

Supporting Career Advancement for Low-Skill Adults

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State Strategies

Career advancement strategies for low-skilled workers (commonly known as “career pathways”) happen at many levels and in a variety of forms. Often, training programs that occur within a community college or are delivered by a Community Based Organization (CBO), perhaps in collaboration with a handful of local employers or public workforce development agencies, are referred to as career pathways. However, career pathways can be, and increasingly are, implemented more broadly and supported by state policies. Many states have adopted some type of career pathways *framework* as a statewide solution to “skilling up” under-prepared workers to meet the demands, and bolster the competitiveness, of employers in their state. This section will describe the most prominent state strategies for building and promoting career pathways found in a review of the literature on career advancement strategies for low –skilled workers over the last decade or so. Note that many of these strategies are interrelated.

Bring multiple stakeholders to the table. According to an analysis of career advancement strategies on five states, undertaken by the Seattle Jobs Initiative and described in the report, **Charting a Path: An Exploration of the Statewide Career Pathway Efforts in Arkansas, Kentucky, Oregon, Washington and Wisconsin** (May 2009), successful statewide initiatives typically have a state agency lead that works with multiple partners – including postsecondary institutions, Adult Basic Education (ABE), CBOs, philanthropic organizations, local Workforce Investment Boards (WIBS), and local employers – to promote a broad vision of workforce development and higher education that matches the training needs of underprepared adults with employers’ skill needs. In its 2006 paper, **Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity**, the Workforce Strategy Center emphasizes the importance of state-level leadership to encouraging improvements in the postsecondary education and training system by “articulating a vision that helps to change mindsets about what is possible and encourages localities to critically reevaluate the status quo.”

Advocacy groups and philanthropic organizations often play a valuable role in helping states develop strategies for career advancement programming. These groups can be a source of both ideas and financial or logistical support, and can serve as an “honest broker when neutral ground is needed for discussion among disparate constituencies,” as noted in **Working Together**. Through its **Shifting Gears**

Career Pathways Defined

“A career pathway is a series of connected education and training programs and support services that enables individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment within that sector. Each step on a career pathway is designed explicitly to prepare the participant for the next level of employment and education.”

Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity
(Workforce Strategy Center, 2006)

“Ideally, career pathways are not a separate program, but a framework for weaving together adult education, training, and college programs that are currently separated into silos and connecting those services to employers’ workforce needs.”

Funding Career Pathways and Career Pathways Bridges: A Federal Toolkit for States
(Center for Law and Social Policy, 2010)

initiative the Joyce Foundation, for instance, has guided many Midwestern states toward the system-level changes needed to implement career pathways training on a large scale.

The governor takes the lead. In some states, the push for career pathways advancement strategies dovetailed with the workforce development priorities of the governors, as was the case in both Arkansas and Oregon – two of nine states to take part in the National Governors Association’s (NGA) Pathways to Advancement Initiative, launched in 2003. Both were early adopters of strategies for expanding working adults’ access to and completion of postsecondary education – efforts that ultimately led to implementing a career pathways framework statewide.

In **Working Together**, the Workforce Strategy Center remarks that “Oregon provides an excellent example for how a governor’s vision and leadership can result in the flourishing of career pathways models across a state.” Under the tutelage of Governor Ted Kulongoski, top administrators from the Oregon Department of Community Colleges and Workforce Development and the state’s Workforce Investment Board, launched the Oregon Pathways to Advancement Initiative in 2004. The goal of the Initiative is to ensure that “all Oregonians have access to postsecondary skills, credentials, certificates and degrees that are valued in the current and future economy leading to good jobs and higher wages.” More specifically, the initiative seeks to increase:

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

Arkansas codified its career pathways approach in state law. **Charting a Path** describes the 2005 Career Pathways Initiative Act, designed “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.”

Use labor market information to make the case. State leads and their partners have pointed to data on demographic shifts, skill shortages, and income insecurity to make a compelling case for career advancement strategies to policymakers, state agencies, and other stakeholders. In her 2007 article for the National Commission on Adult Literacy, **Policies to Promote Adult Education and Post-Secondary Alignment** (Center for Law and Social Policy), Julie Strawn uses data to make the case for the nation as a whole. She cites statistics from the American Community Survey and the Bureau of Labor Statistics indicating that two-thirds of the 2020 workforce is already in the labor market; that half of the current workforce possesses only a high school degree or less; and that by 2014, 24 of the 30 fastest-growing occupations will require postsecondary education or training (either an occupational certificate or degree). Pointing to figures like this, Strawn (and numerous others) call for new approaches to workforce development to ensure that industries can regain their footing and remain competitive, and that workers can access the education and training needed to secure family-supporting jobs and opportunities for advancement.

States across the country are telling a similar story using their own data. Just one of the many examples of this comes from Minnesota, where the Governor's Workforce Development Council (GWDC) cites statistics from various state agencies (among others) to explain the need for career pathways-type programming in its policy brief, **All Hands on Deck: Fifteen Ideas for Strengthening Minnesota's Workforce Minnesota** (2011). The report notes that by 2018, seventy percent of Minnesota's jobs will require some sort of postsecondary education or training; that only 40 percent of working-age adults in Minnesota have a postsecondary degree; and that, because two thirds of the state's 2035 labor force is already of working age, it is impossible to reach the demand for skill labor by focusing only on new entrants to the workforce.

Make an economic development argument. In **All Hands on Deck**, the GWDC goes on to state: "This growing skills gap has enormous implications for Minnesota's economic competitiveness and the ability of its citizens to secure a middle-class lifestyle. Accordingly, Minnesota must focus on helping more adults pursue additional education and training." Indeed, for many states, career pathways programs have become part of an overarching strategy to address challenges facing employers and workers and to increase the economic competitiveness of the state.

The Pathways to Advancement Project: How States Can Expand Postsecondary Educational Opportunities for Working Adults (National Governors Association, 2009) cites several states that are doing so. Hawaii, for example, has modified its workforce development plan to focus less on serving individual workers and more on addressing the labor market issues facing the state in its efforts to grow and diversify the economy. The 2007 Hawaii Innovation Initiative is aimed at aligning the state's postsecondary programs with its economic development goals. To support the Innovation Initiative, the state legislature approved \$5 million to create a variety of new career and technical education programs in high schools, community colleges, and the University of Hawaii.

Use data to substantiate the approach. In addition to the labor market conditions that states point to as justification for new approaches to workforce development, data that clearly demonstrate the efficacy of career pathways-type education and training can be used to secure the support of policymakers and other stakeholders. Perhaps the best known career pathways initiative for low-skill adults in the country, I-BEST in Washington State, gained traction through the "tipping point" study. In **A Short Guide to "Tipping Point" Analyses of Community College Student Labor Market Outcomes** (Community College Research Center, April 2008), author Davis Jenkins explains that the study tracked the progress over five years of a cohort of Washington State community and technical college students 25 or older who entered the system with at most a high school diploma.

Compared to students who earned fewer than 10 credits, those who reached the "tipping point" of at least two semesters of credits and a credential had a considerable average annual earnings advantage: \$7,000 for students who started in ESL, \$8,500 for those who started in ABE or GED, and \$2,700 and \$1,700 for those who entered with at most a GED or high school diploma. Despite these advantages, the study also found that few students actually reach the tipping point, with many adult basic skills students earning no college credits at all.

The findings from the tipping point study not only motivated the Washington State Board of Community and Technical Colleges (SBTC) to work with educators to create I-BEST (which involves courses for basic skills students jointly taught by basic skills and college-level occupational faculty), but eventually led to the 2006 enactment of Opportunity Grant legislation to fund low-income students in reaching the "tipping point." Opportunity Grants enable students pursuing approved pathways in high-wage, high-

demand careers, to receive funds to cover tuition and fees up to 45 credits and up to \$1,000 per academic year for books and supplies. Legislation also allows \$1,500 for student support services, including a single point of contact (also known as “college navigator”), one-on-one tutoring, career advising, college success classes, and emergency child care and/or transportation.

Invest and incent. Implementing a statewide career advancement strategy requires substantial investment. The Center on Law and Social Policy has prepared **Funding Career Pathways and Career Pathways Bridges: A Federal Toolkit for States** (2010) which guides state agencies, educational institutions, and non-profit service providers in an exercise that gets them to think about creative ways to “braid” together a variety of federal funding streams. Indeed, each of the states described in **Charting a Path** has funded its efforts using a mix of sources, including federal funds targeting workforce development and higher education, state general funds, and private dollars from foundations. In turn, states typically allocate funding through grants made directly to community and technical colleges, workforce investment boards, and community-based service providers for things like program development, curriculum design, industry engagement, student support services, and tuition and books.

Wisconsin, as described in **Charting a Path** provides a good example of drawing funds from various sources to implement its career pathways initiative. Wisconsin received a two-year, \$1 million grant from the Joyce Foundation’s Shifting Gears Initiative, which the state has in turn allocated to local partnerships to support curriculum development, and develop industry engagement strategies. In addition, Governor Doyle used WIA discretionary funds in 2009 to further support the work: \$1.5 million for the Opportunity Grant program giving low-income workers not eligible for financial aid up to \$1,000 per year for training; and \$300,000 to fund ABE bridge and career pathway work. In neighboring Minnesota, **legislation** was recently introduced seeking to provide a sustainable funding mechanism to support scaling up adult career pathways across the state.

Many states use provisional funding as a way to encourage the implementation of career pathways programming among institutions. Ohio, for instance, uses incentive funds to encourage local institutions toward policy and programming changes. **Working Together** describes the state’s Success Challenge program, which distributed \$52.6 million in FY 2007 to state universities that improved graduation rates for at-risk students and for accelerated degree completion times for all resident undergraduates. An analysis of the program found that the number of at-risk students who received bachelor’s degrees increased by 13% from FY 1998 to FY 2006, while the percent of in-state bachelor’s degree graduates who earned their degrees in 4 years or less increased from 34% in 1999 to 43% in 2006. As a result of these successes, the state General Assembly has asked the Ohio Board of Regents to explore implementing similar programs in branch campuses and its community and technical colleges.

Increase access to financial aid. Research on low-income adult students reported in **Learning in the Fast Lane: Adult Learners’ Persistence and Success in Accelerated College Programs** (Lumina Foundation for Education, August 2001) reflects what we know about traditional-age students: financial aid is positively related to persistence and degree completion. However, **The Career Pathways How-To Guide** (Workforce Strategy Center, October 2006) cites a 2002 survey that found that as income drops, so too does the likelihood that families know about the availability of financial aid, with the lowest-income families and Hispanic Americans especially unlikely to know what resources are available and how to access them. Further, adults attending community colleges are the least likely to apply for aid, and when they do, they receive the smallest amount on average.

To buck this trend, some places have created statewide campaigns to market college access specifically to adult learners. California, for its part, has spent about \$34 million a year since 2003-04 to expand local community college financial aid outreach and capacity. Another \$3 million annually has been dedicated to a statewide media campaign to promote the availability of financial aid. California reports an increase in financial aid uptake since the inception of the campaign. North Carolina is also addressing capacity issues; the general assembly appropriated \$3.6 million in 2006 to hire additional financial aid officers at each of the state's community colleges. The examples come from an **Achieving the Dream** policy brief **Money on the Table: State Initiatives to Improve Financial Aid Participation** (Heath Prince, October 2006).

Even if potential students know about financial aid, they may bump up against eligibility criteria that disfavor part-time, non-traditional students. Financial aid programs were crafted decades ago for "traditional" students: recent high school graduates without children or 40-hour a week jobs, who attend college full-time. These students are still financially dependent on their parents, for tax purposes at least, and don't have significant economic obligations of their own. As a result, financial aid programs are most favorable to those enrolled full-time in semester length, credit-bearing courses, and who complete their course of study without interruption and within a certain time frame. These and other program biases render thousands of "non-traditional" students – self-supporting working adults, many of them parents, who take one or two classes at a time as job, family obligations, and costs allow – ineligible for financial aid.

Prevalence of "Traditional" & "Non-Traditional" Students

Federal and state financial aid policies tend to penalize "non-traditional" students, despite the fact that they constitute a majority of the country's postsecondary population: "non-traditional" students comprise 89% of all undergraduates at both public two-year and private for-profit colleges, 57% of undergraduates at public four-year colleges and universities, and 50% at private non-profit colleges.

University Professional & Continuing Education Association FAQs

(<http://upcea.edu/resources/faqs.html>)

There are several strategies states can pursue to improve access to financial aid, thereby increasing the number of low-skilled adults obtaining postsecondary credentials. In **Working Together** (December, 2006), the Workforce Strategy Center outlines criteria for what it views as "adult friendly" financial aid programs. They are:

- Available to students attending less than half-time (as few as 3 credits)
- Available for courses offered throughout the calendar year, including the summer
- A supplement to, not a substitute for, Pell Grant awards – the primary federal form of need-based assistance to low-income students
- Available to students enrolled in non-credit occupational programs or short modules (if they are articulated to certificates and degrees)

Program Strategies

The high cost of education, family and work obligations, unmet childcare needs, and limited or unreliable transportation can all be obstacles to pursuing the education and training necessary to advance along a career pathway. In addition, low-skilled adults are often academically under-prepared for and/or intimidated by college-level work. And those who are the first in their families to pursue a college education may feel at sea, with few points of reference as they navigate the higher education system and processes like applying to schools or filing for financial aid.

There is a good deal of research documenting how low-skilled adults have difficulty “transitioning” from adult education to postsecondary programs and on into the work place. In **Overcoming Obstacles, Optimizing Opportunities: State Policies to Increase Postsecondary Attainment for Low-Skilled Adults** (Center on Law and Social Policy, March 2008), for example, authors Amy-Ellen Duke and Julie Strawn describe how the adult basic education/English as a Second Language and/or college developmental education systems “hemorrhage” students at every turn. Similarly, the National Center for the Study of Adult Learning and Literacy (NCSALL), in **Transitioning Adults to College: Adult Basic Education Program Models** (December 2006) refers to the need to address critical junctures – or “loss points” – when students are most apt to quit: the transition from adult education to college, and the transition from developmental education into a vocational training or academic program.

Developmental education, in particular, can “become a black hole from which too many students never emerge” warn authors Amy-Ellen Duke and Julie Strawn in **Overcoming Obstacles**. They note that, nationally, about 40 percent of low-income adult students take at least one developmental course in college before being admitted into college-level courses, with higher rates of remediation among students at community colleges. These classes can eat up financial aid, but do not count toward a certificate or degree; thus, a student can exhaust his or her financial aid without making progress toward marketable skills.

Career pathways programming is being used to address challenges to access, persistence and completion that confront low-skill adults looking to further their education and training. Based on a review of the literature, there are a number of key elements common to successful programming. The side-by-side lists of core components taken from CLASP, in **Funding Career Pathways and Career Pathways Bridges**; MDRC, in **Support Success: Services that may Help Low-income Students Succeed in Community College** (2004); and NCSALL in **Transitioning Adults to College** reflect a broad consensus around what makes career pathways work:

CLASP	MDRC	NCSALL
<ul style="list-style-type: none"> ▪ Multiple entry points, e.g., from adult education, ESL programs, workforce training, and not simply through high school ▪ Innovations in program content and delivery, e.g., flexible scheduling, contextualization, integration of bridge programs ▪ Sequence of education and training leading to credentials with value in the labor market ▪ Support services (provided by community organizations, community colleges, and/or other organizations) ▪ Strong role for employers in pathway development, worksite training, and contribution of resources 	<ul style="list-style-type: none"> ▪ Academic guidance and counseling, including course planning and graduation requirements ▪ Flexible course delivery, including modular, online, and accelerated programming ▪ Academic supports, like tutoring, time management, and study skills training ▪ Career counseling, including occupational aptitude and labor market information ▪ Personal guidance and counseling, such as mental health counseling or crisis intervention for at-risk students ▪ Peer supports, including learning communities and student mentoring, and social integration programs like extended orientation courses and multicultural centers ▪ Integrated work and learning opportunities ▪ Supplemental services, such as childcare or transportation assistance 	<ul style="list-style-type: none"> ▪ Multiple levels of instruction ▪ Teaching and learning of basic education and technical skills that are contextualized around a specific employment sector ▪ Curriculum that is “chunked” into clear steppingstones that are recognized by employers and articulate to academic and career advancement pathways ▪ Intensive support services tailored to the expected challenges of the specific pathway (e.g., intensive support in math and sciences for high-tech careers)

A closer look at some of these key program strategies:

Utilize instructional innovations like “bridges” and integrated instruction. Several states and many local programs have been implementing “bridge” programs within their career pathways framework, intended to address these loss points and keep low-skill learners from opting out of the education system. One strategy to improve educational transitions is implementing “bridge” programs, described in [Promoting College and Career Readiness: Bridge Programs for Low-Skill Adults](#) (US Department of Education, Office of Adult and Vocational Education, January 2012) as one of the first steps in a career pathway for low-skill adults. Bridge programs combine basic skill instruction in reading, math, writing, and English language, including preparation for the GED test, with occupational content, employment skills, and college success strategies. They help adult students identify career and education goals and develop the skills, content knowledge, and learning strategies they need to enter and succeed in postsecondary education and employment. Some bridge programs also offer college credit and certificates.

States like Minnesota and Wisconsin are building programs modeled after Washington's I-BEST, in which basic skills are taught in the context of particular occupations with the goal of helping students increase skills to the level needed for the next education step on a career pathway—while allowing them to simultaneously complete an initial occupational credential. In this model, instructors from ABE and the community college are typically in the classroom together, working as partners to ensure students grasp both the fundamentals and technical skills. In **Policies to Promote Adult Education and Post-Secondary Alignment** (Center for Law and Social Policy, 2007), Julie Strawn describes this approach, and explains that it shortens the timeline for helping adults earn marketable credentials.

Implement flexible programming. Broadening access to non-traditional students like low-skilled adult learners requires programming flexibility. Courses cannot be beholden to the typical semester schedule, for example, but instead must be offered at times and locations convenient to working adults, some with families. This means offering plenty of weekend and evening courses and making high-demand courses available at a variety of campuses or off-campus sites. In addition, because many adults are looking to acquire new skills quickly to maintain their attachment to the labor market, increasing numbers of postsecondary programs offer accelerated courses that deliver content in less time than the traditional course – for example, 20 hours of class time spent during five weeks, rather than 40 hours over 16 weeks. Further, courses can be offered in a flexible, modular format; that is, broken into a series of short (3 or 4-hour) modules (sections), each covering a particular topic. In this format, students could take one or two modules to brush up on certain skills, or enroll in an entire series of modules for more complete training.

Offer Credit for Prior Learning/Prior Learning Assessment. Offering credit for non-college or experience-based skills and competencies acquired from work and life experiences is another important strategy for helping adults progress towards a degree. Recognizing the prior knowledge and skills working adults bring to a postsecondary program can convey a sense of confidence in their abilities, while speeding along the degree completion process. The **Council for Adult and Experiential Learning** (CAEL) describes Prior Learning Assessment (PLA) as the process by which colleges evaluate for academic credit the college-level knowledge and skills an individual has gained outside of the classroom (or from non-college instructional programs), including employment, military training/service, travel, hobbies, civic activities and volunteer service.

Recently, CAEL completed a study of the records of 62,475 students aged 25 or above at 48 colleges and universities who matriculated in 2001-2002. The study, reported on in **Fueling the Race to Postsecondary Success: A 48-Institution Study of Prior Learning Assessment and Adult Student Outcomes** (CAEL, March 2010), which followed students' academic progress over the course of seven years, found that PLA students had greater persistence, higher graduation rates, and earned degrees more quickly than other adult students; more than half (56%) of PLA students earned a postsecondary degree within seven years, while only 21 percent of non-PLA students did so.

Utilize cohorts or learning communities. Another strategy that has emerged in the last decade or so, and appears to have positive effects, is to place entering students in “learning communities” – a cohort of students that take courses together, sometimes organized around a theme. For academically under-prepared students, learning communities may involve a fair amount of basic skills instruction. Many learning communities bring together faculty with student affairs professionals and learning center staff. Integrating campus services and programs into the learning community experience helps connect students to networks of support available on campus, which in turn increases the likelihood they will

stay in school their first year and beyond. In **Learning Better Together: The Impact of Learning Communities on the Persistence of Low-Income Students** (Syracuse University, 2007), authors Cathy Engstrom and Vincent Tinto report on their study, which tracked the progress of about 1,600 “unprepared” students placed in learning communities at 13 community colleges around the nation. Compared with students of similar backgrounds and levels of academic preparation, those in learning communities were more likely to remain in college into their senior year.

Provide academic & personal guidance and supplemental supports & services. While it’s almost certainly the case that most students stand to benefit from academic and personal supports as they make their way through postsecondary programs, for low-skilled adults, these supports can be absolutely crucial to staying in and completing school. Research undertaken by MDRC, and reported in **Support Success**, identifies the following as key supports for low-income students:

- Academic supports, such as tutoring, remedial assistance, and time management and study skills training
- Educational planning and advising that helps students select courses to meet major requirements that fit their career goals
- Monitoring students’ progress to ensure that they reach educational benchmarks in a timely way. Career counseling, which encompasses aptitude assessments, development of career plans, and sharing of information on careers and their skill requirements
- Personal guidance and counseling, which can consist of crisis intervention, information and referral, mental health counseling, life-skills counseling, mentoring or coaching, and peer support
- Supplemental supports that can help alleviate family and personal needs such as child care and transportation

These types of supports can be provided through a college itself or in partnership with a social service provider. The **Capital IDEA** program, created through a partnership between Austin Interfaith and the Central Texas business community, provides a good example. Capital IDEA funds low-skilled, low-income adults pursuing education and training and works with them to find employment with good salaries, benefits and opportunity for career growth. The Aspen Institute, in **Sectoral Strategies for Low-Income Workers: Lessons from the Field** (Summer 2007), observes that a cornerstone of Capital IDEA is the provision of comprehensive support services to every student enrolled in the program until they graduate from college or enter employment. These services include:

- Weekly class meetings with a career counselor
- Weekly (at minimum) individual contact with a career counselor
- Full payment of tuition expenses
- All books and materials provided
- Childcare voucher for hours spent in classes for students actively enrolled
- One-time emergency assistance with rent or other expenses on a case-by-case basis
- Referral and vouchers to more intensive clinical services, e.g. mental health, when necessary
- Transportation assistance, as needed on a case-by-case basis

Sector Strategies

When developing career advancement or pathways programs, states or localities typically build industry-specific training programs designed to prepare workers for skilled positions and connect them with employers seeking to fill such vacancies. Often, this is called “sector strategy.” It is important to note, however, that a true sector strategy involves more than creating skills training programs for a particular employer or even a particular industry. According to the literature, critical pieces to building successful sector strategies include the following:

Sector Strategy Goals

Sector strategies accomplish two interconnected objectives:

1. Promote industry growth and competitiveness by developing immediate strategies to fill pressing skilled workforce needs, as well as long-term plans to grow the industry with a better trained and more productive workforce.
2. Improve worker training, retention and advancement by developing cross-firm skill standards, career pathways, job redefinitions, and shared training and support capacities that facilitate the advancement of workers at all skill levels, including the least skilled.

New Federal Investments in Sector Partnerships
(National Skills Coalition, 2009)

Bring multiple stakeholders to the table, with employers at the center. According to the National Skills Coalition’s **New Federal Investments in Sector Partnerships : Establishing Industry-Wide Capacity to Grow Businesses and Advance Workers Utilizing Existing Workforce and Education Policies** (2009), sector partnerships organize a number of stakeholders connected to an industry—multiple firms (and/or their trade association), unions, education and training providers, and local workforce and education system administrators—to develop plans for growing (or saving) that industry. These partnerships develop new skilled workforce “pipelines” where shortages exist, and change how an industry’s existing workers are trained and utilized.

Further, the Aspen Institute, in **Sectoral Strategies for Low-Income Workers** (Summer 2007) observes that these partnerships are particularly successful when driven by a group of employers within a target industry who are experiencing similar labor market

issues and are prepared to work together to establish mutually beneficial solutions. Research undertaken by the Seattle Jobs Initiative and reported on in **Charting a Path** leads to the same conclusion: partnerships with employers are a critical element in implementing relevant, industry-specific career pathways. Employers can provide essential guidance on curriculum development, identify requisite skill sets, offer job shadowing opportunities, and provide jobs to program completers. Employers also play a role in certifying classes for certificates and in making the “labor market case” for selected sectors.

Target sectors using labor market information. While the creation of sector-based training often happens locally or regionally, some states have taken steps to promote this approach statewide. **Charting a Path** explains that states’ processes for targeting sectors are generally determined at two levels: 1) state economists use labor market data to identify high-demand sectors; 2) community colleges then use this information to develop career pathways programs to meet this demand. “On-the-ground” information from employer partners, local economic development agencies and workforce investment boards is also used to develop these programs.

Charting a Path uses Kentucky to provide an example of this process. The state Economic Development Cabinet identifies high-wage/high-demand sectors, while the Kentucky Community and Technical

College System (KCTCS) adds to this information through ongoing meetings with business leaders to determine how it could better prepare the workforce to meet the needs of employers. KCTCS brings this information to its colleges, and helps them develop partnerships with local employers within targeted sectors. This employer engagement is critical to the individual college's ability to identify local labor market needs and create pathways that mesh with needs of local employers.

In **Sectoral Strategies for Low-Income Workers** the Aspen Institute offers that, in general, targeted industries are those with a strong presence and clear job needs in the region, as demonstrated by such data as location quotients, vacancy rates and other information. However, sector partnerships also make investments in other industries, like an emerging industry that has potential to develop a strong job base, or alternatively, an industry with a shrinking job base that nonetheless remains viable and important to the region.

Seek funding from multiple sources: The **SkillWorks** initiative in Massachusetts is illustrative. SkillWorks is a long-term effort to improve workforce development in the state by bringing together philanthropy, government, community organizations and employers to address the twin goals of helping low income individuals attain family supporting jobs and businesses find skilled workers. The centerpiece of the initiative is its Workforce Partnerships, which focus on specific industry sectors – including health care, hospitality, property services, automotive services, and green jobs – and bring together employers, nonprofit agencies, educational institutions, labor unions, and the government at the local or regional level to develop provide effective training to those entering the workforce and workers stuck in jobs with little opportunity for advancement; and to make sure that employers have workers who meet their needs.

Funding for SkillWorks comes from the following: nearly \$20 million from private philanthropy; over \$7 million in new employer investments in workforce partnerships; and almost \$4 million contributed by public funders (City of Boston, Commonwealth of MA). In addition, through its public policy advocacy work, SkillWorks has helped garner more than \$50M in new workforce funding for the state of Massachusetts, including:

- \$6M to support sector partnerships in the 2004 Economic Stimulus Bill
- Creation and funding Workforce Competitiveness Trust Fund in the 2006 Economic Stimulus Bill. WCTF has since distributed \$18M in funding for sector partnerships statewide
- Creation of the \$1.5M Educational Rewards Grants program for part-time college students
- \$8M in supplemental funding for ABE, School-to-Career, and One-Stop Career Centers
- Changes to the state's Food Stamp Employment Training Program to allow community-based organizations to draw down more federal reimbursements for providing job training to food stamp recipients

Other states have supported sector strategies through a variety of investments. Corporation for a Skilled Workforce, in its **Summary of State Sector Strategies** report (October 2010), notes that since Washington State launched its first **Industry Skill Panels** in 2000, it has funded over one hundred public-private partnerships of business, labor and education. Michigan and Illinois have likewise funded regional "skills alliances" in their states for almost a decade, while New York has provided grants to local workforce boards for the last three years, to help them meet new state requirements to build public-private partnerships in regional labor markets. Oregon, California, Colorado, Minnesota, North Carolina, Wyoming, and Wisconsin provide grants to local workforce boards or other regionally-based organizations to implement sector partnerships.

Data Collection Strategies

States engaging in large scale workforce development program changes typically conduct an upfront analysis of the performance of its postsecondary and workforce training systems. According to the National Governors' Association report, **The Pathways to Advancement Project: How States Can Expand Postsecondary Educational Opportunities for Working Adults** (2009), performing an initial assessment of data and policy is “essential to set a direction and develop priorities for the work ahead. Given the scope and complexity of the policy issues surrounding the adult workforce, it is only by stepping back and looking at the data that states can begin to see where they currently stand and to figure out where they need to go.”

Further, the NGA observes that an initial assessment can also help raise awareness of the limitations of available data, which may lead a state to make improvements in postsecondary education and workforce data systems as part of its overall career advancement strategy. Currently, for example, few states have established the authority for data sharing or developed the capacity to link data systems to track student outcomes over time across education and training systems, and into the labor market. While many are working on integrating data across education and workforce systems, only Florida, Georgia, Texas and Washington are now tracking students longitudinally, as they move through education and training programs and into careers.

Florida, in particular, is recognized as a leader in integrating data across workforce and education systems. The **Florida Education and Training Placement Information Program** (FETPIP) is a comprehensive data collection and consumer reporting system run by the Florida Department of Education. FETPIP gathers data on all former students and program participants who have graduated, exited, or completed a public education or training program within the state, and tracks whether those individuals have found jobs or pursued further education and training.

A review of the literature points to a number of career pathways performance measures for which states should be collecting data. Among numerous examples, Jennifer Phillips' policy brief for the Working Poor Families Project, **Building and Strengthening State Data Systems to Measure Community College and Workforce Outcomes** (Fall 2009) and Jeremy Bearer-Friend's report for the National Governors' Association, **Measuring Student Achievement at Postsecondary Institutions** (November 9, 2009) identify similar sets of indicators:

- Enrollment and retention of adult basic education students participating in postsecondary career pathways programs
- Successful completion of remedial and core courses
- Building towards college-level skills (basic skills gains, passing pre-college writing or math)
- Advancement from remedial to credit-bearing courses
- 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

Further, Phillips and others encourage states and agencies to use data on these measures to reward successful performance. Washington is doing just that. In 2006, the Washington State Board for Community and Technical Colleges (SBCTC) adopted a policy to allocate a portion of its budget to its 34 community and technical colleges based on student progress toward the “tipping point” (see earlier

discussion); the legislature approved \$3.5 million for the program in its 2009-11 budget. By analyzing community college data, the SBCTC, as it reports in **Student Achievement of Washington’s Community and Technical College Students Preparing for Work** (December 2008), identified a set of “achievement points” that, once met, significantly improve students’ chances of completing degrees and certificates. The student progress “achievement points” fall into four primary categories:

- First year retention (earning 15 then 30 college level credits);
- Completing college-level math (passing math courses required for either technical or academic associate degrees); and
- Completions (degrees, certificates, apprenticeship training).

In addition, the **Pathways to Advancement Project** writes about other “leading-edge states” that are using indicators of success to meet education and career advancement goals. Kentucky Adult Education, for example, measures progress towards student transition and other goals each year and awards performance funding to counties in the state that meet or exceed their performance targets. Through its efforts, Kentucky Adult Education has been able to improve the percentage of GED graduates in Kentucky who enroll in postsecondary education within two years of completing their GEDs from 12 percent in 1998 to 21 percent in 2006. In 2007, Kentucky also began awarding performance funding to programs that are successful in transitioning GED graduates into postsecondary programs.

Serving Targeted Populations

By their very nature, career pathways are well-positioned to serve disadvantaged populations – including youth, TANF recipients, ex-offenders, veterans – well. In particular, these groups stand to benefit from the intensive level of support career pathways programs tend to offer their students. In many career pathways initiatives, these groups are regularly being served successfully without additional, targeted services. Take, for example, ex-offenders. **Tuning In to Local Labor Markets: Findings from the Sectoral Employment Impact Study** (Public Private Ventures, 2010), reports that while none of the three sectoral programs studied for the report specifically targeted ex-prisoners, formerly incarcerated participants earned 42% more in their second year of participation than did those in the control groups. According to the report, sector-focused training programs “can be a positive pathway into jobs for the formerly incarcerated.”

This is not to say, however, that states and localities haven’t gone beyond a “traditional” career pathway model to try and reach populations with specific needs. Below, some of the strategies being used across the country to reach these particular groups are described.

TANF recipients

Since the enactment of welfare reform in 1996, which imposed a strict “work first” mandate its participants, many states have limited the ability of TANF recipients to engage in education and training. Some, however, have since tried to boost support for TANF recipients wanting to enroll in postsecondary programs.

Invest TANF dollars in education and training. Kentucky’s **Ready to Work** (RTW) initiative began in 1999 as a joint effort of the Kentucky Community and Technical College System and the state’s Cabinet for Health and Family Services to make additional work-study resources available to TANF students in the state’s community and technical colleges. Similarly, Hawaii’s **Bridge to Hope** is a collaborative

program between the state's Department of Human Services and the University of Hawaii System. The program provides funding for assistantship and internship positions for low-income adult students who are in the university system and are participating in Hawaii's TANF program. The program satisfies TANF work requirements and helps link students to work opportunities in their area of study.

The Pathways to Advancement Project describes Arkansas' approach. There, Governor Beebe's office – with the support of the state TANF agency and higher education department – allocated \$16 million dollars of TANF funds to help develop and implement its career pathways program, and provide tuition grants for the students – both TANF recipients and individuals with earnings up to 250 percent of the poverty level and at risk of needing TANF.

Provide intensive support services. Under Kentucky's initiative, described in the CLASP policy brief, **TANF Education and Training: Kentucky's Ready-to-Work Program** (Center on Law and Social Policy, January 2010), RTW coordinators are paid with federal TANF funds but are employees of individual community/technical colleges. RTW coordinators serve as on-campus case managers and link participants to work-study opportunities, where they can earn up to \$2,500 per year (earnings that are not deducted from the student's welfare check if they are also enrolled in the state's TANF program). Coordinators also facilitate access to skills assessments, tutoring, mentoring and peer support groups; and help with career counseling, financial aid, job development, job placement, and job retention services. In addition, RTW participants may utilize critical support services offered under TANF, including childcare and transportation aid.

Young adults

In **Postsecondary Success of Young Adults: System Impact Opportunities in Adult Education** (National College Transition Network, 2010), the authors note that adult education is the main re-entry option for young adults without a high school diploma or GED. Of the approximately 2.4 million individuals who participated in federally-funded adult education programs in 2008-2009, more than a third (871,573) was between 16 and 24 years old. Few states, however, have programming that is specifically designed for youth within the adult education system (note that there is an ongoing pedagogical discussion around whether it is better to serve youth within the general adult education population – with older adults serving as role models – or separate young adults to better focus on their developmental needs).

Introduce them to and prepare them for the college experience. One of these states is North Carolina (though its program is only being implemented at one community college to date). Its "Backpacks to Briefcases" initiative serves 18-24 year-olds without a GED or high school diploma but who are within 6-8 months of completing. As they work toward secondary completion, students also receive assistance with college admissions, financial aid, career planning and goal setting, study skills, test-taking skills, and general college knowledge. The program also introduces them to certificate programs offered by the college - Automotive Technology, Medical Assistant, Pharmacy Technology, Heating and Air Conditioning, and Early Childhood Education – and they tour the college and meet with deans and program directors.

Help them stay in and complete. Through its nationwide research, reported on in **Employers, Low-Income Young Adults, and Postsecondary Credentials: A Practical Typology for Business, Education, and Community Leaders** (October 2009), the Workforce Strategy Center identified some programs that

can help young adults stay in school and complete their courses (note that some of these strategies were already described, as they can be equally helpful to all non-traditional students):

- Develop a learning community, in which students are placed in classes as a cohort so they can study together and support one another throughout the program.
- Employ a strong case management system so that someone is available to help young students troubleshoot the personal challenges that might get in the way of completing an academic program.
- Provide students with wrap-around social services like housing, transportation, and child care; and with financial assistance to pay for such necessities. Some states use TANF or Supplemental Nutrition Assistance Program (SNAP) dollars for these purposes.

Introduce them to and prepare them for the workplace. There is nothing more deflating than encouraging a student to pursue training for an industry that may appeal to them on paper, but that turns out to be a poor fit in reality (e.g.; the student who trains to be a nursing aide only to find that he faints at the sight of needles). To avoid this, many programs offer young people job shadowing opportunities so that they can get a feel for what it's really like to work in a particular field.

Employers, Low-Income Young Adults, and Postsecondary Credentials describes one such program – again, a local rather than statewide effort – is run by Workforce Development, Inc., (WDI) in southeastern Minnesota, to support young adults preparing for college and careers. Through its Pre-Employment Academies in healthcare, advanced manufacturing, and renewable energy, WDI exposes participants to the industry of their choice. Through job-shadowing, they gain an understanding of the specific tasks, culture and terminology associated with their chosen industry. Students spend about a month in the academies, also obtaining “portable” workplace skills such as communications, problem solving, and decision making. At the same time, they learn “personal and college success skills” such as effective study habits and test taking. Finally, students attend college-level classes to obtain industry certifications (i.e., Certified Nursing Assistant or Forklift Driving License) in their chosen field.

Make opportunities available to youth enrolled in traditional high schools also available to those enrolled in adult education. The National College Transitions Network, in **Postsecondary Success of Young Adults**, offers this approach, noting for example, Florida high school juniors who take the college placement test and are found to need remediation are eligible for specially designed “catch-up” courses in math, reading, and/or writing during their senior year. These courses are designed by colleges so that participating high school students do not have to take developmental education when they get to college. These courses are not, however, currently available to adult education students. Similarly, many states use dual enrollment as a transition strategy for high school juniors and seniors, yet it is not typically an option for young adults of similar age (and often greater need) in adult education programs.

Ex-offenders

Identify industries willing to employ ex-offenders. Perhaps the best strategy for building career pathways training for ex-offenders is to do so in industries willing to hire them. Wider Opportunity for Women (WOW) reports in **Reality Check: Promoting Self-Sufficiency in the Public Workforce System ~ Working with Women, Youth and Ex-Offenders** that successful programs run by local WIBs “were consistent in selectively training their ex-offender customers in industries where they knew – often

through personal relationships between job developers and employers – their customers could get hired with a criminal conviction.” In Minnesota, the state provides a host employment resources, including career options and barriers specific to ex-offenders, within its career and education exploration web portal, [ISEEK](#). Industries that tend to hire ex-offenders include: construction, carpentry, commercial truck driving, HVAC, industrial mechanic, welding, retail/service, and apartment maintenance.

Link inmates to training and employers pre-release. Connecting inmates with employers and training prior to release can be an effective strategy. [Reality Check](#) explains that South Central Michigan Works, for example, has had success partnering with several prison programs to offer job training. The WIB gives employers a chance to give input into the type of training offered in the prison, and creates a potential hiring relationship. Additionally, the WIB facilitates virtual conferencing opportunities for employers to interview inmates while they are still incarcerated.

Provide intensive support services. The provision of support services – housing assistance, drug/alcohol treatment, neighborhood support groups, and the like – is also key, not only to keeping ex-offenders on track, but to boosting the confidence of potential employers. As reported in [Reality Check](#), when WIBs inform potential employers about the support services ex-offender customers receive, the employers tend to feel assured that the applicant is less of a “risky hire.” The Urban Institute, through its evaluation of the [Opportunity to Succeed](#) program, likewise found that it is important to “shift the burden” of dealing with ex-offenders’ personal challenges from the employer to a service provider (often a community-based organization that may or may not be partnering with the local workforce provider). The evaluation found that participants who interacted with a case manager were more likely to report full-time employment and stay in jobs longer than those receiving no case management.

Veterans

Provide intensive support services. The literature points to similar strategies for helping veterans access education and training to move along a chosen career pathway. Again, the intensive support services helpful to other disadvantaged groups are vital to veterans – with the important addition of mental health counseling to deal with returning soldiers experiencing post traumatic stress disorder (PTSD).

In fact, a recent study by the US Department of Veterans Affairs – reported on in the February Edition of [VA Research Currents](#) – found high levels of success helping veterans with PTSD get back to work with a supported-employment model called “individual placement and support” or IPS. The model relies heavily on individualized job development by employment specialists, who spend most of their time in the community, networking and developing job possibilities geared to their clients’ interests and backgrounds. Employment Specialists provide intensive job coaching and other follow-up services, which taper off as the Veteran gets comfortable in the work environment.

The study followed 85 Veterans all with moderate to severe PTSD; many also suffered from depression and addictions, and some had mild to moderate traumatic brain injury. After a year of follow-up, 76 percent in the IPS group had gained competitive employment, compared with only 28 percent among clients receiving traditional employment services.

Develop career pathways in sectors that build off of military experience. In terms of creating career pathway programs that may be particularly well-suited for veterans, there is a relatively new initiative underway, called [Troops to Energy Jobs](#), that prepares veterans for high-demand jobs in the

energy sector, including: engineers, line workers, plant operators, technicians, pipefitters or pipe layers, welders, and security officers. The Initiative is run by the non-profit Center for Energy Workforce Development (CEWD), in partnership with the US Departments of Defense, Labor, and Energy and their state agencies, as well as community colleges, unions, and the American Council on Education. Through the initiative, postsecondary institutions will provide career pathways programs, online and accelerated programs, and prior learning assessment options.

A similar initiative is underway in health care, designed specifically to help veterans with medical training transition to the civilian health care workforce. The **Physicians Assistants Career Pathways for Veterans** program is administered by the US Health Resources and Services Administration (HRSA), which is giving funding priority in physician assistant training grant awards to universities and colleges that support veterans, and will provide technical assistance to accredited physician assistant training programs. Further, HRSA is working to identify and support the replication of model programs that offer expedited curricula, enhanced recruitment, retention, and mentoring services for veterans. In FY 2010 and 2011, HRSA invested nearly \$45 million in 57 grant awards to accredited physician assistant training programs.

RESOURCE LIST

Career Pathways Programming

Completion by Design Knowledge Center and Toolkits (February 2012)

This knowledge center includes "toolkits" in topical areas that pull together relevant and related resources to help institutions improve college completion rates. The toolkits cover a number of topics such as Initiating and Scaling Innovation, Achieving Stakeholder Engagement, and Hosting Student Focus Groups.

Improving Lives: Ensuring the Academic Success of Low-Income Adults. American Council on Education Through this three-year project funded by the Lumina Foundation for Education, ACE has produced reports on low-income adult students as well as an online database of federal and state programs that support this population.

Seattle Jobs Initiative is working to increase the rates of college attainment among low-income residents as part of its mission to help them secure living-wage jobs while also meeting the demands of the local economy for skilled workers. As part of this work, SJI produced **some tools** designed to advance the efforts of community-based providers in assisting low-income and low-skill residents to prepare for, access and persist in college on their way to obtaining a credential and a better-paying career.

The ABC's of College Navigation Guide January 2012

This tool puts important information and resources at the fingertips of college navigators and others supporting low-income individuals, providing comprehensive information organized in sections that reflect the typical steps a college navigator would take to help an individual become a successful community college student.

Community College Program Matrix Tool January 2012

The "Matrix" is an Excel-based tool intended to help college navigators and other community-based organization staff guide students through the local community college system - allowing users to quickly and easily learn more about, compare, select and connect to programs at local colleges within four key local industry sectors: Business Information Technology, Healthcare, Manufacturing and Transportation.

Get With the Program: Accelerating Community College Students' Entry into and Completion of Programs of Study. Community College Research Center (January 2012)

This paper, updated from the April 2011 version, provides evidence that to improve completion rates on a substantial scale, community colleges must ensure that new students enter a coherent college-level program of study as soon as possible. The paper offers research-based suggestions for ways community colleges can rethink their practices at key stages of the student experience to accelerate program entry and completion.

Pathways to Success: Integrating Learning with Life and Work to Increase National College Completion. Advisory Committee on Student Financial Assistance (February 2012)

This report to Congress and the Secretary of Education from the Advisory Committee on Student Financial Assistance (ACSFA) contains recommendations for improving college completion based on written and oral testimony received during an ACSFA hearing on September 30, 2011.

Sector Strategies

State Sector Strategies Toolkit is a web-based tool intended to help states to design and implement statewide sector policies and frameworks that position their regions to strengthen regional, skills-based economic competitiveness. The Toolkit was developed as part of the National Governor’s Association State Sector Strategy Learning Network, in conjunction with the Corporation for a Skilled Workforce (CSW) and the National Network of Sector Partners (NNSP). The toolkit contains information, resources and templates to be used by state policy makers in launching and managing a state sector strategy.

Aspen Institute – Workforce Strategies Initiative (WSI) is a host of research and activities to support sector initiatives in a number of industries including construction, healthcare, logistics, manufacturing, office administration, and transportation. The WSI website houses case studies, sector initiative profiles, research reports and descriptions of worker and business outcomes.

Green for All is a national organization working with the business, government, labor, and community groups to build programs that increase quality jobs and opportunities in green industry for low-skilled, low-income people. Their site hosts a range of resources on green-collar job creation and training.

Data Collection

Steps for Evaluating (and Continuously Improving) Career Pathways Programs. Workforce Strategy Center (2005). This guide recommends steps for evaluating and improving career pathways programs, including: the basic steps for collecting the data needed to assess the performance of students at each program level and track their outcomes when they leave; guidance on assessing how well a program is working and whether it is effective; and how to use the findings from the evaluation process to improve program operation and outcomes over time.

Shifting Gears is an initiative of the [Joyce Foundation](#) designed to promote regional economic growth by improving the education and skills training of the workforce in Midwestern states. Shifting Gears funds states to implement systemic changes to institutionalize innovation in adult education, workforce development and postsecondary education programs. The Shifting Gears website contains links to reports and other resources on using data collection to support and implement change.