



# The Path to a Degree

A LEGISLATOR'S GUIDE TO COLLEGE ACCESS AND SUCCESS

## Engaging Students Academically and Socially: College Success Strategies

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America is losing its lead as the country with the highest percentage of college-educated citizens. According to the Organisation for Economic Co-operation and Development (OECD), America and Germany are the only two OECD countries with a younger generation that is less educated than the older generation. While college access for underrepresented students is still a concern, overall, America ranks high in the world for the proportion of high school graduates that enroll in college. The problem is that too few of America's college students complete their degrees.

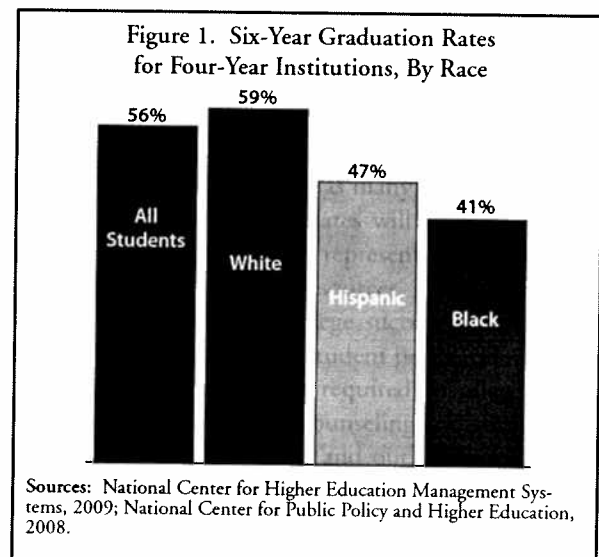
Just over half—56 percent—of students that enroll in a four-year institution earn a bachelor's degree within six years. Only 28 percent of associate degree-seeking students earn their degree within three years.<sup>1</sup> The statistics for students of color are even worse—just 41 percent of black and 47 percent of Hispanic college students attain their bachelor's degree in six years, compared to 59 percent of white students (Figure 1).<sup>2</sup> Just over one third of students who are both low-income and first-generation earn a bachelor's degree within six years at public four-year institutions, compared to 66 percent of their more advantaged peers.<sup>3</sup> These low graduation rates translate into missed economic opportunities for states and for the nation.

People with bachelor's degrees earn 61 percent more during their lifetime than those with only a high school diploma, and 42 percent more than those with some college but no degree.<sup>4</sup> Students who leave college without completing a degree lose money spent on tuition and fees and may incur loan debt. The gaps in completion across groups of students have implications that go beyond the individual. Federal and state governments incur losses when money spent on higher education appropriations and financial aid supports a student who does not complete college. Moreover, college graduates bolster state economies. Not only do college graduates pay more in taxes, they also save states money because they rely less on social programs such as welfare or Medicaid. College

graduates participate in more civic activities, such as voting, and in charitable activities, such as donating blood. In addition, children of college graduates are more likely to achieve higher levels of education, so society continues to reap benefits generation after generation.<sup>5</sup>

College success programs are designed to help at-risk students graduate from postsecondary education. Given their vested interest in having as many college-going students as possible graduate, states will want to consider which programs and policies represent the soundest investment for their limited resources. Various programs that focus on improving college success differ with respect to structure, identified student population, and the amount of financial support required. College success programs include academic counseling and student support services administered in and out of the classroom. These programs are usually targeted to students who are most at-risk of dropping out of college—low-income, minority and first-generation students, and those students who score low on placement exams.

Consensus has emerged that students who are academically and socially engaged during college are more likely



to graduate. A student is academically engaged when he or she interacts with faculty and finds learning meaningful. Social engagement refers to participation in campus activities and multiple connections with other students. Programs that increase academic and social engagement improve the degree attainment of underrepresented students.

Many postsecondary institutions design and implement college success programs, but state legislators can play an important role by providing incentives, funding and reporting requirements. Several states—such as Arkansas, Illinois and South Carolina—have created task forces to develop a state agenda on college success, set state goals, and provide recommendations for increasing degree attainment. Legislatures can require institutions of higher education to report student data on enrollment, retention and graduation so the legislature can track and monitor progress. In Massachusetts, for example, public two-year and four-year colleges are required by law to report annually to the governor and the legislature on a variety of higher education performance measures, including student success.

This brief describes barriers to graduation for underrepresented students, highlights college success programs that researchers have found to have the most effect on increasing retention and graduation rates, and provides examples of legislative action that encourages and supports such programs.

## Barriers to College Graduation

Several factors increase the likelihood that a student will drop out of college. For example, full-time employment, dependent children, weak academic preparation, off-campus residency and college affordability can negatively affect student retention and graduation. Low-income, minority and first-generation students likely face one or more of these factors. Low-income students are more likely to work full-time during college. This places them at a disadvantage, since research shows that working more than 20 hours per week hurts student academic performance.<sup>6</sup> Some estimates suggest that as few as 25 percent of low-income youth are academically well-prepared for college, compared to 60 percent of high-income youth.<sup>7</sup>

It is important to note that the issue of academic preparation can lead to discussion of inadequate high school preparation

and remedial education. Those discussions are covered in the brief *Increasing College and Workforce Readiness*.

In particular, many community college students face barriers to graduation. The Community College Survey of Student Engagement found that 75 percent of students at public two-year colleges face at least one risk factor, compared to 14 percent of students at four-year universities. The survey also found that 25 percent of community college students had children living with them, 25 percent were not native English speakers, and 50 percent worked more than 20 hours per week.<sup>8</sup>

### *Successful state policies and programs recognize and address the factors that cause students to drop out of college.*

Successful state policies and programs recognize and address the multiple factors that cause students to drop out of college. Factors such as full-time employment, off-campus residency and family responsibilities keep students from having time to engage in campus activities or receive needed academic help. By not integrating with the larger campus community, students do not make the personal connections with peers or with faculty that often motivate them to stay in school. College success programs that work with a student's over-loaded schedule by using class time to promote academic engagement or that have flexible hours for support services can be helpful. Such programs can be most effective if they reach out to at-risk students during their first year of college.

## First-Year Retention Strategies

Research indicates that students who return for their second year of college have a higher chance of graduating. Twenty-five percent of students who enroll at four-year colleges and one-half of those at two-year colleges do not continue to their second year on campus.<sup>9</sup> Six in 10 low-income and first-generation students who do not complete their college education drop out after their first year.<sup>10</sup> Because of this, many colleges focus success programs on retaining first-year students through bridge and orientation programs, first-year seminars and learning communities. These programs help underrepresented students engage academically and socially, increasing the chance that they will persist to graduation.<sup>11</sup>

*Summer Bridge and Orientation Programs* To help high school graduates prepare for their first year of college, summer bridge and orientation programs take place before classes convene. They vary in length; orientations usually last a day or two, and bridge programs unfold over a one- to

eight-week period. The goal is to better equip students for their first year in college by helping them build the necessary academic and personal skills. Bridge and orientation programs administer remedial coursework, teach study skills, and provide opportunities to adjust to campus life and meet other students.

Many programs specifically target low-income, first-generation and minority students. Colorado State University's Bridge Scholars program, for example, hosts underrepresented students on campus for eight weeks. Students take classes, learn study skills, and become familiar with the campus and its support services. The Bridge Scholars program recognizes the special needs of underrepresented students and provides them with the opportunity to catch up or even get a head start for college.

Some research indicates that summer bridge and orientation programs can increase retention rates and student participation in campus activities. According to the Pell Institute, bridge programs at Georgia State University, the University of California-San Diego, the University of Maryland-College Park, and California State University contributed to retention gains from freshman to sophomore year. Other studies indicate that bridge and orientation programs increase the likelihood that community college students will become academically engaged. The Community College Survey of Student Engagement found that 40 percent of students have participated in an orientation program.<sup>12</sup>

**First-Year Seminars** Another retention strategy is first-year seminars, which are small classes, typically of 10 to 25 students, that usually are taught by a faculty member. Since most freshmen enroll in large introductory courses with a lecture format and little interaction with faculty members, the seminars give students an opportunity to connect with faculty and receive personal attention and frequent feedback. The small class setting encourages participation in group discussion and fosters development of critical thinking and collaborative learning skills. The relationships with faculty and other students increase the level of academic and social integration for students who participate.<sup>13</sup>

According to the National Resource Center's 2006 survey on first-year seminars, 43 percent of the responding institutions credited the first-year seminar with increasing student persistence to sophomore year. About one third of the institutions indicated that the seminars increased the students' satisfaction with the school and faculty, and reported higher levels of student participation in campus activities. Seminars

also have been linked to better chances of graduation; some research suggests that students who complete freshman seminar courses are 5 percent to 15 percent more likely to earn their bachelor's degrees in four years.<sup>14</sup>

Other research, such as that conducted by the Policy Center on the First Year of College, makes the case that seminars are most effective if they are linked to one or more other courses, a practice commonly referred to as a learning community.

**Learning Communities** Like first-year seminars, the learning community concept is based on the notion that small class size promotes academic and social engagement.



Students take two or more classes together as a group, often with an overarching theme that connects the classes. By keeping the same group of students together for multiple classes, learning communities create more opportunities for social integration.

Creating opportunities for social and academic engagement during class time when students are already on campus is an effective retention strategy for low-income and minority students.

There are various examples of the positive effects of learning communities. At the University of Southern Maine, a commuter school, the learning communities have had positive results for at-risk students. The students who participate in learning communities have higher persistence rates than students who participate in other retention programs. Similarly, students who participate in the Seattle Central Community College learning community exhibit higher rates of retention than do nonparticipants. The students in the Seattle Central learning communities also tend to express higher levels of social and academic satisfaction. The research organization MDRC conducted an experimental program at Kingsborough Community College in which some freshmen participated in a learning community that included remedial English. Students who participated in the learning community were more likely than nonparticipants to take and pass the English skills assessment tests necessary to enroll in college-level English.<sup>15</sup>

In both first-year seminars and learning communities, a major focus is on giving the student personal attention, which translates into small class sizes. However, many required introductory courses are taught in lecture format to large numbers of students, a format in which students can easily feel lost. To ensure that students receive the attention and support they need to be successful in larger courses, many colleges and universities have redesigned their introductory classes.

## Redesigning Courses for Success

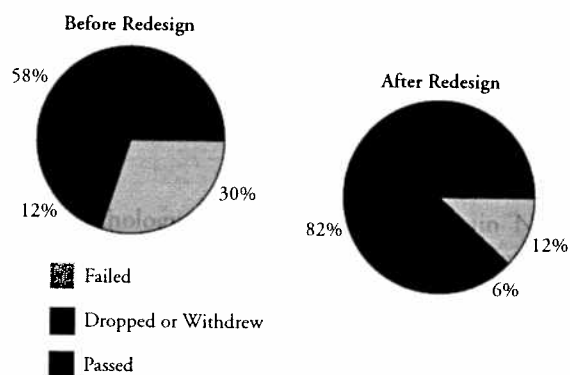
Not surprisingly, large and often impersonal introductory courses have high failure and dropout rates. About 25 introductory courses serve half the student population at community colleges and one third of the students at four-year colleges. These 25 courses have high drop, failure and withdrawal rates, and the rates can vary dramatically across institutions. At four-year institutions the drop, failure and withdrawal rates average from 22 percent to 45 percent, while at community colleges the rates average 40 to 50 percent, but can be much higher. Since these few courses affect such a large proportion of college students, restructuring them to improve student success can significantly affect retention and graduation rates.<sup>16</sup>

The National Center for Academic Transformation (NCAT) conducted research to redesign one introductory course at 30 postsecondary institutions. After evaluating the newly designed courses, the center found that 25 of the 30 colleges showed significant improvement in student performance in class, and all 30 cut costs by an average of 37 percent. According to the project report, "Collectively, the 30 redesigned courses affect more than 50,000 students nationwide and produce a savings of \$3.1 million in operating expenses each year."<sup>17</sup> Half of the institutions were studied closely to evaluate the effect on low-income and minority students; of those, 90 percent demonstrated positive effects on student learning.

*University of New Mexico* At the University of New Mexico, 47 percent of students are minorities, most of whom commute to school and work more than 30 hours per week. The introductory psychology course, one of the largest classes, had one of the highest failure rates. This course is taken by more than 2,000 students each year; of those students, 30 percent failed and another 12 percent dropped out or withdrew. To increase student success, the University of New Mexico worked with the National Center for Academic Transformation to redesign the course.

The new psychology course employed the main NCAT strategies: reduced lecture time and increased time for activities and group work, frequent quizzes, and computer-based learning techniques. The results from the newly designed course were positive—the failure rate dropped 18 percentage points and the drop/withdrawal shrunk by half (Figure 2). At the same time, due to the weekly quizzes and in-class study time, students covered the material more thoroughly than before. Student grades rose, and the learning quality improved. Yet another positive result was the cost savings. The redesigned course cost almost 50 percent less, from \$72 per student to \$37 per student.

Figure 2. Redesigning the University of New Mexico's General Psychology Course: Student Success Rates



Source: The National Center for Academic Transformation, 2005.

The cost savings realized by the University of New Mexico—and the 29 other institutions that participated in the redesign project—demonstrate that improving student success need not cost more money, but can be accomplished by changing how courses are taught to be more relevant and more effective for today's generation of students. Further, by using technology, some tasks become more efficient. Quizzes and assignments can be administered and graded through automated computer programs, thus increasing feedback to students and freeing time for faculty and teaching assistants.<sup>18</sup>

*Technology* Computer-based practices can be used to *in Redesign* redesign a wide range of courses—from *Math Courses* psychology and literature to statistics and math. *MyMathLab* is an example of a computer program used in math courses. The software allows students to do as many math problems as they need and receive instant feedback on their answers. The program also sends faculty detailed information on student progress. The University of Alabama uses *MyMathLab* in its redesigned intermediate algebra course. Students are required to spend time working on problems

in the math computer center using the software. Faculty or graduate students staff the center to help students when needed.

Within four years, the University of Alabama saw a significant increase—from 44 percent to 80 percent—in the number of students who receive a C- or better in the class. In the redesigned algebra course, African Americans, who comprise 14 percent of the undergraduate population, scored significantly higher than their peers in the traditional course. As in the University of New Mexico example, the gains did not come at a higher cost; rather the cost-per-student dropped 33 percent, saving the university about \$60,000 per year.<sup>19</sup>

First-year retention strategies such as redesigned courses, summer bridge and orientation programs, first-year seminars and learning communities are key to helping underrepresented students continue to their second year of college.

Legislators can provide important support and incentives for institutions to implement such practices. Although the focus on first-year retention programs is crucial, it is not sufficient. An effective state strategy also requires that programs and activities be in place to move students from the second year of college to graduation.

### **From Second Year to Graduation: Practices to Increase Degree Attainment**

For college students to persist to graduation, they need to remain engaged academically and socially beyond their first year. Students who participate in activities such as internships, faculty-guided research, and service learning are more likely to remain engaged. If students receive the information and support they need when they need it, they have a greater chance of attaining a degree. Support services can provide students with needed help through academic advising, career counseling, mentoring, tutoring, and financial aid guidance. One program that includes all these services is the federally funded TRIO Student Support Services program.

**Federal TRIO** The federal TRIO Student Support Services program helps low-income, first-generation and disabled students attain a college degree. Of the students participating in TRIO, two-thirds must be both low-income and first generation. Institutions of higher education can apply to the Student Support Services program for competitive grants to fund student support projects on campus.

Recognizing that students who are both first-generation and low-income are more at-risk of dropping out of college, Student Support Services program staff meet often with participating students to monitor their academic progress and track their use of available services. For many students, the Student Support Services office is a “home base” for them on campus—a place they can go at any time and receive needed help or guidance, whether for academic or personal reasons. For those in need of academic help, the program provides supplementary instruction through tutoring, workshops, group study sessions and computer-based exercises.

*Effective support services help students stay enrolled in college by targeting those in need before they drop out.*

Research indicates that Student Support Services programs have had positive results on student retention and persistence. Overall, the 950 programs nationwide serve more than 200,000 students.

According to the U.S. Department of Education’s analysis of the program, those students are more likely to persist through college and attain a degree than other low-income and first-generation students. The more involved the students are—by spending more time in the program or using more services—the more likely they are to complete college.<sup>20</sup>

**State Educational Opportunity Programs** Legislators can encourage colleges to apply for federal Student Support Services grants or can provide state funding for institutions to provide similar services. California and New York, for example, have state-funded Educational Opportunity Programs to help low-income, academically disadvantaged youth succeed in college through financial aid and comprehensive student support. Implementation varies by college; while some require participants to enroll in summer bridge programs or orientations, others require a specific course load. Institutions provide Educational Opportunity Program students with individual attention and extensive academic and personal counseling. Nyack College in New York testifies that it has seen noticeable positive effects from the program. Many of its program students have become leaders on campus, have made the dean’s list and have graduated with honors.<sup>21</sup>

**Early Warning Systems** Effective support services help students stay enrolled in college by proactively targeting those in need before they drop out. Many postsecondary institutions have early warning systems to identify students who are struggling academically and provide them with immediate help. At Hudson Valley Community College, for

example, faculty use the early warning system to alert academic counselors of students who are struggling in class, are misbehaving or are frequently absent. Faculty members notify counselors early in the semester to give students ample time to improve. The early warning system provides training and support to help faculty identify at-risk students.

**High-Impact Practices** In addition to providing support services for students, colleges and universities can promote other practices that increase degree attainment. Student research, service-learning courses, and internships have proven to help students remain in college and graduate.

The Association of American Colleges and Universities considers research with faculty, service learning and internships “high-impact practices” because of their positive results. Students that participate in these activities not only have higher rates of persistence and graduation, but also gain more personally, intellectually and culturally from their education. These positive results apply to all students, but appear to be even more evident in minorities and low-income students. Compared to non-Hispanic students, Hispanic students that participated in “high-impact” activities had better grade point averages, and African American students had higher chances of persisting in college than whites.<sup>22</sup>

**Research Experience** Undergraduate research opportunities give students the chance to work closely with faculty. Research experience can motivate students to continue their education toward advanced degrees. According to the *High-Impact Educational Practices* report, “Students who do research with faculty also are more likely to persist, gain more intellectually and personally, and choose a research-related field as a career.”<sup>23</sup> The report also indicates that students have positive and supportive relationships with the faculty.



**Service Learning** Service learning courses require that students apply what they are learning in class to a community service experience. For example, a public policy course on women as leaders could have its students mentor at-risk girls at local middle schools. The students then would reflect on their mentoring experiences in class. By connecting the classroom with the community, learning becomes more meaningful and engaging—the students integrate what

they learn in school into their lives and careers. They also learn the importance of civic responsibility and giving back to their communities. Further, by having a service project that classmates work and reflect on together, service learning courses can increase the social connection among students.

**Internships** Internships embed students in a job in a career field of interest and enable them to see how their degree can help them. These experiences can lead to greater persistence because students see a tangible result of their educational efforts. Internships also allow students to encounter a work environment with which they may not be familiar, increasing student confidence that they can do the job. If the internship leads them to see that job is not something they want to do after college, students still have time to change their major.

Encouraging underrepresented students to participate in activities such as research with faculty, service learning and internships can be an effective strategy for increasing graduation rates and overall student success. Although most institutions develop and implement their own programs, legislators can offer funding or other incentives to promote high-impact activities. A state plan or agenda on higher education is a good place for legislators to encourage institutions to provide and promote high-impact practices.

## Creating State Agendas that Promote College Success

State legislators can take leadership to improve college completion by letting institutions know that student retention and success are state priorities and that the institutions will be held accountable for results. A state agenda on college success can send that signal. These agendas identify priorities, set goals, and recommend policies and practices to improve college completion. Several legislatures have created task forces that bring together policymakers and higher education stakeholders to articulate state agendas.

**Arkansas** In 2007, the Arkansas General Assembly passed Act 570, creating the Legislative Task Force on Higher Education Remediation, Retention and Graduation Rates. The task force consisted of the governor, legislative leaders, college administrators, faculty and state education board members. The task force was charged with researching and analyzing Arkansas trends and data on student success, and creating a plan to decrease remedial education and increase student retention and graduation. The task force held 16 meetings, during which outside stakeholders presented members with comprehensive testimony and information.

In 2008, the task force released a report of its findings with a set of recommendations, incorporating many of the practices highlighted in this brief.

For example, the task force suggests requiring colleges and universities to use an early warning system to identify students struggling academically. The report also encourages colleges to increase student support services and recommends appropriating \$500,000 for the expanded services. Specifically, the task force mentions such strategies as learning communities, academic help measures and personal support services. Another recommendation is for colleges to take into special consideration the needs of underrepresented students and the fact that they are most likely to drop out during their first year. The task force suggests that colleges offer first-year experiences and evaluate how introductory courses could be redesigned to improve student success. Finally, the task force proposes an annual statewide conference where two- and four-year institutions could share strategies on retention and graduation. The conference could be valuable in continuing reform efforts and providing an opportunity for collaboration.<sup>24</sup>

**Illinois** In 2007, the Illinois General Assembly adopted House Joint Resolution 69, which created the Public Agenda Task Force and directed it to study higher education challenges and opportunities. As in Arkansas, the task force consisted of policymakers, state education leaders, and administrators and faculty from postsecondary institutions. The task force held six formal meetings and conducted regional forums and special briefings. The task force developed a state plan for higher education, taking into consideration input from a wide range of stakeholders. The final report, the *Public Agenda for College and Career Success*, lays out the state plan and serves as a guide for policymakers and higher education institutions as they consider policies, priorities and funding. It defines four main goals for Illinois: to increase access to postsecondary education; to make affordability a priority; to increase the number of degree holders in the state; and to use education, research and innovation to meet economic needs.

Legislators played an integral part in developing the public agenda, and also have a key role in implementing it and monitoring institutional progress. To facilitate institutional accountability to the legislature, the public agenda report advocates more robust state data systems that can accurately track retention and graduation rates.<sup>25</sup>

**South Carolina** In South Carolina, the Higher Education Study Committee was formed by the General Assembly to create a state agenda to improve the higher education system. To accomplish that task, the study committee developed a project plan involving participants from the education, business and government sectors. Subcommittees and additional task forces were formed to study specific issues in depth. The result, a comprehensive report titled *Leveraging Higher Education for a Stronger South Carolina*, includes detailed analysis and recommendations. The report provides information regarding cost, priority, timeline and responsibility for each recommendation.<sup>26</sup>

The report highlights the need for redesigning introductory courses that currently have high failure rates. Another recommendation urges institutions to develop early warning systems to provide students with immediate academic help, particularly during their first year. The report also advises continuing and expanding support for retention programs such as “academic support services, new student orientation, service learning, academic advisement, counseling, tutoring, cultural enrichment, ‘freshman year’ and ‘sophomore year’ programs.”<sup>27</sup> Summer transition and bridge programs also are mentioned as useful to help students adapt to college.

## Conclusion

To maximize a state’s investment in higher education and reach state goals for higher college completion rates, state legislators will want to understand the array of college success programs and know which are effective. Students who are supported in their classes and involved on campus are more likely to graduate. Therefore, student success programs should aim to increase the academic and social engagement of the students beginning in the first year of college and continuing until graduation.

As policymakers work to improve college success for underrepresented students, some points to consider include the following.

- Recognize the common risk factors that underrepresented students face and consider them in developing success programs.
- Use funding or other incentives to encourage institutions to target programs to first-year students.
- Encourage institutions to promote first-year programs such as learning communities, bridge and orientation programs, and first-year seminars to help students remain in school.

- Press institutions to measure the comparative effectiveness of the success programs.
- Support the redesign of introductory courses that have high failure rates to help students be more successful, and use technology to lower costs and improve efficiency.
- Consider funding or incentives to help institutions expand student support services that help students progress from first year to graduation.
- Fully leverage federal funding such as the TRIO programs, which award grants to institutions for student support.
- Recommend that institutions expand programs that keep students engaged academically and socially, such as research with faculty, service learning and internships.
- Create legislative task forces to bring together various stakeholders to develop a state agenda on student success. Institutions need clear signals from state legislatures that retention and success are priorities and that they will be held accountable for results.

## Notes

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