



BreakingThrough

Helping Low-Skilled Adults Enter and Succeed in College and Careers

Overcoming Obstacles, Optimizing Opportunities:

State Policies to Increase Postsecondary Attainment for Low-Skilled Adults

Prepared for Breaking Through by
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Part of a series of state policy reports from *Breaking Through*

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JOBS FOR THE FUTURE
CREATING STRATEGIES
for Educational and Economic Opportunity

State Policies that Help Low-Skilled Adults Enter and Succeed in College and Careers

The sweeping economic changes of recent decades have left many working families wondering how they will survive. The American industrial economy of the early twentieth century, which relied on unskilled labor, has given way to a knowledge economy that demands higher levels of education and skills. For workers seeking to gain the further education now required, the venue of choice increasingly is the community college, with its capacity to provide both postsecondary credentials and advanced skills training. In most cases, these students are older than traditional college students, they have families, and they must continue to work while they study. Frequently, they arrive on campus unprepared to succeed in an academic setting.

This is the backdrop for *Breaking Through,* a multi-year initiative of Jobs for the Future and the National Council for Workforce Education, funded by the Charles Stewart Mott Foundation, the North Carolina GlaxoSmithKline Foundation, and the Ford Foundation. *Breaking Through* is helping community colleges identify and develop institutional strategies that can enable low-skilled adult students to enter into and succeed in occupational and technical degree programs at community colleges. *Breaking Through* currently has projects at 26 community colleges in 18 states.

As a major strand in the initiative, the Ford Foundation has funded research and analysis on state policies that can support these institutional strategies. Several reports will provide insight into key state policies that can be most influential in helping low-skilled adults enter and succeed in college and careers:

Overview: The challenges brought by a rapidly changing economy for the average worker—and the role of state policy and community colleges in addressing this challenge. This overview was prepared by the Center for Law and Social Policy.

Student Financial Aid Policy: Innovative state policies that finance education for "workers who study"—that is, those who work full time (or close to it) and study part time.

Academic Remediation Policy: State policies that help or hinder community colleges in aligning adult education and academic remediation programs to better serve working adults with basic skills deficiencies.

State Institutional Funding Policies: How state-level community college funding policies might impede or facilitate the development of programs designed for the adult learner.

All reports will be available at www.breakingthroughcc.org, www.jff.org, and www.ncwe.org.

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Executive Summary

Just as American business and industry need workers with higher skills to compete in a global economy, workers need higher skills to get ahead. This convergence presents an opportunity for states to work with their community colleges and other key partners to help business and industry compete and entry-level workers advance to higher-paying jobs. However, many challenges exist. Many adults entering community colleges lack college-level reading, writing, and math skills, so they must enroll in remedial courses where progress is slow and attrition high. Others, especially those who lack even a high school diploma or GED, never make it as far as the doors of the college.

This is the backdrop for *Breaking Through*, a multi-year initiative of Jobs for the Future and the National Council for Workforce Education funded by the Charles Stewart Mott Foundation, the North Carolina GlaxoSmithKline Foundation, and the Ford Foundation. *Breaking Through* is helping community colleges identify and develop institutional strategies that can enable low-skilled adult students to enter into and succeed in occupational and technical degree programs at community colleges.

As a major strand in the initiative, the Ford Foundation has funded research on ways to support these institutional strategies in state policy, as summarized in this overview, prepared by Amy-Ellen Duke and Julie Strawn of the Center for Law and Social Policy. It introduces a series of *Breaking Through* reports that provide insight into state policies that can be most influential in helping lower-skilled adults enter and succeed in college and careers.

Specifically, state policymakers can harness the power of the community colleges to address the issues of economic growth and individual prosperity. To do so, they must address six key tasks.

1 Create a shared vision of the state's economic future among key stakeholders in education, workforce development, and economic development—a vision that includes the reasons why increasing the number of adults with postsecondary credentials is crucial.

To engage the right stakeholders in this effort, state leadership must forge a shared vision of the state's economic future and the role of colleges and of individuals in achieving it. Building this vision often starts with an overarching theme that helps distill complex economic realities into a shared understanding of the key workforce problems facing the state. As important as defining the key problems is conveying a clear message about what must be done. This entails devising a vision and investing resources, often financial, in achieving it.

One of the most important tasks for states in this area is to convince adults, especially those with lower skills and incomes, that it is both feasible and desirable to go back to school. Many have been out of school for years, and their prior educational experiences may have been less than

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ideal. Others have worked for years in good jobs with nothing more than a high school diploma and don't believe they need to go back to school. And still others, especially those who are older and displaced from high-paying manufacturing jobs, feel that they will never again be able to command the wages they received in their previous occupations, regardless of whether they go back to school.

To address all these barriers, states can undertake media campaigns that underscore the value of postsecondary credentials and the availability of financial aid and other supports to make college possible for adults. They can help colleges connect to employers to make the benefits of postsecondary education tangible and direct by, for example, guaranteeing pay raises to incumbent workers for completion of certain credentials.

❷ Set measurable goals for achieving the vision, including increasing postsecondary access for lower-skilled adults, and ensure that funding flows in ways that support progress toward those goals.

Setting measurable goals and aligning funding with those goals is essential for translating the shared vision into actual changes in services and outcomes at the community college level for lower-skilled adults. Moreover, funding must support these goals and measures if community colleges are expected to change institutional practices to achieve them. In general, the services most often used by lower-skilled adults—adult education and English as a Second Language, college remediation, and occupational training—are systematically underfunded relative to their costs, which creates a disincentive for colleges to expand them and also affects their quality.

States can revise funding allocations to better reflect the costs of educating lower-skilled adults and encourage community colleges to focus on outcomes important for the state's goals around economic growth and helping lower-skilled adults advance in the workforce. State funding formulas should give at least equal weight to remediation and weigh formula funding for occupational programs in ways that recognize the true costs of those programs.

States can creatively use federal and state categorical funds to help lower-skilled adults earn postsecondary credentials. In addition, they should also look beyond higher education institution funding to the full array of federal and state funds invested in economic development, incumbent worker and customized training, student aid, welfare or Temporary Assistance for Needy Families, Unemployment Insurance, Trade Adjustment Assistance, job training for low-income adults, and child care.

❸ Track individual outcomes across workforce education services and into the labor market, in order to identify trouble spots and document successful approaches with an especially close look at outcomes for lower-skilled students.

Helping more lower-skilled adults obtain marketable postsecondary credentials depends on being able to see where and how individuals are falling through the cracks in the state's workforce education system. To promote such tracking of outcomes, states should establish data-sharing agreements across adult education, training, and postsecondary agencies to allow tracking of individual outcomes along the education pathway and into the labor market. Although legal and technical barriers can make it challenging to create data-sharing capacity, states can place a high priority on the task and aim to overcome barriers while protecting individual privacy.

❹ Help community colleges connect in a broader, more strategic way with local employers, in order to link their needs to for-credit college offerings and to help lower-skilled adults get good jobs in demand in the local labor market.

Improved adult access to postsecondary education does not translate automatically into either worker advancement or more competitive businesses. State policy can increase the odds of

success by using state capacity to analyze labor markets to help identify promising sectors and occupations, and by fostering regional worker training partnerships among community colleges, employers, business associations, and community organizations. Such regional partnerships can help link, on the one hand, employers who are willing to invest in their current and future workers' skills and can offer family-supporting jobs with, on the other hand, community colleges that can provide certificates and degrees linked to those opportunities.

5 Overhaul the content and delivery of adult education, English as a Second Language, and college remediation, in order to accelerate progress and connect these services closely to occupational pathways in the colleges.

Lower-skilled adults—especially those with skill levels lower than eighth grade—need remediation through the adult basic education/English as a Second Language and/or college developmental education systems.

States should promote policies that ensure that developmental education does not become a black hole from which too many students never emerge. To help students advance from developmental education into all types of for-credit coursework, states can shine light on transition rates and then focus energy on improving transitions—for example, by building more robust bridges from developmental education to workforce education. When developmental education is necessary, states can ensure that students with occupational goals receive contextualized, accelerated developmental education; there is growing evidence that this increases retention by making the basic skills relevant to their occupational goals and speeding up time to completion.

States also can encourage credit-bearing occupational programs to enroll more lower-skilled adults by promoting strong connections from pre-college courses and sequences to programs and divisions that serve this population. Articulation agreements are insufficient by themselves: transitions need to be as seamless and automatic as possible for the student. Programs and divisions need to work together to keep paperwork and separate applications to a minimum and to automatically award credit.

6 Create and expand more flexible and comprehensive financial aid strategies and more personalized career and academic counseling and support, in order to support postsecondary access and success for lower-income adults.

States should broaden access to need-based financial aid programs for lower-skilled adult students enrolled in programs tied to certificates and degrees. Policy options tied to such goals include allowing less-than-half-time students and those without a GED or high school diploma to be eligible for financial aid, using aid for developmental education and non-credit occupational programs (if articulated to certificates and degrees), and allowing aid to be used for fractional credit or short modules.

States should allow certificate- and degree-seeking students to combine state need-based aid with federal Pell Grants, up to the total cost of attendance (regardless of enrollment status), including room and board, child care, and other necessary supports (e.g., transportation). States can also provide year-round aid and offer cash incentives to promote persistence, and they can explore performance-based financial aid or scholarships for low-skilled adults.

States should dedicate funding for on-campus child care programs, and institutions should ensure that care is available during non-traditional hours. In addition, states can use federal work-study dollars to provide on-campus jobs, potentially related to the student's area of study, to make it easier for students to combine work and school, while providing students the opportunity to integrate work and learning. ■

The Challenge[1]

Employers are now paying college-educated workers 75 percent more than those with only a high school diploma, compared to just 40 percent more than 25 years ago.[2] Why? Supply and demand. Employers can see that they need more skilled workers in order to compete globally, yet as a country we are not meeting that demand. Between 2004 and 2014, 24 of the 30 fastest-growing occupations are predicted to be filled by people with postsecondary education or training (either an occupational certificate or degree) (Hecker 2005). Yet nearly half the U.S. workforce has only a high school education or less. Some 25 million workers aged 18 to 64 lack a high school diploma or GED, while another 52 million adults have no postsecondary education (Crosley & Roberts 2007).

Even if effective, No Child Left Behind and other school reforms will not be able end this crisis and fulfill employers' needs. About two-thirds (65 percent) of our 2020 workforce is already beyond the reach of our elementary and secondary schools (Aspen Institute 2007). If as a nation we are to meet the employer demand for skilled workers—and by extension help them and our nation prosper—then enabling many more adults to gain marketable skills must be a central part of the solution. In fact, the potential pool of skilled workers among prime-age adults—defined here as the nearly 50 million people aged 18 to 44 with a high school diploma or less—is equal to the next 17 years of high school graduating classes.[3] In effect, we need to "grow our own" skilled workforce from within the workforce we already have.

Just as American business and industry need workers with higher skills, workers need higher skills to get ahead. We know that both earnings and employment rates are higher for those with more years of education, and economists estimate that each year of college increases wages on average by about 10 percent (Barrow & Rouse 2005). And this strong link between skills and wages is expected to continue. Among the top 30 jobs with the most openings between 2004 and 2014, those offering high or very high wages typically will go to workers with either a degree or significant training provided either on-the-job, in apprenticeships, or by community colleges and other institutions (Hecker 2005).

The convergence of employer and worker needs for higher skills presents an opportunity for states to work with their community colleges and other key partners to create solutions that help business and industry compete and help entry-level workers advance to higher paying jobs. However, many challenges exist. Many adults entering community colleges do not come with college-level reading, writing, and math skills and so must take remedial courses, where progress is slow and attrition high. Others, especially those who lack even a high school diploma or GED, never make it as far as the doors of the college.

Overall, the chances are still great that adults with a high school diploma or less will wind up in low-wage, dead-end jobs, especially because these jobs will continue to abound in our economy, representing about half of all job openings over the next decade. States and colleges need to engage in greater outreach to low-skilled adults, and colleges should be more responsive and relevant to the unique needs of adult students, whether through flexible scheduling, supports that promote persistence, or greater emphasis on connecting education and training to the workforce. Change at the college level is not the sole solution, though. The college is part of a constellation of institutions and agencies that have responsibility for helping low-skilled workers advance. ■

What State Policy Can Do

Within communities, the place where both employers and working adults most often turn for help with workplace skills is the community college. And at the end of the day, it will be up to local communities and local colleges to take the crucial steps of helping lower-skilled adults succeed in gaining the marketable credentials that employers want and that will enable employees to support their families.

For this reason, states addressing the challenge of providing employers with skilled workers while giving lower-skilled adults the opportunity to move up to better jobs are likely to find that community colleges are central to the solution. State leadership can create an environment that inspires leaders and citizens to recognize that higher skills can benefit individual workers, business, and the state as a whole. State leadership can also motivate and fund colleges to take ownership of this critical mission, and it can make possible the kinds of technical help and financial and other incentives that allow colleges to carry out this mission successfully.

Specifically, state policymakers can harness the power of the community colleges to address these issues of economic growth and individual prosperity. To do so, they must address six key tasks:

States that want to tackle the challenge of providing employers with skilled workers while giving lower-skilled adults the opportunity to move up to better jobs are likely to find that community colleges are central to the solution.

- Create a shared vision of the state's economic future among key stakeholders in education, workforce development, and economic development—a vision that includes the reasons why increasing the number of adults with postsecondary credentials is crucial.
- Set measurable goals for achieving the vision, including increasing postsecondary access for lower-skilled adults, and ensure that funding flows in ways that support progress toward those goals.
- Track individual outcomes across workforce education services and into the labor market, in order to identify trouble spots and document successful approaches with an especially close look at outcomes for lower-skilled students.
- Help community colleges connect in a broader, more strategic way with local employers, in order to link their needs to for-credit college offerings and to help lower-skilled adults get good jobs in demand in the local labor market.
- Overhaul the content and delivery of adult education, English as a Second Language, and college remediation, in order to accelerate progress and connect these services closely to occupational pathways in the colleges.
- Create and expand more flexible and comprehensive financial aid strategies and more personalized career and academic counseling and support, in order to support postsecondary access and success for lower-income adults.

Create a shared vision of the state's economic future among key stakeholders in education, workforce development, and economic development—a vision that includes the reasons why increasing the number of adults with postsecondary credentials is crucial.

To engage the right stakeholders in this effort, state leadership must forge a shared vision of the state's economic future and the role of colleges and of individuals in achieving it. Building this vision often starts with an overarching theme that helps distill complex economic realities into a shared understanding of the key workforce problems facing the state.

The shared vision will differ from state to state. In Colorado, for example, the theme of "the Colorado paradox" captured the seemingly contradictory facts of being one of the most highly educated states in the country, while having one of the lowest high school-to-college transition rates. This led to a public debate about whether it is good enough to prosper as a state if all of the state's skilled workers are imported and opportunity is stagnant or declining for youth and adults native to the state.

In some Midwestern states with aging populations and declining industrial economies, such as Michigan and Ohio, the overall themes tend to be about declining prosperity and the need to increase the skills of the existing workforce in order to compete for new knowledge economy jobs and shift away from reliance on manufacturing, especially in the automotive industry. Falling household income in recent years adds urgency in these states to the sense that dramatic change is needed to increase worker skills.[4]

As important as defining the key problems is conveying a clear message about what must be done, and this entails devising a vision and investing resources, often financial, in achieving it. Facing thousands of layoffs in the automotive and related industries, and in an economic environment that increasingly demands higher-skilled workers for business to remain competitive, Michigan Governor Jennifer Granholm proposed the "No Worker Left Behind" program, with the goal of training 100,000 adults in high-demand or entrepreneurial occupations over the course of three years. If this program is funded, displaced or low-wage workers will be eligible for up to two years of free tuition at any Michigan community college, university, or other approved training program.

Kentucky's Education Pays campaign, which began in 2001, called for Kentuckians to increase their education levels in order to earn higher incomes. In its first year, the campaign focused on adults ages 18-49 with low literacy skills, along with middle and high schoolers at risk of dropping out or not considering college. Faced with statistics that showed below-average educational attainment and growth in jobs requiring postsecondary education and training, the state undertook a public awareness campaign and set specific goals related to adult and postsecondary education.

One of the most important tasks for states in this area is to convince adults, especially those with lower skills and incomes, that it is both feasible and desirable to go back to school. Many have been out of school for years, and their prior educational experiences may have been less than ideal. Others have worked for years in good jobs with nothing more than a high school diploma and don't believe they need to go back to school.

And still others, especially those who are older and displaced from automotive and other manufacturing jobs, feel that they will never again be able to command the wages they received in their previous occupations, regardless of whether they go back to school.

These fears are not baseless, but states can take a variety of measures to address all these barriers. They can undertake media campaigns to underscore the value of postsecondary credentials and the availability of financial aid and other supports to make college possible for adults. They can help colleges connect to employers to make the benefits of postsecondary education tangible and direct by, for example, guaranteeing pay raises to incumbent workers for completion of certain credentials.

As states create a shared vision around postsecondary attainment, that vision must be inclusive of the range of workers and employers within their borders. For example, stressing "high skills, high wages" may leave out many workers if such jobs are limited to those with Bachelor's or graduate degrees in science, math, and engineering. States also should take care to move forward in tandem on two goals: creating and keeping good jobs; and creating and keeping a skilled workforce. In 2000, almost half of all American jobs—60 million—paid less than $12.59 per hour (in 2000 dollars); such low wages make it difficult to support a family. Of the ten occupations predicted to generate the most jobs through 2012, seven will offer wages below $12.59 per hour; five of these occupations—waiters, food preparation and serving workers (including fast food), cashiers, retail salespersons, and janitors—offer wages less than $8.40 per hour (Mitnik & Zeidenberg 2006).

States must focus their public investments in industries offering pathways to advancement—sectors with more higher-paying than low-paying jobs along each step of the ladder. For example, the construction, manufacturing, and allied health sectors each have high proportions of jobs that pay family-supporting wages and offer good benefits. However, it is dangerous to assume that good jobs will be readily available for everyone with upgraded skills (Dresser 2007). Therefore, states also must focus on improving the quality of low-wage jobs to ensure that those who are employed in lower-wage service occupations have access to a range of benefits—including health insurance, sick leave, and family leave—that are usually absent from such jobs.

Set measurable goals for achieving the vision, including increasing postsecondary access for lower-skilled adults, and ensure that funding flows in ways that support progress toward those goals.

Setting measurable goals and aligning funding with those goals is essential for translating the shared vision into actual changes in services and outcomes at the community college level for lower-skilled adults. Oregon's Pathways to Advancement Initiative, for example, has five central goals that the state hopes to achieve through the better alignment of services by creating career pathways:[5]

- Increasing the number of Oregonians accessing postsecondary education;
- Increasing the number who persist and attain degrees or other credentials;
- Decreasing the need for remediation at the postsecondary level;
- Increasing entry into employment and further education; and
- Increasing wage gains over time for students who complete education programs.

In Kentucky, comprehensive reform of the postsecondary education system ushered in the GoHigher goals and progress reports, which are especially far-reaching: they look at not only whether the state is making progress on access and success in college but also whether higher education progress is benefiting the state's economy and communities. The five core questions for GoHigher are:

- Are more Kentuckians ready for postsecondary education?
- Is Kentucky postsecondary education affordable to its citizens?
- Do more Kentuckians have certificates and degrees?
- Are college graduates prepared for life and work in Kentucky?
- Are Kentucky's people, communities, and economy benefiting?

These questions were translated into specific numerical targets and included adults as well as youth. For example, Kentucky emphasized improving adult education-to-college transitions by setting ambitious state goals for the percentage of GED completers to go onto postsecondary education. The state's transition rate began at 12 percent in 1998-99 and increased to 21 percent in 2005-06.[6] And beginning in 2007-08, local adult education providers will earn additional performance funding for each GED graduate transitioning to postsecondary education (Kentucky Office of Adult Education 2007).

Funding must support these goals and measures if community colleges are expected to change institutional practices to achieve them. In general, the services most often used by lower-skilled adults—adult education and English as a Second Language (ESL), college remediation, and occupational training—are systematically underfunded relative to their costs, which creates a disincentive for colleges to expand them and also affects their quality. For instance, California reimburses colleges for adult education services at roughly 60 percent of credit courses (Morest 2004). In most states, the formula for funding community

colleges—often referred to as "FTE" because it frequently is based on the enrollment of *full-time equivalent* students—does not cover the true expense to the college of providing high-cost occupational programs, such as nursing or machining. Further, FTE formulas rarely distinguish among the varying costs of educating different types of students. This can systematically disadvantage community colleges because a high proportion of their students are nontraditional. For example, it typically costs more to serve two half-time students than one full-time student due to additional instruction and student service costs.

States can revise FTE allocation formulas to better reflect the costs of educating lower-skilled adults and encourage community colleges to focus on outcomes important for the state's goals around economic growth and helping lower-skilled adults advance in the workforce. States should revise funding formulas to give at least equal weight to remediation and weight FTE for occupational programs in ways that recognize the true costs of those programs. For example, Oregon funds developmental education and adult education at the same level as regular credit classes. Ohio distributes community college funding on a per-student amount, based on the program area in which the student is enrolled. Therefore, colleges receive higher allocations for areas such as nursing and engineering than they do for general education classes (Griffith 2005).

States can creatively use federal and state categorical funds to help lower-skilled adults earn postsecondary credentials. States can do this by: aligning funds in a way that complements adult learner advancement; accessing other funding sources; blending funding streams; or simply increasing appropriations to increase the amount of resources available to adult learners. States also should look beyond higher education institution funding to the full array of federal and state funds invested in economic development, incumbent worker and customized training, student aid, Temporary Assistance for Needy Families (TANF), Unemployment Insurance, Trade Adjustment Assistance, job training for low-income adults (Workforce Investment Act), and child care. State examples include:

- New Jersey's Workforce Development Partnership Program, the state's incumbent worker training program, devotes a fifth of its budget—over $20 million annually—to the Supplemental Workforce Fund for Basic Skills. Under the supplemental fund, employed and unemployed workers receive basic skills education in reading comprehension, basic math, basic computer literacy, English proficiency, work readiness, and other areas, and this education is integrated with occupational training (Duke, Martinson, & Strawn 2006).
- The Massachusetts Extended Care Career Ladder Initiative (ECCLI) is a statewide project to improve the quality of nursing home care, in part by increasing workers' skills. Some ECCLI grants have helped Certified Nursing Assistants move into Licensed Practical Nursing positions, by combining financial resources from the state, employers, and community colleges (including financial aid) (Duke, Martinson, & Strawn 2006).

Track individual outcomes across workforce education services and into the labor market, in order to identify trouble spots and document successful approaches with an especially close look at outcomes for lower-skilled students.

Helping more lower-skilled adults obtain marketable postsecondary credentials depends on being able to see where and how individuals are falling through the cracks in the state's workforce education system. A major barrier in this regard is that few states can track student access, success, and transitions as adults move through the educational pipeline into the workforce, and potentially back for more education. The lack of comprehensive and integrated data systems prevents states from pinpointing specific problem areas and directing resources to achieve better outcomes.

Few states track educational and occupational outcomes longitudinally for lower-skilled adults along and through the educational pipeline and into the labor market, even though many have the data capacity to do so. Among state postsecondary education data systems, 40 states can track individual postsecondary education outcomes over time, and 23 state postsecondary education databases are linked to some other state database, typically Unemployment Insurance wage records (Ewell & Boeke 2007).

To promote such tracking of outcomes, states should establish data-sharing agreements across adult education, workforce training, and postsecondary agencies to allow tracking of individual outcomes along the education pathway and into the labor market. Although legal and technical barriers can make it challenging to create data-sharing capacity, states such as Florida, Nebraska, Oklahoma, Texas, and Washington have placed a high priority on the task and overcome barriers while protecting individual privacy (Mills 2005).

For example, the Washington State Board of Community and Technical Colleges conducted longitudinal research of 35,000 students to determine the "tipping point" at which postsecondary education and training pays off. Students see substantial earnings gains from college when they reach at least 30 vocational credits plus a credential. Workforce students entering with a high school diploma or GED earned *$2,700 and $1,700 more per year*, respectively, after reaching the tipping point. And these gains are even larger for lower-skilled students and those with limited English. ESL students earn *$7,000 more per year* and Adult Basic Education students *$8,500 more*. By contrast, those in short-term, customized training gained too few skills to reach the tipping point, earning *$3,800 less per year* than those who do and *$6,800 less* if they started from ABE (Prince & Jenkins 2005). Subsequent research showed that the amount of education needed to reach the tipping point also coincided with the mid-level skills that Washington-state employers need (i.e., more than one year but less than four years of postsecondary education).

In response to the fact that too few students—particularly lower-skilled adults and immigrants—were reaching the tipping point, the state reallocated money to support policies, such as a more generous FTE funding formula for pilots in the Integrated Basic Education and Skills Training (I-BEST) program, which integrates occupational training with adult education and ESL (described below). The state also created the Opportunity Grant, a state student grant aid program for working adults (Washington Higher Education Coordinating Board, Washington State Board for Community and Technical Colleges, and The Workforce Training and Education Coordinating Board 2005).

Help community colleges connect in a broader, more strategic way with local employers, in order to link their needs to for-credit college offerings and to help lower-skilled adults get good jobs in demand in the local labor market.

As previously noted, improved adult access to postsecondary education does not translate automatically into either worker advancement or more competitive businesses. State policy can increase the odds of success by using state capacity to analyze labor markets and help identify promising sectors and occupations, and by fostering regional worker training partnerships among community colleges, employers, business associations, and community organizations. Such regional partnerships can help link, on the one hand, employers who are willing to invest in their current and future workers' skills and can offer family-supporting jobs with, on the other hand, community colleges that can provide certificates and degrees linked to those opportunities.

Pennsylvania's $101 million Job Ready PA initiative, for example, is using state policy to restructure the state's workforce training system by connecting the supply side (job seekers) to the demand side (employers) through skill upgrading, industry partnerships, and the realignment of resources. The state has invested in 86 industry partnerships involving 980 companies. The partnerships must be regional and industry sector- or cluster-based, demonstrate an understanding of the regional labor market and sector, and include multiple employers and unions (where possible),

as well as a strategy for worker advancement. In addition, the Pennsylvania Higher Education Assistance Agency is funding postsecondary workforce education for nearly 3,000 adult learners and advanced training for over 7,500 incumbent workers (Vito 2007).

Another example is in Washington State, where Industry Skill Panels bring together business, labor, education, and workforce professionals at the regional level to assess current and future skill needs and how best to help workers advance and businesses prosper.[7] The panels consider a wide range of workforce education issues, such as curricula, apprenticeships, and the articulation of education and training programs. In both Pennsylvania and Washington, a variety of organizations can lead these regional efforts, depending on which are best equipped to bring the necessary partners together.

Washington also has funded Centers of Excellence across the state.[8] Individual community colleges develop deep expertise in education and training needed by a particular industry sector—such as construction, boat-building, winemaking, health care and others—and then share their curricula with other colleges around the state.

Illinois has also chosen to make regional workforce skill partnerships the centerpiece of its efforts to help businesses and workers prosper in challenging economic times. The Critical Skill Shortages Initiative uses state Workforce Investment Act funds to support regional partnerships to identify occupations in which there are critical shortages of skilled workers and to pull together services to address those shortages.[9] The partnerships are composed of employers, economic and workforce development agencies, and postsecondary providers. The state also has begun to use CSSI findings about shortages to guide other investments in workforce education. For example, CSSI has identified transportation/logistics, manufacturing, and health care as high-priority areas, and that has shaped which adult education and college remediation bridge programs the state has chosen to invest in with its new Shifting Gears initiative.

Finally, several states are using the concept of career pathways to better link community colleges with regional workforce needs. In Arkansas, Kentucky, and Oregon, statewide career pathways initiatives have catalyzed action by community colleges to: identify promising sectors or occupational clusters in their regions; and work with employers to create a sequence of education and training opportunities connected to in-demand jobs in the local labor market. The goal is for these career pathways to cover the spectrum of workplace skill levels, starting with adult education and ESL and reaching at least as high as an Associate's degree, and ultimately to a four-year degree as well.

In Kentucky, the community and technical colleges have created at least twenty-two career pathways to date: fourteen in allied health; three in advanced manufacturing; two in construction; two in business; and one in transportation. Nineteen of these were funded through formal career pathways state grants, while the others were supported through outside grants. Over 5,300 students have participated in these pathways. The state investment of $6.2 million has resulted in projected revenue of approximately $2 million, along with cash and in-kind contributions of an additional $10.7 million, much of it from employers.

But the most important dividend from that investment is increased student success. Preliminary outcome data suggest that career pathways

students have a significantly higher retention rate than the general Kentucky Community and Technical College System (KCTCS) student population (71 percent vs. 46 percent), and that they are seeking certificates and Associate's degrees at a higher rate than those community college students not enrolled in pathways (King-Simms 2008).

Overhaul the content and delivery of adult education, English as a Second Language, and college remediation, in order to accelerate progress and connect these services closely to occupational pathways in the colleges.

Overall, nontraditional students are only about half as likely to complete a degree as traditional students within five years. For example, just 27 percent earned an Associate's degree in that time, compared with 53 percent of traditional undergraduates, and they were no more likely to still be enrolled.[10] One culprit is transition rates along the education pathway from adult education and ESL to postsecondary education, which are abysmally low. The system hemorrhages students at every transition point. Adult education students do not typically persist long enough to advance even one grade or English ability level. A national survey of adult education programs in 2002 found that the most commonly reported length of stay in programs was 30 to 50 hours, with 51 to 80 hours the next most common, even though research shows students need on average at least 100 to 110 hours of instruction to advance one level (Tamassia et al. 2007; Comings 2007; McHugh, Gelatt, & Fix 2007).

To make matters worse, most adult education students do not earn a GED, let alone a college certificate, diploma, or degree. Although longitudinal studies of adult education students are rare, such studies have found that most adult education students do not participate for more than a few months and most (typically 70 percent or more) do not earn a GED.[11]

Although most students who take the GED see postsecondary education and training as the ultimate goal, only 12 percent who earn the GED complete one year of college within 10 years (Murnane, Willett, & Tyler 2000). A Washington State longitudinal study tracking the community college persistence and completion of adults 25 years and older with a high school diploma or less; only 13 percent of students who began in ESL programs and 30 percent of ABE/GED students transitioned to college; 4 to 6 percent of either group accumulated at least 45 credits or earned a college degree or certificate within five years (Prince & Jenkins 2005).

Most college programs and all federal student aid programs require students to have a high school diploma or GED or be able to pass a basic skills exam at a tenth- to twelfth-grade level (depending on the college) prior to entry into credit programs. Lower-skilled adults—especially those with skill levels lower than eighth grade, as targeted in *Breaking Through*—need remediation through either or both the adult education/ESL or college developmental education systems. Because students require an average of 100 to 110 hours of class time to advance one adult education grade level, the prospect of advancing to postsecondary education in a reasonable amount of time is daunting. Even those who have a high school diploma or GED must often spend long periods in remediation before they can enter an occupational program that relates to their career goals.

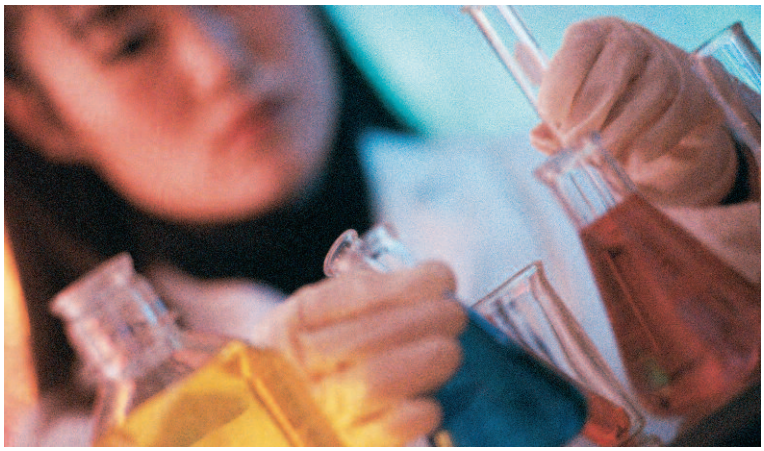
Once students make the transition to postsecondary education, persistence and completion remain challenges. Forty-six percent of students who begin their postsecondary education at community colleges never complete a degree (Brock & LeBlanc 2005). The Washington State study found that 29 percent of students who started with a GED and 35 percent of students who started with a high school diploma completed at least 45 credits or a credential in five years. Only 14 percent of those adult students who began college with a GED and 18 percent of those who began with a high school diploma earned an advanced certificate or Associate's degree within five years (Prince & Jenkins 2005).

Remedial education often is a significant stumbling block facing adult students. The Washington State study of adults over 25 who enrolled in occupational programs found that 40 percent of those with either a high school diploma or GED took at least one remedial course (Prince & Jenkins 2005). Remedial education has similarly high attrition rates as ABE and ESL, with more than a quarter of students failing to complete their prescribed remedial courses (Jenkins 2003).

More generally, content along the pathway from basic skills to occupational education is seldom connected in any coherent way; entrance and exit criteria at each point often don't match up; policies prevent concurrent enrollment in adult education or developmental education and credit-bearing coursework; and there is no common definition of college readiness, even across institutions within the same state (Alamprese 2004; Hughes & Karp 2006). For example, the GED neither prepares students in key subjects needed for college, such as trigonometry, nor introduces them to college skills, such as researching and writing research papers. Further, lower-skilled adults may start in short-term, non-credit workforce education unconnected to a degree but ultimately need to receive for-credit certificates or degrees to advance. Each of these factors prolongs the path to a career—factors contributing to low rates of transition and completion.

States can accelerate progress along the pathway by creating bridge programs into occupational training, promoting adult dual enrollment strategies, strengthening transitions from developmental education into occupational coursework, and easing the transition of students from non-credit to credit-bearing occupational programs. In addition, states should align adult education and ESL content with college-entry criteria and crosswalk assessments in order to eliminate or reduce the need for developmental education.

Bridge programs incorporate occupational or academic content into basic skills training as a means of providing low-skilled adults with the foundation needed to advance and succeed in postsecondary education. Supports can be designed to meet the needs of English-speaking students at fifth- or sixth-grade reading levels or non-English speakers at the low-intermediate ESL level (Henle, Jenkins, & Smith 2005). Bridge programs also cover other areas viewed as essential for college success (e.g., problem-solving, working in teams, study habits) and offer support services. Oregon's Pathways to Advancement Initiative provides a bridge program for intermediate-level, limited English, non-native speakers. The program includes occupational training incorporated with ESL and basic skills and offers six tracks: health care, institutional food service, direct care worker, office skills, entry-level high-tech manufacturing, and welding (Henle, Jenkins, & Smith 2005).



Dual enrolling students in basic skills or remedial education and for-credit occupational coursework can accelerate advancement along the pipeline. Dual enrollment can increase multiple skills concurrently through integrated coursework and facilitate accumulation of college credits in a compressed timeframe. Colleges can use dual enrollment in a number of ways, including combining adult and developmental education or integrating adult education or ESL with occupational training. This model also makes college more financially accessible, because tuition-free adult education can be used to offer developmental education, and financial aid is available to students enrolled in degree programs that integrate adult education and ESL.

Washington State's Integrated Basic Education and Skills Training Program (I-BEST) uses the dual enrollment approach, pairing ABE/ESL and professional-occupational instructors in the classroom to advance students concurrently in both areas, while the students earn credits toward certificates and/or degrees.[12] The state funds colleges at 1.75 FTE for I-BEST courses—versus 1.0 FTE for traditional courses—recognizing the extra costs of two instructors, coordinating instruction, and additional student support necessary to ensure positive outcomes. All I-BEST programs have to be part of a one-year certificate program or another occupational program with proven ability to place graduates in higher-wage jobs.

There is evidence that I-BEST helps students build first-year momentum for earning college credits and thereby increases their preparation and possibilities for going even further. The percentages of I-BEST students who earn their first 15 college credits is substantially higher than in cases when basic skills students attempt college coursework in other ways (53 percent versus 11 percent for ESL, and 61 percent versus 26 percent for ABE/GED students). Furthermore, I-BEST students maintain momentum better by completing 30 or more credits at a higher rate than ABE/GED students enrolled in college courses in other ways (32 percent for I-BEST students compared to 11 percent for other students) (Washington State Board for Community and Technical Colleges 2008). A state study found that I-BEST students earned five times more college credits on average, and they were fifteen times more likely to complete occupational training, compared to traditional ABE/ESL students (Washington State Board for Community and Technical Colleges 2005).

States need to promote policies that ensure that developmental education does not become a black hole from which students never emerge. To help students advance from developmental education into all types of for-credit coursework, states can shine light on transition rates and then focus energy on improving transitions—for example, by building more robust bridges from developmental education to workforce education. When developmental education is necessary, states should also ensure that students with occupational goals receive contextualized, accelerated developmental education. This increases retention by making the basic skills relevant to their occupational goals and speeding up time to completion.

States also can encourage credit-bearing occupational programs to enroll more lower-skilled adults by promoting strong connections to programs and divisions that serve this population. Articulation agreements are insufficient by themselves: transitions need to be as seamless and automatic as possible for the student. Programs and divisions need to work together to keep paperwork and separate applications to a minimum and to automatically award credit. State mandates may be necessary to ensure that these connections occur.

For example, Ohio's Career-Technical Credit Transfer Initiative (CT^2) will articulate non-credit career-technical programs to credit-bearing ones in high-priority areas across the state, beginning with health care and engineering. State legislation served as a catalyst to define learning outcomes based on industry standards and to get institutions to agree to standards-based outcomes, match courses and programs to the agreed upon learning outcomes, and submit the courses and programs for review by joint faculty panels to ensure equivalency of rigor and applicability to major.[13]

In addition, states should adopt incumbent worker/customized training policies that encourage training within articulated career pathways leading to certificates or degrees.

Create and expand more flexible and comprehensive financial aid strategies and more personalized career and academic counseling and support, in order to support postsecondary access and success for lower-income adults.

The barriers that lower-skilled adult students encounter are numerous: lack of financial means to attend school; juggling work, family, and school; limited exposure to career options; lack of confidence and personal support; and difficulty navigating complex bureaucracies (Cook & King 2004). Pell Grants, the federal government's main student grant aid program, do cover some of the needs of lower-skilled adult students, including students attending less than half time. However, state financial aid tends to be geared toward traditional, full-time students, and it rarely considers the unique circumstances and paths followed by lower-skilled working adults pursuing credentials.

States should broaden access to need-based financial aid programs for lower-skilled adult students enrolled in programs tied to certificates and degrees. Policy options tied to such goals include allowing less-than-half-time students and those without a GED or high school diploma to be eligible for financial aid, using aid for developmental education and non-credit occupational programs (if articulated to certificates and degrees), and allowing aid to be used for fractional credit or short modules.

For their part, institutions can streamline the curriculum approval process so more non-credit occupational education can qualify for credit, and therefore be eligible for student financial aid. States should allow certificate- and degree-seeking students to combine state need-based aid with federal Pell Grants, up to the total cost of attendance (regardless of enrollment status), including room and board, child care, and other necessary supports (e.g., transportation). States can also provide aid year-round and offer cash incentives to promote persistence.

Georgia and Washington provide examples of flexible aid geared toward nontraditional students seeking occupational credentials.

Georgia's HOPE Grant (not to be confused with the state's popular merit-based HOPE Scholarship) is the state's financial aid program for public postsecondary programs at the diploma or certificate level or below. HOPE grants cover tuition and fees and provide a book allowance for students enrolled in programs leading toward a technical certificate or diploma (up to a total of 95 credit hours or 63 semester hours, with exceptions for programs requiring more hours or for students returning for an additional diploma or certificate). HOPE Grants can also cover developmental education courses, and students enrolled less than half time are eligible (Duke, Martinson, & Strawn 2006).

Washington State's Opportunity Grants are aimed at increasing low-income students' access to and success in earning postsecondary credentials at the Associate's degree or below, including apprenticeship programs, in fields related to high-demand jobs. Washington recently expanded the student aid pilot into a $23 million program that will eventually operate statewide. The grants cover tuition and fees, as well as providing an additional $1,000 annually for books, tools, and supplies. Students attending less than half time are eligible. In addition, public colleges receive $1,500 per FTE student in the Opportunity Grant program at

that institution, which they must use to provide student support services. The state is piloting local partnerships with Workforce Development Councils to provide Opportunity Grant students with mentors in their fields of study (Kaz 2007).

States can also explore performance-based financial aid or scholarships for low-skilled adults. In MDRC's Opening Doors demonstration program, two Louisiana community colleges offered college-ready low-income student parents a $1,000 scholarship for each of two semesters, for a total of $2,000, if they maintained a 2.0 (C) grade point average and were enrolled at least half time.[14] The scholarships augmented Pell Grants and other financial aid. Early results from an experimental evaluation showed that students in the demonstration were more likely to enroll in college full time, pass more courses, earn more credits, and have higher rates of persistence than those who did not (Brock & Richburg-Hayes 2006).

Student support services, developed and administered by local institutions, are an essential, yet insufficiently funded, component of increasing the retention and completion rates of adult students. They include academic guidance and counseling, academic supports (e.g., tutoring, time management, study skills training), personal guidance and counseling, career counseling, and supplemental services. Advising and counseling services are greatly underfunded, with student-to-counselor ratios at community colleges hovering near 1,000:1 (Grubb 2001). Effective advising and counseling can help students navigate transitions, as well as address personal issues before they become cause for dropping out.

A handful of states have adopted policies that directly fund services to support student success. In Illinois, the Student Success Grant, funded from the state higher education board budget, is allocated to each community college. The college uses the grant to provide services to students who are academically at risk, economically disadvantaged, or disabled, based on that campus's student needs. It can be used for personal, academic, or career counseling; assessment and testing; mentoring and persistence; and completion programs (Unruh 2006).

Supplemental support services, such as work study, child care, and transportation assistance, are also necessary to help ensure better outcomes for lower-skilled adults. States should dedicate funding for on-campus child care programs, and institutions should ensure that care is available during non-traditional hours. In addition, states can use federal work-study dollars to provide on-campus jobs, potentially related to the student's area of study, to make it easier for students to combine work and school, while providing opportunities to integrate work and learning (Duke 2006).

For example, California's Extended Opportunity Program and Services is dedicated money from the state general fund that goes to community colleges to provide low-income students with student services (academic and personal counseling, child care, and transportation). Kentucky's Ready to Work program, geared toward TANF participants pursuing postsecondary education, offers work-study jobs that allow students to earn up to $2,500 annually while in school at jobs connected to their field of study. Ready to Work also provides academic counseling as well as assistance with job placement. ■

Additional Policy Research from *Breaking Through*

Partway into the *Breaking Through* initiative, community college teams and a state policy workgroup identified three high-priority areas for research into how state policy for community colleges can better help lower-skilled adults enter and succeed in college and careers. This paper, introducing a series of policy reports from *Breaking Through*, has outlined several ways that state policies can act as levers toward that goal. Other reports in this series provides a detailed analysis of policy barriers and incentives in three areas:

- The alignment between adult education and developmental education;
- State student financial aid; and
- Institutional financing.

The policy research papers will serve as valuable tools for policymakers, advocates, and other stakeholders seeking to overcome economic and policy challenges and to capitalize on opportunities to expand educational access and success for an often overlooked but critical population of students.

The series will be released in 2008 (see inside front cover for more information).

Together, the policy research papers will provide analysis and examples of state policies that improve community colleges' ability to educate and support low-skilled adult students. They will serve as valuable tools for policymakers, advocates, and other stakeholders seeking to overcome economic and policy challenges and to capitalize on opportunities to expand educational access and success for an often overlooked but critical population of students. Not only is this in the best interest of low-skilled adults—it is in the best interest of states and of our nation.

Endnotes

[1] This discussion is adapted from Strawn (2007).

[2] *Wall Street Journal*. Capitol Column, April 18, 2007.

[3] CLASP calculations, from Census Bureau data from the March 2006 Current Population survey and from the Western Interstate Commission on Higher Education (2003).

[4] For income data, see: http://www.census.gov/hhes/www/income/histinc/h08b.html.

[5] See: http://www.pcc.edu/continuing-education/career-pathways/documents/oregon-pathways-initiative-overview.pdf.

[6] For 1998 data, see *Kentucky Adult Education Report Card 2005* at http://cpe.ky.gov/NR/rdonlyres/03AC88A6-ED01-473A-B327-E41CFA5F97B4/0/KYAEReportCard05_20060627.pdf; for 2005-06 data, see *A New Framework for Adult Education*, at http://www.kyae.ky.gov/NR/rdonlyres/5D218E65-A7CE-4536-B77B-2D101638A341/0/ANewFrameworkforAdultEducation.pdf.

[7] For information on Industry Skill Panels, see: www.wtb.wa.gov/IndustrySkillPanel.asp.

[8] For information on Centers of Excellence, see: www.sbctc.ctc.edu/College/_e-wkforcecentersofexcellence.aspx.

[9] For information on the Critical Skills Shortage Initiative, see: www.commerce.state.il.us/dceo/Bureaus/Workforce_Development/Resources/CSSI.htm.

[10] See: *The Condition of Education, Special Analysis 2002, Nontraditional Undergraduates*. http://nces.ed.gov/programs/coe/2002/analyses/nontraditional/index.asp

[11] See: Bos et al. 2001; Porter et al. 2005; Reder & Strawn 2006.

[12] The most recent guidelines provide three models from which colleges can choose. Two of the models require a minimum of 20 credits and must be toward a certificate or degree and the third is a short-term certificate option requiring less than 20 credits. See: http://www.sbctc.ctc.edu/Workforce/docs/IBESTpercent20Guidelines percent20andpercent20Process.pdf.

[13] For more information on this initiative, see: www.regents.state.oh.us/careertechtransfer.

[14] Although MDRC's program enrolled college-ready participants, a similar program could be designed for basic education or remedial courses.

References

Alamprese, Judith. 2004. "Approaches to ABE Transition to Postsecondary Education." *Focus on Basics*, Vol. 6, Issue D. February.

Aspen Institute. 2007. "Sector Initiatives and Community Colleges: Working Together to Provide Education for Low-Wage Working Adults," *Workforce Strategies Initiative Update*, Washington, DC: Aspen Institute. Issue 4, April. Calculations from data projections reported in Mitra Toossi. 2006. "A New Look at Long-term Labor Force Projections to 2050." *Monthly Labor Review.* November.

Barrow, Lisa & Cecilia Elena Rouse. 2005. "Do Returns to Schooling Differ by Race and Ethnicity?" Working Paper. Chicago, IL: Federal Reserve Bank of Chicago and Princeton University.

Brock, Thomas & Lashawn Richburg-Hayes. 2006. *Paying for Persistence: Early Results of a Louisiana Scholarship Program for Low-Income Parents Attending Community College.* New York, NY: MDRC.

Comings, John. 2007. "Persistence: Helping Adult Education Students Reach Their Goals." *Review of Adult Learning and Literacy 2007,* Chapter 2. Cambridge, MA: National Center for Study of Adult Learning and Literacy.

Cook, Brian & Jacqueline King. 2004. "Low-Income Adults in Profile: Improving Lives Through Higher Education." Washington DC: American Council on Education.

Crosley, Adair & Brandon Roberts. 2007. *Strengthening State Policies to Increase the Education And Skills of Low-Wage Workers.* Chevy Chase, MD: Working Poor Families Project.

Dresser, Laura. 2007. *Stronger Ladders, Stronger Floors The Need for Both Supply and Demand Strategies to Improve Workers' Opportunities.* Madison, WI: Center on Wisconsin Strategy.

Duke, Amy-Ellen. 2006. "Supporting Success." PowerPoint presentation. Working Poor Families Project Academy on State Postsecondary Policy. Washington, DC: Center for Law and Social Policy.

Duke, Amy-Ellen, Karin Martinson, & Julie Strawn. 2006. *Wising Up: How Government Can Partner with Business to Increase Skills and Advance Low-Wage Workers.* Washington, DC: Center for Law and Social Policy.

Ewell, Peter & Marianne Boeke. 2007. *Critical Connections: Linking States' Unit Record Systems to Track Student Progress.* Boulder, CO: National Center for Higher Education Management Systems.

Griffith, Michael. 2005. *Issues in Community College Funding*. Denver, CO: Education Commission of the States.

Grubb, Norton. 2001. *Getting into the World: Guidance and Counseling in Community Colleges*. New York, NY: Community College Research Center, as cited in Thomas Brock and Allen LeBlanc. 2005. *Promoting Student Success in Community College and Beyond: The Opening Doors Demonstration*. New York, NY: MDRC.

Hecker, Daniel E. 2005. "Occupational Employment Projections to 2014." *Monthly Labor Review*, 128 (11).

Henle, Toni, Davis Jenkins, & Whitney Smith. 2005. *Bridges to Careers for Low-skilled Adults: A Program Development Guide*. Chicago, IL: Women Employed Institute.

Hughes, Katherine & Melinda Karp. 2006. *Strengthening Transitions by Encouraging Career Pathways: A Look at State Policies and Practices*. New York, NY: CCRC Brief No. 30.

Jenkins, Davis. 2003. *The Potential of Community Colleges as Bridges to Opportunity for the Disadvantages: Can it be Achieved on a Large Scale?* New York, NY: Community College Research Center, Columbia University.

Kaz, David. 2007. *Legislation Affecting Employment and Training for Low-Income State Residents: Brief on the 2007 Washington State Legislative Session*. Seattle, WA: Seattle Jobs Initiative.

Kentucky Office of Adult Education. 2007. *A New Framework for Adult Education*. Frankfort, KY: Author.

King-Simms, Shauna. 2008. Email correspondence.

McHugh, Margie, Julia Gelatt, & Michael Fix. 2007. *Adult English Language Instruction in the United States: Determining Need and Investing Wisely.* Washington, DC: Migration Policy Institute.

Mills, Jack. 2005. *State Data Systems and Privacy Concerns: Strategies for Balancing Public Interest*. Boston: Jobs for the Future.

Mitnik, Pablo & Matt Zeidenberg. 2006. *From Bad to Good Jobs?* Madison, WI: Center on Wisconsin Strategy.

Morest, Vanessa Smith. 2004. *The Role of Community College Systems in State Adult Education Systems: A National Analysis.* New York, NY: Council for the Advancement of Adult Literacy.

Murnane, Richard J., John B. Willett, & John H. Tyler. 2000. "Who Benefits from a GED? Evidence from High School and Beyond." *Review of Economics and Statistics, 82* (1).

Porter, Kristin E., Sondra Cuban, John Comings, & Valerie Chase. 2005. *Building Pathways to Success for Low Income Adult Students: Lessons for Community College Policy and Practice From a Statewide Longitudinal Study.* New York, NY: MDRC.

Porter Kristin E., Sondra Cuban, & John P. Comings, with Valerie Chase. 2005. "*One Day I Will Make It" A Study of Adult Student Persistence in Library Literacy Programs*. New York, NY: MDRC.

Prince, David & Davis Jenkins. 2005. *Building Pathways to Success for Low Income Adult Students: Lessons for Community College Policy and Practice From a Statewide Longitudinal Study.* New York, NY: Community College Research Center, Columbia University.

Reder, Stephen & Clare Strawn. 2006. "Self-Study: Broadening the Concepts of Participation and Program Support." In *Focus on Basics*, Cambridge, MA: National Center for Study of Adult Learning and Literacy.

Strawn, Julie. 2007. *Policies to Promote Adult Education and Postsecondary Alignment*. Prepared for the National Commission on Adult Literacy. New York, NY. September.

Tamassia, Claudia, Kentaro Yamamoto, Marylou Lennon, & Irwin Kirsch. 2007. *Adult Education in America: A First Look at Results from the Adult Education Program and Learning Surveys*. Princeton, NJ: Educational Testing Service.

Unruh, Rachel. 2006. *Investing in Success: Educational Supports for Illinois Community College Students*. Chicago, IL: Women Employed.

Vito, Sandi. 2007. "Pennsylvania Experiment: No Failure, Only Learning." Presentation given at the Wisconsin Shifting Gears meeting. Madison, WI.

Washington State Board for Community and Technical Colleges. 2005. *I-BEST: A Program Integrating Adult Basic Education and Workforce Training.* Olympia, WA: Author.

Washington State Board for Community and Technical Colleges. 2008. *Increasing Student Achievement for Basic Skills Students*. Research Report No. 08-1. January. Olympia, WA: Author.

Washington Higher Education Coordinating Board, Washington State Board for Community and Technical Colleges, & The Workforce Training and Education Coordinating Board. 2005. *A Skilled and Educated Workforce: An assessment of the number and type of higher education and training credentials required to meet employer demand*. Olympia, WA: Authors.

Western Interstate Commission on Higher Education. 2003. *Knocking at the College Door: Projections of High School Graduates 1998 to 2018*. Boulder, CO: Author.

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