NGA Center for BEST PRACTICES

Issue Brief

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December 9, 2009

Increasing College Success: A Road Map for Governors

Executive Summary

In the modern economy, a college degree has become the gateway to the middle class. Nearly 75 percent of future jobs will require a postsecondary degree or certificate, and many of these job openings will be in middle-skill professions that require more than a high school degree but less than a four-year college degree.

Although the demand for greater knowledge and skills is high, U.S. college completion rates are flat. Twenty years ago, the United States was first in the world in postsecondary attainment for adults ages 25 to 34; the nation now ranks 12th. The countries that have eclipsed the United States have done so by emphasizing student attainment of degrees from two-year colleges. In 2008, Rhode Island Governor Don Carcieri and Virginia Governor Tim Kaine held a forum in Richmond, Virginia, on college and career success.[2] Forum participants suggested four broad actions states can take to raise college attainment rates.

First, states need to improve students' readiness for college and careers. Most American teenagers aspire to postsecondary education, but only a quarter of them enter college ready to do the work. While states have taken great strides to raise high school graduation requirements during the past few years, they still need to make sure high school courses are rigorous and more consistent with one another. In addition, states have to get the signaling right, so test scores tell students whether or not they are prepared for college work. Also helpful in improving student readiness are programs of study that integrate career and technical education with academic coursework and that are linked to a two-year college degree or certificate program.

Second, students need supports both to get into college and to persist in earning a degree. For too long, policy has emphasized college access without enough organizational practices to ensure students, especially those from low-income families, are successful. Private two-year colleges have much higher graduation rates than public two-year colleges, even though they enroll similar students. The private colleges recognize they have nontraditional students who need different types of support. They provide them with clear pathways to degrees, information systems to track their progress, mandatory advising, and active job placement assistance. Colleges that spend more money on supporting students generally have higher rates of degree attainment.

Third, states must remove barriers that make it hard for students to transfer from two-year to four-year programs. Policies to consider include common course numbering and statewide agreements among institutions on which two-year college course credits are accepted at four-year colleges.

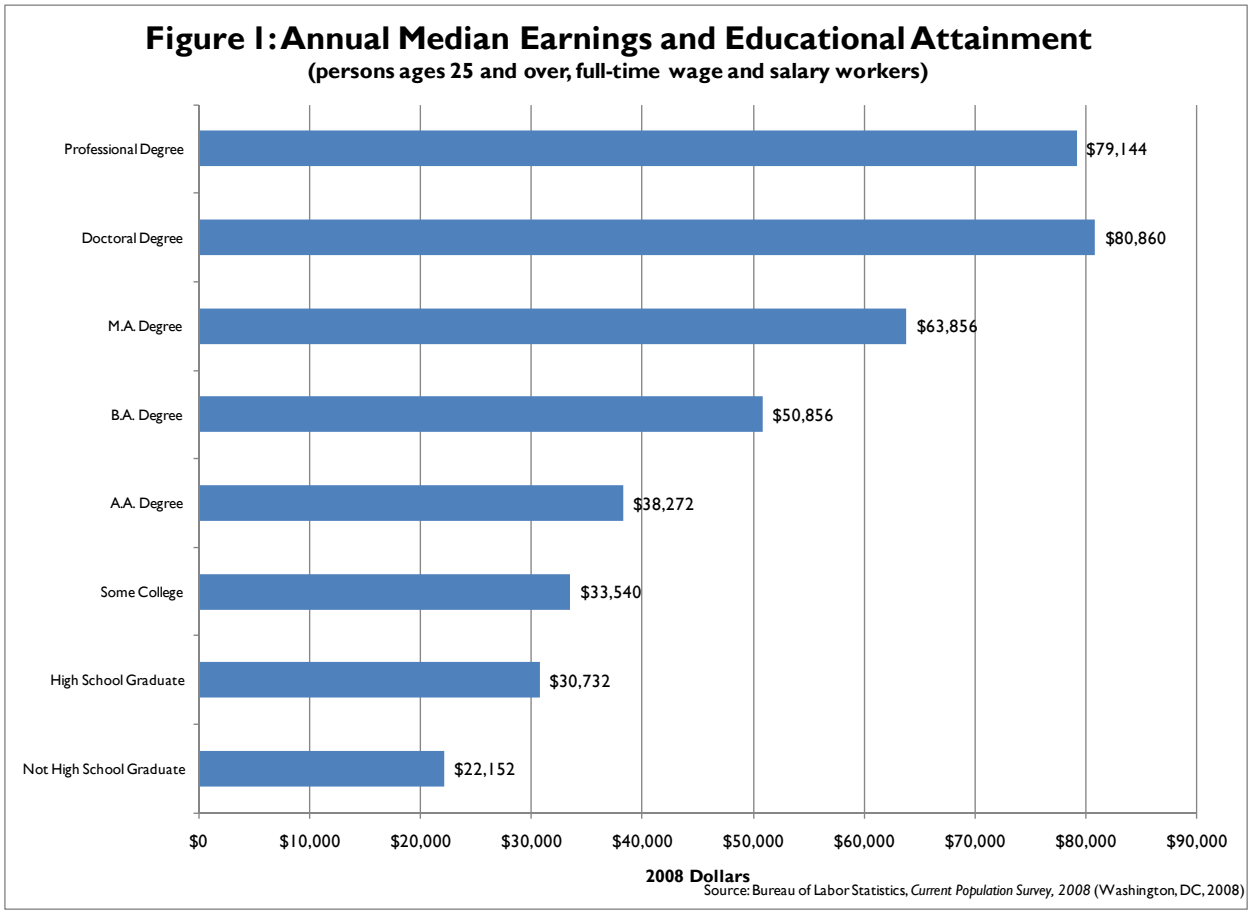
Finally, states need to experiment with performance-based funding. The dominant mode of funding for colleges is based on enrollment and fails to create an incentive to ensure students complete degrees or certificates.

The Growing Importance of a College Education

College is widely understood to be the gateway to the middle class. Workers with college degrees earn more than workers with less education. Moreover, college-educated workers will be needed to fill the jobs of the future.

The Value of Postsecondary Attainment

In 2008, the average income for someone employed full time with a bachelor's degree was 65 percent higher than for someone employed full time with only a high school degree; workers with an associate degree earned 25 percent more (see Figure 1).[3] Furthermore, the earnings advantages of a college education have widened during the past 30 years.[4] Over a lifetime, someone with a bachelor's degree can earn 75 percent more than a high school graduate can expect to earn—$2.1 million compared with $1.2 million. Even an individual with some college, but no postsecondary degree, can expect to earn one-third more than a high school graduate.[5] Workers currently earn about 10 percent more money for each additional of year of schooling they complete beyond high school.[6]

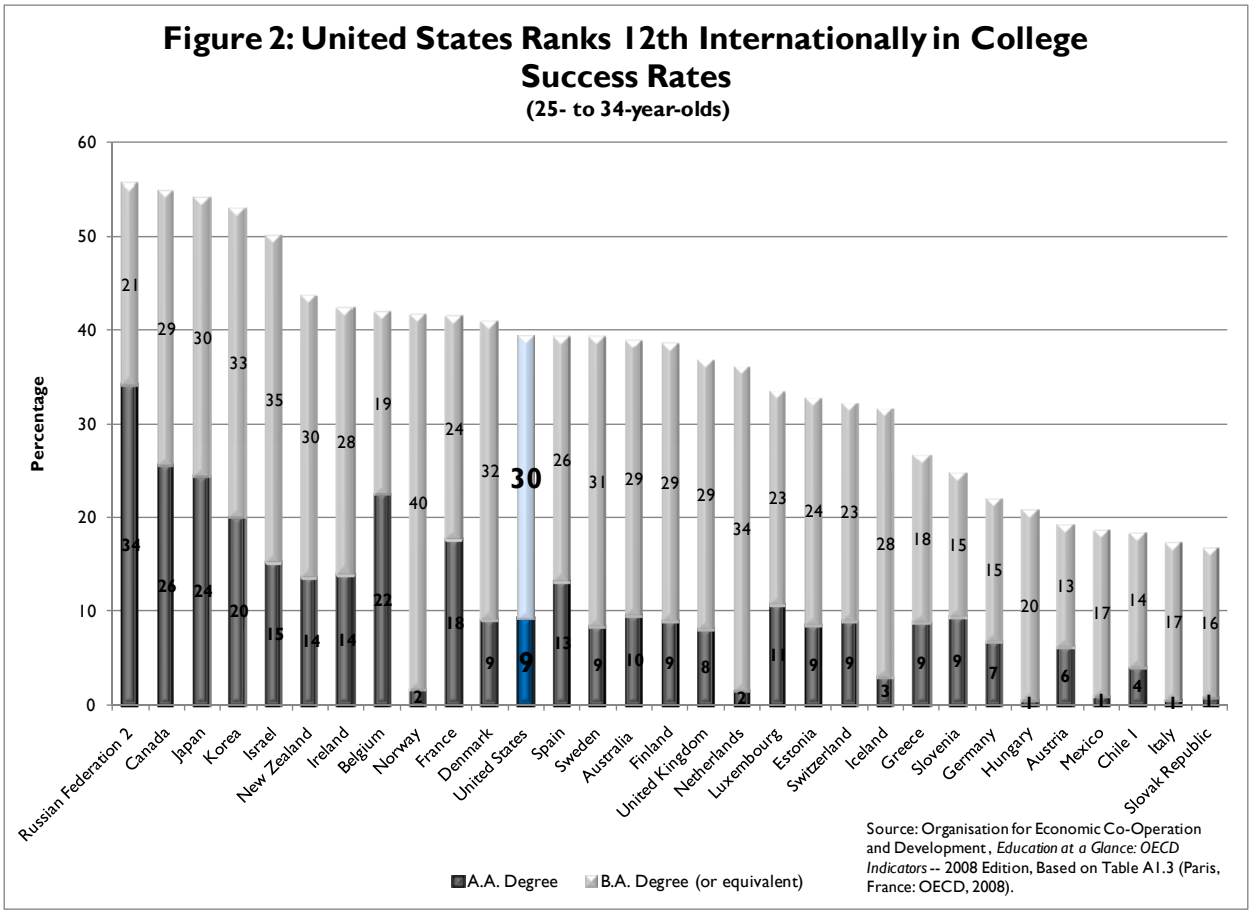


The Need for College-Educated Workers

More jobs of the future—74 percent by 2014—will require some type of postsecondary education or industry certification.[7] Most of these job openings will be in middle-skill professions that require more than high school but less than a four-year college degree.[8] Even in the current economic downturn, the Bureau of Labor Statistics projects strong future growth in green, education, and health care jobs. Sectors that will decline as a share of total employment, such as manufacturing, still have middle-skill job growth projections in subsectors such as aerospace and pharmaceuticals.[9]

Public opinion reflects this understanding that the economy places a greater premium on knowledge and skills. In 2000, only 31 percent of adults surveyed by Public Agenda said a college education is necessary to be successful in today's economy; in 2008, this percentage increased substantially to 55 percent.[10] Student aspirations to attend college also are high; 87 percent of high school students plan to attend a two-year or four-year college. An additional 6 percent of high school students say they plan to pursue an apprenticeship or vocational program.[11]

Although individual desire is strong, college attainment rates have been flat for the past decade. Twenty years ago, the United States was first in the world in postsecondary attainment for adults ages 25 to 34. Now it ranks 12th. Among developed countries, the Organisation for Economic Co-operation and Development (OECD) reports that the United States now has the highest college dropout rate. More than 40 percent of college students who earn more than 10 credits never complete a two-year or four-year degree.[12] As a result, the United States is the only first-world nation whose young adults between the ages of 18 and 24 are less well educated than its older adults between the ages of 25 and 65.[13]



Bachelor's degree attainment is high in the United States compared with that in most OECD countries. The countries that have eclipsed this nation in postsecondary attainment have done so by emphasizing attainment of degrees from what the United States refers to as community or two-year colleges (see Figure 2). While countries such as Canada and Korea have between 20 percent and 25 percent of adults earning degrees from institutions that emphasize technical or occupational skills—what OECD calls Tertiary B institutions—the United States has only 9 percent of its adults doing so.

These data suggest that federal and state policy should aim to improve the productivity of two-year colleges, which enroll 46 percent of the nation's college students.[14] In the coming decade, the fastest job growth will occur in occupations that require a two-year degree or postsecondary vocational certificate.[15] Public two-year colleges are a bargain, charging one-third the tuition of public four-year colleges. In an economic recession, enrollments surge at two-year colleges. Yet too many of the students who attend two-year colleges must first complete remedial coursework. As result, only half of these students make it to a second year of study and only 30 percent of first-time students earn a degree within three years of enrolling.

With these trends in mind, President Obama recently set the goal that by 2020, America will once again have the highest proportion of students in the world graduating from college. In his remarks before a joint session on Congress he said, "I ask every American to commit to at least one year or more of higher education or career training. This can be community college or a four-year school; vocational training or an apprenticeship. But whatever the training may be, every American will need to get more than a high school diploma."[16]

To accomplish this bold goal, the federal government has taken steps to restore the buying power of Pell grants and simplify the application for financial aid. Investment in community colleges is slated to increase to $9 billion, with new competitive grants being used to innovate and expand proven reforms.

However, most public funding for colleges and universities comes from state governments, so state policymakers are best positioned to initiate the needed policy changes. In 2008, National Governors Association Center for Best Practices Co-Leads for Education, Rhode Island Governor Don Carcieri and Virginia Governor Tim Kaine, hosted a forum in Richmond, Virginia, to discuss ways to improve college and career success.

State teams at the forum visited Highland Springs Technical Center, a high school with a pre-engineering academy that blends challenging academics with technical learning. A panel of social entrepreneurs from YES! Prep Academies, College Summit, and Year Up discussed policies and practices that will ensure students are ready for college without need for remediation. Expert panelists and participants at the forum identified four actions states can take to increase college success:

- Improve readiness for college and careers;
- Establish academic and social support structures;
- Remove barriers to transition; and
- Experiment with performance-based funding.

Barriers to College Success

Although access to college is widely thought to be a problem, in the past 20 years, tuition increases at public colleges have been constrained and have risen at less than the rate of inflation.[17] Instead, four barriers are keeping college attainment rates flat.

First, too many students are not prepared for college from the start. Even though many high school students are taking more challenging courses, states fail to give them clear signals on what it means to be "college ready." Second, once in college, students fail to persist to a second year because they lack academic and social support structures. Third, unclear transfer policies make it difficult for too many students to move from two-year to four-year colleges. Finally, two-year colleges are funded strictly on the basis of enrollment, not performance, and often lack incentives to ensure students earn degrees and certificates.

Inadequate Readiness

Students admitted to nonselective institutions—namely the 80 percent of students who go to college—often find their high school coursework did not prepare them for the rigors of credit-bearing college courses. These students are forced to complete remedial work before they can begin a degree. This is demoralizing and an added financial burden to students and state governments. Among two-year college students, 61 percent must take at least one remediation course;[18] taking even a single remedial course significantly lowers the chance of ultimate degree completion.[19] The cost to state budgets of such inefficiency is at least $3.7 billion annually.[20]

Since the 2005 National Education Summit, 22 states have revised their English and mathematics standards to more accurately reflect college expectations. Nineteen states now require all students to complete a college-preparatory curriculum to earn a high school diploma.[21] Although it runs counter to conventional wisdom, American students are working harder and taking what appear to be more challenging courses. Today, one in five (21 percent) students dedicate more than 10 hours each week to homework; three years earlier, only 12 percent of students worked this hard.[22] In 1978, only 47 percent of high school students had taken at least geometry; by 2008, 82 percent had taken at least Algebra II.[23]

Yet this extra effort has not come close to eliminating the need for remediation once in college. Among ACT test takers, 43 percent of high school students who were given a grade of A or B in Algebra II failed to score at least 22—the benchmark for college readiness—on the math section.[24] In **Nevada**, a score of 500 on the math section of the SAT is needed to avoid a remediation course at a state university, but 35 percent of high school seniors who take precalculus cannot meet this requirement. An administrator at the University of Oregon said that for incoming students, "There is a lot of cognitive dissonance over, 'Why am I not able to place into college Algebra when I just finished precalculus?'"[25]

Too often, the content and cognitive demands required to be "college ready" are confusing to students. An 11th-grade student applying to a state university might have to take as many as six subject-area tests that have no admissions or course placement stakes. A student can score "proficient" on these state tests and still not be prepared for college.[26] The student can be admitted to the college under one standard, then discover placement in college courses is based on a higher standard.

Lack of Academic and Social Supports

The nation's stagnant college attainment rate is not caused solely by inadequate academic preparation. Well-qualified high school students from low-income families do not conduct broad college searches. Only 20 percent of low-income parents say they encourage their child to apply to college, and 57 percent say the decision to attend college is strictly up to the child.[27] As a result, these students enroll in less-selective colleges with weak graduation rates.[28] Approximately 500,000 low-income students who graduate in the top half of their high school class fail to earn a college degree within eight years of finishing high school.[29] All students, but especially those from low-income families, need academic and social supports.[30]

Nearly 60 percent of students who attend two-year college do so part time and 40 percent work full time. Barely half of first-time community college students persist to their second year, though it is highly likely they will return to another college at some point in their lives. Not surprisingly, only 30 percent complete a degree within three years. Students who receive academic and social support services have greater rates of persistence into the second year of college. Also, with the help of support services, more first-generation college students graduate.[31]

Ineffective Transfer Policies

A third barrier to college success is the minefield surrounding the transfer of credit between two- and four-year colleges. The economic downturn is pushing more students to begin their degree courses at community colleges. Yet two-year college course credit transfers to four-year colleges are not guaranteed. Students who are forced to retake courses can feel discouraged by the added cost and wasted effort; 60 percent of low-income students who attend two-year colleges aspire to earn a bachelor's degree, but only 5 percent do so.[32] Most of today's students, including a disproportionate number of low-income students, will attend two or more postsecondary institutions.[33] Without careful planning and state policies in place, students are unlikely to make this transition successfully and may fail to achieve even a two-year degree.

Funding Tied to Enrollment Instead of Degree Attainment

A final barrier to college success lies with the system of state funding, which fails to create the institutional incentives for completion. It is not inherently bad for states to fund colleges based on enrollment; colleges need to be able to support the students they admit. Yet when enrollments are weighted heavily or exclusively in the funding formula, to the exclusion of incentives, the consequence is a lack of attention to performance. An enrollment-heavy funding formula also encourages colleges to neglect the student supports and other innovations that would improve outcomes. Not surprisingly, in **California**, only 24 percent of two-year college students receive a vocational certificate or an associate degree or transfer to a four-year college after six years.

State Strategies to Increase College Success

Participants and experts at the forum discussed four broad actions states can take to increase college attainment rates. First, states must improve student readiness for college and careers. Most American teenagers aspire to postsecondary education, but only a quarter of them enter college ready to do the work. Second, students need supports both to get into college and to persist in earning a degree. Third, states have to remove barriers that make it hard for students to transfer from two-year to four-year programs. Finally, states should experiment with performance-based funding and create institutional incentives to increase the number of degrees or certificates earned.

Improve Readiness for College and Careers

States hoping to save money on remediation costs can pursue three strategies to improve students' readiness for college and careers: ensure high school courses are rigorous and consistent with one another, use assessment data to signal whether or not students are ready for college, and expand programs of study.

States can ensure courses are rigorous and more consistent with one another by focusing on inputs—selectively auditing high school lesson plans or developing statewide model curricula—or assessing the outputs—through end-of-course exams—differently.[34] **Delaware**, **Maryland**, and **Massachusetts** provide teachers with recommended curriculum frameworks that include sample lesson plans, instructional units, and classroom tests based on the course content standards. Ultimately, the goal is for states to specify the content that should be taught in high school courses while giving schools and teachers maximum flexibility in how they engage students. A more comprehensive approach in **Maine** has high school teachers submit their course syllabi for review by state teams of high school and postsecondary faculty.

End-of-course exams lead to more consistent instruction and improved performance. **New York**'s end-of-course exams, the Regents, have been found to give students a 40-point advantage on the SAT-I. Minority and low-income students in New York also perform much better than similar students in 36 other states where the SAT is the most-used college-readiness exam.[35] Students in countries that take end-of-course exams also have higher levels of achievement. A study of individual scores of 15-year-old students from

31 countries finds end-of-course exams correlate with a 19-point improvement on the Programme for International Student Assessment (PISA).[36]

State use of end-of-course exams is rising. In collaboration with Achieve, Inc., 14 states have developed an end-of-course exam for Algebra II.[37] Additionally, eight states have implemented their own end-of-course exams for multiple subjects. In **New York** and **Virginia**, students cannot earn credit only by completing seat time; they must also pass end-of-course exams to earn course credit and demonstrate college readiness. During the next eight years, six states are moving completely to end-of-course exams.[38]

High school assessments provide a good measure to determine college readiness, but only 10 states currently use them for this purpose. In **New York,** the Regents exams align secondary and postsecondary expectations. Since the City University of New York uses the Regents as a placement exam, students have a clear signal about whether or not they are ready to meet postsecondary academic standards. **California**'s Early Assessment Program (EAP) is an optional section on the 11th-grade math and English tests; scores on this section communicate to students whether or not they are ready for college-level work in the state's university system. As a result of EAP, the state has seen a 5 percent drop in the number of students who need remedial college courses.[39]

States can also provide feedback reports to all high schools that indicate how prepared graduates were for college. To improve performance, each high school can see how the most recent class of graduates is doing two years into college, relative to their peers in the district and the state. Feedback reports reinforce the principle that learning does not stop at high school graduation.

Kentucky's high school feedback reports link K–12 and postsecondary data in a comprehensive, user-friendly way. The reports are produced by the Kentucky Council on Postsecondary Education, Kentucky Department of Education, and Kentucky Higher Education Assistance Authority. They enable district leaders and teachers to understand:

- Which universities and colleges their graduates are attending;
- The percentage of students who have to take remedial courses, and how this varies by family income and prior achievement level;
- The percentage of students meeting ACT's college-readiness benchmarks, and how those students fare once enrolled in college; and
- The number of college credits earned.

During the forum, participants discussed how most states do not align the exit standards from high school to the entrance standards of college. YES! Prep, a network of public charter high schools in Houston, **Texas**, serving 3,100 low-income students, is strongly committed to the principle that high school is not the end point of learning. YES! Prep requires students to be admitted to at least one college in order to graduate high school. Two states have recently taken a similar approach. **Michigan** and **New Mexico** require all students to take at least one college-level course—dual credit or Advanced Placement—in order to graduate from high school.

Finally, states can design more programs of study that link high school and postsecondary learning. Programs of study are built around broad industry sectors, which also are linked to a college degree or certificate program. Each program of study encompasses a broad group of related courses within an occupational interest area.

For example, in the finance sector, the National Academy Foundation has developed four programs of study—financial planning, business management, banking, and insurance services—enabling students to specialize in an area while developing cross-cutting skills and knowledge. Students who aspire to a

certain career know exactly what certification or postsecondary degrees are needed. Governors in both **California** and **Maryland** have conveyed the message that programs of study are not like the "old vo-tech," but are a rigorous and relevant path to high-paying jobs for any student.

States can borrow from a promising effort under way in **California** to develop the curricula for programs of study for any student. ConnectEd's "multiple pathways (e.g., biomedical and health science) are programs of study organized around California's major industries that combine college-prep academics with high-quality career-technical education, work-based learning opportunities, and effective student support services. Students pursue a pathway for several years and graduate prepared for the full range of postgraduate options.[40]

Maryland also has reorganized its vocational education programs into 10 broad career clusters that provide students with programs of study that link employment and postsecondary education. Approximately 350 business partners collaborated with secondary and postsecondary educators to identify the core functions of each industry, which became the basis for the clusters. To ensure programs of study are rigorous and relevant, the state reviews and approves programs as a condition of districts receiving federal Perkins Act funds. As a result, nearly half of all high school students enroll in Career Technical Education (CTE) courses and one-quarter of the class of 2007 completed a CTE program of study. About 50 percent of CTE graduates now meet the state university system's admission requirements, up from 14 percent a decade ago. Programs that integrate academic with technical coursework improve student motivation and increase earnings after high school, with no reduction in rates of high school graduation or college enrollment.[41]

Establish Academic and Social Supports

High school students need support to gain "college knowledge" (i.e., an understanding of what it means to be college-ready). Once in college, students also need to feel connected to a learning community and to have access to advisers who can help keep them on track to earning a degree or certificate.

How to Implement a College-Going Culture

College Summit offers four elements in its approach for working with schools and districts:

1. A **college and career planning course**, so postsecondary guidance is for all, not just some, students.
2. **Professional development for educators**, because students get most of their college information and expectations from the college-educated adults around them.
3. **Student leadership training**, because students are drivers, not just recipients, of school culture. The most influential students can spread a college-ready culture among their peers.
4. A **college enrollment performance management system**, because school leaders need timely data reports and analysis to determine whether their students are performing the tasks and activities necessary to keep them on the path to college enrollment.

To give high school students the early and continuing consultation they need, states can establish teacher mentor programs. These programs supplement the work of school counselors or graduation coaches. In the past few decades, counselors have done a lot to encourage all students to attend college. Yet because counselors have to manage as many as 700 students at a time, what they do less well is help high school students make informed choices about what course sequences they need to succeed in college. States should ensure teacher mentor programs remain a priority in high schools that need them the most.

For help in designing teacher mentor programs, states can turn to College Summit, a national nonprofit organization that is working with 150 urban and rural high schools in 12 states to build a college-going culture. The organization has succeeded in raising college enrollment rates among low-income students. During a period when national rates have risen just 4 percent, College Summit high schools have raised their college enrollment rates schoolwide by 15 percent. Four key program elements explain their success:

a senior-year curriculum, peer leaders, teacher professional development, and college partnerships (see How to Implement a College-Going Culture).

Part of College Summit's vision is that states will eventually provide feedback reports to all high schools on the college enrollment and persistence rates of their graduates. Its performance management system also enables College Summit to compare schools with similar demographics and understand which factors contribute to greater success.

Both College Summit and YES! Prep espouse that high school is not the end point for students. Their work suggests that states use their longitudinal data systems to provide all high schools with timely reports during the school year, cross-district analysis, and recommended best practices to drive consistent implementation and program improvements.

Continuing Support into College

States may not be in a position to fund new academic and social support programs for college students, but, where possible, they should encourage the reallocation of existing dollars to develop or maintain these programs. Currently, the federal government funds support programs through TRIO,[42] but these programs cover only a small percentage of college students who need them.

The most effective support programs states can fund are learning communities, where students participate as part of a cohort and instruction is organized around themes.[43] Learning communities are especially valuable in connecting students at two-year colleges, who spend little time on campus outside of taking classes. To design effective support programs, states can take their cues from Year Up, a program featured at the forum, which gives students the skills, support, and work experience they need to earn college degrees (see Year Up: Closing the Opportunity Divide). Absent such support programs, states could see 20 percent fewer students move on to the second year of college.

Finally, publicly funded community colleges also have a lot to learn from private two-year colleges about providing support. Private two-year colleges have much higher graduation rates, especially for African American and Hispanic students. What do these colleges, which tend to have an occupational focus, do differently?[44] The private two-year colleges recognize they have nontraditional students who may not always have well-developed plans and who may lack the motivation and organizational skills needed to earn a degree. As a result, these institutions structure their support for students differently than public two-year colleges by providing:

- A clear pathway to each program's goal and a clear timeframe;
- Information systems to track progress closely, which then is used to guide students' choices;
- Mandatory advising and peer cohorts that meet regularly; and
- Active job placement assistance.

Year Up: Closing the Opportunity Divide

States can also rely on public-private partnerships such as Year Up, a program that recaptures students who leave college without finishing a degree. Year Up blends postsecondary study, marketable skills development, job placement, and mentoring support to help low-income youth bridge the gap between high school and successful careers. The intensive educational and workforce training program provides urban young adults, ages 18 to 24, with technical and professional skills and a paid corporate internship.

Year-Up currently operates in six cities and serves 1,500 students a year. It has created partnerships with banks, hospitals, retailers, and investment firms that provide paid corporate internships for Year Up students and ultimately hire Year Up graduates for full-time positions. Year Up students also earn 20 college credits, and many continue on to complete a postsecondary degree.

Private two-year colleges rely on tuition—approximately $4,000 more per year than publicly funded community colleges—and evidence of degree completion to remain profitable, so it is in their interest financially to provide these supports and ensure their students attain degrees. Colleges that spend more money on student academic and social support generally have higher rates of degree attainment.[45]

Remove Barriers to Transfer

State leaders can encourage institutions to develop effective transfer and articulation policies, so two-year students can move to four-year campuses. **Nevada**, **New York**, **North Carolina**, **Texas**, and **Virginia** have statewide transfer and articulation policies that enable students to know ahead of time which courses at which colleges transfer, both where and for what amount of credit.[46] A common course numbering system across two-year and four-year colleges in **Florida** allows for the smooth transfer of credit across all colleges. In **California,** the University of California (UC) system has formed a transfer course agreement that identifies the courses taken at a two-year college that will receive UC credit.[47]

State articulation policies are necessary but not sufficient to encourage transfer.[48] Two-year college students also need academic support from advisers who can guide them on which courses transfer to four-year colleges. When states provide a setting for faculty across both institutions to discuss the rigor of coursework, the number of successful transfers from two-year colleges will also increase.

Experiment with Performance-Based Funding

States should experiment with tying a substantial percentage of funding—between 8 percent and 10 percent—to publicly reported outcomes. Historically, states' use of financial incentives has tended to be too small to influence institutional behavior.[49] To ensure stability, states also need to create these incentives in statute. If left in a budget line item, the incentives are likely to be cut as the state budget declines or policymakers move on to other jobs.[50]

Last year, **Washington**'s Board for Community and Technical Colleges implemented a performance-based program to reward its institutions financially when their students reached key education goals. As one of 15 states involved in the Lumina-funded Achieving the Dream initiative,[51] Washington had already committed to increasing the success of its two-year college students. The Student Achievement Initiative takes this one step further, providing performance funding to institutions as their students reach research-based "momentum points" that, in addition to earning a degree, include such benchmarks as earning their first five math credits, their first 15 or 30 credits to a degree, or making significant gains in scores on basic skills tests. Incentive funding began in September 2009, based on performance in 2008–2009[52] (see Choosing Performance Indicators and Outcomes).

Choosing Performance Indicators and Outcomes

When structured appropriately, performance funding can drive improvement that supports state goals. States can choose from a broad range of student-level and institution-level performance indicators. The measures should reflect institutions' differing goals and diverse student populations.

Student remediation, retention, and completion milestones can serve as institutional performance indicators, including:

- Successful completion of core courses;
- Passage of remedial and college-level courses;
- Advancement from remedial to credit-bearing courses;
- Semester-to-semester or year-to-year continuous enrollment;
- Advancement from part-time to full-time status;
- The transfer rate to four-year institutions from two-year institutions;
- Attainment of a bachelor's degree;
- Attainment of an associate degree;
- Attainment of a credential below an associate degree;
- Total time to degree; and
- Employment in field of study within one, three, and five years of graduation.

Georgia and **Minnesota** have created consumer-friendly Web sites that highlight the key higher education indicators and outcomes.

States can also ease the negative effects on under-resourced colleges by providing equal levels of per-student performance funding to all public colleges, regardless of how much they currently receive.[53] To increase the total number of degrees awarded, **Indiana** has proposed to offer a fixed amount of funding for each additional degree earned. As a result, the state expects improved completion rates and increased enrollment. Indiana also is considering moving from an annualized full-time equivalency (FTE) enrollment count that records "attempted" credit hours at the beginning of each academic term to an annualized credit completion count at the end of each term, as follows.

- Current formula requires reporting at the beginning of the semester:
  Enrollment growth = 4-year average FTE enrollment − Actual FTE enrollment x $3,500

- New formula requires reporting at the end of the semester:
  Credit completion growth = 4-year average completed credit hours − Actual completed credit hours x $3,500

Ohio's ambitious strategic plan for its higher education system replaces a portion of enrollment-based funding with performance funding based on five accountability measures: access, quality, affordability, efficiency, and economic leadership. Each measure has a target outcome to be achieved by 2017.[54] **North Carolina**'s success matrix identifies five critical success factors by which the state evaluates its 58 two-year colleges: student success, workforce development, response to diverse populations learning needs, resources, and technology.[55]

For more on increasing college success, see the National Governors Association Center for Best Practices' companion issue brief, "Measuring Student Achievement at Postsecondary Institutions."

A Road Map to Return the Nation to Prominence

College graduates can earn one-quarter to two-thirds more than high school graduates. Technological changes continue to increase employers' demand for more skilled workers who can think critically and solve non-routine problems. The demand is there, but the supply is not. The United States once led the world in college attainment rates, but that ranking has slipped to 12th. The nation's ability to compete in the international marketplace depends on increasing the number of citizens with a postsecondary degree or credential.

Participants and experts at a forum on college and career success identified four actions states can take to increase postsecondary attainment and return the nation to prominence. First, states have to let students know whether or not they are ready for college and careers. To this end, states can ensure high school courses are rigorous and consistent with one another, use assessment data to signal whether students are ready for college, and expand programs of study that link high school and postsecondary learning. In addition, states need to establish or maintain academic and social support programs for students to help them both prepare for college and persist toward a degree.

States also have to get the incentives right. They have to remove the barriers that inhibit student transfer from two-year colleges to four-year colleges. Finally, states should experiment with performance-based funding and encourage two-year colleges to focus on outcomes, especially degree attainment. In the past, states have done an outstanding job of expanding access to college. By taking these actions, they will increase students' chances of college success.

Notes

[1] Sharmila Basu Conger contributed to an earlier draft of this Issue Brief.
[2] A grant from the Nellie Mae Education Fund generously supported the forum and the writing of this Issue Brief.
[3] Bureau of Labor Statistics, *Current Population Survey, 2008* (Washington, D.C.: U.S. Department of Labor, 2008). Available at: http://www.bls.gov/emp/emptab7.htm.
[4] National Center for Education Statistics, *The Condition of Education, 2008*, Table A-17-1 (Washington, D.C.: U.S. Department of Education, 2009). Available at: http://nces.ed.gov/programs/coe/2009/section2/table-er2-1.asp.
[5] U.S. Census Bureau, *Current Population Survey 1998* (Washington, D.C., 1998): U.S. Census Bureau, *Current Population Survey 1999* (Washington, D.C., 1999); and U.S. Census Bureau, *Current Population Survey 2000* (Washington, D.C., 2000).
[6] Thomas J. Kane and Cecilia E. Rouse, "Labor-Market Returns to Two-and Four-Year College," *American Economic Review 85*, no. 3 (1995): 600–14.
[7] Anthony P. Carnevale, "College for All?" *Change* (January/February 2008).
[8] Harry J. Holzer and Robert I. Lerman, *America's Forgotten Middle-Skill Jobs* (Washington, D.C.: The Workforce Alliance, November 2007). See, also, Jessica Milano, Bruce Reed, and Paul Weinstein Jr., *A Matter of Degrees: Tomorrow's Fastest-Growing Jobs and Why Community College Graduates Will Get Them* (Washington, D.C.: The New Democratic Leadership Council, September 2009). From 2006 to 2016, more than 2 million new jobs will be created that require at least an associate degree or postsecondary training.
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[38] The six states are **Indiana**, **Maryland**, **New Jersey**, **North Carolina**, **Tennessee**, and **Texas**. **Massachusetts**, **South Carolina**, and **Washington** will blend end-of-course exams with a comprehensive test. For more information, see Center on Education Policy, *State High School Exit Exams: A Move Towards End-of-Course Exams* (Washington, D.C.: Center on Education Policy, August 2008).
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[51] More information on the Achieving the Dream: Community Colleges Count initiative can be found at http://www.achievingthedream.org/default.tp.
[52] To learn more about the Student Achievement Initiative, visit the Web site of the Washington State Board for Community and Technical Colleges (SBCTC) at http://www.sbctc.ctc.edu/college/e_studentachievement.aspx.
[53] Ibid.
[54] Ohio's strategic plan is available at http://uso.edu/strategicplan/handbook/execSummary.php.
[55] North Carolina's "Handbook of Critical Success Factors for Community Colleges" is available at http://www.ncccs.cc.nc.us/Publications/docs/Publications/csf2008.pdf.