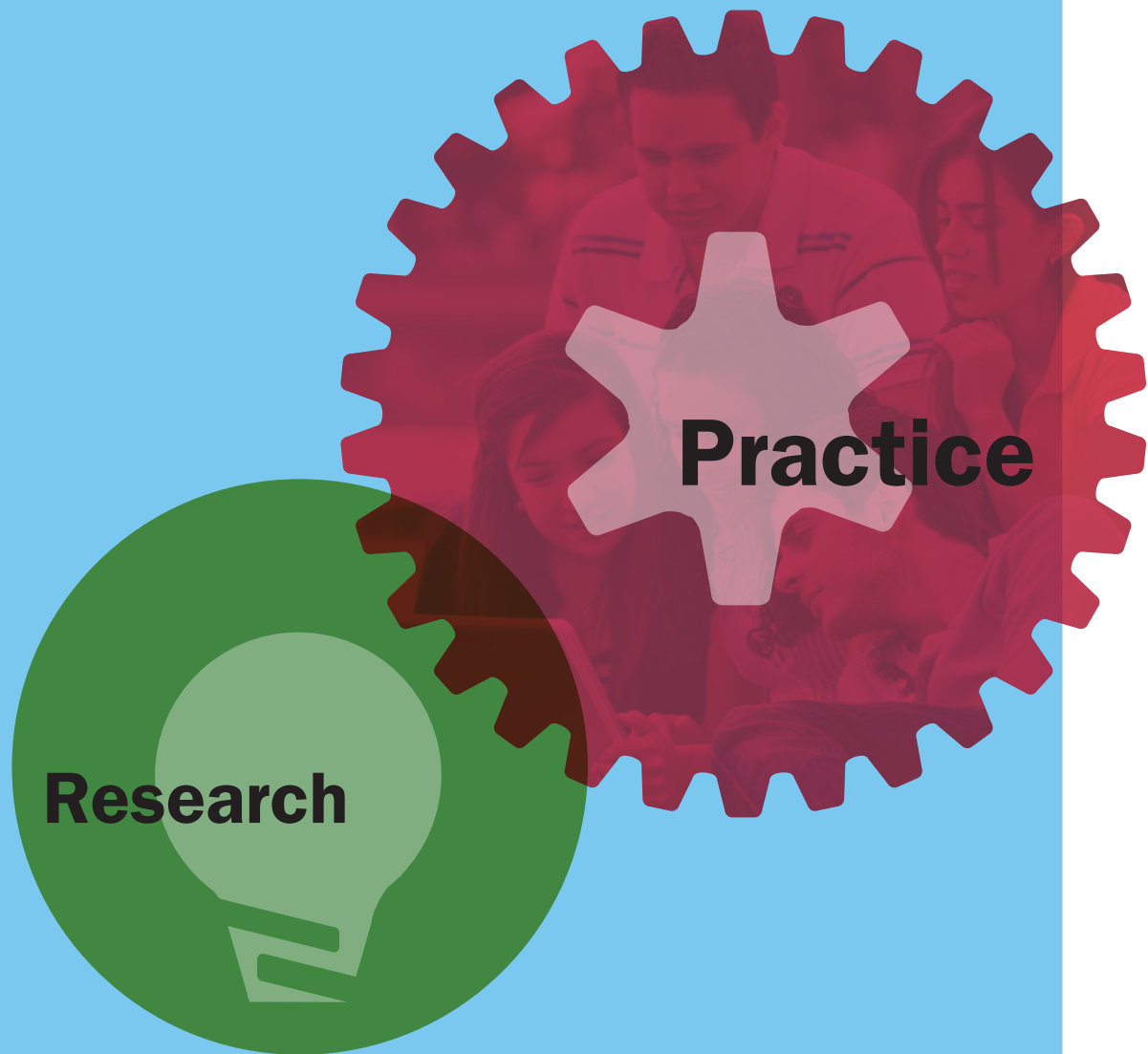


Connecting **RESEARCH** About Access to Higher Education to **PRACTICE**

An Introductory Guide for Educators



HIGHLIGHTS research findings, policy and practice options, and resources | March 2010

Contents

| | Page |
|------------------------------------|------|
| Introduction | 1 |
| Barriers to Higher Education | 3 |
| Policy Options | 8 |
| Conclusion | 18 |
| References | 19 |

Introduction

The trends are clear—a high school education is no longer adequate to prepare young people for the rapidly changing information economy of the 21st century. According to the U.S. Department of Labor (2009), approximately 65 percent of the fastest growing jobs today require at least some form of postsecondary education. If the United States is to remain economically competitive, more students must complete a postsecondary degree. Currently, however, the United States has a smaller percentage of young adults who enter college and graduate with a postsecondary degree than many other developed nations. The possibility that a high school freshman will enroll in college by age 19 has improved modestly in this decade, from 39 percent to 42 percent, and the proportion of 18- to 24-year-olds enrolled in college also has increased slightly (National Center for Public Policy and Higher Education, 2008). Although the United States has made small gains in the rates of college participation in recent years, the United States also is falling behind in completion rates. Bridging the transition after graduation is a key issue in ensuring that students successfully complete college.

Although college attendance rates have increased slightly, significant gaps in enrollment between low-income and minority students and their more affluent, white peers persist (National Center for Public Policy and Higher Education, 2008). As shown in Table 1, although 63 percent of Asian-American students enroll in college, only 33 percent of their African-American peers and 27 percent of their Latino peers continue on to postsecondary education.

Table 1. 18- to 24-Year-Olds Enrolled in College by Race/Ethnicity in 2007

| Race/Ethnicity | Enrollment Rates |
|-------------------|------------------|
| Whites | 45% |
| African Americans | 33% |
| Latinos | 27% |
| Asian Americans | 63% |
| American Indians | 25% |

Note. From *Minorities in Higher Education: 2009 Supplement*, by M. Ryu, 2009, Washington, D.C.: American Council on Education.

Low-income and first-generation students are at times dissuaded from continuing on to college, even those who are high achievers. In addition, racial and ethnic disparities continue to exist in access to higher education. However, if the United States is to maintain its level of economic competitiveness, all students must have the opportunity to obtain a postsecondary education—at a community college, at a university, or through postsecondary vocational and technical training. This Connecting Research to Practice Policy Brief outlines the barriers to higher education for students and then provides policymakers and practitioners with research-based policy options, examples of best practice, and resources that can help all students increase their access to higher education.

Barriers to Higher Education

Recently, the administration of President Barack Obama has made an unprecedented commitment to increase access to higher education and has invested significant resources from the stimulus package to achieve this goal. The term access suggests that full participation in higher education requires the elimination of barriers that have historically limited participation for all students. Research and policy discussions about factors that undermine students' access to higher education focus on three major barriers: poor academic preparation, students' lack of financial resources, and students' lack of knowledge about what is involved in the application and enrollment processes and what is necessary for full participation once they are in college.

Inadequate Preparation

According to a recent ACT (2009) report, only 23 percent of students who graduated in 2009 met ACT's college readiness benchmarks for all four subjects.¹ Rates of academic preparation are even lower for minority students, with only 4 percent of African-American students and 10 percent of Latino students meeting the benchmarks for all four subjects.

Only 23 percent of students who graduated in 2009 met ACT's college readiness benchmarks for all four subjects.

Research indicates that academic rigor and student achievement in high school are strong predictors of student success in college (Adelman, 1999; Allensworth, 2006). However, access to rigorous courses is unevenly distributed in today's high schools. For example, an analysis conducted by researchers at the Tomás Rivera Policy Institute demonstrated that access to Advanced Placement (AP) courses in California public high schools remains an unlikely opportunity for African-American and Latino students and many low-income or rural students (Zarate & Pachon, 2006).

¹ An ACT benchmark score is the minimum score on an ACT subject test required for students to have approximately a 50 percent chance of obtaining a B or higher or approximately a 75 percent chance of obtaining a C or higher in the corresponding credit-bearing college course. The 2009 benchmark scores are 18 for English, 22 for mathematics, 21 for reading, and 24 for science.

Unfortunately, while many researchers acknowledge that inadequate preparation is a key barrier to access to higher education, there is a lack of consensus about what it means to be academically ready for college. This issue is complicated further by the poor alignment of K–12 standards and assessments with higher education standards and assessments, often resulting in a gap between what colleges expect and what high schools produce. This disconnect has created confusion and frustration among high school teachers and administrators about the most appropriate way to prepare their students for success in postsecondary education.

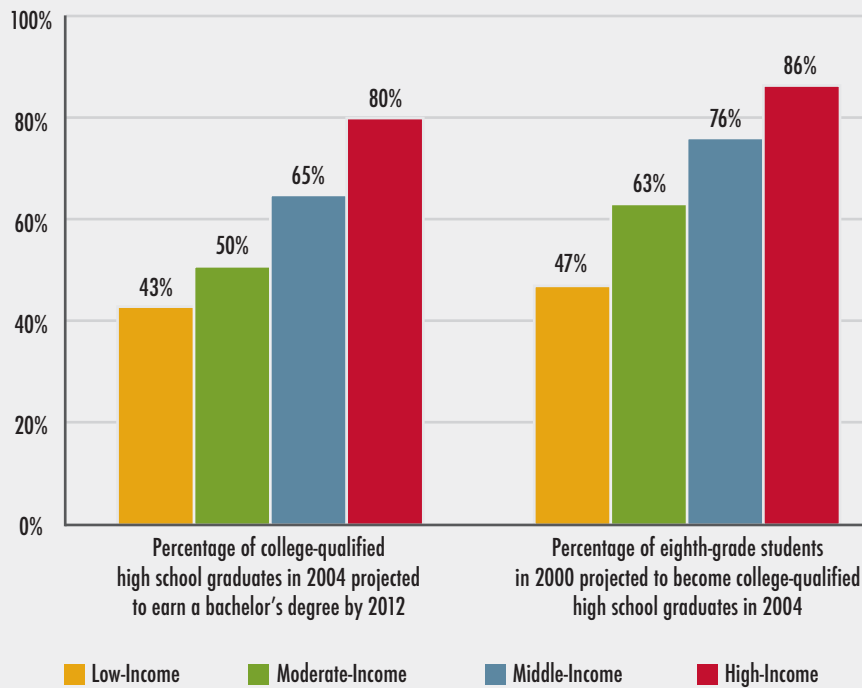
Financial Barriers

Of all students who are academically prepared for college, only 43 percent of low-income high school graduates are projected to earn a bachelor's degree.

Lack of financial resources also can affect preparation for and persistence in higher education. As shown in Figure 1, a 2006 report from the Advisory Committee on Student Financial Assistance indicates a highly unequal distribution of educational opportunity by family income. Of all students who are academically prepared for college, only 43 percent of low-income high school graduates are projected to earn a bachelor's degree, almost half the rate of their high-income peers (80 percent). In addition, these low-income students do not receive, on average, the same level of academic preparation as their high-income peers. Only 47 percent of eighth-grade students from low-income families are likely to become college-qualified high school graduates compared with 86 percent of their peers from high-income families.

For decades, federal and state governments and institutions of higher education have provided billions of dollars annually in student aid to help students pay for college. Despite this ongoing investment of resources, financial barriers to higher learning persist for many low-income students. College tuitions and fees have been rising rapidly in the last decade at the same time that average family incomes have declined

Figure 1. Educational Opportunity by Family Income



Note. From Mortgaging Our Future: How Financial Barriers to College Undercut America's Global Competitiveness, 2006, Washington, D.C.: Advisory Committee on Student Financial Assistance.

by 3 percent for the poorest 20 percent of families between 1978 and 2008 (The College Board, 2009). Moreover, research has documented the trend of financial aid shifting from grants to loans and from income-based aid to merit-based aid (Heller, 1999, 2008). Increasing college tuition rates and reductions in the availability of need-based financial aid have contributed to increases in the unmet financial need of low-income students and the widening of the gap in college participation rates between low-income students and their more affluent peers. The current economic climate is expected to increase these challenges further.

Lack of Knowledge

Information and knowledge about college and financial aid also play important roles in increasing access to higher education. Research suggests that students' lack of information and knowledge about college opportunities, college admissions and course placement policies, and the financial aid application process has led to perceived or imagined barriers to higher education, meaning that some students may make assumptions that they or their parents cannot afford college or that they will not be able to succeed academically in college (Grotsky & Jones, 2004; McWhirter, 1997). Because these students perceive that college is not a realistic possibility, they have less motivation to focus on academic performance and thus put less effort into studying and homework. A recent study found that this perception could occur in children as young as 11 years of age (Destin & Oyserman, 2009).

Many students do not enroll in colleges that match their capabilities and potential.

For students who aspire to complete a four-year degree, effectively participating in the college selection and application process remains a challenge. Many students do not enroll in colleges that match their capabilities and potential, and many high-achieving students enroll in mediocre institutions of higher education. This circumstance is referred to as *undermatching* in a recent book by Bowen, Chingos, and McPherson (2009). The data from the book suggest that low-income and minority students are especially susceptible to undermatching because they lack the necessary resources and networks of support to help them navigate through the college selection and application process.

Disconnects also exist for low-income students who need to access financial aid. The 2006 Secretary of Education's Commission on the Future of Higher Education declared the entire financial aid system in the U.S. as "confusing, complex, inefficient, and duplicative" (U.S. Department of Education, 2006, p. 3). For low-income students, the complicated financial aid process and their lack of knowledge about what is available and what steps they need to take to access aid often results in students not accessing the full amount of aid available to them. Despite the great financial need that exists for low-income students, federal and state agencies report unused financial aid each year (Center for Higher Education Policy Analysis, 2007).

Despite the great financial need that exists for low-income students, federal and state agencies report unused financial aid each year.

As a result of the complex interplay between poor academic preparation, lack of financial resources, and lack of knowledge about what is involved in applying for, financing, and participating in college, postsecondary education currently is not uniformly accessible for all students. Several policies and strategies have been developed and implemented at various levels to increase access, but the results have been mixed. These strategies include breaking down the barriers on students' path to college, increasing investments in high school reform in order to increase students' academic preparation, increasing financial support for low-income students, and providing information and support to students to assist with navigating the college search, admissions, and financial aid application processes.

Policy Options

In today's economy, it is important for students to attain advanced skills in order to be successful after high school. Numerous policies and programs have been developed to prepare high school students for the transition to postsecondary education (Bangser, 2008). This section of the Policy Brief highlights some of these policies and programs, which include efforts to enhance the rigor of the high school curriculum, build and support college-going aspirations, use data to help students succeed, and streamline transitions from high school to college. Examples of best practices and key resources are included for each policy option.

Policy Option 1: Increasing the Rigor of the High School Curriculum

Ensuring that all students have exposure to an academically rigorous curriculum is, according to research, a strong predictor of college completion (Bailey, Hughes, & Karp, 2002). The federal government has promoted rigorous college preparatory curricula through programs such as the Academic Competitiveness Grant (ACG) and the National Science and Mathematics Access to Retain Talent (SMART) Grant, thus tying financial incentives for students to academic preparation. A key requirement of the ACG program is that students complete a rigorous high school program as defined by the U.S. Department of Education. States also have implemented various policies to ensure that all students have access to an academically rigorous

curriculum. A growing number of states have required that students complete a college-preparatory program to obtain a high school diploma or to gain admission to a state postsecondary institution. The Indiana Core 40 curriculum and the Arkansas Smart Core curriculum are two of the earliest examples of academic preparation reform initiatives. More recent examples include the Michigan Merit Curriculum and California's A-G Requirements.

Exposure to an academically rigorous curriculum is ... a strong predictor of college completion.

Another popular policy tool used in states is to require that students pass a minimum competency test or a more difficult standards-based exam to receive a regular high school diploma. Currently, 24 states require students to pass exit exams in order to receive their high school diplomas, which affects approximately 68 percent of public high school students in the United States (Editorial Projects in Education, 2009).

Currently, 24 states require students to pass exit exams in order to receive their high school diplomas, which affects approximately 68 percent of public high school students in the United States.

Schools that implement reforms to increase the rigor of curriculum often increase academic support to students who need help in handling challenging coursework successfully. Strategies such as personalized or small-group tutoring, afterschool programs, and summer programs often are used. In addition, teachers may use a variety of methods to improve their instruction and to address the needs of different groups of students.

Examples:

Indiana's Core 40 Curriculum. Established in 1994, Indiana's Core 40 curriculum is a classic college preparatory curriculum designed to prepare students for success in college and the workforce. Currently, more than 73 percent of all Indiana students earn a Core 40 or Core 40 with Honors diploma.² The Indiana General Assembly has made completion of Core 40 a graduation requirement for all students beginning with those who entered high school in fall 2007. Beginning in fall 2011, the legislation also makes Core 40 the minimum course requirement for admission to Indiana's public four-year universities.

² This number came from a recent presentation by Indiana Commissioner for Higher Education Teresa Lubbers at the Connecting Research to Practice event *Increasing Access to Higher Education*, which was hosted by the Regional Educational Laboratory (REL) Midwest at Learning Point Associates in fall 2009.

Michigan Merit Curriculum. The Michigan Merit Curriculum, which went into effect beginning with students who entered eighth grade in 2006, is regarded as being among the most academically rigorous curricula in the United States. In addition to requiring students to earn a full complement of mathematics, science, English, and other credits to receive their diplomas, Michigan is the first state to require students to have an online learning experience to prepare them for postsecondary education and the workplace. In addition, students who entered third grade in 2006 (and beyond) need to complete two credits of languages other than English or equivalent K–12 experience prior to graduation.

Project GRAD USA. Project GRAD USA is a nonprofit education reform model that aims to increase high school graduation and college access rates for low-income youth. Their model focuses on five core programs (mathematics, literacy, classroom management, social services and parental involvement, and the high school program) that are implemented within and outside the classroom at disadvantaged public schools across the United States (Project GRAD USA, 2009).

Key Resources:

U.S. Department of Education: Recognized State Rigorous Secondary School Programs
<http://www.ed.gov/admins/finaid/about/ac-smart/state-programs.html>

Lists of rigorous secondary school programs of study recognized by the U.S. Department of Education are provided. Participation in these programs qualifies students to receive an Academic Competitiveness Grants (ACG).

The American Diploma Project (ADP) Network
<http://www.achieve.org/ADPNetwork>

The American Diploma Project (ADP) Network includes 35 states that have been working toward making sure that every high school graduate is prepared for college or a career. It is built on the work by the American Diploma Project (ADP), an initiative launched by Achieve, The Education Trust, and the Thomas B. Fordham Institute in 2001.

Policy Option 2: Building and Supporting College-Going Aspirations

Although the majority of American youth aspire to attend college, some do not see college as a realistic possibility and, hence, lack motivation for preparing for college. Many high schools continue to explicitly and/or implicitly separate students into college-preparatory and non-college-preparatory tracks, which convey differing expectations to students in the varying tracks. Students in the non-college track are never exposed to the challenges and potential benefits of higher education. They may never realize what they are capable of achieving because they are not required to try. One approach to building high expectations for all students is to create a “default” college-preparatory track for all students. In addition, having a comprehensive strategy aimed at cultivating and supporting high expectations among students can build a culture of college going in high schools. Studies indicate that attending a high school with a strong college-going culture may shape students’ participation and success in the college application process (Corwin & Tierney, 2007; Roderick, Nagaoka, Coca, & Moeller, 2008).

Attending a high school with a strong college-going culture may shape students’ participation and success in the college application process.

Having high expectations for all students should be accompanied by social support for students, particularly for underrepresented youth who have fewer resources at their disposal and lack access to college-conducive social networks. As discussed elsewhere in this Policy Brief, such youth include first-generation college students, students from low-income families, African-American students, and Latino students. Even academically well-prepared students in these groups are less likely to go on to postsecondary education (Advisory Committee on Student Financial Assistance, 2006). These students may require greater access to structured social services and support to help them sustain the preparation for college. Group and peer support, mentoring and personalized support from experienced and helpful adults, and early preparation and planning are all identified in the research literature as potentially effective strategies to increase expectations, improve academic persistence, and promote college going (Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009).

Examples:

Upward Bound. Upward Bound prepares young people for higher education by providing instruction and tutoring in the core content area subjects after school, on Saturdays, and during the summer months. Upward Bound staff members also assist students with college applications, college advising, and college visits. Most services take place on college campuses.

Talent Search. Talent Search serves students in Grades 6–12. The program provides participants with information about college, admission requirements, scholarships, and various student financial aid programs. Its aim is to help young people better understand their educational opportunities beyond high school. Most services are provided within targeted middle and high schools.

GEAR UP. GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) is a federal program that provides supplementary support for low-income students. These supports include academic preparation for postsecondary education, tutoring, summer programs, Saturday activities, parent programs, and teacher professional development.

Key Resources:

KnowHow2Go

<http://www.knowhow2go.org/>

This campaign, supported by the Lumina Foundation for Education, provides direct-service grants for public awareness campaigns dedicated to educating underserved, low-income students about how to get into college.

Pathways to College Network: College Readiness for All Toolbox

<http://toolbox.pathwaystocollege.net/>

The College Readiness for All Toolbox is a set of well-researched tools, lessons learned, resources, and documents designed to help create a culture of college readiness and access within a secondary school or district.

Policy Option 3: Using Data to Help Students Succeed

The education community increasingly has recognized the importance of using data to inform decision making and to improve student outcomes. To support this goal, the federal government has promoted building statewide longitudinal data systems (SLDS) through SLDS grants. In particular, the emphasis on linking K–12 and higher education data systems has gained enormous momentum as a result of the federal stimulus funding that has been designated for the creation of P–20 data systems. Tracking student achievement over time may help alert students, parents, and teachers about whether students are on track for college. These early warning systems also will help schools and districts identify at-risk students at different stages of the P–16 pipeline and align appropriate interventions for struggling students in a timely manner. Schools and districts have developed early warning systems that use indicators based on readily accessible data to predict, during students' first year in high school, whether the students are on track to graduate. On the other end of the pipeline, data from higher education institutions can provide feedback to high schools to indicate how prepared graduates from that high school were for college.

A central element of many successful college access programs is their commitment to the effective use of data in their decision making (Mangrulkar, 2004). These programs often collect extensive data about students, programs, schools, and school districts. These data allow the programs to learn what works to better prepare students for success in college and what interventions are not as effective (Hooker & Brand, 2009).

A central element of many successful college access programs is their commitment to the effective use of data in their decision making.

Examples:

Chicago Public Schools: On-Track Indicator. Chicago Public Schools adopted an early warning system that uses the on-track indicator developed by researchers at the Consortium on Chicago School Research (Allensworth & Easton, 2005). The on-track indicator measures whether students make sufficient progress in their first year of high school to be on track to graduate within four years based on the number of credits earned and the number of F's in core subjects.

The Early Assessment Program (EAP) in California. Offered for the first time in spring 2004, EAP, using results from a voluntary college-placement exam, provided California high school students with early feedback (during the summer before their senior year) about their preparedness for college-level classes in English and mathematics. The program also provides assistance for students in Grade 12 who need additional preparation. Recent research has found that participation in EAP reduces the average student's probability of needing remediation at California State University, and EAP appears to encourage students to increase their academic preparation while they are still in high school (Howell, Kurlaender, & Grodsky, 2009).

Kentucky's High School Feedback Report. Kentucky's High School Feedback Report is an example of linking K–12 and postsecondary data in a comprehensive way. The reports are produced collaboratively by the Kentucky Council on Postsecondary Education, the Kentucky Department of Education, and the Kentucky Higher Education Assistance Authority. These reports show high schools how the most recent graduates are doing relative to their peers in the district and the state after two years in college.

Key Resources:

Data Quality Campaign

<http://www.dataqualitycampaign.org/>

Founded in 2005, the Data Quality Campaign (DQC) consists of 14 managing partners and many more endorsing partners that work collaboratively to encourage and support state policymakers to improve the collection, availability, and use of high-quality education data to improve student achievement. DQC provides support and information to help states build longitudinal student-level data systems and use the data to help students succeed.

College Access and Success State Data

<http://www.pathwaystocollege.net/statelibraries/AllStates.aspx?id=130>

This resource provides links to several state-specific data resources, including data on student demographics, youth well-being, K–12/college preparation, college access and participation, financial aid/affordability, higher education retention, transfer, and success.

Data Use for School Improvement

<http://www.learningpt.org/expertise/schoolimprovement/data/>

Learning Point Associates provides a variety of services to assist schools and districts in interpreting their data to understand student progress and program effectiveness and to develop goals and actionable next steps to improve student learning.

Policy Option 4: Improving the Transition to College

Developing a seamless transition from high school to college is essential, and efforts to ease the transition are currently under way in several states. Improving the transition to college for all students involves not only high schools but also elementary and middle schools. Increasingly, governors and state policymakers are reconceptualizing public education as a P–20 pipeline and are looking for ways to strengthen academic preparation along the P–20 pipeline. They also are exploring ways in which prekindergarten programs, K–12 school systems, postsecondary institutions, and state policymakers can work together to create a seamless pathway between high

school and college. P–20 alignment often involves bridging the K–12 and postsecondary education sectors in the following areas:

Prekindergarten programs, K–12 school systems, postsecondary institutions, and state policymakers can work together to create a seamless pathway between high school and college.

- Aligning academic standards and curriculum expectations
- Aligning testing and data systems
- Collaborating to create quality learning programs that combine secondary and postsecondary learning (e.g., early college high schools, dual enrollment, distance learning, and technical education)
- Collaborating to improve information about college opportunities and admissions and to provide support for college and financial aid applications

Examples:

Multiple Pathways. In an Issue Brief, Richmond (2009) describes high schools and institutions of postsecondary education working together to develop multiple pathways for students in a variety of career areas that combine college-preparatory academics with high-quality career-technical education, work-based learning opportunities, and student support services. According to Richmond, the combination of a rigorous curriculum with real-life workplace experience and skills ensures that students have a variety of opportunities after high school. Many of these pathway programs are located on community college campuses and work to prepare students for both college and careers.

Early College High Schools. Early college high schools blend high school and college education in order to ensure that their students are prepared for and can successfully complete a degree in postsecondary education (National High School Center, 2007). A report by Nodine (2009) states that these schools engage their students in a rigorous and supported educational program that enables them to succeed in college classes before graduating from high school. According to Nodine, this initiative also gives their students the opportunity to earn a number of college credits, up to an associate's degree, and a high school diploma within four to five years of beginning ninth grade.

Dual Enrollment. Dual enrollment programs allow high school students to take college courses while still in high school. These programs give high school students first-hand exposure to college-level work while gaining college and high school credit simultaneously (Bailey et al., 2002).

Key Resources:

National College Access Program Directory

<http://www.collegeaccess.org/accessprogramdirectory/>

The National College Access Program Directory is a searchable online database of U.S. college access programs that help underserved students prepare, plan, and pay for college.

National College Advising Corps

<http://www.advisingcorps.org/>

The National College Advising Corps works through a nationwide consortium of colleges and universities to place recent college graduates as college advisers in low-income high schools and community colleges, providing the advice and encouragement that low-income students need to navigate the college-going process.

Bill & Melinda Gates Foundation

<http://www.gatesfoundation.org>

The Bill & Melinda Gates Foundation partners with organizations across the United States to increase the number of high-quality educational opportunities that are currently available for disadvantaged young people. The foundation and its partners support early college high schools and provide scholarships for postsecondary education.

Conclusion

This Policy Brief has summarized existing research on the barriers to accessing higher education and has provided policymakers and practitioners with four policy options related to increasing access to higher education. For each policy option, examples of strategies and programs as well as links to key resources were provided. Many of the programs highlighted in this Policy Brief integrate a range of strategies and adopt a systematic approach that addresses multiple barriers. These programs often involve coordinated activities that span the entire educational pipeline. Using as a starting point the best practices that were outlined, policymakers and practitioners should consider innovative strategies to build partnerships along the P–20 pipeline and to work collaboratively with organizations outside of the education sector to improve access to higher education for all students.

References

- ACT, Inc. (2009). *ACT profile report—National: Graduating Class 2009*. Iowa City, IA: Author. Retrieved February 17, 2010, from <http://www.act.org/news/data/09/pdf/National2009.pdf>
- Adelman, C. (1999). *Answers in the toolbox: Academic intensity, attendance patterns, and bachelor's degree attainment*. Washington, DC: U.S. Department of Education. Retrieved February 17, 2010, from <http://www2.ed.gov/pubs/Toolbox/index.html>
- Advisory Committee on Student Financial Assistance. (2006). *Mortgaging our future: How financial barriers to college undercut America's global competitiveness*. Washington, DC: Author. Retrieved February 16, 2010, from <http://www2.ed.gov/about/bdscomm/list/acsfa/mof.pdf>
- Allensworth, E. (2006). *Update to: From high school to the future: A first look at Chicago Public School graduates' college enrollment, college preparation, and graduation from four-year colleges*. Chicago: Consortium on Chicago School Research. Retrieved February 17, 2010, from <http://ccsr.uchicago.edu/publications/PostsecondaryUpdate.pdf>
- Allensworth, E. M., & Easton, J. (2005). *The on-track indicator as a predictor of high school graduation*. Chicago: Consortium on Chicago School Research. Retrieved February 16, 2010, from <http://ccsr.uchicago.edu/publications/p78.pdf>
- Bailey, T. R., Hughes, K. L., & Karp, M. M. (2002). *What role can dual enrollment programs play in easing the transition between high school and postsecondary education?* New York: Community College Research Center. Retrieved February 17, 2010, from <http://ccrc.tc.columbia.edu/Publication.asp?UID=13>
- Bangser, M. (2008). *Evaluating the impact of interventions that promote successful transitions from high school*. Washington, DC: National High School Center. Retrieved February 17, 2010, from http://www.betterhighschools.org/docs/ResearchBrief_ImpactofInterventions_073108.pdf
- Bowen, W., Chingos, M., & McPherson, M. (2009). *Crossing the finish line: Completing college at America's public universities*. Princeton, NJ: Princeton University Press.
- Center for Higher Education Policy Analysis (2007). *Putting money on the table: Information, financial aid and access to college*. Los Angeles: Author. Retrieved February 17, 2010, from http://www.usc.edu/dept/chepa/pdf/Early_Commitment_Programs_final.pdf
- The College Board. (2009). *Trends in college pricing 2009*. New York: Author. Retrieved February 17, 2010, from http://www.trends-collegeboard.com/college_pricing/pdf/2009_Trends_College_Pricing.pdf
- Corwin, Z. B., & Tierney, W. (2007). *Getting there—and beyond: Building a culture of college-going in high schools*. Los Angeles: Center for Higher Education Policy Analysis. Retrieved February 17, 2010, from <http://www.usc.edu/dept/chepa/working/Getting%20There%20FINAL.pdf>

- Destin, M., & Oyserman, D. (2009). From assets to school outcomes: How finances shape children's perceived possibilities and intentions. *Psychological Science*, 20(4), 414–418. Retrieved February 17, 2010, from http://sitemaker.umich.edu/daphna.oyserman/files/destin_oyserman_2009_psychological_science.pdf
- Editorial Projects in Education. (2009). *Diplomas count 2009: The challenge of college readiness for all students*. Retrieved February 17, 2010, from www.edweek.org/go/dc09
- Grodsky, E., & Jones, M. (2004). *Real and imagined barriers to college entry: Perceptions of cost*. Paper presented at the annual meeting for the American Sociological Association, San Francisco. Retrieved February 17, 2010, from <http://escholarship.org/uc/item/7v87v3j0>
- Heller, D. E. (1999). The effects of tuition and state financial aid on college enrollment. *Review of Higher Education* 23(1), 65–89.
- Heller, D. E. (2008). *Financial aid and admission: Tuition discounting, merit aid and need-aware admission*. Arlington, VA: National Association for College Admission Counseling. Retrieved February 17, 2010, from http://www.personal.psu.edu/deh29/papers/NACAC_2008.pdf
- Hooker, S., & Brand, B. (2009). *Success at every step: How 23 programs support youth on the path to college and beyond*. Washington, DC: American Youth Policy Forum. Retrieved February 17, 2010, from <http://www.aypf.org/publications/SuccessAtEveryStep.pdf>
- Howell, J., Kurlaender, M., & Grodsky, E. (2009). *College readiness to degree completion: Remedial placement and patterns of college persistence*. Manuscript submitted for publication. Retrieved February 19, 2010, from <http://www.airweb.org/images/Kurlaender%20Final%20Report.pdf>
- Mangrulkar, L. (2004). *The Santa Ana Partnership*. Battle Creek, MI: W.K. Kellogg Foundation.
- McWhirter, E. M. (1997). Perceived barriers to education and career: Ethnic and gender difference. *Journal of Vocational Behavior*, 50, 124–140. Retrieved February 17, 2010, from http://management.uta.edu/Casper/MultiStat/Articles%20Fall%202007/MANOVA/MANOVA_McWhirter_1997.pdf
- National Center for Public Policy and Higher Education. (2008). *Measuring up 2008: The national report card on higher education*. San Jose, CA: Author. Retrieved February 19, 2010, from <http://measuringup2008.highereducation.org/print/NCPPEMUNationalRpt.pdf>
- National High School Center. (2007). *Findings from the Early College High School initiative: A look at best practices and lessons learned regarding a dual enrollment program*. Washington, DC: Author. Retrieved February 19, 2010, from http://www.betterhighschools.org/docs/NHSC_EarlyCollegeHighSchool_032107.pdf

- Nodine, T. (2009). *Innovations in college readiness: How early college schools are preparing students underrepresented in higher education for college success*. Boston: Jobs for the Future. Retrieved February 17, 2010, from http://www.jff.org/sites/default/files/Innovations_in_College_Readiness_PDFVersion_102909.pdf
- Project GRAD USA. (2009). *Project GRAD USA: National College Readiness*. Houston, TX: Author. Retrieved February 17, 2010, from http://www.projectgrad.org/atf/cf/%7B9A8B1B2B-8144-4568-AFEB-FD51204B79B9%7D/01_college%20readiness_general_january%202009.pdf
- Richmond, E. (2009). *Preparing students for college and career: California Multiple Pathways*. Washington, DC: Alliance for Excellent Education. Retrieved February 17, 2010, from <http://www.all4ed.org/files/IssueBriefCAMultPathways.pdf>
- Roderick, M., Nagaoka, J., Coca, V., & Moeller, E. (with Roddie, K., Gilliam, J., & Patton, D.). (2008). *From high school to the future: Potholes on the road to college*. Chicago: Consortium on Chicago School Research. Retrieved February 16, 2010, from http://ccsr.uchicago.edu/publications/CCSR_Potholes_Report.pdf
- Ryu, M. (2009). *Minorities in higher education: 2009 supplement*. Washington, DC: American Council on Education. Retrieved February 19, 2010 from <http://www.acenet.edu/AM/Template.cfm?Section=CAREE&Template=/CM/ContentDisplay.cfm&ContentID=34214>
- Tierney, W. C., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N. F. (2009). *Helping students navigate the path to college: What high schools can do* (NCEE 2009-4066). Washington, DC: National Center for Education Evaluation and Regional Assistance. Retrieved February 19, 2010, from http://ies.ed.gov/ncee/wwc/pdf/practiceguides/higher_ed_pg_091509.pdf
- U.S. Department of Education. (2006). *A test of leadership: Charting the future of U.S. higher education: A report of the commission appointed by Secretary of Education Margaret Spellings*. Washington, DC: Author. Retrieved February 19, 2010, from <http://www2.ed.gov/about/bdscomm/list/hiedfuture/reports/final-report.pdf>
- U.S. Department of Labor (2009). *Occupational outlook handbook, 2010–11 edition*. Washington, DC: U.S. Bureau of Labor Statistics. Retrieved February 19, 2010, from http://www.bls.gov/oco/oco2003.htm#occupation_d
- Zarate, M. E., & Pachon, H. P. (2006). *Gaining or losing ground? Equity in offering Advanced Placement courses in California high schools 1997–2003*. Los Angeles: Tomás Rivera Policy Institute. Retrieved February 19, 2010, from <http://www.ecs.org/html/offsite.asp?document=http%3A%2F%2Fwww%2Etrpi%2Eorg%2FPDFs%2Fap%5F2006%2Epdf+>

Connecting RESEARCH About Access to Higher Education to PRACTICE

An Introductory Guide for Educators

Written by

Sheila Rodriguez, Research Specialist

Yinmei Wan, Ph.D., Research Associate

About Learning Point Associates

Learning Point Associates is a nationally recognized nonprofit consulting organization with 25 years of experience. In partnership with our clients, we apply research, evaluation, and direct practice to impact policy and tackle the most pressing issues in education today.

We move research from the shelf into the everyday practice of educators by leading and facilitating critical conversations. We are skilled at fostering the exchange of knowledge across ideologies and roles to ensure that fresh ideas and the latest research are injected into the national conversation on education.

Our Connecting Research to Practice events bring research to the field, providing opportunities for practitioners and policymakers to deepen their understanding of evidence-based research. For more information about connecting research to practice, please visit <http://www.learningpt.org/rel/events.php>.

Our Connecting Research to Practice policy briefs are designed to help educators make informed decisions about investing in programs to improve student achievement. Highlights of each policy brief include key research findings, policy and practice options, and resources for practitioners.

