



Strong Students, Strong Workers

Models for Student Success through Workforce Development and
Community College Partnerships

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Introduction and executive summary

The importance of community college to the education and vocational training of our nation's low-income youth and working adults cannot be overstated. More than 6.2 million students attended 1,045 community colleges in the United States in 2006, the most recent year for which federal statistics are available, and today represent about 35 percent of all postsecondary education students.¹ These institutions have a range of educational offerings, from two-year degrees to nondegree and vocational programs focused on a wide range of subjects, to match the increasing diversity of their students. Many of these programs can provide the postsecondary credentials needed by low-income youth and working adults to increase their labor market earnings, and the overall skills needed to keep the American workforce productive and competitive.

The Obama administration recognizes the potential of community colleges for these groups and for others, such as the workers displaced during the current economic downturn from their earlier jobs. The administration in July 2009 proposed a major new initiative that would provide significant new funding to states and community colleges to support innovations in these areas.

Yet there are some critical problems that now limit the extent to which the potential positive effects of community college in these areas can be realized. For one thing, despite considerable improvement over the past decade, low-income youth and adults still have relatively limited community college enrollments, and often fail to complete a degree or certificate once they enroll. A range of barriers still limits their ability to successfully attend these institutions and to complete courses of study there.

Furthermore, the classes and programs in which they enroll are often disconnected from areas of strong labor market demand where their earnings potential are most likely to be improved. In particular, community colleges are frequently disconnected from state and local workforce development systems, whose One-Stop Career Centers and personnel provide the employment services and training intended to help workers find jobs or improve their skills and earnings. Without better linkages across these two sets of institutions, students at community colleges do not necessarily take the classes and earn the credentials that will best serve them in the job market.

How can these problems be remedied? And what are states and local community college systems doing now to deal with these problems? In this paper, we address these issues. We begin by reviewing both the promise of community colleges as a source of skill development for low-income students, as well as the problems that currently limit their success with this population. We then review a wide range of efforts by community colleges and states, with funding from private foundations as well as the federal government, to improve enrollments and completion rates among disadvantaged youth and adults. These efforts include:

- **Systemic reforms** at the state level, including regulatory changes, legislative initiatives, and administrative modifications to better link community colleges and labor markets.
- **Instructional, curricular, and program reforms** at community colleges to provide skills remediation, labor market preparation and support services to low-income students.
- **Efforts aimed at disadvantaged youth**, including those still in high school as well as dropouts, to better connect them to community college and labor market opportunities.

In the vast majority of cases, these innovations have yet to be evaluated with any real level of rigor. Among the more promising to consider are:

- **Bridge programs and career pathways** that specify steps through which individuals' progress for upward career mobility, from remedial education to certificates academic degrees.
- **Alternative training and education, such as modular courses and stackable credentials** that allow open-entry and exit to and from programs and policies that allow time and course flexibility for adult students.
- **Integrated education, occupational and vocational training** rather than separate and disconnected strategies.
- **Sectoral training** to prepare workers and future workers for high demand occupations in growth industries.
- **Incorporation of supports and assistance** specifically designed to guide low-income students.

Thus, these efforts remain “promising,” but not yet “proven,” in most cases. Still, we provide evaluation evidence on the cost-effectiveness of these efforts whenever such evidence exists, and try to infer policy options that promote adoption of promise approaches. Specifically:

- State legislation can directly increase the attention and priority placed on integrated education and workforce development programs and policies. Legislative action in states such as Ohio and Arkansas called for new directions in programming statewide that requires integrating workforce development, college, and adult education programming.
- Administrative actions at the state level can also serve as major policy catalysts to require or encourage integrated programming. The well-known I-BEST model in Washington State that integrates adult education and occupational training began in a few community colleges as a state initiative and is now in all community colleges and the model is being continuously enhanced.

- State administrative structures can also link community colleges and workforce development more closely. In Oregon, they are organizationally integrated into the Department of Community Colleges and Workforce Development.
- The availability of federal grant funding to develop training programs that consciously involve collaborations among workforce development agencies, community colleges and, in some places, economic development can prove to be essential additional resources to encourage communities to adopt innovative approaches.

In the pages that follow, we will explore our findings in greater detail and then close with some implications of this review for federal and state policy in the areas of higher education and workforce development. We will argue that Congress should:

- Fully fund the Obama administration’s proposed \$12 billion initiative on community colleges, and use it to encourage continued experimentation with and evaluation of local and state innovations that promote both greater academic and labor market success for the disadvantaged.
- Amend the Workforce Investment Act during reauthorization in 2010 to fund and incent training at community colleges, as well as from other providers, that is cost-effective and tied to well-paying “middle-skill” jobs in local areas.
- Amend the Perkins Vocational and Technical Education Act, the Elementary and Secondary Education Act, or ESEA, and the Higher Education Act, or HEA, to improve access to and retention at community colleges for disadvantaged youth.

In addition:

- American Recovery and Reconstruction Act, or ARRA, and other funds should support research efforts to develop a better statistical inventory of the range of certificates and degrees now awarded by community colleges and other proprietary schools.
- States can and should do more to generate the kinds of systemic and instructional or curricular changes that we describe here, including better funding incentives for curricula that lead to certificate or degree completion in areas of strong labor market demand and stronger ties to local workforce development systems.

Community colleges and the disadvantaged: Promise and problems

Improving the educational attainment of low-income youth and adults in the United States is critical for their own sake but also for the general health and competitiveness of the U.S. economy. It is clear that the low earnings of the poor are heavily tied to their lack of postsecondary credentials. Seventy-one percent of the heads of poor families in the United States in any year have just a high school diploma or less, and that is also true of 60 percent of those with incomes between 100 percent and 200 percent of the poverty line—or about \$20,000 - \$40,000 per year for a family of four. The same level of educational attainment is found among the heads of just 31 percent of families with incomes above twice the poverty line.²

More broadly, the future success of the U.S. economy likely depends at least partly on our ability to raise educational attainment among disadvantaged populations. If current patterns of immigration, retirement, and educational attainment continue, the imminent retirements of “baby boomers” and their replacement by immigrants in the labor force will no doubt tend to lower the educational attainment of U.S. workers.³ With such a workforce, U.S. employers would have greater difficulty finding and paying for skilled workers domestically who, because of their greater relative scarcity, would now be more expensive to hire. This means higher domestic production costs and perhaps greater rates of offshoring of their business activities.

Given these concerns, the promise and potential of community colleges to improve the labor market earnings of the poor and to help provide the needed skills for American workers rest on a number of factors. For one thing, despite some recent reports of growing polarization in the job market—with the strongest growth in the highest and lowest-skill jobs—the demand for workers in “middle-skill” jobs remains strong.⁴ These jobs are generally defined as those that require some kind of postsecondary education or training, but less than a bachelor’s degree.

There are a number of important middle-skill occupations or sectors that pay quite well in which both employment and wages have grown over the past two decades, and where employment is projected to continue growing in the next decade and beyond.⁵ Employers typically report some difficulty filling jobs in these areas, which include many occupations in health and elder care, technician jobs, and installation-maintenance-repair positions.⁶

Despite some job loss during the current downturn, the Council of Economic Advisers projects the return of employment growth in these areas, as well as in middle-skill construction and durable manufacturing jobs, over the next six or seven years as federal spending on infrastructure and “green jobs” flourish and as export demand recovers.⁷

Studies of labor market earnings show a strong “rate of return” for those who earn community college degrees and certificates. The economic returns to a year of community college, in terms of higher earnings, appear fairly comparable to those of 4-year colleges.⁸ Studies suggest that community college degrees generate strong improvements in earnings, even for disadvantaged adults such as current or former welfare recipients.⁹ And recent evidence from Florida administrative data shows that disadvantaged youth—even those with relatively weak grades in high school—can benefit greatly from earning certificates in a number of “middle-skill” occupations.¹⁰ Those from low-income families with college degrees, from either a two-year or four-year school, often enjoy substantial economic mobility across generations and over the course of their lives.¹¹

Community college certificates and degrees thus have great promise as a source of skills and credentials that can provide pathways for the disadvantaged into well-paying jobs that remain in strong demand. This promise has not been fully realized, as millions of disadvantaged youth and adults fail to earn the credentials that could help them—and the economy—so much.

A quarter of all high school students, for instance, still fail to graduate from high school, and another quarter graduate but do not attend any kind of college.¹² Furthermore, minorities and low-income youth remain overrepresented among those who fail to attend any postsecondary institution.¹³ Black and Hispanic students account for 12 percent and 14 percent, respectively, of community college enrollees, which represent nearly exact proportions to their presence in the overall U.S. population. Moreover, blacks and Hispanics account for only 10 percent and 9 percent respectively of those earning associate’s degrees at community colleges.¹⁴ But these enrollment rates are not proportional to their much greater presence in the noncollege population, since blacks and Hispanics now account for roughly a third of young people who never enroll in college. Closing this “college gap” between race and ethnic groups will require community colleges to do more.¹⁵

Today, more than half of those who enroll at community colleges fail to earn any credential or transfer to a four-year school within six years.¹⁶ These numbers might at least partly reflect the many different populations served by community colleges and the varying missions that these institutions undertake, including the provision of customized occupational training to nondegree enrollees.¹⁷ But high rates of noncompletion can be found even among those who initially plan to earn degrees, and the rates of noncompletion for minorities and those from low-income families are significantly higher than those of whites and middle-income attendees.

What accounts for the difficulties experienced by the disadvantaged in attending and completing community college work? For one thing, the academic preparation of low-income youth and adults lags behind that of other students.¹⁸ When many disadvantaged individuals try to attend community college, they often find themselves in remedial or “developmental” classes in which they languish for months or years and ultimately drop out.

Students from disadvantaged families attend and complete college less frequently than those from middle- and upper-income families, even among those with comparable grades or test scores in high school. This occurs at least partly due to the costs of higher education, and the financial constraints low-income families face—even when they are eligible for Pell grants, which help fund tuition and fees for low-income students at accredited colleges and universities.¹⁹ But it also seems to reflect their having less information and knowledge about academic requirements as well as available opportunities in these institutions.²⁰ And, for those who are single parents and have family responsibilities, the pressure to provide income and care for children often make it very difficult to attend school and complete courses of work at the same time.

Then there’s the disconnect between community colleges and other labor market institutions, which limits the availability of other employment services to the disadvantaged when they attend community college. For instance, Louis Jacobson and Christine Mokher point out the strong earnings potential of those who earn certificates in high-demand and/or somewhat technical fields, but they also show that many other certificates earned by disadvantaged students are not well-rewarded in the labor market.²¹

So why don’t more students enroll in the higher-demand or more technical fields? Part of the answer lies in the limited academic ability of many students. In many cases, students’ weak performance in high school prevents them from enrolling in or completing more rigorous and technical coursework in some of these areas. But it doesn’t appear as though their lack of academic ability fully accounts for the pattern of enrollments that we observe among low-income students, since the authors of the above study have controlled for student performance in high school in their estimated returns to certificates and degrees. Instead, it is likely that many students obtain little guidance about job availability and labor market rewards to different courses of study.

The incentives of community colleges to offer more classes in areas of instruction where per-student costs are higher is limited by state funding formulas that reimburse them primarily on a per-capita student enrollment basis, without any financial rewards provided for completion of degrees and certificates, especially in programs that generate strong labor market performance. While some institutions are more responsive than others to local labor market conditions, many show little ability or inclination to adjust their course offerings to the strength of local labor demand.²²

This problem reflects limitations and weaknesses not only in community colleges and the ways they are financed but also in local workforce development systems. Our nation's workforce development programs, as currently funded and structured through the Workforce Investment Act, or WIA, are supposed to provide job training plus a range of employment services to anyone in the labor force who needs them, including disadvantaged youth and adults. These services should guide students to high-demand sectors of the economy where good-paying jobs are available if they gain the appropriate skills and certification.

But the WIA system suffers from very limited and declining funding over time, inconsistent employer engagement, and fragmentation and disconnection from other sources of public funding and services, including the community colleges and other parts of the educational system.²³ Research and evaluation evidence still suggests that some employment services and job training programs funded at least partly through WIA are quite cost-effective—especially when they target high-wage jobs or sectors and involve employers as well as students and various training providers. And community colleges are one such type of provider, though not the only one that can be effective at meeting the needs of different populations and economic sectors.²⁴

Our nation's workforce development system, however, still has difficulty replicating and bringing successful models to scale, and then providing the linkages to employers and job training providers—as well as support services—that are necessary for workers to gain both the skills and jobs they need to achieve labor market success.²⁵ That's where our community colleges offer substantial promise when it comes to training disadvantaged adults and youth for available jobs in good-paying fields. What we need in this area is a set of programmatic-institutional reforms at community colleges that can help address the specific needs of low-income youth and working adults when they attend, as well as systemic reforms that broadly improve operations and the responsiveness of community colleges to employer and labor market needs at the state and local levels.

Fortunately, a number of states, localities, and community colleges are already doing to meet these needs. Below we review several of these programs.

Innovative statewide reform efforts

Community colleges have emerged over the past century as a critical link in the education policy arena as well as in workforce development and economic development policy. The original mission of two-year colleges was to serve as “local, relatively easy-access schools given all who wanted to attend college the opportunity to do so without overburdening the four-year colleges.”²⁶ Over the years, the core mission of education was expanded to also include remedial and developmental education to help prepare individuals for college-level studies and the articulation of procedures for students to transfer to four-year colleges after receiving a two-year associate’s degree.

Both the mission and financing of community colleges have changed over time. The schools gradually increased their role in providing job skills training, particularly for occupations requiring state certification, remedial education, English as a Second Language, lifelong learning, and generally adapting their offerings to meet the economic as well as educational needs of the community. Originally financed by local governments, the schools today have a mix of funding sources, primarily state revenue, but also federal and local funding, student fees, payments from businesses, and contracting with community colleges to train workers.

There are some important commonalities among community colleges. Every state has a community college system and fiscal provisions for allocating state funds to schools, although the funding mechanisms and formulas vary. In addition, open-admission policies and low tuition encourage a range of students in degree, non-degree, credit, non-credit, credential and non-credential programs. The average full time tuition plus fees for degree students in public community colleges in the 2006-2007 school year was just over \$2,000, compared to \$5,700 for public four-year colleges, \$13,000 for two-year private colleges and \$21,000 for four-year private colleges. In keeping with their original mission, such policies expand access to a broad population.²⁷

But there is much variation across states and across community colleges in the size of the schools, their structure and financing, the relative priority placed on core education objectives versus economic development and job training, and the extent to which degree programs and non-degree programs interact at the schools. About 6.2 million students were enrolled in 1,053 community colleges nationwide, according to the most recent National Center for Educational Statistics data.²⁸ The schools vary widely in size.

The medium community college enrolls between 2,500 and 4,999 students—with the greatest number of students in Texas and California—but a few schools are very small, with fewer than 500 students. And some are very large, with more than 20,000 students. In terms of geographic location, they are almost evenly distributed among cities, suburban areas, towns, and rural areas.

Nearly all community colleges are public, although about 150 are independent or tribal schools.²⁹ The associate’s degree is the most common credential offered, although nearly every school also has nondegree and certificate programs, and a few community colleges are now offering bachelor’s degrees.³⁰ Over the past 30 years more community colleges also received contracts to deliver specific classes or programs. Community colleges are often WIA contractors for specific training programs, receive Individual Training Accounts, or ITAs, from WIA for individuals enrolled in college training courses, or obtain state economic development funds for customized occupational training.

Many community colleges actively market to businesses and industry groups for contracts to deliver or coordinate training to incumbent workers. One study estimated that more than 90 percent of community colleges had some contract training activity in 2000.³¹ There was an increase in community college involvement with contract training in the 1980s, partly in response to state fiscal constraints that led to budget reductions in their primary source of funds—state revenues.

While every state provides some funds to community colleges, the degree of centralization versus decentralization of the community college system varies considerably. One way to categorize community colleges is by their different governing arrangements. A study of all states done in 1980 and 1990 found that a few states were highly centralized and a few were highly decentralized, with most states falling along a continuum between the extremes.³² The researchers also found there was little change in these governing arrangements over the decade. While it is possible that changes have occurred since then, it is still useful to note the variability in the extent to which state agencies or boards have control over community college policies (see table on below)

Different states, different systems

Variation in state community college system centralization, 1992

Degree of centralization	States
Highly decentralized (2 states)	Pennsylvania, Montana
Decentralized (11 states)	Idaho, Iowa, Kansas, Maryland, Michigan, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, Texas
Moderately decentralized (12 states)	Arizona, Arkansas, California, Florida, Illinois, Massachusetts, New York, North Dakota, Ohio, Oregon, Wisconsin, Wyoming
Moderately centralized (5 states)	North Carolina, Oklahoma, South Carolina, Utah, Washington
Centralized (15 states)	Alabama, Alaska, Delaware, Georgia, Indiana, Louisiana, Maine, Minnesota, Nevada, New Hampshire, Puerto Rico, Rhode Island, Vermont, Virginia, West Virginia
Highly centralized (5 states)	Colorado, Connecticut, Hawaii, Kentucky, Tennessee

Source: Terrence A. Tollefson, "Mission, Governance, Funding, and Accountability Trends in State Systems of Community Colleges," Fifty State Systems of Community Colleges: Mission, Governance, Funding and Accountability, eds. Terrence A. Tollefson, Rick L. Garrett, William J. Ingram, and Associates, (no publisher), 1999.

About half the state systems were fairly centralized and the other half quite decentralized. In all but the most centralized systems, state agencies or boards may appropriate funds to schools but otherwise serve in advisory or coordinative roles. In Illinois, for instance, local community college boards of trustees oversee policies, priorities, and programs in each school. In Oregon, an integrated state agency, the Department of Community Colleges and Workforce Development was established to streamline and coordinate multiple funding streams, including WIA, funding for vocational education from the Carl Perkins Vocational and Technical Education Act, and funding for adult education. The role of the integrated state agency is to provide “resources and leadership” to the 17 independent community colleges and seven Local Workforce Investment Agencies, or LWIAs.³³

Various efforts are currently underway to improve the opportunities and outcomes of low-income youth and adults at community colleges. Many of the current reforms were initiated by community colleges given the high degree of system decentralization. Community colleges are not the only player in the workforce training field, but they do represent an important and growing source of, and place for, occupational and career training and instruction. The role of community colleges in providing occupational and vocational training to individuals with low skills and/or low incomes, in both college-specific efforts and in partnership with the public workforce investment system, has expanded in the past decade in particular. This expansion has resulted in part from investments by philanthropic foundations and the federal government, and in part because states and local jurisdictions have increased their emphasis on upgrading the workforce to improve the area’s economic competitiveness and ability to attract new business development.

The upshot: there are initiatives underway to improve the entire community college system’s role in workforce development for low-skilled and low-income students, and initiatives that are more specifically intended to implement new instructional and training strategies at particular schools.

The first subsection below describes some of the most extensive systemic initiatives intended to achieve major, systemwide reforms regarding community colleges’ role in engaging low-income and low-skilled students. The second subsection discusses some of the innovative and promising strategies and initiatives for adults, noting some programmatic examples, especially where there is a link between education and career or workforce development systems. The final subsection extends the discussion by addressing strategies more specifically designed for youth and their transition from high school to post-secondary education and careers. Foundations have funded and—sometimes—evaluated several pilots and demonstrations; where there are evaluation or research findings, they are noted in this section.

Systems reform

Many efforts over the past decade were initiated to improve how the nation's community college system engages and supports low-income students and to strengthen institutional linkages among community colleges and other entities such as workforce development programs that provide employment, training, and career development services. Major funding and support of private foundations spurred much of the impetus for system reform. But before describing some of the instructional strategies and program models operating in specific schools, it is useful to note some of the important systemic projects that have each supported or encouraged reforms in multiple states, localities, or multiple schools. Some of these systemic initiatives focus specifically on community colleges; others have broader agendas but include a major role for community colleges.

The following major multistate, multicollege, or multisite initiatives together encourage a great proliferation of community college-based programs for low-income students, including welfare recipients. Several community colleges are involved with more than one systemic initiative and, as indicated later, many have also established their own innovative strategies and programs for less-skilled and low-income students. In many schools and states, the outside funding and support worked in tandem with reform efforts initiated at the school level.

Whether or not the combined effect of these systemic initiatives actually resulted in permanent systems change at the state or local level or in community colleges is still to be determined. But it is clear that these multistate and multicollege initiatives spearheaded a vibrant nationwide movement that led to an explosion of new program development at community colleges, specifically intended to engage and support low-income and less-skilled students, sometimes along with expanding opportunities for all students.

Before presenting programmatic examples, we note here some of the most significant initiatives—funded by private foundations as well as the U.S. Department of Labor—that heavily influenced the current wave of community-college innovation. Several community college programs mentioned later in this section received funding and other support under one or more of these broad initiatives intended to encourage systemwide reform and innovation in community colleges and in workforce development more generally.

Systemic reforms include, for example, attempts to improve cross-program collaboration and blending of funds, long-term strategic planning, transfer of knowledge, and technical assistance to adopt proven best-practices, and incentives and rewards for institutions that achieve desired results. Many of these systemic initiatives provided the institutional context for some of the more innovative programming and curriculum strategies that have emerged over the past decade and which are described in the following section. Many of the states and schools that received funding or other support through these initiatives are also reviewed later when we highlight innovative strategies or programs. Cases in point:

- **Shifting Gears.** Funded by the Joyce Foundation, this program provides financial and technical support to five states—Minnesota, Illinois, Indiana, Ohio, and Wisconsin—to develop innovative regional approaches to economic development that include targeted opportunities for low-skilled and low-income workers. Community colleges are key partners in the economic development and workforce development approach promoted. The Joyce Foundation’s goal is to help states implement systemwide, innovative changes to the community college, workforce development, and adult education system to better serve all adults, but with a heavy emphasis on low-income working adults.³⁴
- **Making Connections.** Funded by the Annie E. Casey Foundation, this program, provides financial and technical support to develop “pipelines” of integrated services considered essential for strengthening families, communities, and children. The workforce development “pipeline” includes community colleges and other workforce development institutions. Support was initially provided through grants to 20 communities, 10 of which continue to receive Casey Foundation support.³⁵
- **Achieving the Dream.** Initiated originally by the Lumina Foundation and now supported by over a dozen other funders, provides financial and technical support to 35 community colleges in seven states to implement promising strategies and effective practices for improving student success.³⁶
- **Breaking Through.** Funded by the Charles Stewart Mott Foundation, the Ford Foundation, and the Bill and Melinda Gates Foundation, this program provides grants to six “leading colleges” and “10 learning colleges” to encourage improved system wide access to an expanded range of educational and service offerings through community colleges for low skilled and low income individuals.³⁷
- **MetLife Awards.** Funded by the MetLife Foundation, this program provides awards to community colleges for implementing innovative strategies for low income and disadvantaged youth and adults.³⁸
- **U.S. Department of Labor’s Training Grants.** This government-funded program includes the High Growth Job Training Initiative, Community-based Job Training Grants, and Workforce Investment in Regional Economic Development. These programs provide awards for hundreds of grants to encourage the development of demand-driven training, many of which have been awarded to community colleges or included major partnerships among community colleges, workforce development agencies, and economic development agencies. Continuing in this vein, the Department of Labor is currently in the process of awarding several new rounds of grants for demand occupations, particularly in green jobs and health care sectors.

Before describing some of the initiatives, it is important to keep a few key points in mind. First, “one size does not fit all.” States, community colleges, local officials, and communities have much discretion in how they govern and they are in the best position to determine the direction for programs and systems. The examples below suggest that in order to continue to develop an integrated community college-workforce development system it is critical to have a range of program offerings designed to meet the needs of all workers, potential and future workers, businesses, and communities. Bridge programs that help low-skilled individuals qualify for higher level training and education is as central to an effective system as customized training programs to meet the needs of current or potentially new businesses.

Second, the critical partnerships among federal government, state and local governments, and foundations, have spearheaded the current proliferation of innovative programs in community colleges and workforce agencies. No partner alone is likely to be able to accomplish the types of institutional change needed to transform the systems. And finally, some changes may be initiated locally or may occur at the school or local level, with or without statewide changes.

Similarly, there may be value in expanding the implementation of potentially innovative approaches or models while simultaneously pursuing systemwide change. Some of the examples that follow represent conscious efforts to follow a specific sequent of organizational and system change, for example strategic planning or agency restructuring, and some involve local initiatives pursued by one institution or a local partnership. Both types of innovation are important.

Administrators and staff in community colleges, workforce agencies, and state and local departments of workforce and education often began preparing for their involvement in one or more of the above efforts with strategic planning, including assessing their current policies and programs for low-skilled workers, identifying barriers to effective programming and developing new approaches to address those barriers. The resulting program initiatives, therefore, include both systemic reforms to address identified problems that may have hindered effective programs and cross-program collaboration in the past, and some new program directions that typically involve adopting new instructional and service delivery approaches.

The examples of three states involved in the Joyce Foundation’s Shifting Gears project (see sideboxes on pages 15, 16, and 19) highlight the difference in focus and scope of the statewide reform efforts currently underway. Minnesota, for example, used the state’s involvement in the Joyce Foundation’s Shifting Gears to conduct a comprehensive review of the state’s adult education, workforce development and community college system and create a statewide “stackable credentials” model, which uses specifically-defined competencies that together are formally recognized as representing the skills and abilities required for

certificates or academic degrees. Stackable credentials, with linked courses, curricula, and credits, have become quite common in career pathway training programs, allowing students to accumulate and link together credentials that qualify them for particular occupations and to advance to higher occupations.

Other states have also used Shifting Gears to make statewide changes. Ohio incorporated the concepts of Shifting Gears into their ongoing 10-year plan to reform training and education for adults, premised strongly on the need to improve the state's economic competitiveness. The Ohio plan also integrates economic development and demand-driven priorities included in the federal Department of Labor's Workforce Investment in Regional Economic Development initiative, or WIRED, which focuses on systemic integration of regional economic development with workforce investment and community college programming. And Illinois used the Shifting Gears project to embark on major reforms intended to ultimately change the community college system, the first step of which involves a wide public information campaign.

Similar comprehensive systemwide reform is also occurring at the community college level. One example of long-term systematic reform at the community college level is the Community College of Denver. The reforms implemented followed a sequential planning and benchmarking process and have included major changes in organization, teaching methods, counseling and student services, relationships to the community and organizational philosophy.⁵⁷ Miami Dade College also developed a systematic eight-step process that helped them reform their community college structure, drawing from earlier pilot projects they developed to specifically improve outcomes for students who required English language developmental instruction.

Instruction, program, and curriculum reforms

Community colleges traditionally are viewed mainly in terms of their role between high school and four-year colleges. The reforms occurring now are shifting, or expanding their mission to more directly focus on workforce preparation for students who may lack the academic preparation required for traditional community college degree programs. Support from various foundations has helped expand concepts such as bridge programs, stackable credentials, and learning communities, which are generally defined as linked and coordinated classes of studies often with student cohorts and support by instructors working as a team and peer groups. All of these curricular and instructional models are intended to improve upon the more traditional instructional models and individual classes. But they also represent very different public perspectives about community colleges. The terminology becomes somewhat complicated, with different terms often used to describe similar general models.

Minnesota's FastTRAC (Training, Resources, and Credentialing) Initiative: Stackable Credentials Model)³⁹

Minnesota's interest in the Joyce Foundation's Shifting Gears initiative came from a state-wide awareness of a need to reform the workforce development and adult education systems to meet changes in the economy and the aging of the workforce. In analyzing the community college and workforce development systems, Minnesota planners determined it was necessary to create pathways from adult basic education, or ABE, and short-term occupation training to more advanced post-secondary, degree and certificate programs. They identified four main barriers to developing such a stackable credential model:

- **Lack of coordination and resource sharing across institutions and agencies:** There was no state level policy coordination or resource sharing, which meant that when adults moved from one program-system to the other, there was little or no coordination of course credits or requirements, which can lead to "redundancies in course curricula and assessments" of students.
- **Lack of flexible programmatic and supportive services:** Despite serving diverse students in the community college system, there were no "systematic and differentiated strategies,"⁴⁰ for specific population subgroups with particular needs (for example, low-income, full-time working parents, families leaving welfare, students with limited English proficiency).
- When special programs were developed they tended to focus on high-level courses and programs with few low-income students.
- **Lack of unified data reporting:** The lack of uniform data collection prevented tracking students' progress across programs.

In response, the FastTRAC initiative was developed to completely overhaul the state adult education and training system. The goal of the new system is to "create a state-level "stackable credentials" education and training framework that integrates adult basic education, non-credit occupational training and for-credit postsecondary degree and certificate programs."⁴¹

FastTRAC has a three-pronged framework:

- Increased support services for low-income adult students to help them move through the system
- "Bridge curricula" for seamless transitions between basic adult education, noncredit occupational training and for-credit postsecondary degree and certificate programs.
- "Integrated data capability."⁴²

To develop policies and program initiatives for FastTRAC, the state created four special implementation teams: (1) the Stackable Credentials Team, (2) the Student Support Team, (3) the Data and Information Team, and (4) the Systems Team (for system alignment).⁴³

To test the new policies, several "incubator" sites were established, including: a) Pre-Apprenticeship in Manufacturing at St. Cloud Technical College, which is linked to certified apprenticeship; b) M-Powered at Hennepin Technical College, which is a manufacturing career pathway; c) Healthcare Academies in Southeast Minnesota, which established specific career ladders; and d) Workforce U at St. Cloud Technical College, which developed specific training for high demand sectors such as healthcare, printing and publishing, manufacturing, engineering and management services, wholesale trade and business services.

The incubator programs are implementing the following strategies considered "key to stackable credentials models:

- Fast-track programming.
- Career Pathway development.
- Multi-level, industry recognized credentials.
- Contextualized and competency based curriculum.
- Flexible entry points.
- Connections to regional, demand drive job needs.
- Support services specific to adult students.
- Comprehensive data collection and evaluation."⁴⁴

Illinois' Shifting Gears Program⁴⁵

The Illinois Community College Board is the lead agency for the state's Shifting Gears Program to "expand training and education opportunities for low-skilled adults."⁴⁶ The ICCB in partnership with the Illinois Department of Economic Opportunity is developing "bridge programs and related services designed to 'bridge' academic, employability and technical skills through contextualized instruction, career development and support services."⁴⁷ The initiative has three goals: "1) Increase the income and career potential of low skilled adults; 2) Build a skilled workforce in high demand occupations; and 3) Strengthen the competitiveness of Illinois' employers in sectors that are important to Illinois's economy."⁴⁸

The first stage of Illinois' Shifting Gears program (2007-2009) has two components:

- **Pilot Bridge Programs:** ICCB has funded 10 pilot bridge programs across the state to serve as laboratories for "identifying policy barriers, challenges in implementation, testing new approaches and building a constituency for new policies."⁴⁹
- **Policy Agenda:** The cross-agency collaborative has developed an agenda for "1) Adopting a "bridge" definition to help standardize program approaches; and 2) Enhancing the ICCB data and measurement system to include and track bridge students' transitions."⁵⁰

The second stage of the program, slated for 2009, will involve translating the lessons learned and successful policies developed at the laboratory sites into system wide policy changes. The process for implementing these transformations will involve extensive activities

such as public outreach and information campaigns, beyond simply providing funding and leadership. The Stage Two "plan includes:

- Demonstrating the importance of training low skilled adults to the state's economic future and the important role played by the bridge programs.
- Engaging state decision makers in developing and implementing bridge program policies.
- Developing and promoting bridge program models and practices.
- Strengthening data systems and performance tracking.
- Communicating student and program outcomes to stakeholders, decision-makers and the public."⁵¹

The next steps in the state's plan are to:

- "Gain formal support of the "bridge" definition by the Community College Presidents Council.
- Invite the Illinois Community College Presidents Council to designate a president to serve on the Senior Leadership Steering Committee.
- Hold a Learning Community with pilot participants and other stakeholders.
- Determine how the bridge definition may be incorporated in Adult Education and Career and Technical Education Program Classification Codes and how it may be incorporated in WIA programming.
- Finalize performance and transition measures for bridge students and link them to state career clusters."⁵²

The terms “bridge programs” and “stackable credentials,” for example, are becoming common terms in community college circles, but the concepts are not well understood by policy makers and administrators in other related areas. As indicated in the short description of the Illinois “Shifting Gears” initiative, which is essentially developing a community college-based bridge system, one challenge facing policymakers attempting system reform relates to explaining the changes to the public, to potential students, and to employers and the business community.

The programs that emerge from the systemic investments of foundations and from policies initiated by specific states, local agencies, and schools use a variety of strategies to increase low income students’ access to post-secondary education and training, improve their chances for success in education and training, and expand the capacity of the community college and workforce development systems to provide programming to low income and low skilled individuals to better connect them to education and training.

Whether focused just on community colleges, adult education, or workforce development, these and other statewide systems reforms include both institutional and policy changes and, to varying degrees, introduce or encourage new instructional programming in community colleges. Among the more common programming shifts that appear to be expanding nationwide are:

- Expanding the range of vocational training program offerings at community colleges, particularly for jobs that have high demand for workers.
- Integrating education and training in classes, including teaching in academic classrooms that incorporates contextual learning for specific jobs or industries.
- Reforming curriculum and credential policies, such as offering sequential bridge programs or stackable credentials to improve the successful transition of low skilled students from development programs to certificate training and degree programs to qualify for particular occupations.
- Incorporating specific supportive components to provide low income and non-traditional students with guidance, peer support, and interventions to help them navigate the college requirements and assist with both personal and academic issues that may arise.

In many places, all these approaches are being implemented simultaneously in comprehensive multicomponent, multiservice, and multiagency models. Some of the strategies that appear to hold the most promise involve curriculum and credential reforms, for example, modular course offerings, sequential credentials or certificates, and bridge programs that often begin with developmental education, and integrated education and occupation-specific instruction such as sectoral training, career pathways, and employer partnerships.

Selected examples of community college programs are given in the sections below show the diversity that exists based on a review of literature, research, and articles. These are not the only schools implementing the models, but do represent some of the more common approaches in the field. There is little rigorous evaluation yet on the effectiveness of specific instructions or components, but a number of studies are currently underway, including the Opening Doors demonstration testing financial and instructional strategies designed to improve student success in school and careers, being evaluated by MDRC, a research and demonstration organization.

Sequential, linked courses, and bridge programs

One way community colleges and other training and education providers such as adult education programs and job training programs are attempting to increase low-skilled and low-income students' access to, and success in, post-secondary courses and programs involves modifying class curricula and credential requirements into linked and manageable segments. Some programs of this type—but not all—involve accelerated degree programs, some are called bridge programs, and many have developed sequential and linked courses and credentials.

The key point is that modifications to the programs, courses, and curricula allow low-skilled students to make steady progress, in smaller increments than is common in traditional programs and that include linked sequential coursework. Some of these programs involve interagency or interprogram coordination; for example, businesses working with WIA may provide workplace-based internships or WIA may subsidize work experience or transitional jobs, and community colleges provide the classroom instruction.

In many programs, the adaptations can occur within the community college alone, for example, by changing the sequence of classes or scheduling of classes to accelerate progress. The expectation is that students will be more likely to remain in programs that have linked and sequential components, and program retention has been shown to be associated with more positive employment and income outcomes. Stackable^{3/4} or recognizable and transferable^{3/4} credential models, modular coursework, accelerated schedules, and student support programs are some of the approaches used to create the sequential models to address the low academic levels, low-income, and complicated family situations some students face. Students can accumulate sequential certificates that are linked and that together lead to a higher credential or degree. Coursework occurs at a more manageable pace or over a shorter time period than the traditional academic calendar.

When the contextual programs also offer modular courses and stackable credentials, a student can progress from developmental education, English as a Second Language classes, or adult education, to courses that may be prerequisites to formal occupational classes. Some of these programs are referred to as “bridges” since they are designed specifically to help

Ohio's 10-year Plan to Improve Adult Education and Training

Ohio's 10-year strategic plan for its higher education system for the period 2008-2017 laid out three clear goals: "1) Graduate more students, 2) Keep more graduates in Ohio, and 3) Attract more degree-holders from out of state."⁵³ The plan sets a benchmark of "increasing enrollment in higher education by 230,000 by 2017 and increasing the rate of graduation by 20 percent."⁵⁴ This goal includes all post-secondary education—two and four year colleges—and all degrees—associate's, bachelor's, and graduate and professional degrees. The plan acknowledges that this goal cannot be met just by focusing on increasing the number of high school students who attend college. The comprehensive plan, therefore, includes specific strategies for increasing the number of adult learners, including reforming the state's adult education and technical education system. Implementing the comprehensive plan involves many strategies and policies including a mandate by the Governor and the General Assembly that the responsibility for adult and career education be transferred from the Department of Education to the University System of Ohio, which occurred in early 2009.

The State Advisory Committee on the Transfer of Adult and Career-Technical Education presented its plan in June 2008 for the transfer in its report *Creating Opportunities: Connecting Adult Learners with Economic Success*.⁵⁵ The primary reason for the transfer is to integrate the adult education system with the college system to expand and improve access to higher education by workers and to better meet the needs of businesses. The stated principals underlying the new system presented in the Advisory Committee report are that it should be:

Demand-driven—responsive to both employer needs and the career advancement requirements of workers—and focused on regional economic development needs.

Adult-friendly—offering services that are easy to understand and navigate, emphasizing adult-focused teaching methods with applied learning models, integrating job-related content and providing career-relevant instruction, and facilitating students' movement between programs and institutions with advance knowledge of what course credits will follow them.

Learner-centered—equipped and committed to helping learners address academic and nonacademic challenges and to providing learning supports that enable all learners to reach their potential, such as advising, tutoring, individualized learning plans, academic learning centers, computer-based remedial preparation, childcare and transportation.

Innovative—offering all adult learners new and accessible career pathways and employment opportunities, sometimes at no- or low-cost, starting with Adult Basic and Literacy Education, or ABLE, and developmental education and continuing seamlessly to college-level credentials and degrees, with financing and payment options that expand equity and flexibility.

Business and industry endorsed—ensuring support from employers who make investments in their workers' talent development and take sustainability strategies seriously, and benefiting employees whose earnings and career opportunities are enhanced as they acquire new knowledge and skills.

High-quality and "cutting edge"—making a commitment to providing instruction that satisfies both Ohio employers and employees, in part through comprehensive and integrated

A number of concepts and priorities are incorporated into the Advisory Committee's recommended strategies for the newly integrated state system of higher education, adult education, and career training. For example, the report notes that it is important that programs be designed to attract and retain all types of learners, and to recognize the different circumstances, needs, and perspectives of "employees who learn" and "students who work."⁵⁶ Lifelong learning opportunities should be offered, support services should be made available to adult learners, and transitions along a pathway or sequence of programs should be clearly specified. And the workforce development system should be aligned with the adult learning and college system, including funding and incentives to maintain integrated information systems and coordinated governance.

students make the transitions to successful completion and career stability, regardless of where they begin. In addition to Minnesota’s stackable credentials in FastTRAC, other colleges with curriculum reforms include a number of those that are part of the Mott, Ford, and Gates Foundations’ “Breaking Through” initiative:⁵⁸

Central New Mexico College’s pre-apprenticeship program emphasizes apprenticeships in the construction trades including accelerated basic adult education and developmental education, specifically for low-skilled students—in this case, those with less than an 8th grade ability level. The remedial adult classes were also contextualized, meaning the subject matter (for example, mathematics) was taught in the context of the apprentice occupation (for example, construction trades). The program also includes a sequence of courses building upon earlier courses completed which also could lead to certificates or associate’s degrees. Students are also provided with academic and non-academic supports by staff called Achievement Coaches

Community College of Denver offers several accelerated programs, including “Fast Start,” an intensive development program for students whose skills and test scores are not high enough for college-level coursework. The course is accelerated, which allows students to take two courses in the time usually allowed for one course, but also offers students the opportunity to concurrently participate in short-term career exploration in their occupations of interest. They also receive staff and instructor support and assistance to help students remain in the program, finish successfully, and proceed to another level of education if appropriate.

The College also has developed a dual-customer Certified Nursing Assistant-to-Licensed Practical Nurse career ladder program funded by the Mayor’s office of Workforce Development, which allows students to advance to the LPN degree in half the time of students starting in traditional developmental programs. And the Community College of Denver also has an “Essential Skills Program,” which began as a welfare-to-work program, and is an employment focused program with basic adult education, ESL and GED instruction taught in the context of career clusters including business services, early childhood education, and information technology.

Integrated education, occupational, and vocational instruction

Programs that combine academic and occupational instruction are becoming quite common in community colleges. These approaches usually allow students to obtain credit for developmental, occupational, and academic courses. Some examples include:

Riverside Community College, New Visions Program, Riverside, California: New Visions was a partnership of the Community College and the Riverside County Department of Social Services to integrate short-term occupational training, remedial and developmen-

tal education, and support services. The students were recipients of welfare through the Temporary Assistance for Needy Families program, or TANF. Rules in TANF require recipients of welfare to work or participate in work-related activities at least 20 hours a week and those without a high school diploma must be in school to complete high school or obtain a GED. A contextual instruction model was used, for example, teaching mathematics by including problems taken relevant to targeted occupations. The courses also critical thinking and problem solving skills, and study and communication ability based on the skills included in SCANS, or the national Secretary's Commission for Achieving Necessary Skills. After completion of the 24-week core program, students participate in an occupational miniprogram for 1 to 5 months, for example, medical technical, early childhood education, correction, office administration, manufacturing, construction. Students also have the option of enrolling in regular certificate programs and other for-credit courses. An evaluation by Abt Associates found that while the program was successful in improving math and language skill, it had limited success in increasing enrollment into regular college degree programs.⁵⁹

Integrated Basic Education and Skills Training, Washington: I-BEST is a model based in community colleges that teaches English as a Second Language (ESL) and Adult Basic Education (ABE) in an integrated manner. ESL and ABE instructors work in a classroom together as a team, each teaching their respective curriculum. I-BEST began as a demonstration in ten community colleges in 2004, and is now available in all community colleges in Washington. Programs have now added classes that result in recognized credentials in work readiness and in vocational skills areas, to facilitate both educational and employment advancement. Several of the colleges developed pathways in the I-BEST program that linked to further education and training to help students reach the “tipping point” in terms of pay-offs from post-secondary education, generally one year of education plus a recognized skills credential. Nonexperimental research has found that I-BEST students subsequently earned more college credits than regular ESL students and they were more likely to complete job training.

Sectoral training

To prepare workers for jobs in specific industries, sectoral training is one type of integrated instruction model increasingly offered by community colleges for low-skilled workers. This type of program is also common in private and nonprofit training institutions, and is encouraged and financed by U.S. Department of Labor programs through WIA and national grants programs such as the High Growth Job Training Initiative and the Community-Based Job Training Grants. Sectoral training programs and the curriculum they use are often developed collaboratively with industry or business representatives. In some cases, the course requirements follow the state certification for particular occupations such as those in the health care industry.

Colleges have developed a number of new pedagogical, curriculum and administrative approaches in response to the needs of both low-income individuals and businesses community. These new innovative approaches include dual enrollment in for-credit courses and adult basic education-developmental education, modularized career and technical offerings, intensive case management to help at-risk students, and flexible class schedules and locations to reduce barriers to course completion for working or disadvantaged individuals. Many sectoral training programs for low-income workers implemented by community colleges alone or in partnership with WIA, nonprofit training institutions, or industry groups also incorporate supportive services into their program models to help students address personal and family issues that might otherwise make it difficult for them to success in school.

South Seattle Community College, Seattle, Washington: SSCC developed the Vocational English as a Second Language, or VESL, program as part of the I-BEST initiative. The program, like all I-BEST models, uses the team instructor approach, working together in the classroom, one of whom is certified to teach curriculum leading to an occupational certification or qualifying students to pass licensing examinations.

Alamo County Community College in Texas is one example of a community college sectoral program. The college, which participated in the Mott Foundation's Breaking Through initiative, has enrolls many low-income and nontraditional adult students, and offers technical training in four industry clusters: allied construction, drafting and design, multi-modal transportation, and repair and manufacturing.

Career pathways

Career pathways are becoming very common in the training and education community. They represent a form of sector training with specific components designed to allow individuals to move up from one occupation or position to another, guided by specific requirements, courses, credentials, or degrees that must be met in order to qualify for career progression. Many of these models also involve contextual learning where academic courses, such as English, science, or mathematics, are taught in the context of a particular occupation or industry such as health care, advanced manufacturing, and information technology.

While the terminology and definitions of career pathways are not consistent, there are commonalities in the general model, whether it is referred to as a pathway or a ladder. "Career Pathways" is a term that describes various programs that connect education or training classes together to provide individuals with the skills, certifications, and knowledge needed to obtain jobs in particular sectors or occupational clusters. David Jenkins' definition is often used when describing career pathways:⁶⁰

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

There are many different types of career pathway programs. Some begin with remedial education and advance from there. Others develop strategies that begin with instruction in middle schools or high schools and transition to post-secondary institutions. And some career pathways are specifically designed for individuals already working—incumbent workers—but wishing to advance. The most comprehensive use official labor market data and information to determine which occupations and industries should be targeted, and are based on partnerships with particular employers and industries to establish curriculum. Programs are financed through a blend of federal funding, including Perkins Act vocational training, WIA, TANF, and state and local education funding.

There are many examples of Career Pathways programs operated by colleges, community colleges, and nonprofit organizations, usually in partnership with a college. Several states have established statewide Career Pathways programs, many with the support of legislatures, governors, and private foundations such as the Ford, Joyce, Gates, Mott, and Lumina Foundations.

Arkansas, Kentucky, Oregon, and Washington have some of the best known state career pathways programs. Many colleges have also developed Career Pathways programs, on their own or as part of state initiatives. Examples include:

- **Arkansas Career Pathways Initiative**, which targets adult TANF recipients of cash assistance, food stamps, or Medicaid, and those with incomes below 250 percent of the federal poverty level. The program is a partnership of the Arkansas Departments of Education, Social Services, and Workforce Services, and partnering social services organizations, and is designed to provide training for jobs in specific industries: manufacturing, health care and social assistance, transportation and warehousing, and professional and technical services. The Career Pathway Initiative Act was enacted in Arkansas in 2005 to specifically increase the number of adults who complete college or receive post-secondary credentials. Each college has a Career Pathways program with funding and services provided by the three partner agencies.
- **Kentucky Career Pathways** targets underemployed adults with limited educational attainment, including TANF recipients through the Ready-to-Work program operated by the community colleges. The program is a partnership of the Kentucky Community and Technical College System, the Department of Social Services, state and local Workforce Investment Boards—which have local responsibility for the administration of the federal Workforce Investment Act— and the Kentucky Council on Post-

Secondary Education. In developing its Career Pathways policies, the state adopted guidelines centered around nine principles that emphasize that “Career Pathways is not a program, it is a systematic framework” that requires coordination of programming, funding, and accountability mechanisms across agencies, programs, and policy areas, and between the public education and training programs and the private business sector.⁶¹ Community colleges have implemented a number of Career Pathway programs across the state that use a variety of strategies including multiple entry and exit points into the system, modularized curriculum, remedial bridges, alignment of community college courses with four-year institutions, credit for customized and short-term programs, integrated work experience and industry recognized credentials, employer engagement, and career counseling.

- **Oregon Career Pathway Program** is a statewide partnership of the Oregon Department of Community Colleges and Workforce Development, Career and Technical Education Network, Department of Education, Employment Development, Department of Human Services, and state and local WIBs. The program has two goals: to increase the number of residents with certificates, credentials, and degrees in high-demand occupations; and to articulate and ease student transition across the education continuum from high school to community college, from pre-college ABE/GED/ESL programs to credit post-secondary programs, and from community college to university to employment.

All 17 community colleges in Oregon have implemented the Career Pathways model and are guided by the National Council for Workforce Education’s framework that involves “institutional and instructional transformation, student supports and tools, partnership driven, employer involvement, continuous improvement, and sustainability.”⁶² There are “bridge” courses for students who require basic education instruction in reading and math, and “bridge” components where students are provided career guidance, in collaboration with the One-Stop Centers, to transition to job training or degree programs. One example of the Oregon Career Pathway model is a partnership of Portland Community College and Mount Hood Community College that together developed pathways for nine occupations, in coordination with the local workforce board and industry representatives.

- **Wisconsin’s Regional Industry Skills Education Program**, established in 2007 by the Wisconsin Technical College System and the Wisconsin Department of Workforce Development, is a career pathways and bridge program targeted on low income adults with limited education. Colleges and local workforce investment boards in partnership with industry and business sectors is designing regional economy career pathways programs that meet the labor market demands in each local area and develop training and education programs that prepare workers for clearly defined career advancement pathways. The program, funded by the state with some private funding, particularly from the Shifting Gears Initiative of the Joyce Foundation, also emphasizes provision of support services such as transportation and child care, access to financial aid, and mentoring.⁶³

- **Carreras en Salud- Instituto del Progreso Latino, Chicago, IL:** The City Colleges of Chicago partner with the community-based nonprofit organization Instituto del Progreso Latino and the National Council of La Raza in this developmental education career pathways program targeted low-income Latinos to prepare them for health sector jobs. Funding comes from the Joyce Foundation's Shifting Gears project and the U.S. Department of Labor. Both Basic Adult Education and GED classes are offered, each taught in the context of health care occupations to prepare students for the formal LPN classes. A full range of support services, financial aid and counseling is provided, and students receive employment services once they reach certain completion levels, from GED attainment to certified nursing assistant, LPN, associate's degree and bachelor's degree.
- **General Service Technician-Shoreline Community College, Shoreline, WA:** Shoreline Community College's General Service Technician training program integrates ESL, basic adult education, developmental and remedial education, all of which is taught in the context of particular occupations. The program uses a stackable credential approach with modularized curriculum allowing multiple entry and exit points to meet student scheduling needs. The course targets jobs in the automotive industry, and partners with businesses, community-based service organizations for special services such as mental health counseling and child care, and provides students with job placement services.

Student support and assistance

Along with curricula reforms and contextual learning, it is also very common now for community colleges, like many training programs operated by non-profit organizations, to provide students with formal support services designed to help them navigate the college or course requirements, encourage peer learning to reinforce classes, provide special financial assistance or crisis intervention services, and incorporate guidance and counseling for personal as well as academic issues.

Many low-income students, including single mothers, have issues and complications in their lives that can make it difficult for them to remain in school while balancing family and work obligations and also navigating the rules and requirements of college. There is a strong belief that providing low-income students with sustained support, counseling, and guidance should be a key component of their post-secondary educational programs. The large-scale Achieving the Dream initiative and the Opening Doors demonstration both emphasize the provision of student services, in combination with academic courses and occupational training.

The 35 community colleges that are part of the Achieving the Dream initiative supported by Lumina and other foundations implemented student advising, counseling, and mentoring, in addition to developmental education and planning for collegewide reforms. The designers of this initiative determined that based on prior research, the most consistently

effective programming appears to occur in the first-semester freshman orientation class, which orients students to the institution and its programs and teaches important academic survival skills.⁶⁴ Therefore, the 35 Achieving the Dream colleges emphasize student support services, funded by the Federal TRIO program.

The same concepts central to student supportive services form the basis for learning communities, another core component of Achieving the Dream. Learning communities are organized around central themes such as peer support and shared learning, and students go through programs in cohorts, taking their classes with the same fellow students. The National Learning Communities Project at Evergreen State College reviewed more than 100 studies of learning communities in 2003. The authors concluded that learning communities strengthen student retention and academic achievement. An evaluation of learning communities at Seattle Central Community College in 1997 found that “participation in a learning community did increase the probability of quarter to quarter persistence by facilitating the creation of supportive services peer groups among students, encouraging shared learning, and giving students the opportunity to actively participate in knowledge creation.”⁶⁵

MDRC’s Opening Doors demonstration also emphasizes the importance of learning communities along with enhanced counseling, scholarships and incentives, and enhanced student services. Many community colleges are adopting the concept of learning communities, which combine life-skills support and services with peer learning and reinforcement, usually in the context of sequential or accelerated curricula, among them:

LaGuardia Community College’s College Opportunity to Prepare for Employment in New York City is a welfare-to-college program that uses a learning communities model with four clusters: ESL, Human Services, Allied Health or New Student House. Students in each cluster have a counselor who provides support, leads workshops, facilitates peer support groups, and organizes other supports such as a book exchange.

Owens Community College (Owens, Ohio) and Lorain County Community College (Elyria, Ohio). These two Ohio community colleges focused on the enhanced student services as part of the Opening Doors program. A special adviser meets with students once a month for two semesters. The meetings allow students to discuss academic success and any issues that may be affecting academic progress. The Opening Doors counselors had a case load of no more than 125 students, much lower than the typical 1,000 student caseload for counselors at the school. In addition, other student service departments such as financial aid and career services dedicated at least one individual to serve as a point person for Opening Doors participants. Students also received \$150 per semester—for two semesters—scholarship, as an incentive if they stayed in contact with their advisor.

Results for the Opening Doors demonstration have been somewhat positive, at least in the short term. In a study of the project in two community colleges, the two semesters after beginning the program, more participants enrolled in courses and they completed more credits. The effect was not maintained over time, though, and the researchers suggest that more intensive support services sustained over a longer period of time might improve long term impacts.⁶⁶

These descriptions of systemwide reforms and the examples of instructional and programming innovations in community colleges show the extent of innovation that is occurring around the country. Community colleges are restructuring their programs, reforming their administrative mechanisms, and engaging in more cross-system collaboration with workforce agencies and human services agencies. Initiatives funded and promoted by major foundations and by the Department of Labor have spurred some of the development and innovation. And in many places economic development motivations are clearly consistent with the new reforms in skills training and education.

One might conclude that the nation is in the midst of major reforms, from the grassroots up, facilitated and encouraged by foundation and federal government support and funding, and being infused by peer exchanges among community college administrators. But it is still not possible to determine whether these reforms are indeed succeeding in increasing the access to postsecondary education by low income students or to know whether the outcomes in terms of long-term employment, earnings, and income are improving.

It is clear, however, that the movement toward community colleges playing a more active role in workforce skills training for low-income and low-skilled adults is changing the basic notion of community college. Community colleges are no longer viewed only as providing associate's degrees on the way between high school and four-year college degrees. Now, in addition to that traditional role for high school graduates and adults interested in pursuing higher education, community colleges are squarely in the middle of the workforce development and remedial education policy arena. The Career Pathways, integrated education models, and sectoral training efforts of community colleges are particularly relevant in this regard.

Many of the programs described here focus on low-income adults who had already completed their formal education. The next section addresses the new roles that community colleges may be playing in terms of implementing strategies for youth, and discusses efforts that create effective pipelines from high schools into community college for disadvantaged students, as well as those that seek to "reconnect" high school dropouts with high school completion efforts and then postsecondary curricula at community colleges.

Efforts for disadvantaged youth: High school students and dropouts

The initiatives discussed above are targeted at the wide range of students who already attend, or can attend, programs at community colleges—which can include both full-time and part-time attendees, in degree or nondegree programs, and both older youth and adults. However, policies aimed at disadvantaged teens, including those in high school who are at risk of dropping out and those who might have already done so are also important. Increasing programs for these groups will help ensure that more high school graduates attend college—either two-year or four-year—and complete a degree or certificate while there.

Roughly one-fourth of our youth still fail to complete high school, and another fourth fail to attain any postsecondary education. Approximately 2 million to 3 million young people are completely disconnected from both school and the labor market in any year, and often remain so for long periods of time, even when the economy is strong.⁶⁷ And when the labor market worsens as it has recently, the numbers of disconnected youth worsen quite dramatically. The disconnected youth are heavily represented among the huge numbers of young men who become incarcerated in the United States and the young women who become single teen parents.

The forces leading to such large numbers of high school dropouts include not only a lack of basic skills and behavioral issues but also a perceived lack of relevance in available educational options. Young people who see no obvious link between their high school classes and ultimate success in the job market are not motivated to take their education seriously. Similarly, a lack of awareness about postsecondary options—including what is required to succeed in college but also the kinds of good jobs that such education can lead to—can certainly deter young people from attending, even when they graduate high school.⁶⁸

Accordingly, policy initiatives are needed that will reach students while they are still in high school, improving their orientation to the labor market as well as their knowledge of and preparation for postsecondary education, including community colleges. For those who have already dropped out, a range of efforts are needed to “recover” these students.⁶⁹ This will enable them to quickly finish their high school education and then move onto postsecondary options that are closely tied to labor market opportunities.⁷⁰

Along these lines, many states are now undertaking a range of efforts to directly improve the access of high school students to community colleges as well as four-year institutions. These efforts are broadly referred to as “dual enrollment” options, in which high school students can directly enroll in postsecondary institutions and obtain both high school and college credit. As early as the 2002-2003 school year, more than 70 percent of U.S. public high schools were offering dual credit courses, and that 10 percent to 20 percent of juniors and seniors that year were enrolled in such classes.⁷¹ They also report that a number of states including Florida, Georgia, Illinois, Kentucky, Maine, New York, North Carolina, Pennsylvania, Rhode Island, Texas and Utah had in place or were developing policies to support dual enrollments by establishing criteria for admission as well as funding sources that eliminate potential costs to both sets of institutions.

But preserving equitable access to “dual enrollment” efforts is challenging, as the students most qualified and most inclined to enter such programs are often those who are already successful in high school and most likely to obtain postsecondary education on their own. High schools with large minority populations are less likely to offer dual enrollment options than are those with small ones, while many more high schools offer enrollments in academic rather than technical classes.⁷² Therefore, without special efforts to raise access to dual enrollments, these programs might actually tend to widen existing gaps in postsecondary education between more and less advantaged students, rather than narrow them.

Some states have developed multiple criteria for admission based on test scores, grades, and/or teacher recommendations, as well as separate criteria for academic and technical classes to encourage more equitable access. States can also undertake special efforts to ensure that high schools with larger minority or low-income populations offer such arrangements, and to provide assistance to the more disadvantaged populations within these schools in gaining enrollments.

Some particular community colleges have also set up special programs designed specifically for disadvantaged high school students. For instance, the College Bound program at Portland Community College, the Trade and Technology Prep program at Sinclair Community College in Dayton, Ohio, and the Excel program at LaGuardia Community College in New York all target low-income or minority-immigrant populations in local high schools.⁷³ They provide special courses for those with weak basic skills or limited English proficiency, and usually provide both academic and technical classes and curricula.

Other programs focus specifically on students in career and technical education, or CTE, tracks in high school. The largest and best known such effort, Tech-Prep, enables high school students to combine the last two years of high school with two years of community or technical college, either sequentially or simultaneously. Using advanced statistical techniques to evaluate this program, Tech-Prep has successfully raised high school graduation rates as well as those at community college for disadvantaged students, though it might tend to reduce enrollments at four-year institutions.⁷⁴ Betsy Brand of the American Youth

Forum has argued for a broader range of such efforts for CTE students in high school, to raise their access to community and technical colleges, and for the federal Perkins Act—through which the federal government funds some career and technical education at the secondary and postsecondary levels—to encourage more such efforts.⁷⁵

There is also a need to help “reconnect” young people who have already dropped out of high school, to help them obtain their high school diplomas rather than GED degrees and perhaps some postsecondary credentials as well. Alternative charter high schools around the country already try to do so, especially by locating on community college campuses. One such promising effort, the Gateway to College program, began at Portland Community College and now has spread to 24 colleges in 14 states.⁷⁶ It enrolls 16- to 20-year-old high school dropouts in programs where they enter a “learning community” of approximately 20 students, first taking some preparatory classes and then simultaneously enrolling in high school and college classes, in pursuit of both their high school diplomas and a college credential.

Overall, a wide range of efforts are now underway around the country to improve the access of disadvantaged young people to community colleges, both for those still enrolled in high school and for those who have dropped out. The most promising of these efforts deserve more financial and technical support but also require more serious evaluation of their impacts on these young people. And these efforts should occur within the context of a broader range of policies designed to improve educational and employment outcomes for disadvantaged youth.

Policy implications

The above review indicates that now is a time of great experimentation at the community college level as local institutions and their foundation funders grapple with a range of innovations designed to improve access, retention, and completion of programs for disadvantaged youth and adults. Certain states are also innovating a great deal, as they try to develop systemic approaches to workforce development and—in many places—to adult education, which integrate community colleges and other providers, employers, and state and local workforce development officials. But relatively little is known at this point about the effectiveness of most of these innovations, as rigorous evaluation evidence remains scarce. And given the enormous variation that exists across states in the nature of community college financing and governance, it is difficult to generalize about exactly what legislative and regulatory changes need to be made to further this entire process.

So what does all of this imply for education and/or workforce policy at the federal level? And how could all this experimentation encourage appropriate community college and labor market innovations at the state and local levels? Before we discuss specific national legislation and programs, some broad principles can be advanced.

In general, federal policy should strongly encourage and fund these innovative efforts around the country. Strong financial and policy support of foundations helped develop many of the innovations that exist now and a number of them have benefited from federal agency program grants such as the Department of Labor’s Community-Based Job Training Grants. Our review also clearly indicates that “one size doesn’t fit all,” and thus the federal efforts should not be too specific or prescriptive regarding state and local policy. Still, the rigorous evaluation efforts from the Opening Doors project, among others, do suggest that the federal government should encourage, among other things:

- Enhanced financial aid—including stipends—tied to satisfactory student performance.
- The establishment of “learning communities” of students.
- Ongoing supports and services, which should sometimes be mandatory.

In fact, many of the curricular and programmatic innovations described above have focused on exactly these kinds of efforts.

More broadly, analysis of the wide variation in labor market success for those who earn certificates and associate's degrees certainly implies the need for greater labor market information to be provided to students, and better incentives for community colleges to align their course offerings with labor market demand, as many of the systemic initiatives at the state level have done.

While federal policy should not be too prescriptive about the kinds of specific legislative or regulatory changes that will achieve these goals, federal legislation must require appropriate performance measurement and accountability to incent states and their local institutions to implement reforms that will be effective in their particular contexts and bring them to scale. As a first step, more systematic data should be collected to fully document the initiatives discussed in the previous sections. Questions to be asked should include: Are the programs still operational? Are there new programs? How many participants are enrolled in these initiatives? What is the funding level and source for programs? What is known about the effectiveness of various programs and initiatives?

In addition, stronger and more effective performance measurement in formula-funded programs can improve the incentives of states to implement broad policy reforms. While competitive grants can also drive changes, changes are more likely to persist if the grants are renewable and where renewal is tied to appropriately measured performance. But even one-time grants can sometimes lead to local institutional and systemic changes that can persist over time, as we have learned from the Labor Department's Youth Opportunity grants in the early part of this decade.⁷⁷

Federal support should, whenever possible, be tied to rigorous evaluation requirements, so we can learn much more about exactly which approaches and which mixes of strategies are cost-effective and which are not. As the systemic innovations continue to proliferate, the evaluations must be more targeted on learning about the effectiveness of some of the more promising strategies such as learning communities, integrated education, and occupational training.

Once this knowledge is available, federal policies should both fund and incent the states to replicate successful models and bring them to a scale at which they could broadly expand opportunities to low-income workers. Efforts to better integrate the innovations undertaken in community colleges with the activities and institutions of the workforce development system, including local workforce boards and One-Stop Career Centers, should be encouraged as well by federal policy in these areas.

Below are some suggestions for federal policy that would help move us in this direction.

Congress should fully fund the Obama administration's proposed \$12 billion initiative on community colleges, and use it to encourage continued experimentation with and evaluation of local and state innovations that promote both greater academic and labor market success for the disadvantaged.

The Obama administration's "American Graduation Initiative" was announced in July 2009. It proposes to increase the number of community college graduates in the United States by 5 million by 2020, and to spend about \$12 billion over the next decade through a set of competitive grants to states and localities toward this goal. In particular, the initiative calls for the creation of a Community College Challenge Fund to encourage innovative strategies to improve community colleges to raise completion rates, modernize their facilities, and improve their online course offerings.⁷⁸

The Student Aid and Fiscal Responsibility Act of 2009, H.R. 3221—a bill written by the members of the Committee on Education and the Workforce in the House of Representatives—embodies these proposals. The bill calls for grants to community colleges—in partnership with employer groups and/or foundations—to expand supports for students, curricula leading to "industry-recognized credentials," and "dual enrollment" as well as "early college high schools" aimed especially at the disadvantaged. The bill also calls for grants to states to pursue a range of more systematic reforms in these areas.⁷⁹ Rigorous evaluation of all initiatives would be required and funded under this legislation.

Legislation like H.R. 3221 should be used to fund activities along the lines of the Achieving the Dream, Breaking Through, Shifting Gears, and other initiatives described above, along with rigorous evaluation of these efforts.⁸⁰ Specifically, funding should be provided for Career Pathway and sectoral training efforts that generate stackable credentials and that integrate remedial efforts and bridge programs into community college curricula.

Congress also should amend the Workforce Investment Act during reauthorization in 2010 to fund and incent training at community colleges, as well as from other providers, that is cost-effective and tied to well-paying "middle-skill" jobs in local areas.

As noted earlier, local educational and workforce systems should be much better integrated to provide residents access to labor market information and services along with skill building in ways that will measurably improve their labor market outcomes. The next generation of WIA should better help and incent state and local workforce boards to develop a range of career pathways and sectoral training that link local residents with a wide range of skills to appropriate skill providers, including but not limited to community colleges as well as employers in growing sectors with good-paying jobs. To accomplish this, Congress should increase formula funding under WIA for adults, displaced workers, and youth, and create stronger incentives for spending these funds effectively.

Specifically, it should adjust WIA performance measures for adults and youth to more directly reward these kinds of activities. For instance, the granting of certificates in well-paying fields as well as associate's degrees should be included among the outcomes that WIA tracks for program participants of adults as well as youth. Changes in labor market certifications and in employment and earnings over longer time periods, rather than the levels of these outcomes right after program exit, should be the basis on which performance is

measured, to discourage “creaming”—where agencies only admit for services those whom they believe will be successful—and other forms of gaming in measurement.⁸¹ Statistical adjustments for the demographics of the participant population should also be required to further discourage the avoidance of disadvantaged populations.⁸²

And Congress should also consider including state-level measures of outcome changes for entire disadvantaged populations in its performance measures, as is done in No Child Left Behind for educational outcomes, rather than those for program participants only, to encourage states to scale up promising initiatives in ways that will benefit their populations overall. All of these measures would incent states to better integrate their WIA employment services with educational providers, including community colleges, who provide skill-building that should directly improve labor market performance over the long run. WIA should also include competitive grants to states and localities that encourage more system-building in ways that better integrate community colleges, other providers and their workforce systems.

For example, one study outlines a competitive grants program for states and localities that build local “advancement systems” combining education and training, other labor market services, and work supports such as childcare and transportation, job placement and retention assistance, and earnings supplements for their low-income populations.⁸³ Grant approval would heavily depend on plans to integrate the local educational institutions with workforce development services, and grant renewal would highly depend on the achievement of better outcomes at sufficient scale as well as rigorous evaluation to measure impacts as well as outcomes. At least some portion of the competitive grants should require matching funds. Matching grants can both provide additional incentives to state and local governments to invest in career development and would allow federal officials to gauge the interest in these strategies for low-skilled workers.

Several practical considerations make the goal of integrating workforce development agencies and their One-Stop offices with local community colleges a challenge. One issue is simply that of relative scale and institutional capacity—in most places, community colleges enroll vastly more individuals than are served by One-Stops. The latter cannot be expected to directly serve the former. The relevant question, then, is how the local WIBs can make sure that the kinds of services and information available at One-Stops are accessible through the community college’s own personnel and institutional mechanisms.

Congress should also amend the Perkins Vocational and Technical Education Act, the Elementary and Secondary Education Act, or ESEA, and the Higher Education Act, or HEA, to improve access to and retention at community colleges for disadvantaged youth.

Federal Perkins dollars should specifically fund a wider range of high-quality CTE

efforts—including apprenticeships—that span high school and community college, as it now does with Tech Prep.⁸⁴ Additionally, ESEA and HEA should fund effective models of dual enrollment, especially those that focus most on the disadvantaged, as well as “Gateways” and other efforts to reconnect “disconnected” youth with high school completion efforts at community college, along with requirements for rigorous evaluation of these efforts. And ESEA should also fund a range of efforts in secondary schools to better familiarize disadvantaged high school students with both the requirements of postsecondary education and with opportunities like Pell grants to support them if they attend.⁸⁵ Pell grants as well as other financial aid instruments should also be simplified and better structured to be more accessible to the disadvantaged population, while stipends might be funded to provide more financial support for working parents with small children.⁸⁶

Also, American Recovery and Reconstruction Act and other funds should support research efforts to develop a better statistical inventory of the range of certificates and degrees now awarded by community colleges and other proprietary schools. Research should also be supported to measure the impacts of these different kinds of certifications on earnings over time.

There are relatively few statistics available at the moment on what kind of certificates and how many degrees and certificates are being awarded at public and private—including proprietary—postsecondary institutions, and thus we know little about their relative economic value to those who obtain them. Both survey and administrative data could be used to develop an inventory of these credentials. Linking these data to administrative earnings records—like those available in the Unemployment Insurance System—would then enable researchers to estimate their relative impacts on earnings, as Jacobson and Mokher have done with the Florida community college data. This research would be of enormous use in guiding local workforce and education officials as they develop curricula and Career Pathways for the students and trainees whom they serve.

Finally, states can and should do more to generate the kinds of systemic and instructional or curricular changes that we described above.

For instance, the National Governors’ Association Center for Best Practices has outlined a set of programs that should be undertaken by states and their community colleges to improve access and retention of the disadvantaged.⁸⁷ Their recommendations center around four strategies: generating innovative financing models and public-private partnerships between industry and the public sector to better fund training at community colleges; creating more flexible and integrated service delivery models to improve the linkages between community college curricula and the job market for disadvantaged students; providing a comprehensive range of support services, to meet the specific needs of disadvantaged adults and youth, including those with children; and improving the quality of data that are used to track the performance of students over time in the labor market.

These recommendations are consistent with many of the local initiatives that we review above, which embody many of the same concepts. In addition, states should incent their community colleges to fund curriculum expansions in programs that prepare individuals for areas of strong labor market demand such as health care and other technical fields, even if per-student costs in these areas are higher.

Funding should be at least partly tied to completion of certificates and degrees and not just based on enrollment, and institutions should be rewarded for generating certifications in areas of strong labor market demand, as measured by state and labor market information that is already available.⁸⁸ Such incentives obviously must be structured in ways that do not generate more “creaming” in admissions—which would favor better students over those at greater risk of dropping out—or lower standards for certification.

States should also better integrate their community colleges with local workforce boards and One-Stop offices, which could provide the relevant labor market information and a range of employment services to both community college administrators and students.

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Endnotes

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- 2 Harry Holzer and Karin Martinson, "Helping Poor Working Parents Get Ahead: Federal Funds for State Strategies and Systems" (Washington: The Urban Institute, 2008). If these numbers were calculated for the long-term poor and nonpoor rather than just annual poverty, the gaps in education would be even greater, since some individuals with postsecondary education achieve "transitory" poverty associated with temporary unemployment or school enrollment that will likely disappear after a year or two.
- 3 Harry Holzer and Robert Lerman, "America's Forgotten Middle-Skill Jobs: Education and Training Requirements in the Next Decade and Beyond" (Washington: The Workforce Alliance, 2007); Aspen Institute, "Growing Together or Growing Apart. Domestic Strategies Group Report" (2002).
- 4 See, for instance, David Autor and others (2006).
- 5 Holzer and Lerman, "America's Forgotten Middle-Skill Jobs: Education and Training Requirements in the Next Decade and Beyond." Examples of well-paying jobs in the middle skill categories include the range of crafts in construction—electricians, plumbers, carpenters—welders and machinists in manufacturing, health care technologists and technicians as well as licensed practical nurses and therapist assistants, police and firefighters, and those performing installation, maintenance and repair work in a variety of fields.
- 6 Labor economists generally believe that, absent any regulations that keep wages and salaries from adjusting, shortages within an occupation or industry will eventually close as rising wages attract a greater supply of workers to the field while also restricting employer demand. But a variety of market "failures," such as imperfect information and capital market constraints on individuals and small employers, might render these adjustments costly or incomplete, thus enabling labor market tightness to last for long periods of time in any particular sector.
- 7 Council of Economic Advisers, *Preparing the Workers of Today for the Jobs of Tomorrow* (Executive Office of the President, 2009).
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- 11 Ron Haskins, Harry Holzer and Robert Lerman, "Promoting Economic Mobility by Increasing Postsecondary Education" (Washington: Economic Mobility Project, Pew Charitable Trusts, 2009).
- 12 James Heckman and Paul LaFontaine, "The American High School Graduation Rate: Trends and Levels" (National Bureau of Economic Research Working Paper, 2007).
- 13 Carolyn Hill, Harry Holzer and Henry Chen, *Against the Tide: Household Structure, Opportunities and Outcomes for White and Minority Youth* (Kalamazoo: W.E. Upjohn Institute for Employment Research, 2009). Some controversies have emerged over the measurement of high school dropout rates, with those relying on administrative school records (for example, Chris Swanson, 2004) finding higher rates while those using self-reported survey data (for example, Lawrence Mishel and Joydeep Roy, 2006) finding lower ones. Heckman and LaFontaine (2007) analyze the differences in these estimated rates and generate a convincing set of estimates.
- 14 Among those earning certificates, blacks were mildly overrepresented (at 17 percent) while Hispanics were underrepresented (at 10 percent) relative to their respective presence in the population. Similarly, those from families in the lowest-income quartile accounted for a quarter of all community college students, but less among those earnings associate's degrees.
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- 16 Thomas Bailey, Davis Jenkins and Timothy Leinbach, "What We Know About Community College Low-Income and Minority Student Outcomes: Descriptive Statistics from National Surveys"; and Thomas Bailey, Davis Jenkins and Timothy Leinbach, "Is Student Success labeled Institutional Failure? Student Goals and Graduation Rates in the Accountability Debate at Community Colleges" (New York: Community College Research Center, Teachers College, Columbia University, 2006).
- 17 Michelle Van Noy and James Jacobs, (New Directions for Community Colleges, 2009) Vol. 146, 87-94.
- 18 The "achievement gap" as measured by cognitive test scores between whites and minorities, or between those from higher- and lower-income families, is analyzed in Magnuson and Waldfogel eds. (2009). A great deal of recent evidence suggests that these gaps begin to develop at very early ages, and tend to widen when children enter primary school for several years before stabilizing and persisting over the lifecycle.
- 19 Haskins and others, "Promoting Economic Mobility by Increasing Postsecondary Education."
- 20 Because of the availability of financial aid, the costs of tuition are often a relatively small part of the total cost of obtaining higher education. More important are the costs of foregone earnings and time while students are engaged in schoolwork. Even for Pell grants and other kinds of tuition assistance, limited information and the complicated nature of the application process might keep potential recipients unaware of the benefits or deter them from applying. And a great deal of general knowledge about higher education requirements and options that is widely available to those in the middle class might not be available to low-income youth or adults. See Bowen and others (2004) for a broader discussion.
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- 78 See http://www.whitehouse.gov/the_press_office/Excerpts-of-the-Presidents-remarks-in-Warren-Michigan-and-fact-sheet-on-the-American-Graduation-Initiative.
- 79 At the time of our writing, as recently as mid-October 2009, the Senate Health, Education, Labor and Pensions Committee was preparing its own version of this legislation but an actual bill had not yet been released.
- 80 "Rigorous evaluation" includes random assignment methods when evaluating programs focusing on individuals, or various kinds of "natural experiments" that randomly generate access to policy benefits for some individuals and not others based on attributes such as geography, dates of birth and the like. Statistical matching techniques—like propensity score matching—differ widely in their usefulness, depending on the ability of researchers to observe and control for a range of personal attitudes and aptitudes that often drive "selection biases" in most studies. But random assignment and other methods are often not appropriate for analyzing institutional or systemwide changes, and other methods must then be used to "match" treatment and control sites appropriately.
- 81 For a good discussion of creaming and other ways in which WIA performance dating are affected by gaming, see Barnow and Smith (2004).
- 82 In other words, adjusting for the presence of demographic groups with weaker basic skills and work experience would counter the worse outcomes that might be observed for these groups and thus should tend to further discourage "creaming." Such adjustments were systematically made to performance measures under the Job Training Partnership Act but not under WIA. Also, the ability of such adjustments to fully offset weaker outcomes for certain groups depends on the quality and detail of the demographic data available.
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