staying connected to students and providing the supports they need to ensure persistence and completion of higher levels of training is another key piece. However, when employment is a top priority, it can be a tough sell if students are unable to work and go to school at the same time, particularly if course schedules do not accommodate the needs of working adults.

DEVELOPING A DATA COLLECTION PLAN

The career pathways framework also involves a commitment to outcomes. Thus, it is important for the state to develop a plan for data analysis that can span multiple agencies and information systems. As noted by the states – Arkansas, Kentucky, Oregon and Washington – capturing data that tells the entire student story from basic skills through employment and retention is difficult. Though not insurmountable, developing a data plan requires a great deal of careful planning, particularly in the development of shared outcomes, an accountability plan and data sharing agreements.

V. RECOMMENDATIONS AND CONCLUSION

The experiences of Arkansas, Kentucky, Oregon, Washington and Wisconsin are illustrative of the key driving forces behind career pathways: 1) commitment to addressing the needs of low-skill and/or low-income adults; 2) support at the highest levels of state government, including the Governor, legislature, and state agencies; 3) a vision that gets articulated and adopted by all involved stakeholders; and 4) a strategy for implementing the framework.

There are several recommendations for consideration when seeking to develop career pathways at a statewide level. The first set of recommendations focuses on strategies to consider when implementing career pathways. The next set of recommendations points to policies that may be adopted either at a state agency level or through legislative action to drive the adoption and implementation of career pathways.

STRATEGIES TO DEVELOP AND ADVANCE CAREER PATHWAYS

- Identify a lead agency, individual, or coalition that has oversight of the career pathways work. Ideally, stakeholders from multiple systems will be working in concert on the pathways work to mitigate the “silo” effect. The state lead will be charged with multiple tasks such as providing technical assistance, developing partnerships, securing funding, creating a legislative agenda, tracking and reporting outcomes, and engaging employers.
- Develop a career pathways communications strategy that can be used by all stakeholders in promoting the value of the framework. Focusing on shared communication ensures that a consistent message is being delivered and demonstrates cohesion among all partner agencies and organizations. Language is essential in building a coalition of support. Emphasis on the student experience, business responsiveness, and the universality of career pathways in bringing multiple partners to the table are examples of elements to highlight when developing a career pathways message. Describing career pathways as an extension of existing work and explaining how college staff fit into the framework helps move the conversation away from “We don’t need to change because we do that already.” Roadmaps that depict career pathways are also an effective communications tool as they provide a concrete picture of the employment and educational gains students can make.
- Provide technical assistance to support colleges with integrating the framework. Each of the states illustrated some level of capacity building that takes place on a college-by-college basis and through group sessions to allow for “cross-pollination” among colleges. Presentations by experts in a variety of arenas are also critical resources for the colleges and pathway stakeholders. Some states brought in experts on data collection or serving those living in poverty. Employers can also be invited to share expertise when developing the pathway and to assist with curriculum development.
- Identify early faculty adopters who can help drive changes related to curriculum development and ease the resistance to changing how instruction is delivered, particularly when modifying curriculum to be taught in shorter, contextualized “chunks” that build on one another.
- Develop a Career Pathways Coordinator or equivalent position within the colleges who can execute the statewide vision for career pathways and serve as a “boundary spanner” who works to align the multiple missions of the college – workforce or professional/technical education, basic skills and academic transfer. This role can also coordinate with community agencies and the college student services staff on providing case management and support services.
- Explore private funding opportunities that can serve as seed money for pathways work that can be leveraged to gain state or federal funds. Private support can also prompt accountability on the part of colleges because they now need to demonstrate their outcomes to a third party.
- Consider operating a pilot with a few colleges to test the model. Pilots can demonstrate results and help bring other important stakeholders and funders into the pathways work.

POLICY RECOMMENDATIONS

- Assess whether and how state and/or federal funds (TANF, incentive grants) can be directed to support career pathways implementation (Arkansas, Kentucky, and Oregon).
- Develop a legislative agenda that can lead to a codification of the pathways work as a strategic workforce development initiative in the state (Arkansas).
- Develop employer-validated, state-recognized educational credentials that are contained in an Associates Degree or certificate of completion (Oregon).
- Explore the potential for establishing new funding sources that can be provided to the colleges through differentiated funding models (Washington) or through grants specifically for low-income adults that also build in support services (Washington and Wisconsin).
- Consider incentive or momentum payment points to reward colleges for the skill gains students make along the education continuum, which can start with basic skills and culminate with attaining a certificate or degree (Washington).
- Develop bridge programs that directly link to certificate and degree programs, which allow students to earn credit and provide contextualized learning opportunities for students who need remediation, a “refresher” in basic skills.

CONCLUSION

Career pathways are an effective framework for a statewide workforce development initiative. Community colleges are well-positioned to meet the needs of low-income adults and employers in need of a skilled workforce. Supporting pathway development in the community college system is a sound investment and provides a much-needed educational and employment boost to the adults trapped in low-wage work or those who need to gain additional skills to access good paying jobs.

Implementing a career pathways framework statewide requires careful consideration of several key elements:

- Potential partners that represent a variety of interests, including postsecondary education, social services, business and industry, employment and training, workforce development, and state government.
- The commitment and capacity of colleges to transform the way they do business and organize their work around the principles at the core of career pathways.
- The ability to gain political support and identify sources of funding and maintain that support as leadership changes occur.
- The infrastructure needed to track and share data across multiple information systems.
- The needs of students, both in terms of educational and support services, combined with the needs of business and industry.

Addressing these issues takes time and a great deal of relationship building, but the result can be a new, robust way of delivering education that helps low-income residents move from the margins toward economic stability.