

BETRAYING THE COLLEGE DREAM:

**How Disconnected K-12 and
Postsecondary Education Systems
Undermine Student Aspirations**

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**FINAL POLICY REPORT FROM
STANFORD UNIVERSITY'S BRIDGE PROJECT**



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Executive Summary

BETRAYING THE COLLEGE DREAM

America's high school students have higher educational aspirations than ever before. Eighty-eight percent of 8th graders expect to participate in some form of postsecondary educationⁱ, and approximately 70 percent of high school graduates actually do go to college within two years of graduating.ⁱⁱ These educational aspirations cut across racial and ethnic lines; as with the national sample cited above, 88 percent of all students surveyed for Stanford University's Bridge Project, a six year national study, intend to attend some form of postsecondary education. In each of the six states studied for this report (California, Georgia, Illinois, Maryland, Oregon, and Texas), over 80 percent of African American and Latino students surveyed plan to attend some form of postsecondary education.

But states have created unnecessary and detrimental barriers between high school and college, barriers that are undermining these student aspirations. The current fractured systems send students, their parents, and K-12 educators conflicting and vague messages about what students need to know and be able to do to enter and succeed in college. For example, this research found that high school assessments often stress different knowledge and skills than do college entrance and placement requirements. Similarly, the coursework between high school and college is not connected; students graduate from high school under one set of standards and, three months later, are required to meet a whole new set of standards in college. Current data systems are not equipped to address students' needs across systems, and no one is held accountable for issues related to student transitions from high school to college.

Many students and parents are confused by what is expected of students when they enter college, and these misunderstandings can contribute to poor preparation for college. We found that many students believe a variety of misconceptions, ranging from "Meeting high school graduation requirements will prepare me for college," to "Community colleges don't have academic standards" (see page 31 for a complete list of misconceptions).

Other findings highlighted issues such as inequalities throughout education systems in college counseling, college preparation course offerings, and connections with local postsecondary institutions; sporadic and vague student knowledge regarding college curricular and placement policies; the importance of teachers in advising students about college preparation issues; student overestimation of tuition; and an inequitable distribution of college information to parents.

This report describes these problems further, provides a context for why they exist, and offers recommendations to improve the current situation. Our research found that the following three actions are most promising for immediate reform:

- Provide all students, their parents, and educators with accurate, high quality information about, and access to, courses that will help prepare students for college-level standards.
- Focus on the institutions that serve the majority of students. Shift media, policy, and research attention to include to broad access colleges and universities attended by the vast majority of students (approximately 80 percent).

- Create an awareness that getting into college is not the hardest part. Expand the focus of local, state, and federal programs from access to college to include access to success in college—access to the resources and information students need to prepare well for college and to make informed decisions.

How can we achieve these ends? For a start, college stakeholders must be brought to the table when K-12 standards are developed. Likewise, K-12 educators must be engaged as postsecondary education admission and placement policies are under review. Reforms across the two education systems will be difficult if not impossible to implement without meaningful communication and policymaking between the levels.

There are several other important steps that states, K-12 schools and districts, postsecondary institutions and systems, and the federal government can take to improve the transition from high school to college for all students. These include:

- Examining the relationship between the content of postsecondary education placement exams and K-12 exit-level standards and assessments to determine if more compatibility is necessary and possible.
- Reviewing postsecondary education placement exams for reliability, validity, efficacy, and the extent to which they promote teaching for understanding.
- Allowing students to take placement exams in high school so that they can prepare, academically, for college and understand college-level expectations.
- Sequencing undergraduate general education requirements so that appropriate senior-year courses are linked to postsecondary general education courses.
- Expanding successful dual or concurrent enrollment programs between high schools and colleges so that they include all students, not just traditionally “college-bound” students.
- Collecting, and connecting, data from all education sectors.
- Establishing data collection standards.
- Establishing federal grants to stimulate more K-16 policymaking.

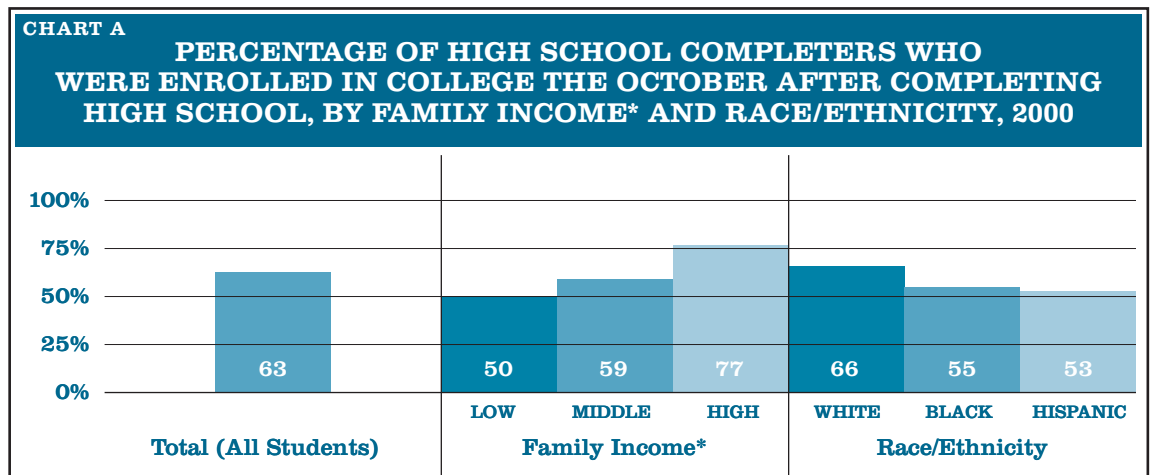
These recommendations will be easier to accomplish, and more effective in their implementation, if there is an overall organizational base for K-16 policymaking and oversight. Having a K-16 entity does not, however, ensure that innovative K-16 reforms will follow. Only a concerted effort by policymakers, educators, parents, and students will do the job. Implementing these recommendations will not magically eliminate the dozens of other reasons why students are not prepared adequately for college. But they are important steps toward developing a more equitable educational experience for all students, and providing all students with the preparation they need to succeed in college.

Introduction and Context

| BETRAYING THE COLLEGE DREAM |

Students Have High Aspirations, but Lack Adequate Preparation for College

America's high school students have higher educational aspirations than ever before. Eighty-eight percent of 8th graders expect to participate in some form of postsecondary educationⁱⁱⁱ, and approximately 70 percent of high school graduates actually do go to college within two years of graduating.^{iv} These educational aspirations cut across racial and ethnic lines; as with the national sample cited above, 88 percent of all students surveyed for this project intend to attend some form of postsecondary education. In each of the six states studied for this report (California, Georgia, Illinois, Maryland, Oregon, and Texas), over 80 percent of African American and Latino students surveyed intend to attend some form of postsecondary education. The chart below shows the percent of high school graduates who go directly to college after high school.



SOURCE: October Current Population Surveys, U.S. Department of Commerce, Bureau of the Census, 1972-2000.

* Low Income is the bottom 20 percent of all family incomes, high income is the top 20 percent and middle income is the 60 percent between.

Included in the total, but not shown separately are students of other racial/ethnic groups. Includes students ages 16 to 24 completing high school in a given year.

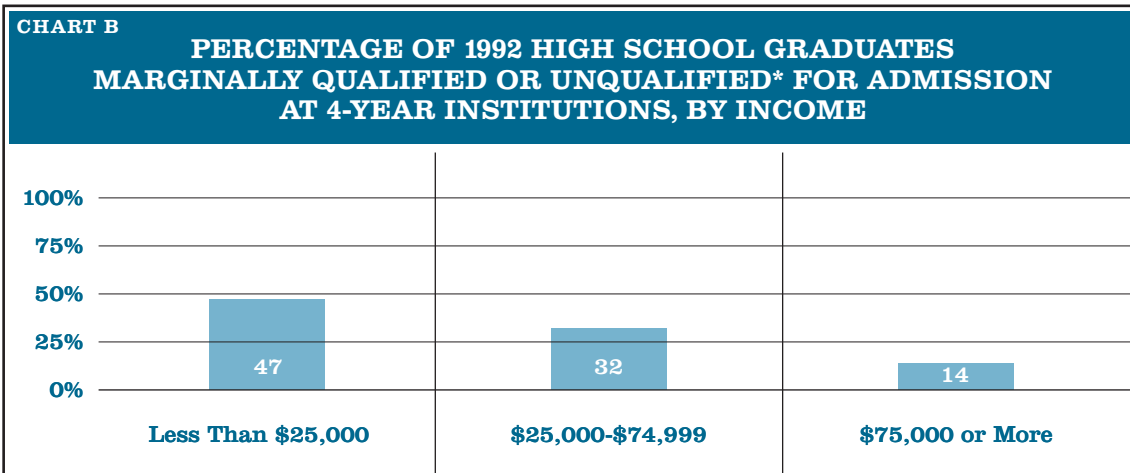
Low-income students and students of color are less likely to transition directly to college after completing high school.

"I see students every day who don't believe they belong in college, and they kind of want to take a class and so maybe they'll take a typing class or they'll take a college class, even though it's not a transfer class. And they get some success and then they build and the next thing you know, they're transferring with a degree and it's just awesome."
 COMMUNITY COLLEGE ADMINISTRATOR

These high expectations among high school students are grounded in economic reality. Students and their parents understand that a college education greatly improves an individual's opportunities for economic security in today's marketplace. Data from the U.S. Census illustrate the significant economic returns of enhanced education. In 2000, the median annual earnings for workers aged 25 and over with a high school diploma was \$24,267, compared with \$30,774 for workers with an associate's degree and \$40,314 for those with a bachelor's degree.^v There are also economic benefits to completing community college certificates, though the amount of the benefit varies by field of study.^{vi} In many ways, students' educational aspirations reveal the success of parents, teachers, and educational leaders in communicating to students the importance of college.

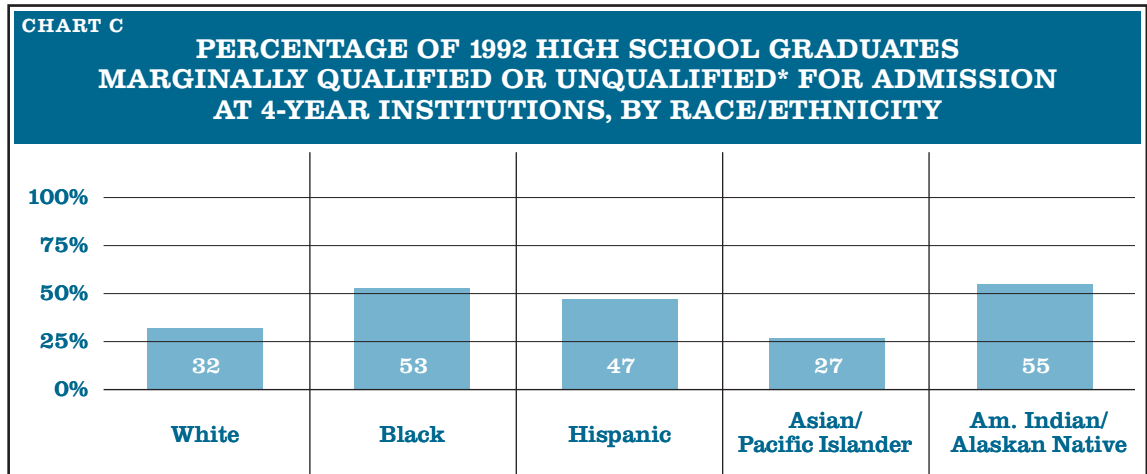
Nevertheless, most K-12 and postsecondary education systems have not met teenagers’ heightened aspirations with sufficient and well-targeted resources to help all students prepare well for college. Despite their high aspirations, not enough students are well-prepared (as evidenced by high college remediation rates), and not enough complete college. Once they enroll in college, many students are startled to learn that getting into a college is often the easiest step. Completing a degree, or even enrolling in college-level courses, requires higher levels of academic preparation. In short, simply graduating from high school does not ensure that a student will be ready for college level courses.^{vii} Tables B and C illustrate the extent of the under-preparation problem. As an administrator at The University of Oregon said:

The most interesting part of this whole placement process is from my perspective that students move along a path where they assume that there is a logical progression—that they move from one step to the next and that is how they progress through high schools...And then they come to the university where all of a sudden there is a new standard that is being placed on them and sometimes they kind of fall short of that standard. And there is a lot of cognitive dissonance over, ‘Why am I able to not place into College Algebra when I just finished pre-calculus?’ We deal with that all the time.



SOURCE: *The Condition of Education 2000*, page 47 (Indicator 30), U.S. Department of Education.
 * The four-year College Qualifications Index is based on high school grade point average, senior class rank, NELS 1992 aptitude test, SAT or ACT scores and curricular rigor.

A greater percentage of low-income students are marginally qualified or unqualified for admission at four-year institutions.*



SOURCE: *The Condition of Education 2000*, page 148 (Indicator 30, supplemental tables), U.S. Department of Education.

* The four-year College Qualifications Index is based on high school grade point average, senior class rank, NELS 1992 aptitude test, SAT or ACT scores and curricular rigor.

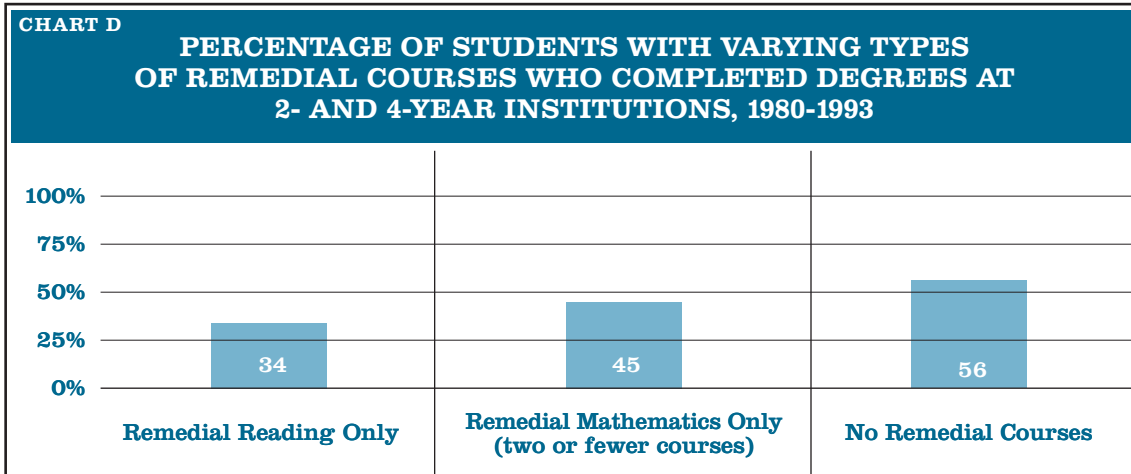
A greater percentage of Black, Hispanic, and American Indian/Alaskan Natives are marginally qualified or unqualified for admission at four-year institutions.*

A major cause of insufficient preparation, explored in this report, concerns the disjuncture between public K-12 and postsecondary sectors. This disjuncture can impede successful transitions between the systems and diminishes educational opportunities for many students, particularly for those who are traditionally underrepresented in postsecondary education. Underrepresented students are especially likely to be hampered by insufficient access to college preparatory courses, student placement into remedial-level coursework in college, and a lack of early and high-quality college counseling.

A symptom of college under-preparation is that approximately half of the students entering college take remedial courses; 40 percent of students in four-year institutions take some remedial education as compared with 63 percent at two-year institutions.^{viii} While 72 percent of students went on to college (within two years of graduating from high school) in 1992, only 47 percent of them had enrolled in a college preparatory curriculum in high school.^{ix} The following examples are typical:

- In Texas, the Higher Education Coordinating Board found that, in 1996, more than half of Texas' public higher education students were placed in remedial course work. The financial price tag for the state was over \$153 million, but remediation also costs students time and money.^x
- Of the first-time students enrolled in the Baltimore City Community College (BCCC) in the fall of 2000, 95 percent required remediation in math, and 65 percent of entering students needed remediation in math, English, and reading. At BCCC, nearly one-half of all entering students were assigned to the lowest level of remedial math in the year 2000—a placement that would require a student to take as many as nine courses (27 credits) before being able to begin credit level work in math.^{xi}

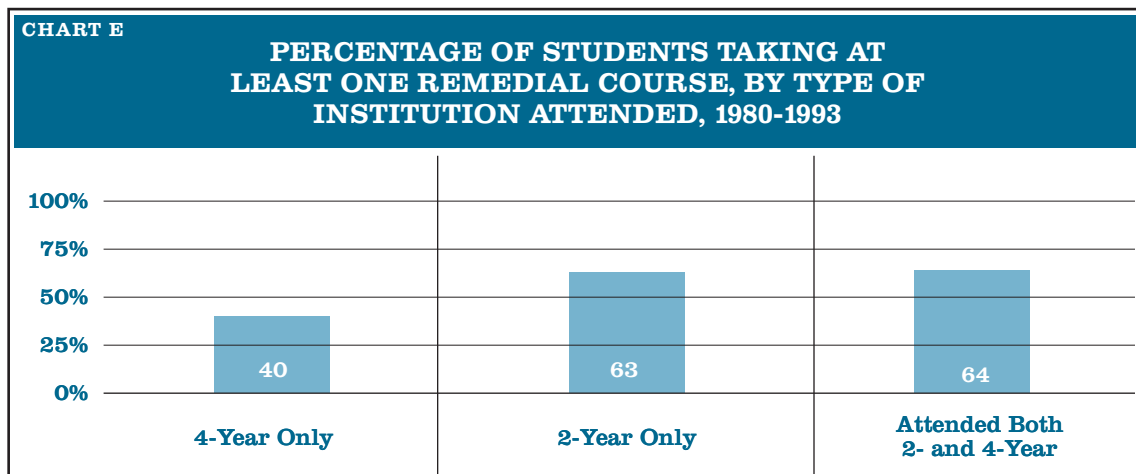
These types of situations are significant not only because they mean more time for students to get to the point of actually taking college level courses—increasing the cost of their education and creating a somewhat demoralizing atmosphere for the student—but because the data show that students requiring extensive remediation graduate at lower rates.^{xii} As the chart below illustrates, between 1980 and 1993, only 34 percent of students who had to take even one remedial reading course completed a two- or four-year degree, compared with 56 percent of students who had taken no remedial courses at all.^{xiii} Also, remedial needs are greater at two-year institutions.



SOURCE: *The Condition of Education 2001*, page 49 (Indicator 29), U.S. Department of Education.

Students who take either remedial reading and/or remedial mathematics graduate in lower percentages.

The statistics regarding student attrition in college are startling. About half of first-year students at community colleges do not continue on for a second year. About a quarter of first-year students at four-year colleges do not stay for their second year. Over 40 percent of college students who earn more than 10 credits never complete a two-year or a four-year degree. At two-year colleges, over 70 percent of students who enroll say they expect to obtain a bachelor's degree, but only 23 percent receive one.^{xiv} While student finances are very important, the intensity and quality of the secondary school curriculum is the best predictor of whether a student will go on to complete a bachelor's degree.^{xv}



SOURCE: *The Condition of Education 2000*, page 148 (Indicator 29, supplemental tables), U.S. Department of Education.

Students who attend four-year institutions take the fewest remedial courses.

AT A PARTICULAR DISADVANTAGE: STUDENTS OF COLOR

As the table below demonstrates, these problems affect students of color disproportionately. Underrepresented students of color do not obtain higher education anywhere close to the levels of White, non-Latino students.

TABLE 1

NUMBER OF EVERY 100 KINDERGARTNERS ACHIEVING DIFFERENT EDUCATIONAL LEVELS (24 YEAR OLDS)

	Graduate from High School	Complete at Least Some College	Obtain at Least a Bachelor's Degree
Asian/Asian-American	94	80	49
White, non-Latino	93	62	29
African American	86	48	15
Latino	61	31	10
Native American	58	data not available	7

SOURCE: "Youth at the Crossroads," The Education Trust. 2001. Washington, DC: The Education Trust.

Not only are African American and Latino students not obtaining postsecondary education degrees at the same rate as their White, non-Latino counterparts, they are not graduating from high school with the same level of academic skills. Across the country, African American and Latino 12th graders read and do math at the same levels as white 8th graders. This is particularly problematic given the data on college remediation and the extent to which the necessity of one or more remedial courses (particularly in math or reading) negatively influences the chances that one will obtain a bachelor's degree.^{xvi}

The Structure of this Report

We begin by briefly describing the Bridge Project’s research, from which this report was generated.¹ Then, after summarizing the roots of the disconnect between K-12 and post-secondary education, we examine how this schism has inhibited the ability of schools and colleges to address the issues of inadequate preparation for college, high levels of remediation, and low rates of college completion. One of the major problems, illustrated in our findings section, concerns the poor knowledge students and teachers have of college policies—their lack of clear understanding makes good college preparation difficult. This problem is compounded by the fact that many high schools students—especially the most disadvantaged—receive inadequate counseling and opportunities for college preparation. We conclude this report with a series of recommendations as to how students can be better supported in their efforts to succeed in college.

Stanford University’s Bridge Project

How are states developing K-16 reforms—reforms that span the continuum from kindergarten through the end of a four-year undergraduate degree program (grade 16)? What are the policy structures in place that support, assist, or confuse students, their parents, and K-12 educators? How are postsecondary education admissions standards and placement policies, as well as relevant state-level reforms, communicated to, and interpreted by, K-12 stakeholders? Are there differences in how students receive and interpret those policies?

Stanford’s Bridge Project, a six-year national study that began in 1996, sought to answer these questions by examining these issues in regions in California, Illinois, Georgia, Maryland, Oregon, and Texas.² Researchers interviewed state agency, university, and community college staff and faculty; interviewed high school teachers, counselors, and administrators; surveyed high school students and their parents; and talked with groups of high school students and community college students. Researchers studied a specific geographical area in each of the six states. Each state’s postsecondary institutions and high schools were, for the most part, in the same general feeder pattern—that is, within each region, a large proportion of students from the studied high schools attend those colleges and universities. We expected that students in the studied high schools had some exposure to the community colleges and universities in our study. For a more detailed description of the research design, please see the Appendix.

¹ For more detail on each region in the study, technical reports on each state are available at <http://bridgeproject.stanford.edu>.

² Texas was the pilot state for the Bridge Project. Consequently, it differs substantially from the other states in terms of the number of students and parents surveyed, and it was more qualitative in nature.

The table below shows the institutions included in the study.

TABLE 2						
UNIVERSITIES, COLLEGES, AND SCHOOLS STUDIED						
	California	Georgia	Illinois	Maryland	Oregon	Texas
More selective 4-year universities	The University of California, Davis	The University of Georgia	The University of Illinois, Urbana-Champaign	The University of Maryland, College Park	The University of Oregon	The University of Texas, Austin
Less-selective 4-year universities	California State University, Sacramento	State University of West Georgia	Illinois State University	Towson State University	Portland State University	Southwest Texas State University
Community colleges	Consumes River and Sacramento City Community Colleges	N/A	N/A	Catonsville and Rockville Community Colleges	Portland and Mt. Hood Community Colleges	N/A
High schools³	Greater Sacramento metropolitan area	Greater Atlanta metropolitan area (rural)	Central Illinois	Greater Baltimore County	Greater Portland metropolitan area	Central Texas

Table 3 shows the sample characteristics of the high school students surveyed; the student surveys provided most of the quantitative high school-level data for this report. A total of 1,962 of their parents were surveyed as well (453 in California, 249 in Georgia, 610 in Illinois, 224 in Maryland, 318 in Oregon, and 108 in Texas).

³ To protect their anonymity, the K-12 schools in this study are not named. The Texas study included two high schools and three middle schools.

TABLE 3

STATE SAMPLE CHARACTERISTICS
(by percent unless otherwise stated)

Institution	CA (n=443)	GA (n=249)	IL (n=626)	MD (n=232)	OR (n=318)	TX (n=110)
Women	63	53	57	61	60	54
High-SES⁴	40	26	31	57	32	32 ⁵
Mid-SES	39	42	50	34	55	27 ⁶
Low-SES	21	32	19	8	14	41 ⁷
African American	11	13	5	32	2	11
Asian American	37	4	1	5	12	0
Latino/a	10	5	3	50	4	40
White	27	74	92	49	75	46
other race/ethnicity	15	4	2	13	9	3
8th graders	N/A	N/A	N/A	N/A	N/A	40
9th graders	47	45	22	55	45	N/A
10th graders	0	1	30	<1	0	60
11th graders	53	52	21	44	54	N/A
12th graders	0	2	27	0	1	N/A
“honors” students⁸	59	39	51	57	59	49
# of high schools sampled	6	2	7	4	4	2 HIGH; 3 MIDDLE
# of districts sampled	3	2	7	2	3	2
# of rural schools sampled	0	2	5	0	0	3
# of suburban schools sampled	2	0	0	4	2	0
# of urban schools sampled	4	0	2	0	2	2

NOTE: Student group sample sizes may differ from total due to missing data.

The research provides a picture of what is happening in relatively typical suburban and mid-level (in terms of funding and student achievement) urban high schools. Georgia, Illinois, and Texas also included a few rural schools. But none of the states included inner city urban high schools that are truly struggling with issues surrounding student performance and resources; although researchers proposed conducting research in such schools, the requests were turned down by district office officials. Thus, in many schools, the situation regarding student preparation for college is worse than what is presented here.

⁴ For California, Georgia, Illinois, Maryland, and Oregon, socioeconomic status (SES) was measured by a composite of two variables, maximum parental education and family income, both taken from the parent survey. Maximum parental education was scaled from 1 (less than high school) to 7 (graduate/professional degree) and was taken as the higher level of attainment among the mother and father. Family income was scored 1 (below \$15,000 a year) to 12 (over \$100,000 a year). SES was computed as the sum of the two measures. For crosstabular analyses, we divided these SES values into three major categories: low-SES (2 to 7), middle-SES (8 to 13), and high-SES (14 to 19).

⁵ Earned \$60,000+.

⁶ Earned \$30,000-\$60,000.

⁷ Earned \$15,000-\$30,000.

⁸ The sample is divided between students in honors classes, and students in nonhonors classes. The regional cases tend to more honors students, because a greater proportion of students in honors classes returned their surveys.

This project transpired in a crucial time in terms of educational change. Because the research was conducted between 1997 and 2000, this report provides information from a particular snapshot in time. Across the country, state-level K-16 reforms were just beginning, and many states were grappling with the aftershocks created by the elimination of affirmative action practices in postsecondary admissions decisions (California and Texas, two of our study states, had just eliminated affirmative action policies when the field research began). Oregon was beginning to ratchet up the implementation of its Proficiency-Based Admission Standards System (PASS)—a system intended to improve its students’ preparation for college, and to change how the state’s public universities admit students. Oregon was also working to connect its K-12 policies (most notably its Certificates of Initial and Advanced Mastery, awarded at the 10th and 12th grades, respectively) with the PASS System. Georgia was embarking on its statewide P-16 initiative by developing a state P-16 council as well as local P-16 councils (comprised of people representing early childhood education through college). Maryland had started developing a new set of assessments that were intended to connect high schools and colleges and it, too, created a state-level K-16 council. Illinois was revising its state assessment system to combine the ACT with a state standards-based exam.

As the project proceeded, we found that the greatest problems were concentrated in “broad access postsecondary institutions,” or institutions that admit almost every student who applies. Broad access institutions comprise about 85 percent of all postsecondary schools and educate the majority of the nation’s college students. For example, community colleges enroll 45 percent of all first year postsecondary students and are the place where the majority of students of color start their postsecondary paths. Approximately 80 percent of first-year students attend minimally-selective and non selective two- and four-year institutions.^{xvii} Most media and public attention, however, focuses upon the approximately 20 percent of students who attend the selective four-year institutions that have the best prepared students and the most complicated methods to help sort and select applicants.^{xviii} Completion rates at selective four-year institutions are much higher than at broad access institutions.^{xix} Focusing on selective institutions helps students with the most resources at their disposal, while the majority of students, especially those who are underrepresented in postsecondary education, are often ignored.

The History of the Disconnect Between K-12 and Postsecondary Education

While the reality for students is that their education will likely continue past the secondary years, state and institutional policies continue to reflect a significant separation between K-12 and postsecondary education. The current organization of secondary schools and postsecondary institutions is such that policymaking communication between levels is often difficult.

The roots of this lack of connection between K-12 and higher education reflect the fact that they were created as two separate systems. In 1900, the educational systems were briefly, if loosely, linked because the College Board set uniform standards for each academic subject, and issued a syllabus to help high school students get ready for college entrance subject-matter examinations. This K-16 academic standards connection later frayed and then broke open, and the only remaining major linkage is usually through teacher preparation programs in schools of education. This is an American phenomenon: there is a much greater disjuncture between secondary and postsecondary education here than in most other nations.^{xx} Increasingly, however, more and more people are calling for what is often called a K-16, or P-16, perspective⁹ on education—a recognition that this is ideally “all one system.”^{xxi}

⁹ K-16 refers to Kindergarten through “grade 16,” or the end of a four-year undergraduate program; many states call their efforts K-16, or preschool through “grade 16” reforms.

Postsecondary education institutions have traditionally been responsible for defining standards for college level coursework and remedial courses. At the same time, K-12 entities, whether at the local or state level, define the curricula for college prep courses in high schools.^{xxii} Hence, the high school curricula and postsecondary standards are rarely consistent with one another. High school teachers and college professors often differ in their views of what students should know in order to go on to, much less succeed in, postsecondary education.^{xxiii} It is not surprising, therefore, that standards and assessments differ across the levels.

The curricular disjunctures have major implications for students' course-taking patterns during their senior year of high school. Aside from end-of-course exams, the K-12 accountability movement has no plans for senior year assessments; this can de-emphasize the need to take core courses in the senior year, especially if students have already met high school graduation requirements. In addition, college admission policies usually do not stress second semester senior year grades. These messages can signal to students that they do not need to take challenging courses in the senior year, such as college prep mathematics.

One similarity across the levels is that, traditionally, what has been valued in American education is participation in the system for as long as possible.^{xxiv} Getting the high school diploma has typically been more important than what was learned, particularly for movement from high school to work. K-12 schools and postsecondary institutions traditionally receive some streams of funding based on student seat-time. K-12 education systems focused more, therefore, on keeping students in high school, and on providing opportunities for them to graduate, than on what they should know and be able to do to succeed in postsecondary education.

This report advocates changing the status quo, but that will be difficult as long as enrollments are adequate. Postsecondary education systems and institutions have little incentive to collaborate with K-12 districts and schools. High drop-out rates are not a fiscal problem, as long as new students keep attending postsecondary education institutions in sufficient numbers. Higher education is susceptible to financial constraints, and often the first programs cut are ones that may be supportive of K-16 work. While there are local partnerships focused around outreach issues, there are few levers—such as K-16 accountability systems or funding mechanisms that cross the sectors—in place to encourage postsecondary education to change its practices. K-12 systems, on the other hand, are currently grappling with a wave of recent reforms, including the No Child Left Behind Act, and often do not have the time and resources to provide college counseling for each student. Thus, K-12 policies, such as standards and assessments, are at the mercy of political forces, while higher education is often viewed as comparatively untouchable by state legislatures and governors.

Many state and local politicians have in recent years provided resources for school-college collaborative efforts, but we argue that this is only a first step; sufficiently ensuring the successful student transition requires a re-conception of current structures and practices as well as the development of new systemic approaches to link the two education sectors.

“[The most important function of the P-16 Council is]...to give institutions, public schools, two- and four-year institutions, colleges of arts and sciences and schools of education, a notion that there ought to be a seamlessness to participate in the learning process of our students...[it] never existed for a whole range of political and historical reasons.”
LOCAL GEORGIA P-16 COUNCIL REPRESENTATIVE

State Stories: Why Did We Study These States?

| BETRAYING THE COLLEGE DREAM |

CALIFORNIA

California has worked to align standards with assessments in K-12; unfortunately, efforts to improve compatibility and coherence between K-12 and higher education have lagged behind. While there have been important discussions about the potential use of statewide secondary school assessment data for admission and placement at California's public universities, no concrete action had been taken by the end of 2002. Differentiation of mission and function within public higher education in California, while promising to be efficient from a systemic point of view, may actually contribute to inefficiencies and inequalities with respect to serving the K-16 educational needs of the state. The University of California (UC), legislated to be the most selective public university system in the state, is currently focusing admission policy on minority student access—an issue that is of less consequence for the California State University System (CSU). Major policy moves at the CSU, meanwhile, have focused on remediation—an issue of little interest to the UC because of its legislated greater selectivity. A result is two systems continuing down a path of uncoordinated policy development surrounding student access to college.

GEORGIA

Georgia was the first state to develop both state- and regional-level P-16 councils. Georgia has learned lessons that can help other states in the midst of K-16 reform. It has lost leaders who have been instrumental in leading the K-16 charge, namely Chancellor Portch and two governors. Consequently, it has had to embed the reforms in the state's curriculum, and not just focus on a governance structure. As Georgia has learned, just putting together a P-16 council will not ensure that the necessary changes will occur. The work of the councils has had to evolve to meet changes in the state's policy and political environments, and to deal with set-backs in the reform efforts.

The Georgia P-16 Initiative is a collaborative statewide effort aimed at raising expectations and ensuring student success from pre-school through post-secondary education. The statewide and regional councils include educators, members of the community, and business representatives. Each council is a member of the Georgia P-16 Network; the Network serves as a vehicle for maintaining close communication and building cross-regional relationships among participants for improving student success. The Network brings representatives together several times a year to focus on local, regional or statewide needs. The long-term goals of the Initiative include:

1. To improve the achievement of Georgia's students at all levels of education, pre-school through post-secondary programs.
2. To help students move more smoothly from one educational sector to the next.
3. To ensure that all students who enter post-secondary institutions are prepared to succeed, and to increase the success rate of those who enter.
4. To close the gaps in access to post-secondary education between students from majority and minority groups and between students from high and low income groups.
5. To focus the co-reform of schools and teacher education on practices bringing P-12 students from diverse groups to high levels of achievement.
6. To help students become more responsible in their citizenship.

"I would love to sit down and talk with, or get reports from college professors about what they're expecting in their English programs for different groups of kids...That's what I'd like to know. When I was teaching eighth grade I was constantly asked what was going on in the high school level. It's very necessary to me to have that transitional element and to have that communication. And I don't right now, but I would like that."

GEORGIA TEACHER

ILLINOIS

Illinois revamped its assessment system to include an 11th grade exam for all public school students. This exam incorporates both the ACT and Illinois-based items aligned to Illinois standards. After this change, almost 40,000 more students took the ACT than in the past. Illinois also funds a P-16 research organization, the Illinois Education Research Council (IERC), housed at Southern Illinois University, Edwardsville. The IERC was established in 2000 by the Joint Education Committee (created by statute to facilitate interaction between independent boards of education and workforce). The Council's staff actively participates in P-16 state initiatives, publishes research reports on issues of interest to the P-16 community, and has established a regular research symposium focusing on Illinois P-16 education.

MARYLAND

A major reason for choosing Maryland for this study was its K-16 Partnership for Teaching and Learning—an active, voluntary alliance that has undertaken a variety of initiatives involving a broad range of educators throughout the state. The Partnership was established in 1995 through a formal commitment of the heads of the University System of Maryland, the Maryland State Department of Education, and the Maryland Higher Education Commission to develop “strategies for strengthening K-16 standards, competencies and assessments, the professional development of educators, and community engagement in the K-16 initiative.”^{xxv} The USM Chancellor is widely recognized as being the driving force in establishing this partnership and in formulating its agenda. The goals of the Partnership include:

- setting standards and expectations for student learning;
- increasing college participation and graduation rates;
- creating a seamless web of postsecondary education in Maryland;
- reducing the need for remediation;
- reducing time-to-degree;
- increasing the competitiveness of Maryland's businesses; and
- improving productivity and accountability.^{xxvi}

“In an ideal world? Come and sit down with us when we plan our curriculum, and we’d plan a coherent K through 16 program that would have the outcomes that we want. I think what happens now is we have a K through 6 program that gets chopped off, and then a 7 through 8 program that gets chopped off, and then a 9 through 12 program that gets chopped off; and then a four-year institutional program, that are totally disconnected.”

ILLINOIS TEACHER

OREGON

Oregon is a relatively small state, and is progressive on many fronts. The legislatively mandated K-12 reforms, including the Certificates of Initial and Advanced Mastery (CIM and CAM), were intended to include wide-ranging innovative assessments, but those tests are now more standardized than originally planned. The Proficiency-based Admission Standards System (PASS) is an effort by the Oregon University System to improve both student preparation for college and the ways in which college readiness is determined. PASS successfully articulated its standards, but has had only limited impact, in part because it does not have a legislative mandate and is present in a limited way in approximately half the public schools. In general, there was a lot of confusion, and little true understanding of these reforms, by the students and parents surveyed.

The Oregon higher education system has capacity for qualified students who meet minimum standards, so the desire for better prepared students is less about selection than about overall minimum competency for college-level work. Given the relatively long commitment to the K-12 assessment system and the capacity in higher education, Oregon is in a good position to make formal curricular and assessment linkages between high schools and postsecondary institutions.

TEXAS

Given the Fifth Circuit Court of Appeals' decision in the *Hopwood v. State of Texas* case in 1996, and Texas' attorney general's consequent interpretation of the decree (eliminating the use of affirmative action in higher education admissions decisions), we were interested in equity issues regarding K-12 students' college knowledge. In a series of focus groups in Central Texas conducted during the 1998-1999 school year, middle school, junior high and high school students voiced concern that their planned courses did not match up with college entrance requirements. A common fear was, as one student said, "whatever we do here is not going to matter in college." None of the 110 students sampled was able to articulate accurately what the specific course requirements are to gain admission to Southwest Texas State University or The University of Texas at Austin—the two universities in the study. Eleven students could accurately define the state's postsecondary education placement exam—the TASP—but the majority of them were honors students who had been told by their counselors that they were exempt from taking it because of their high TAAS scores. One-quarter of the nonhonors students had never heard of the SAT.

For many Texas high school students, the desire to go onto college is imperiled by insufficient or inaccurate information; the students simply do not know what it takes to get into and succeed in college. This issue is particularly important in Texas, where demographic projections from the Texas State Data Center show that student groups who have been traditionally under-represented in higher education will grow faster than traditionally well-represented student groups. Texas faces a challenge to ensure that its population does not become more stratified because of unequal access to postsecondary education and the increased earning power it promises.

Since this research was conducted, Texas has taken many steps to improve college preparation options for more students, including the legislation of the default curriculum.

Findings

BETRAYING THE COLLEGE DREAM

1.) Current Policies Perpetuate Disjunctures between K-12 and Postsecondary Education

Many K-12 students do not have a good sense of what is expected of them in college, and most K-12 educators do not know how to help students gain an understanding of those standards. K-12 students must take many courses, and pass many tests to graduate from high school and attend college, but those hurdles often have little to do with the academic expectations that students face in their first year in college.

A number of state policy-level disjunctures, discussed below, help promote and sustain the harmful separation between K-12 and postsecondary education.

A.) MULTIPLE AND CONFUSING ASSESSMENTS

State K-12 standards have swept across the country with scant participation by postsecondary education institutions or systems. Postsecondary admissions and placement officials overwhelmingly reported that they were unaware of K-12 standards and assessments, and K-12 educators were usually unaware of specific postsecondary admission and placement policies. Postsecondary education respondents stressed that K-12 policies are politically volatile and may change quickly; therefore, they were wary about using data from K-12 assessments because they did not want to become tethered to tumultuous, and politicized exams. Both K-12 and postsecondary education interviewees consistently stated that no one asked them to participate in devising the others' standards or assessments.

“So many students come to this college with not a clue that they’re underprepared. They get those [placement] test results and they are sometimes very upset.... We always have people here who got B’s in English and test into developmental English and they think they know how to write and read, so it’s a surprise.”

MARYLAND COMMUNITY COLLEGE ADMINISTRATOR

In addition, many K-12 respondents indicated that new testing burdens keep them too busy to attend to other needs, such as helping students prepare for college. Counselors have less time than ever to be “college counselors.” Instead, they are often the testing coordinators for their schools, in addition to being in charge of course scheduling, academic advising, career planning, mental health counseling, and other responsibilities. Many K-12 educators stated that they are trying to “sit out” the current reforms and wait for them to disappear.

From a student perspective, the resulting testing burden is very high; between high school and college, all students, but particularly college-bound students, face a confusing set of exams. In high school, most students take state-mandated assessments, district tests, and exams in their individual courses. Students preparing for college often take a number of other tests. These include multiple Advanced Placement (AP) tests, the SAT I, multiple SAT II tests, the ACT, and tests that help students prepare for those tests, such as the PLAN and the PSAT. Once students are admitted to a college or university, they typically have to take one or more placement exams to determine whether they are ready for college-level work. Departmental faculty members often develop their own placement exams as well. While many colleges use the same tests for admission (e.g. SAT or ACT), each may have its own placement test (or series of tests), and there is little uniformity among these tests. Community colleges do not require entrance examinations for most programs, but, in most cases, degree-seeking students cannot enroll and register at a community college without taking a placement exam. In 1992 in the southeastern United States, colleges and universities administered nearly 125 combinations of 75 different placement tests.^{xxvii} Departmental faculty members often develop their own placement

exams as well. Compounding these issues is the finding that many postsecondary institutions were not confident that their placement processes met students' needs, and few conducted research regarding the efficacy of placement processes.

In California, college-bound students can end up taking over 20 tests between high school and the beginning of college; that does not count district and classroom-level exams. The former superintendent of Long Beach Unified Schools estimated that, throughout their K-12 years, students in that district would take approximately 14 district tests.^{xxviii} Texas has a required statewide postsecondary placement test (TASP), but many Texas universities also use their own additional placement exams. Also, meeting exit-level standards on tests such as California's High School Exit Exam or for Oregon's Certificate of Initial Mastery does not signify that students are prepared for college-level work. Nor does it signify that students are prepared to score highly on the SAT or ACT, the dominant entrance examinations for college admission.

All this testing creates a difficult situation for students. On each exam, many of which have different formats, they are tested on different content and on a range of standards. New K-12 standards and assessments increasingly require students to construct meaning, solve problems, and learn cooperatively, in addition to memorizing facts. At the same time, postsecondary education admission and placement policies are mostly based on multiple choice tests, grades, and other "objective" measures of students' secondary-level performance. College placement exams often measure students' knowledge of a subject according to a standard set by large-scale assessment developers or by professors in university departments.

Differences in the content and format between assessments used at the K-12 exit and college entrance levels point to variances in expectations regarding what students need to know and be able to do to graduate from high school and enter college. Many of those differences evolved in an era when only a small fraction of the student-age population attended college. But the differences in expectations are outdated, and the current situation can damage student preparation for a large number of students. Different standards can create confusion and can hinder students' abilities to prepare well for tests, and for college-level work. Many of the community college students reported not knowing of the existence of placement tests, and most high school and college students reported feeling overwhelmed by the testing burden. One college student highlights the proliferation of tests noting, "We just took so many of those tests in high school...we just took them and didn't really even pay attention to what it was about."

This study found several discrepancies between K-12 and postsecondary assessments. For example, approximately 33 percent of the items on any state high school-level assessment were framed within realistic situations, and as many as 92 percent of the items were contextualized. In contrast, the placement tests and college entrance exams assessed examinees primarily with abstract questions. Also, many states are using writing samples in their K-12 assessments. By contrast, the ACT and SAT I use multiple-choice formats to test writing attainment (although the College Board is planning to add a writing component to the SAT I).^{xxix} (See sidebar for additional RAND findings, page 24.) Other studies have come to similar conclusions. For example, the Education Trust has shown that placement standards in mathematics often include Algebra II, while admission tests rarely exceed Algebra I.^{xxx}

RAND researchers, conducting research for The Bridge Project, found the following discrepancies in the studied subject areas:

MATHEMATICS: State high school assessments are more likely to contain open-ended items than are either college admissions or college placement tests. State assessments are also most likely to include items framed within a realistic context. College admissions exams, as well as college placement tests, assess intermediate algebra and trigonometry to the greatest extent. College admissions exams are also most likely to contain logic items, which are generally absent from other types of assessments. College placement measures contain, on average, the highest proportion of procedural knowledge items; college admissions exams contain the fewest. Problem-solving items are relatively uncommon, but are most likely to be on college admission tests, followed by state assessments, and then college placement tests.

READING: Most of the reading tests measure reading proficiency solely with multiple-choice items. College admissions tests are more likely than either college placement or state high school tests to assess inference skills.

EDITING: College placement tests are more likely to assess recall skills than are state tests or college admissions exams.

WRITING: Few college admission exams or commercially-available placement tests require students to produce a writing sample. In contrast, the majority of state high school tests require a writing sample.¹⁰

B.) DISCONNECTED CURRICULA

Most states require that teachers teach, and students learn, a certain set of knowledge and skills by the time students graduate from high school. Usually, state- and school-level graduation plans vary, depending upon whether a student intends to attend college or not. Consequently, many high school graduation standards do not meet the demands required by college entrance or placement requirements, but that is not usually publicized by high schools or colleges. There are many inequalities related to high school course-taking patterns; for example, students of color are over-

represented in nonhonors and general education graduation plans.^{xxxi} Out of the six states studied for this report, only Texas has legislated curricular alignment across the systems; the legislature has specified that the college preparation graduation plan will be the default curriculum for all public high schools by 2005.

Most states have large gaps between the two sets of standards. Table 4 illustrates California’s curricular disconnects.

“About 20 years ago, word got out the University of Georgia would give extra weight to the GPA if honors courses were taken. At that point, one school system changed all its courses to honors courses. There is nothing to keep a school from doing that; there is no standardized definition of honors.”

GEORGIA STATE OFFICIAL

¹⁰ For more data from RAND’s analyses, please see the project’s website at <http://bridgeproject.stanford.edu>.

TABLE 4

CALIFORNIA'S HIGH SCHOOL GRADUATION AND UNIVERSITY ENTRANCE COURSE REQUIREMENTS

	Four-year public universities in California require:	California's minimum high school requirements
English	4 years college preparatory classes; regular writing, and reading of classic and modern literature	3 years
Mathematics	3 years college preparatory classes required, 4 years recommended; elementary and advanced algebra and two- and three-dimensional geometry	2 years
Laboratory Science	2 years required, 3 years recommended; fundamental knowledge in biology, chemistry and physics	2 years (including biological and physical sciences)
History/ Social Science	2 years U.S. history, American government, world history, cultures and geography	3 years
Language Other than English	2 years required, 3 years recommended; speaking, understanding, grammar, vocabulary, reading and composition	none
Visual and Performing Arts	1 year; dance, drama/theater, music and/or visual art	1 year of visual or performing arts or second language (other than English)
Electives	1 year; visual and performing arts, history, social science, English, advanced mathematics, laboratory science and languages other than English (www.ucop.edu)	2 years of physical education and other coursework as the governing board of the school district may by rule specify (California Education Code 51225.3)

A particularly troubling issue arises with regard to community college standards. Community colleges admit any adult who can benefit from the college's courses; this policy seems to suggest to students that there are no curricular standards. That, however, is not the case. One set of community college standards is embodied in placement tests, which are usually set at a higher level than high school graduation requirements. If students are not prepared for college-level work when they enter a community college, they spend more than two years trying to earn a transfer degree. Another set of standards are attached to transfer degrees. In most public systems, in order to transfer to a four-year institution, community college students must complete two-years of college-level work. In addition, many technical and medical programs in community colleges are selective and require students to go through an admission process. As stated earlier, because 88 percent of 8th graders aspire to attend college, and approximately 70 percent of high school graduates do attend some form of postsecondary education program, it makes sense to close the curricular gap between the two levels and provide opportunities for all students to prepare well for college.

"There are people from our school who got straight A's, and they've gone to UIUC [The University of Illinois, Urbana-Champaign] and flunked out or got like C's and D's."

ILLINOIS STUDENT

Community colleges are unique in mission and function: they are open access and welcome all who can benefit from the instruction they provide. Because community colleges serve as the point of entry for almost half of U.S. undergraduates, particularly for economically disadvantaged students, they play an important role in the high school-to college-transition. In the context of K-16 research, community colleges are crucial, as they link to both high schools and four-year institutions. Yet two-year institutions are not studied much by researchers, and are often not major players when states develop education reforms.

It is clear that community colleges should be part of these K-16 discussions to ameliorate some of the current disjunctures. They have open enrollment policies and often do not advertise their academic standards and placement procedures; many community college students are unprepared to do college-level work and often do not complete their intended degree or transfer programs. This lack of preparation calls attention to issues of high school course-taking, placement, remediation, persistence, transfer and degree completion. A community college administrator stated that, “Probably just like everybody else [I believe it should be] a seamless flow for the students. The content, the knowledge they had in high school should be a foundation for them to be successful in college. That transition should be as smooth as possible. They should be able to walk into those [college] classes and feel confident.”

Across the country, community colleges face budgetary constraints and general resource problems. For example, there are few community college institutional researchers who can gather data and analyze the effects of their programs and policies on students. The data that do exist are usually not connected to data collected by other educational entities, such as local high schools or neighboring four-year postsecondary institutions. Consequently, most community colleges cannot be certain, for example, of the number of their transfer students who earn a bachelor’s degree.

While community colleges take pride in providing all students with postsecondary opportunities and second chances, the growth in the entrance of underprepared students has forced them to modify policies and make the skills assessment and placement process the primary focus for entering students. None of the respondents had considered using existing data from K-12 assessments (or other such mechanisms) to determine a student’s readiness to do college level work. However, while that link has not been formed, there are many examples of successful local partnerships between community colleges, high schools, and four-year institutions. These practices offer a glimpse of how broader efforts might best be implemented.^{xxxii}

C.) LACK OF LONGITUDINAL K-16 DATA

Almost no state can answer the questions, “What percentage of students who enrolled in an early childhood education program entered college?” “What percent graduated from college?” Few states can even accurately determine their high school drop-out rates. Most states are not able to identify students’ needs as they transition from one education system to another, or assess outcomes from K-16 reforms, because they do not have K-16 data systems. A state that has made progress in this arena is Texas. It is working to develop a K-16 data system; the Texas PK-16 Public Education Information Resource project connects public primary, secondary, and postsecondary education data. Major issues to address when creating such a system include student privacy rights and student mobility.

If states are to determine students’ needs across the K-16 continuum, they must collect and use longitudinal data—for example, the percent of the students of color in a state who graduate from high school, attend college, and graduate from college—from across the K-16 levels. In Illinois, Texas, Oregon, and Maryland, data from postsecondary institutions were shared with high schools. Of the K-12 educators who knew about those data, none reported using them for any purpose.

D.) FEW K-16 ACCOUNTABILITY MECHANISMS

A related issue is the development of K-16 accountability systems. No state has implemented a comprehensive K-16 accountability system that includes incentives and sanctions for postsecondary institutions, or mechanisms that connect the levels. K-12 entities across the country face a variety of accountability measures, but postsecondary education has remained untouched. For example, under No Child Left Behind, schools will be accountable for closing the achievement gap between White, non-Latino students and students of color. Colleges and universities are not held accountable for that, and their achievement gaps (as measured by college persistence and graduation rates) are inequitably distributed.^{xxxi} It is important to note, however, that an accountability requirement that focuses on student persistence in, and graduation from, postsecondary education is difficult because 1) it is hard to determine if students intended to graduate from college and 2) many students end up attending several colleges (sometimes in several states) before they earn an undergraduate degree.

With so many confusing expectations—multiple assessments, unaligned curricula—it’s little wonder that students are confused about college entrance standards. Section 2 examines students’ attitudes and concerns by presenting additional findings—the findings from research in high schools in the six states and community colleges in three states. Nearly 2,000 students and their parents were surveyed; students were included in focus groups; and teachers, counselors, and administrators were interviewed.¹¹

¹¹ This study surveyed and conducted focus groups with students in honors classes (usually labeled, “honors,” “pre-Advanced Placement,” “Advanced Placement,” or “International Baccalaureate”) and nonhonors classes (usually labeled, “general education,” or as a 9th or 11th grade class, such as “11th grade history.”) The sampled schools in California had three tiers of programs, so researchers sampled from the “college preparatory” and “honors” tracks and not from the vocationally-oriented track. In that case, college preparatory was not truly college preparatory. For more detailed information about the design of this study, please see the Appendix.

E.) INSUFFICIENT K-16 GOVERNANCE MECHANISMS

In traditional state education systems, no one is held responsible for K-16 reform, and the education sectors often act independently, without regard to each other's reforms or needs. Also, when states do consider policy options to connect K-12 and postsecondary education, community colleges are sometimes not included in the policy discussions. This is problematic considering the percentage of students—especially students of color—who begin their postsecondary experiences in community colleges.

Few states have K-16 governing boards or councils, and when they do, they often have no legislated authority to develop and implement policies. Maryland and Georgia stand out as states that created P-16 or K-16 councils, comprised of representatives from early childhood education through college. Maryland's councils focus more on connecting teacher preparation with the current K-12 standards movement, while Georgia's council has student- and teacher-centered activities. Oregon's Joint Boards committee focuses primarily on the transfer function between community colleges and universities. In California, K-16 policymaking is divided amongst approximately a dozen groups, creating a rather fragmented approach.^{xxxiv} In order to create coherent, aligned, policies that span the K-16 continuum, states and regions need to have mechanisms in place to develop and oversee appropriate policies.^{xxxv} But these groups must have authority, and a mandate to create change; often, these groups are only symbolic in nature.

It is important to note, however, that most K-16 reforms are in their infancy. This is a critical time in their development and well-implemented, systemic, and comprehensive models must still be developed.

2.) Student, Parent, and K-12 Educator Understandings—and Misunderstandings—about College

With the disconnections come confusion, poor knowledge about specific policies and practices, and the stratified possession of knowledge—an inequitable distribution of who knows what about college preparation.

Students, their parents, and K-12 educators expressed confusion and frustration when they discussed their understandings of college entrance and placement requirements, and of related state-level policies. A significant cause of their frustration has to do with recent policy turmoil in K-12 education. The current reforms—especially state assessments—are adding to already hectic environments in which college counseling and related activities too often fall by the wayside. The findings presented here highlight both the similarities and differences between states and regions in terms of individuals' college knowledge—what people knew about how to prepare for college, and about college admission and placement policies. For example, some of the states had greater differences by race, others by socioeconomic status (SES).

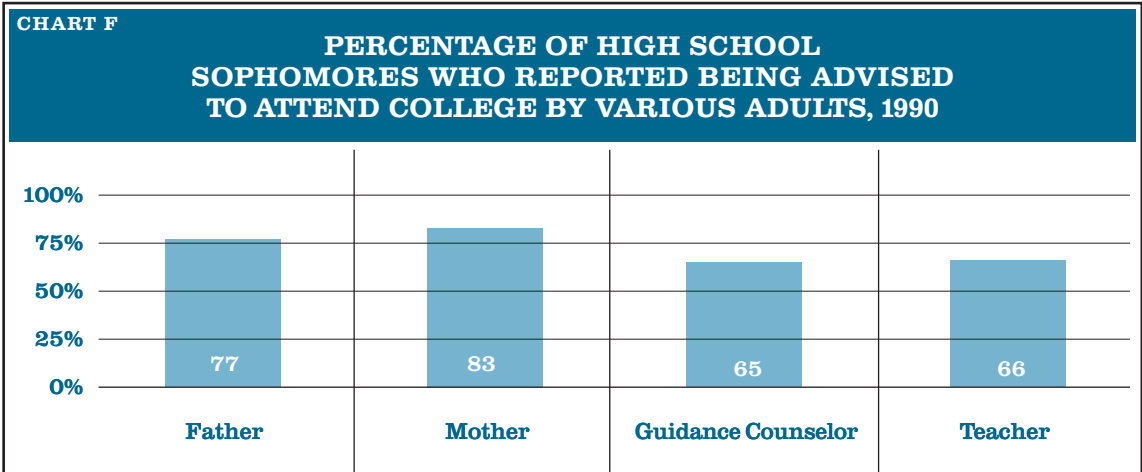
The parent surveys pointed to some good news. The majority of the parents surveyed had received college preparation information from their high schools with proportions ranging from 61 percent in California to 68 percent in Georgia. When disaggregated by SES level, disparities emerged, however; 42 percent, 44 percent, and 47 percent of economically disadvantaged parents in Illinois, Maryland, and Oregon, respectively, stated that they had received college information, as compared with 74 percent, 71 percent, and 66 percent of their more economically well-off counterparts.

Students were very worried that what they were learning in high school would not help them in college. Approximately half of the students wanted to go to the more-selective institution in their region, and slightly less than one-quarter aspired to attend the less-selective institution or local community college. As would be expected, a greater proportion of the students in honors English classes wanted to attend the more-selective institutions than did the nonhonors English students, but nonhonors students did show a substantial interest in the more-selective institutions.

Even though the majority of students wanted to attend college after high school, they confessed that they have a certain level of apathy about the college preparation process. Although students intended to attend college, the majority had not been involved in many college preparation activities. For example, approximately one-quarter of the students sampled in California, Illinois, Maryland, and Oregon had attended a college night. About one-quarter of the students sampled in California, Georgia, Maryland, and Oregon had taken the ACT or SAT. Nevertheless, many did engage in college preparation activities, such as visiting college campuses. Predictably, high-SES/honors students tended to participate more, and 11th graders were more active in, and informed about, college preparation activities than were the 9th graders.

Student aspirations differed by type of high school. Students in higher performing schools in Oregon, Texas, California, and Maryland tended to have higher aspirations in both honors and nonhonors classes. Also, many students across the six states, particularly honors students, looked down on community colleges. In Maryland, when asked about community colleges in the area, students in one focus group replied, “Usually, we’re making fun of somebody [who goes to community college].” High school students described community college as “last resort” and said, “you don’t want to go there.” Even so, some students pointed to the financial benefits of attending community college prior to transferring to a four-year school.

High school students are, however, talking with people about college. As Chart F shows, the majority of students are advised to attend college by their parents, counselors, and teachers. Our data show that, aggregating across the states, a greater proportion of students have spoken with a teacher about college admission policies than with a counselor. Also, honors English students tended to talk with counselors and teachers more than did their non-honors peers (see Tables M and O for more data).



SOURCE: America's High School Sophomores: A Ten Year Comparison, 1980-1990 (NCES 93-087), p. 47, U.S. Department of Education, National Center for Education Statistics.

Teachers are as likely to advise students to go to college as are guidance counselors, yet teachers often do not have access to the information they need.

The vast majority of K-12 educators interviewed expressed a deep concern about students' preparation for college. They cited a number of problems facing them and their students, including inadequate college resources and materials, inequitable college advising by counselors and teachers, inequitable college preparatory curricula, and a general lack of teacher knowledge of college preparation issues. Community college educators reported similar concerns. One community college advisor explained the disjuncture between high school graduation and preparedness for college by saying:

Well, I think the biggest thing for them is, here, they've graduated from high school but they come and take our placement test and they're still in pre-college reading, writing and math and they don't understand that if they stop taking math in their sophomore year that, you know, they don't get it...and I think the sad thing is that they say... 'no one told me that I should be taking math all the way through.' They just weren't warned or they don't remember being warned, so now they're having to pay for it, and that is extremely frustrating. I think it's embarrassing, especially with reading and writing. It's embarrassing to them. And they'll almost start crying because [they'll say], 'I graduated [from high school].'

A.) STUDENTS' COLLEGE KNOWLEDGE

Throughout the discussions with students, it became apparent that they had many misconceptions about college preparation and attending college. Below are the top ten myths that students believe about college.

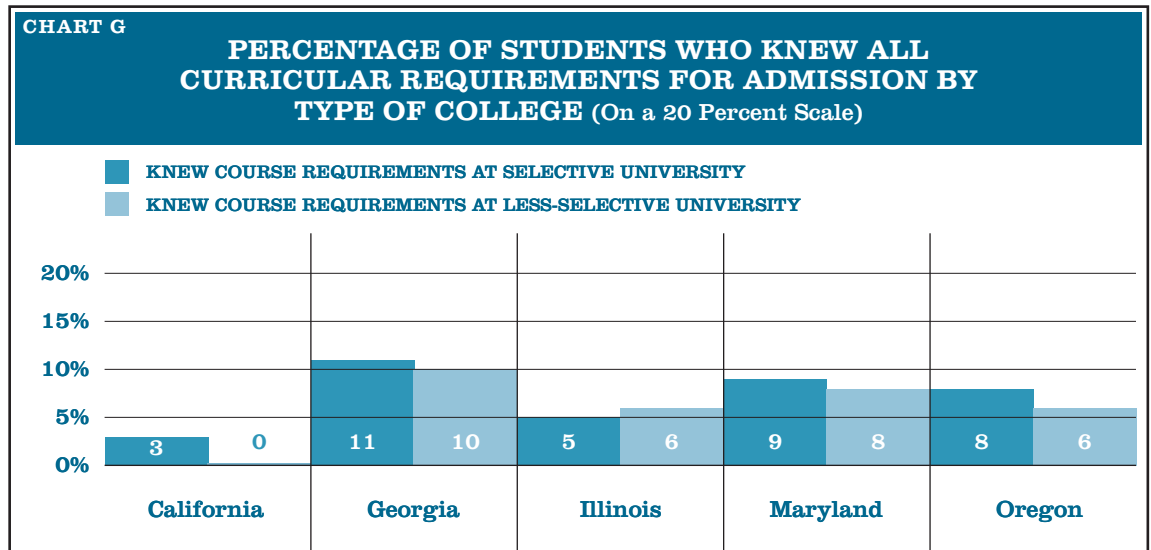
TABLE 5 STUDENTS' MISCONCEPTIONS ABOUT PREPARING FOR AND ATTENDING COLLEGE	
Many students believe that	In truth
I can't afford college.	Students and parents regularly overestimate the cost of college.
I have to be a stellar athlete or student to get financial aid.	Most students receive some form of financial aid.
Meeting high school graduation requirements will prepare me for college.	Adequate preparation for college usually requires a more demanding curriculum than is reflected in minimum requirements for high school graduation, sometimes even if that curriculum is termed "college prep."
Getting into college is the hardest part.	For the majority of students, the hardest part is completing college.
Community colleges don't have academic standards.	Students usually must take placement tests at community colleges in order to qualify for college-level work.
It's better to take easier classes in high school and get better grades.	One of the best predictors of college success is taking rigorous high school classes. Getting good grades in lower-level classes will not prepare students for college-level work.
My senior year in high school doesn't matter.	The classes students take in their senior year will often determine the classes they are able to take in college and how well-prepared they are for those classes.
I don't have to worry about my grades, or the kind of classes I take, until my sophomore year.	Many colleges look at sophomore year grades, and, in order to enroll in college-level courses, students need to prepare well for college. This means taking a well-thought out series of courses starting no later than 9th or 10th grade.
I can't start thinking about financial aid until I know where I'm going to college.	Students need to file a federal aid form prior to when most college send out their acceptance letters. This applies to students who attend community colleges, too, even though they can apply and enroll in the fall of the year they wish to attend.
I can take whatever classes I want when I get to college.	Most colleges and universities require entering students to take placement exams in core subject areas. Those tests will determine the classes students can take.

KNOWLEDGE OF CURRICULAR REQUIREMENTS

While the majority of students aspire to attend college after high school, their knowledge of specific college preparation issues was sporadic and vague. One measure of student understanding of post-secondary education admission policies is whether they knew the course requirements for admission at the two targeted institutions in their region. Both institutions in California required a specific number of completed courses in six subject areas. Institutions in all other states required courses in five subject areas.

“I heard [The University of Maryland College Park’s] pretty difficult. I have a couple of friends who go there. They’re freshmen this year. It’s harder for out-of-state kids, but for us, as long as you get good grades and you have a good teacher recommendation [you’ll be fine].”
MARYLAND STUDENT

Knowledge of this aspect of admission policy was poor in all states. As Chart G shows, less than 12 percent of the students knew all the course requirements for the institutions studied. This ranged from less than one percent in California to 11 percent in Maryland. This is surprising in California, since the state has developed well-publicized public university eligibility requirements (called the A-G requirements).



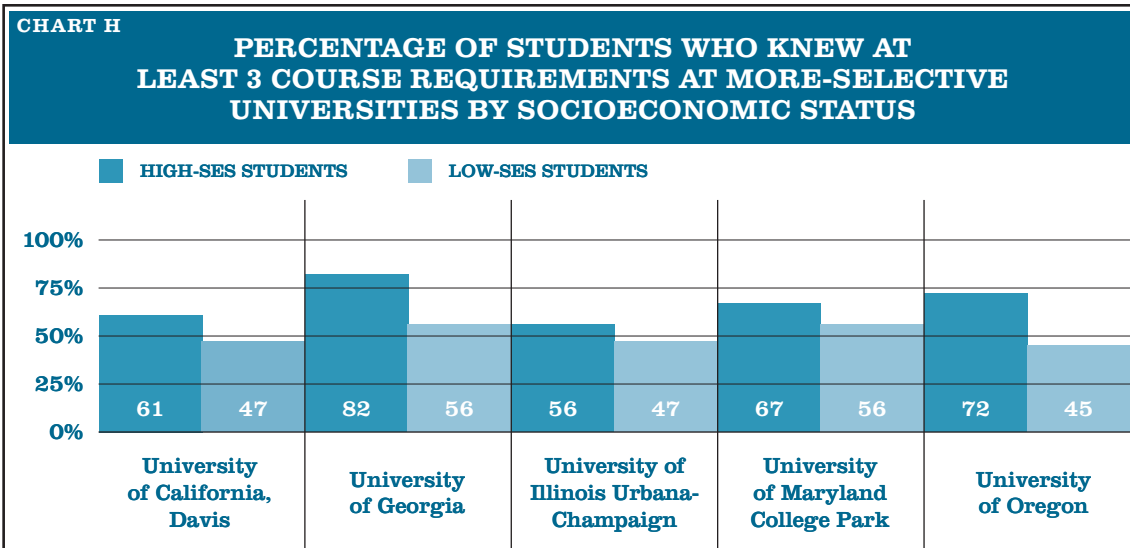
SOURCE: Bridge Project data

Across all states, less than 12 percent of students surveyed knew all the curricular requirements for admission to the studied postsecondary institutions.

A Maryland focus group also revealed the vagueness of students’ knowledge about college entrance requirements. One student stated that, “Different schools say different things. Like at one it could be the essay you write, you know. One could be, like, your grades, your GPA, your SAT. It depends on where you’re applying.” Another student added, “If you go wrong on the SATs, it basically screws you up for college, but if you do good in school and you do it all the time, that stands out more than the SAT.” Students often understood the centrality of GPA and SAT scores, but their understanding of other factors was weak.

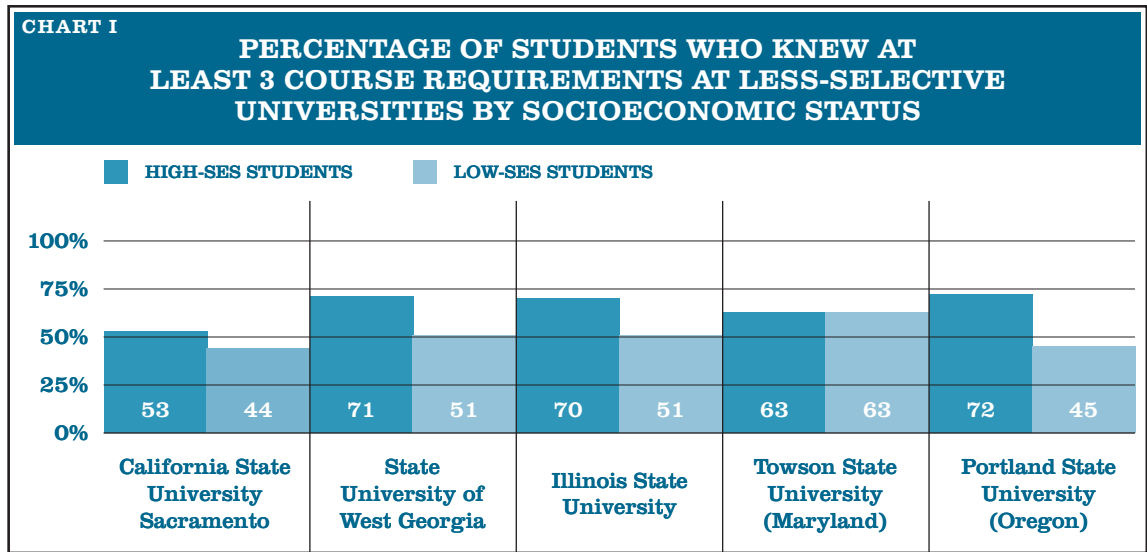
As Charts H and I show, students do appear to have considerable partial knowledge of curricular requirements. Slightly more than one-half of the students knew three or more course requirements and, in general, a greater proportion of high-SES students and students in honors English knew the requirements than did low-SES students and students in nonhonors English (high-SES and honors, and low-SES and nonhonors, were highly correlated).

“Sometimes it’s almost more frustrating to us that we preach their gospel to our kids and then somebody gets admitted anyway when we said you cannot go if you don’t take Algebra 3 and 4 absolutely, positively...and then I feel like we have a little bit of egg on our face.”
 OREGON COUNSELOR



SOURCE: Bridge Project data

A greater percentage of high-SES students knew a least three course requirements for admission to the more-selective universities studied.



SOURCE: Bridge Project data

A greater percentage of high-SES students knew at least three course requirements for admission to the less-selective universities studied.

Many students in the community college focus groups were very concerned about their preparedness coming out of high school. One student explained, “In my high school they didn’t prepare you for college at all. Well, I had college prep classes, but my school, they’re so quick to pass you...when I got here I was so used to being in a fly-by [easy] class, I was like, OK these teachers they don’t care if I come or not. I’m not gonna come. But when I got my transcript it was a totally different story. I was like, they’re not playing here.”

KNOWLEDGE OF PLACEMENT TESTS

Across five of the states, a greater proportion of students knew the required university placement exams of the less-selective university than those of the more-selective university, although knowledge about specific tests and subject areas was vague and incomplete.

Students in California showed a more sophisticated knowledge of assessment processes than did students in the other states, noting that the English placement exams are essays, while college entrance exams are multiple choice and vocabulary tests. As part of a collaborative agreement between a studied district and California State University at Sacramento, some students had taken a practice placement exam for the University of California or the California State University System via the Internet. Those students received clearer signals to students about postsecondary standards than did students in other districts.

Across all the states, less than one-half of the sampled students knew the specific placement testing policy for the institutions in the study. This ranged from approximately 16 percent who knew the policies for the University of California at Davis and California State University at Sacramento, to

43 percent who knew the policies for the State University of West Georgia. Logically, a greater proportion of 11th graders knew the policies than did 9th graders, but less than half of both groups knew the policies. Texas was the only state with a statewide postsecondary education placement test (TASP); only 11 out of 110 students knew about the TASP and what it tests. Students tended to guess which subject tests were required and assumed test requirements when there were none. This overestimation could create additional barriers in students’ minds if they believe there are additional hurdles to jump.

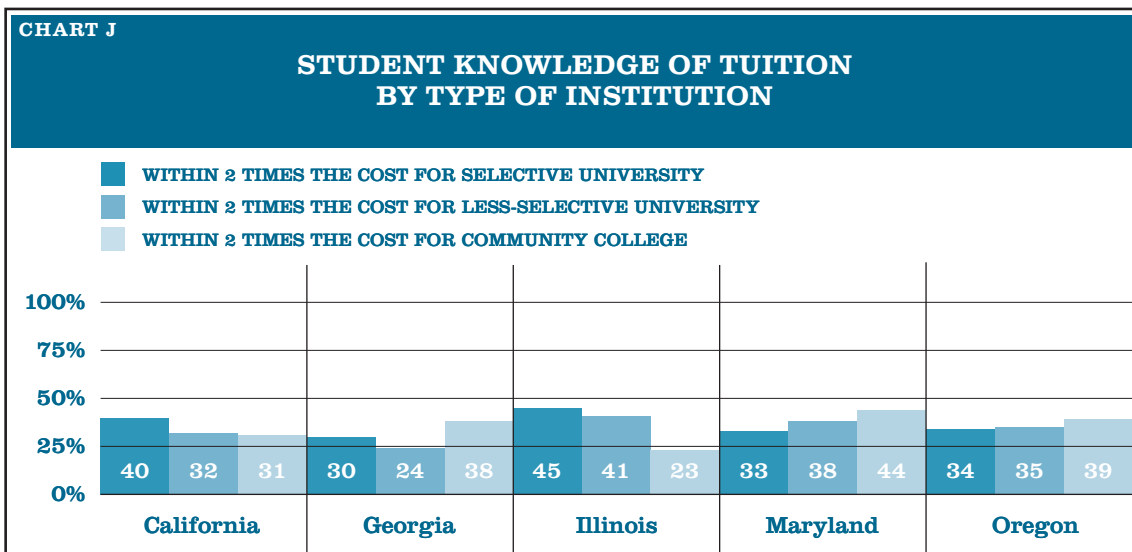
“I think they should prepare us better for the placement tests so that we don’t get stuck in basic classes. I think we should have the opportunity to know, not necessarily what’s on the test, but have a good idea of it so that we know what to expect.”

CALIFORNIA STUDENT

Students in the community college focus groups reported being unaware upon their enrollment that they were required to take placement tests. While not necessarily concerned or even fazed by these tests, it was clear that these standards conflicted with the perception of community college having low standards. As one community college student said, “So I did my orientation, and they told me something about testing. I was like, what? You have to do a test? I wasn’t ready to do this because usually, everybody said, if there’s a test, you have to get ready, you have to study, but no one told me about them when I graduated from high school.” Part of the reason students seemed relatively unperturbed by the tests, even though they were unaware of them prior to entering college, seems to be a result of the proliferation of tests they took in high school.

KNOWLEDGE OF TUITION

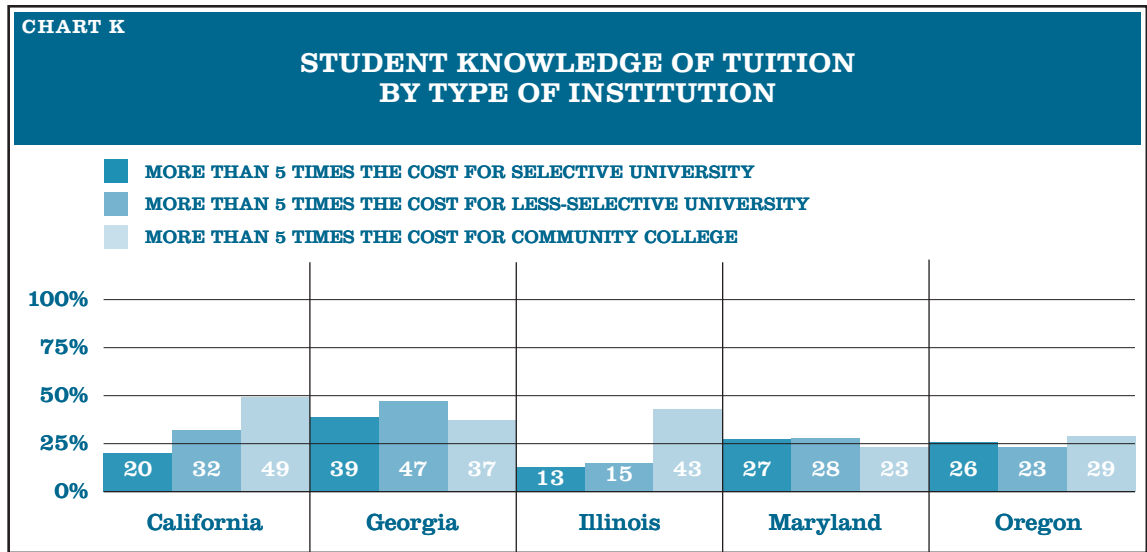
As Charts J and K demonstrate, students across the board overestimated the cost of tuition at their regional institutions.¹² This is consistent with other studies that examined students’ tuition estimates.^{xxxvi}



SOURCE: Bridge Project data

Less than half the students surveyed estimated tuition costs within two times the actual cost for each type of institution.

¹² The Texas surveys asked students to estimate the cost of tuition, fees, room, board, and books per year at the studied institutions; the other state surveys asked students to estimate the cost of tuition only per year at the studied institutions.



SOURCE: Bridge Project data

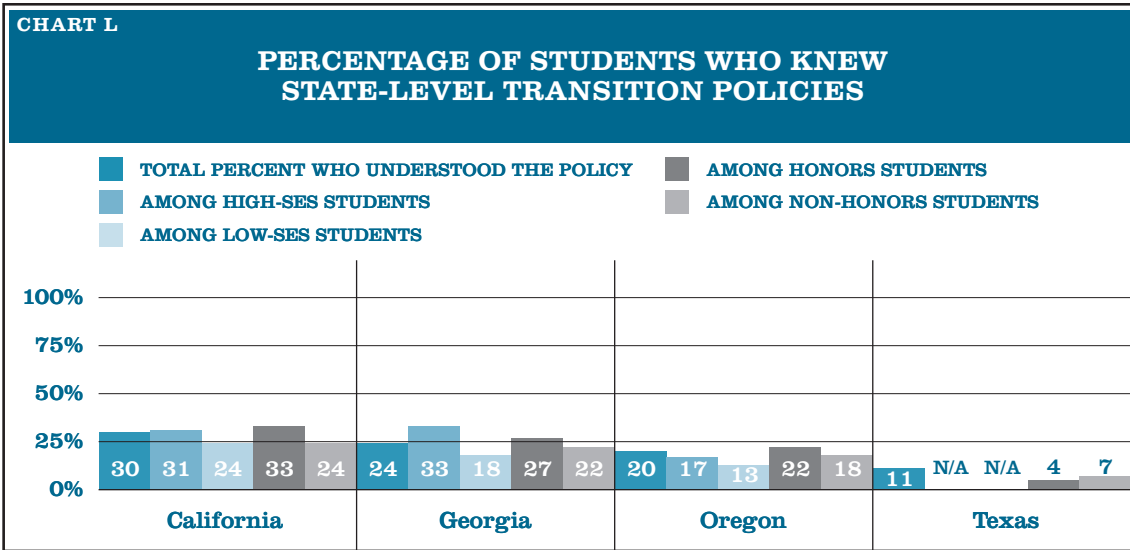
While students overestimated tuition at all types of institutions, they tended to have greater overestimations of tuition at less-selective institutions, including community colleges.

In Texas, while most respondents were relatively close to the actual amount, 22 percent estimated the costs were between twice and five times more than the actual costs. Across the states, students overestimated the cost of community colleges and the less-selective university. While they still overestimated the cost of the more-selective university, in general, students were closer in estimates to the actual costs of these institutions. This pattern makes sense, since the costs of attending a community college or less selective institution are generally lower than the cost of attending a more-selective institution. High-SES and honors English students (again, highly correlated groups) tended to be slightly more accurate in their cost predictions. Overestimating costs can lead students, and their parents, to believe that they cannot afford college.

B.) STUDENT KNOWLEDGE OF STATE-LEVEL REFORMS

Student surveys in California, Georgia, Illinois, and Texas—states that had made recent education policy changes, such as the development of K-16 reforms—included questions regarding student knowledge of those policies. In California, since affirmative action practices had just been eliminated in public postsecondary institutions across the state, students were asked if they knew that race was not an important factor in undergraduate admissions. In Georgia, the surveys collected data on whether students knew the HOPE Scholarship’s program requirements.¹³ In Oregon, the surveys gathered data on students’ knowledge of the Proficiency-Based Admission Standards System (PASS). And in Texas, the surveys asked students to describe the statewide postsecondary education placement exam, the TASP. As Chart L demonstrates, across the states, less than 35 percent of students knew the policies, and there were knowledge gaps based on SES and honors status. One nonhonors focus group in Texas stated that the teacher talked about TASP during class; that explains why a greater percentage of nonhonors students knew about the TASP than did the honors students. Without that one class, no nonhonors students would have demonstrated knowledge of the TASP.

¹³ At public colleges, the HOPE Scholarship provides full tuition, approved mandatory fees, and a \$150 per semester book allowance. For more information, see www.gsfcr.org/HOPE/. High school students must maintain a 3.0 or better grade point average to get aid. A recent statewide survey in Georgia found that the HOPE Scholarship is an effective signal for the majority of parents and students. See Henry, G. T. and R. Rubenstein. 2002. “Paying For Grades,” *Journal of Policy Analysis and Management*, Vol. 21, No.1, p.96.



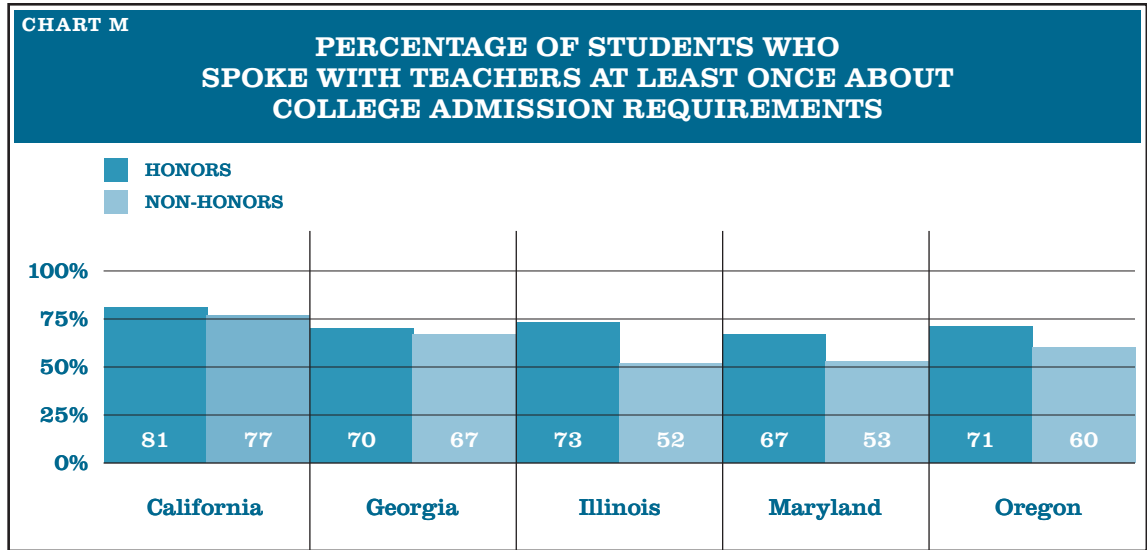
SOURCE: Bridge Project data

Across all states, less than 35 percent of students surveyed could accurately identify state-level transition policies, such as the Georgia HOPE Scholarship.

C.) TEACHERS’ COLLEGE KNOWLEDGE AND THEIR ROLE IN HELPING STUDENTS PREPARE FOR COLLEGE

Counselors often lack the time to provide adequate support for all students and so teachers, especially honors teachers, often try to fill in where counselors leave off. (Chart M shows the percentage of students who spoke with teachers about college admission requirement.) Yet teachers, by and large, are not nearly as connected to colleges as are counselors. Several teachers stated that students talk with them more frequently about college planning than with counselors; this may be because teachers are more accessible. But teachers usually do not have the training or materials they need to provide students with accurate, up-to-date information. One teacher in Georgia stated, “I wish the counselors did it [college advising] instead of us. It terrifies me and I think most teachers feel the same way—that we just do not know enough to be doing all this advising with our little hour or hour and a half session and our notebooks and the way [college requirements] change. I’m always really worried I’ll miss something.” Other teachers wanted to be more involved, but did not have up-to-date admissions and placement information. Sometimes they faced issues regarding territorialism when they trod on counselors’ turf. Researchers in Maryland found that counselors held almost a monopoly on college admission materials in the studied schools. Teachers in Oregon, Illinois, Texas, and Georgia reported that they get college information from graduates who are now in college, student teachers, newspapers, their own college experiences, and their children—not from institutional sources.

“The students consider [going to] their teacher far more often than they consider going to their counselor because if they have established a connection with a teacher, this is the most believable person to them and the one that they have the most frequent contact with.”
 OREGON TEACHER



SOURCE: Bridge Project data

In every state, a greater proportion of honors students spoke with their teachers about college than did nonhonors students.

Teachers in every state but California (a state with well-defined and well-publicized eligibility criteria) believed that admission and placement policies in the state and region are too complex. They often thought that the complexity of the policies, coupled with frequent K-12 policy shifts, made it difficult for them to stay abreast of the policies, especially in states where institutions were moving toward becoming more selective.

“In fact, about a month ago, one of my seniors said to me, ‘I’m going to take my placement exams for UIUC next weekend. Do you know what I’ll be taking?’ And I couldn’t answer that question. I didn’t know. As a teacher, I don’t get much of that information; basically, we’re uninformed.”
ILLINOIS TEACHER

Most teachers throughout the states were completely uninformed about specific placement policies. A Maryland teacher commented, “I’ve never seen [a placement test], so all of my presumptions are based on my experience with the placement tests ten years ago at a state college.” Another Maryland teacher said, “No kidding—every freshman has to take these tests?”

D.) INADEQUATE COLLEGE RESOURCES, CONNECTIONS WITH POSTSECONDARY INSTITUTIONS, AND COLLEGE ADMISSIONS INFORMATION FOR ALL STUDENTS

Students and educators from every state voiced some level of frustration about the resources, K-16 connections, and college information provided. For example, students in less advantaged schools and classes in Illinois, Oregon, and Texas in particular knew that students in wealthier schools had many more advantages.

Students, teachers, and counselors in Georgia, Illinois, Oregon, and Texas often stated that the information they receive from postsecondary institutions is not helpful; it is usually glossy and

superficial. They want information about course-taking patterns students should take in high school and the types of courses and majors offered at the institutions. One student in Illinois said, “Get rid of the nice, beautiful pictures and give us the actual details—what specific departments have to offer, the curriculum, what classes you’d be taking, what exactly you might be able to test out of...the job opportunities available after you graduate from college.” Also, students are not always receiving current information. An Illinois high school student stated that her school counselor had recently given her a state university’s application form from 1993.

A district in the Sacramento, California region stands out as having a promising set of policies geared toward helping students prepare for California State University, Sacramento (CSUS). The district and CSUS have a Memorandum of Understanding (MOU)—an arrangement between CSUS and the district that draws upon an Upward Bound program model. While each MOU is unique, the cornerstone is broad-based support and ownership on the part of school faculty, parents, and students. The four main purposes of the district’s MOU are: (1) to increase college awareness among parents and students in the district; (2) to increase the college preparation of students in the district beginning in grade 9; (3) to enroll 299 students per year from the district’s high schools; and (4) to ensure that matriculants from the district receive support to facilitate their graduation from CSUS. In this arrangement, CSUS places a staff member at participating MOU schools and the university provides “a different level of expectation of services,” according to the Vice President for Enrollment. CSUS helps to develop education plans, determine what educational needs exist, provide support services such as tutoring, and coordinate community-based organizations to work in and with the schools. According to the MOU, the “Guiding Principles” are as follows:

- Identify students who have college aspirations and motivate students who may not see college as their first option.
- Increase the number of students who enroll at CSUS with the requisite courses to reduce the need for remediation and help ensure their graduation.
- Place an outreach admissions professional within the district office.
- Commit to the value that it is possible and attainable for every child to learn.
- Monitor students’ decisions regarding coursework and intervene, when necessary, to insure that students consult with a counselor prior to changing.

The MOU offers a number of targeted services such as co-sponsored math and English articulation conferences, tutoring and mentoring, ACT and SAT test preparation workshops, application workshops, proactive college planning and guidance, monitoring of students’ academic progress, and administering CSUS’ placement exams on-site.^{xxxvii}

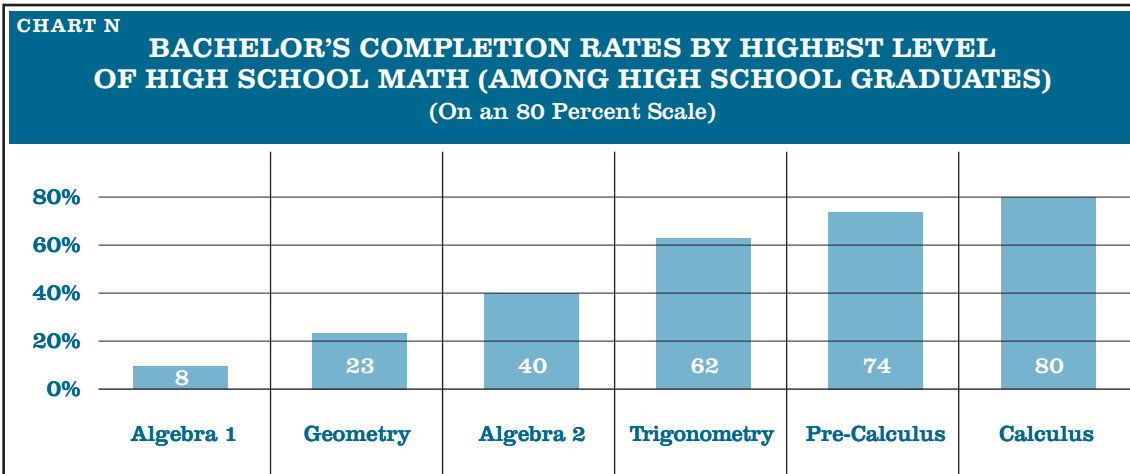
In Texas and Illinois strong networking occurred between rural, lower performing schools and the less-selective university in the study. Often, teachers at those high schools had attended the less-selective institution and encouraged their students to do the same. Many of the educators often believed that their schools were neglected by their local flagship university. In Oregon, the lower performing high schools had more of a vocational connection with community colleges; the higher performing high school had more of an academic connection with community colleges and with the four-year institution in the area. In all of the school districts in Illinois, staff members believed that articulation is smoother between high schools and community colleges than between high schools and four-year institutions.

E.) INEQUITABLE COLLEGE PREPARATORY OPPORTUNITIES FOR ALL STUDENTS

While most students need better information about college preparation, students who are in accelerated curricular tracks in high school receive clearer signals about college preparation than do their peers in other tracks. Students' high school course-taking patterns are the main predictor of college success. As Chart N shows, taking a high level of mathematics in high school, for example, is crucial. The impact of a high quality, rigorous, high school curriculum on degree completion is more pronounced, positively, for African American and Latino students than any other pre-college academic resources indicator.^{xxxviii}

Also, students in high-level courses often receive the information from a variety of sources, including the challenging content of their courses, university recruitment efforts, their parents, counselors, other students, and teachers who are knowledgeable about college-level standards. But many students in middle and lower level high school courses are not reached by higher education outreach efforts, or by college counseling staff in their high schools. Many economically disadvantaged parents often lack experience and information concerning college preparation for their children.

Many honors students believed that students need to start preparing, academically, for college in 9th grade or later, but stated that they had started much earlier, often in elementary school. In the Texas sample, although both honors and nonhonors students seemed to believe that they did not have enough information regarding how to prepare well for college, they planned their paths in different ways. On average, the honors students said they enrolled in the most difficult classes in the hopes that they would be able to gain admission to a selective institution. The nonhonors students stated that they assumed that they could gain admission to some postsecondary institution if they graduated from high school, even if they had not taken rigorous courses. Although students perceived correctly that there would be postsecondary opportunities at the community college level, they did not receive the important message that they would still be expected to perform at a level beyond the general education graduation requirements. Chart N shows bachelor's completion rates by the highest level of high school math the students finished.



SOURCE: Adelman, C. *Answers in the Toolbox*, U.S. Department of Education, Office of Educational Research and Improvement.

“Of all pre-college curricula, the highest level of mathematics one studies in secondary school has the strongest continuing influence on bachelor degree completion.”
Answers in the Toolbox, page vii

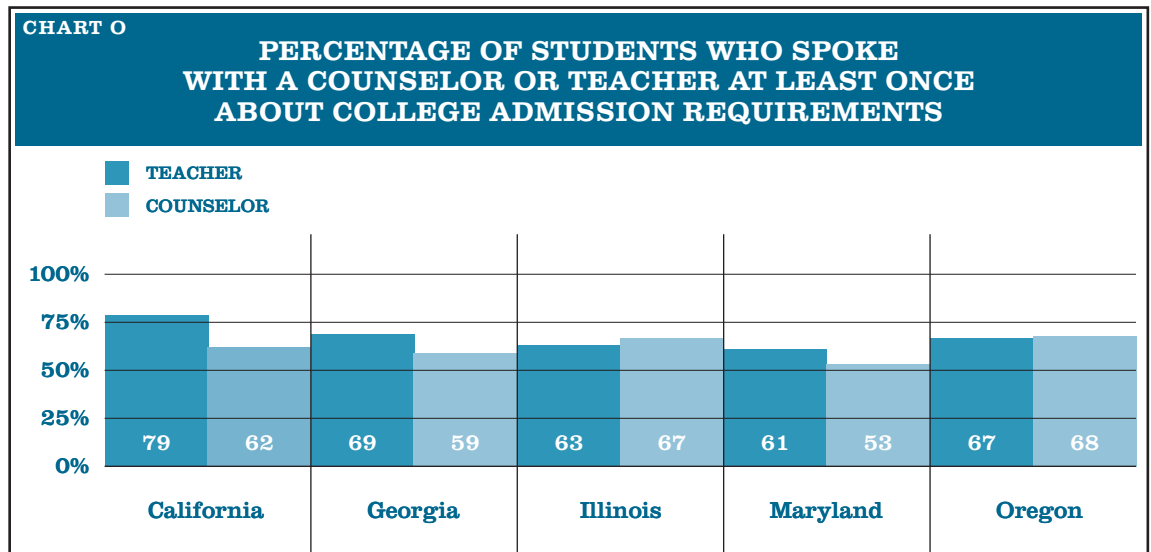
A school in the greater Portland, Oregon metropolitan area took a unique approach to developing courses that prepared students for college. The high school, a fairly high achieving school with a lot of resources, partnered with a local community college and state university to offer college preparatory courses at the high school. The courses were thematic in nature—they focused on a particular person or era and then integrated subjects such as art, literature, philosophy, science, and mathematics around the core theme. Students and teachers seemed genuinely excited with the course. It was, however, only offered to honors students.

F.) LACK OF COLLEGE COUNSELING FOR ALL STUDENTS

Counselors face a range of responsibilities that compete for their time, including test administration, course scheduling, providing mental health or other counseling services, addressing disciplinary issues, and supporting students with special needs. This leaves many students with few available people at the school site who are familiar with college transition issues. Many high schools do not have counselors who specialize only on high school to college transitions.^{xxxix}

“The counselors probably spend the vast majority of their time with five to ten percent of the students. The squeaky wheel is the student who is continuously running into problems; you see a lot of the same faces in there. The students who go to class every day, do their homework, participate in activities—they may come in two, three times a semester.”
 ILLINOIS COUNSELOR

An inequitable distribution of academic counseling and curricular opportunities in high schools can close off opportunities to college for some students, and lead to inadequate preparation for others. Many students in all of the states were dissatisfied with the college counseling in their high schools. For example, in Illinois, students reported their guidance counselors had been of little help in providing them with college admissions and placement information. One honors student said, “They just look at what you’re required to take to graduate [from] high school. The counselors don’t look at what you have to have to get into college.” Chart O shows the percentage of students who spoke with their counselor or teacher about college admission requirements.



SOURCE: Bridge Project data

Overall, aggregating all the state data, a greater percentage of students spoke with teachers than with counselors.

In Georgia, Illinois, Oregon, and Texas, the general belief among counselors and students was that only the most motivated students talk with their counselors about college, and that the conversations are initiated by students. For example, an Illinois student said, “You have to take the initiative. I think that a lot of times, a lot of students just don’t talk to their counselors about it; and that’s why a lot of us feel like we’re not getting all that we need.” Many students were concerned that college counseling is only for honors students.

Overall, our study found that many students, their parents, and educators are very confused or misinformed about how students should prepare for college.⁴¹ Students had vague understandings of specific admission and placement policies, and there were many inequalities between students in honors and nonhonors classes in terms of the amount and quality of the college counseling they received. Teachers in honors classes were more involved in college counseling than were teachers of nonhonors courses, and counselors had many responsibilities and could not focus on college preparation issues. Consequently, there was often no one at some of the schools who worked to “level the playing field” for all students.

From a policy perspective, it's no wonder that many students and parents are confused about what it takes to succeed in college, considering:

- the lack of policy coordination between K-12 schools and postsecondary education institutions;
- the inconsistencies between K-12 assessments and postsecondary placement tests;
- the disconnected curricula from high school to college;
- the lack of K-16 accountability; and
- poor and inequitable dissemination of admissions and placement information to high school students and their parents.

The recommendations in the next section were derived from the research conducted for this project, and from a review of the literature. Not all of the relevant project research is included in this report; to read the draft technical report from each state, please visit the project's website at <http://bridgeproject.stanford.edu>.

Recommendations and Summary

| BETRAYING THE COLLEGE DREAM |

How Connected Systems Can Help Students Prepare Better for College

None of the problems explored above will be easy to overcome, given the profound disjunctures between secondary and postsecondary education in the United States. Even if efforts to increase policy compatibility across systems succeed, there is no guarantee that the content of reform will reflect high-quality standards and assessment tools. In a rush to reach consensus, reformers might settle for the lowest common denominator. Simply aligning current standards and assessments, especially if they are of poor quality or are not aligned with what is taught in the classroom, will not solve deeply entrenched problems.

Our research found that the following three actions are most promising for immediate reform:

- Providing all students, their parents, and educators with accurate, high quality, information about, and access to, courses that will help prepare students for college-level standards.
- Shifting media, policy, and research attention to include broad access colleges and universities attended by the vast majority of students (approximately 80 percent). Unfortunately, media and much public policy attention is focused on those highly selective colleges and universities where persistence and completion rates are not as problematic.^{xli} Broad access colleges need the financial and policy attention of federal, state and other leaders. Increasing the rates of student success at these colleges is a sound public investment because it can have a tremendous impact on the civic and economic well-being of each state by improving people's economic security, increasing their civic participation, and increasing college completion rates for economically disadvantaged students and students of color.
- Expanding the focus of local, state, and federal programs from access to college to include access to success in college. For the past 50 years, it has made sense for the U.S. to concentrate its postsecondary education policies on opening the doors to college—and by and large these policies have a major positive impact. There remain significant gaps in enrollment and completion among ethnic groups, and between low- and high-income families. Also, college access varies greatly depending on where students live, and the level of their parents' education. These gaps suggest show that the nation's work, as effective as it has been, is not complete.

Access to entrance to college, however, is only half the picture. True college opportunity includes having a real chance to succeed, which clearly is not happening often, as indicated by the fact that the percentage of four-year graduates among the U.S. adult population has barely increased since 1980, despite increasing attendance rates.^{xlii} We found large differences in college knowledge, and in understanding what it takes to succeed in college, among students within schools by academic tracks and between schools by SES. It is time to expand policy attention to emphasize not just access to college, but also access to success in college. High school course content, academic counseling, college outreach, and other programming needs to reflect this so that students are clear about what it takes to succeed in college, including community college.

How can we achieve these ends? For a start, college-level stakeholders must be brought to the table when K-12 standards are developed. Likewise, K-12 educators must be engaged as postsecondary education admission and placement policies are under review. Reforms across the two education systems will be difficult if not impossible to implement without meaningful communication and policymaking between the levels.

There are several other important steps that states, K-12 schools and districts, postsecondary institutions and systems, and the federal government can take to improve the transition from high school to college for all students. These include:

- Ensuring that colleges and universities state, and publicize, their academic standards so that students, their parents, and educators have accurate college preparation information. Since almost all students are planning to attend college, all students should receive college preparation information and resources. Policy communication and signaling is key; not enough attention is paid to communicating clearly up and down the systems. This effort must go beyond targeted outreach, and fragmented categorical programs, to universal programs for all students. In addition, states should disseminate materials in several languages, depending on the language groups in their states.^{xliii}
- Examining the relationship between the content of postsecondary education placement exams and K-12 exit-level standards and assessments to determine if more compatibility is necessary and possible. K-12 standards and assessments that are aligned with postsecondary education standards and assessments can provide clear signals and incentives if they are high quality standards and assessments. Assessments should be diagnostic in nature, and the results should include performance levels that indicate to students that their scores meet or exceed the level for college preparation and placement without remediation. Appropriate K-12 assessments could be used as an admission and placement factor by public postsecondary education institutions, although caution must be taken to ensure that 1) more than one measure of student preparation is used and that 2) the stakes attached to K-12 assessments are not too high for students.
- Reviewing postsecondary education placement exams for reliability, validity, efficacy, and the extent to which they promote teaching for understanding. This includes scrutiny of assessments developed by individual campuses, departments, and faculty. Data need to be maintained regarding the efficacy of placement procedures. Consider using K-12 assessment data for postsecondary course placement purposes.
- Allowing students to take placement exams in high school so that they can prepare, academically, for college and understand college-level expectations. These assessments should be diagnostic so that students, their parents, and teachers know how to improve students' preparation for college.
- Sequencing undergraduate general education requirements so that appropriate senior-year courses are linked to postsecondary general education courses.^{xliv}

- Expanding successful dual or concurrent enrollment programs between high schools and colleges so that they include all students, not just traditionally “college-bound” students. Many students are

“The students that we counsel...they’ll choose the co-admit program because it connects them to our university and provides on-site advising at the community college so that there’s a seamless transition, or as near seamless as we can make it. It really is a nice program. They love it, and we love it because there are no surprises.”

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not comfortable socially or emotionally in high school environments, while others complete their schools’ highest level courses as sophomores and juniors and have trouble finding appropriate courses as seniors. In addition, concurrent enrollment programs can stimulate curricular review and innovation in both systems, as well as provide more purpose to the high school senior year. These programs are especially valuable for high schools that do not have the resources to provide college-level work on their own campuses.

- Collecting and connecting data from all education sectors. This means that states and regions should create common identifier numbers for students and track teachers during preparation and professional development programs. These systems can include, for example, data on the relationship between student coursetaking patterns in high school and the need for remedial work, and longitudinal trends on what happens to students after they complete remedial-level coursework. They also should be tied to a K-16 accountability system. Postsecondary institutions and K-12 schools need assistance in learning how to use data to inform curricular and instruction policies and practices.
- Providing technical support to states by having the federal government establish voluntary data collection standards. The inability to obtain complete and current data on issues that span the education sectors (such as remediation, student success in college after the completion of a pre-college outreach program, degree or certificate completion rates, the efficacy of placement procedures, and student persistence in postsecondary education) was evident throughout our study. Statewide data are spotty, and publicly available institutional data are rare. The federal government could provide technical support for states by establishing data standards in areas such as those mentioned above, and, as a condition for receiving federal funds, should require institutions to report those data annually.
- Expanding federal grants. Federal grants could be used to stimulate more K-16 policymaking. Specifically, federal competitive grants should be available for the following activities: 1) collaborative discussions between K-12 and postsecondary education, with requirements for examining and improving particular issues (such as the collection and use of data across the systems); and 2) joint development activities that enable students to transition successfully from one system to the next.

These recommendations will be easier to accomplish, and more effective in their implementation, if there is an overall organizational base for K-16 policymaking and oversight. While every state and region needs to have its own form of governance, there are many models that can be used. Most states implicitly discourage K-16 policymakers by having separate K-12 and higher education legislative committees and state agencies. These structural barriers inhibit joint policymaking and communication for issues such as funding, data sharing, student learning (curriculum, standards, and assessment), matriculation and transfer, teacher training and professional development, and accountability. Having a K-16 entity does not, however, ensure that innovative K-16 reforms will follow. Only a concerted effort by policymakers, educators, parents, and students will do the job. As evidenced by the major reform efforts in the studied states, changes take a long time, and need buy-in from a multitude of stakeholders. Implementing these recommendations will not magically eliminate the dozens of other reasons why students are not prepared adequately for college. But they are important steps toward developing a more equitable educational experience for all students, and providing all students with the preparation they need to succeed in college.

Appendix: Research Design and Methodology

| BETRAYING THE COLLEGE DREAM |

This report is the result of six years of field research, literature review, and data analysis. An overarching purpose of the Bridge Project is to support the development of policies that improve opportunities for all students to enter and succeed in postsecondary education. This project examined 1) the relationships between K-12 and postsecondary education as they relate to student transitions from secondary to postsecondary education, and 2) high school student, parent, and educator understandings of policies at the high school graduation and college entrance levels.

There are strong regional issues at play here. For example, the greater Sacramento, California metropolitan region—a site where this research was conducted—is very different from an urban area like Los Angeles or a rural area such as the Central Valley. Likewise, Northern Illinois is very different from down-state. This is an issue in every state included in this project. Also, since this project included more schools that are categorized as middle-to-higher achieving than it did very low achieving, chances are that these problems are worse elsewhere.

The field research was divided into two phases. In the first phase of the project, researchers sought to answer the following research questions: 1) What are the postsecondary education admission and placement policies within the six states? and 2) To what extent are policies, procedures, practices, and expectations compatible across state education institutions? By compatibility, researchers sought to understand whether, for example, state K-12 high school graduation standards ask students to know and do the same knowledge and skills as do the postsecondary admission and placement standards of the studied institutions in that state.

Project researchers interviewed approximately 165 people in state education agencies, state-level K-16 committees or councils, twelve universities, and six community colleges. The project included one region per state and two universities per region. One more-selective and one less-selective institution were included per region. Since funding was more limited for the community college part of the study, three states were included (California, Oregon, and Maryland), and a comprehensive literature review conducted. Researchers selected two community colleges per region, in the same feeder areas as the studied universities and high schools (see Table 2). Along with interviews with approximately 15 administrators and faculty per institution, two student focus groups were conducted on each of the six community college campuses. When possible, recent high school graduates were included in the focus groups to examine the link between their high school and community college experiences.

In addition, RAND researchers conducted content analyses of high school exit-level and college entrance-level assessments in each Bridge state.¹⁴

For the second phase of the project, the main research questions were: How are postsecondary education admissions standards and placement policies, and relevant state-level reforms, communicated to, and interpreted by, K-12 stakeholders? Are there differences in how student groups receive and interpret those policies? Researchers conducted field research in 24 high schools across the six states;

¹⁴ Illinois was not included in the RAND analyses because its assessments were not fully developed when Bridge analyses were conducted.

the high schools were all in the feeder area for the universities included in the study.¹⁵ They interviewed K-12 educators and staff (usually the principal, a vice principal, a counselor in charge of seniors or of college counseling, and four teachers per school), surveyed two 9th grade and two 11th grade classes (one honors and one nonhonors per grade level), surveyed those students' parents, and included subsamples of 11th graders in focus groups.

The names of the schools and districts are being kept anonymous at the request of the K-12 participants, but they are all in feeder districts for the postsecondary institutions studied.

The project included a range of school types. Schools were selected on several criteria, including test scores on statewide exams, percent of students enrolled in college preparation courses, SAT/ACT scores, racial/ethnic diversity, percent free/reduced lunch, college-going rate, and involvement in K-16 reform. Researchers interviewed 6-10 educators per school, conducted focus groups with groups of honors and "nonhonors" eleventh graders, and surveyed 2,013 students and their parents. Ninth and eleventh grade honors and nonhonors English classes were included, though a few classes were other disciplines such as social studies or history. Honors classes were defined as high-level courses that school staff believe prepare students well for college. Nonhonors classes were defined as mid- to lower-level courses that are academic in nature, but not as rigorous as the honors classes.

Each state followed very similar data sampling and collection procedures to allow for cross-case analysis. In general, there are more young women than young men represented in our study; this is probably because there are more young women in honors classes, and honors classes comprised half of the sample.

There were slight methodological differences across the states due to logistical issues (e.g., gaining approval from schools to conduct research in certain schools and classrooms), which resulted in slightly differing student and parent samples in each state. Differences among the state samples should be kept in mind when examining cross-case data. The primary differences to note are, first, with respect to socioeconomic status (SES). In three states, Georgia, Illinois, and Oregon, the majority of students in the samples fall into the middle SES category. The samples in California and, especially, Maryland, have a majority of high SES students. Racially, the California sample is quite diverse; Maryland's is primarily African American and White, non-Latino; Texas' is primarily Latino and White, non-Latino; and the remaining cases are predominately White, non-Latino (though there is some diversity within that category; for example, in Oregon, there are a lot of Eastern European immigrant and first-generation students). Texas was the pilot state and, consequently, the field research in the schools was substantially different. It was smaller in scope, more qualitative, and included middle schools and high schools. Lastly, the Illinois case is unique because data collection was spread out over two school years in which 9th and 11th graders were surveyed in May of one year and 10th and 12th graders were surveyed in September of the next (to keep the cohorts together).

¹⁵ Texas, the pilot state, also included three middle schools.

Endnotes

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Additional Resources

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Additional Resources:¹⁶

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For a more thorough analysis of Bridge Project data, please see Michael W. Kirst's and Andrea Venezia's forthcoming book to be published by Jossey-Bass in Spring 2004.

¹⁶ This is a list of resources not already cited in the endnotes. A more comprehensive K-16-focused bibliography is available at <http://bridgeproject.stanford.edu>.



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