Introduction

There is widespread agreement among policymakers, the business community, and educational leaders that the U.S. must raise the educational achievement of its young population. Simply stated, in a 21st century labor market, all high school students must graduate with the knowledge and skills needed to succeed in some form of postsecondary education. The challenge of providing this level of education can not be accomplished by K–12 education alone, but most college readiness reforms target K–12 only. Both systems have created academic preparation problems for prospective students, and both systems should work together to improve student preparation. Each sector also has unique responsibilities to improve college readiness. For example, it is up to higher education to provide clear signals about what students need to know and do to be ready for college-level coursework.

Currently, high schools—particularly schools that educate a large proportion of underrepresented students—are not connected to their local postsecondary institutions, and policies such as disconnected standards perpetuate the divide between the systems. Without clear signals from postsecondary education and policies that support, and create incentives for, improved connections between the levels, many high schools will be unable to provide the appropriate academic opportunities for their students.
Improving students’ college readiness must become a national, state, and local imperative, not just an altruistic gesture. The focus of our efforts must be on students who attend broad access institutions—insti tutions that enroll almost every applicant and that educate approximately 80 percent of the nation’s postsecondary students. Almost half of the nation’s postsecondary education students attend community colleges. Most media and public attention, however, focus upon the approximately 15 percent of students who attend the most selective four-year institutions; those institutions have the best-prepared students, and the most complicated methods of sorting and selecting applicants.

Broad access institutions admit almost every student who applies; getting admitted to college is not the most difficult hurdle. What most students do not realize is that they will face course placement tests after they enroll. Placement exams are hidden high stakes exams. The results of those tests will determine whether or not students can enroll in college-level courses. Approximately one-half of the nation’s entering postsecondary students do not meet placement standards and are not ready for college-level work. Enrolling in remedial work increases the time and money spent toward earning a degree. There is virtually no way to prepare for placement standards because they are not connected to K–12 standards, nor are they communicated to high school students or educators. Consequently, the students who receive the fewest college preparation opportunities in high school—who are often the first in their families to attend college and have to rely on public institutions to provide them with the necessary knowledge and information—face the biggest challenges when they start college.

Many states are developing policies to advance and support student achievement in K–12 schools, including standards-based reforms, state assessments, and high school redesign. Yet most standards-setting activities in K–12 systems stop at or before the 10th grade level, well before students reach college placement standards. State high school exit exams typically send students the message that 10th grade or lower skills comprise an adequate preparation for college. Yet few K–12 educators or students receive accurate information about what students need to know and do to succeed in college-level coursework. K–12 reforms alone can not improved college readiness and the policies to expand higher education access have not led to higher percentages of students earning a college degree.

There is great news amidst the concern. 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 education, and approximately 70 percent of high school graduates actually do go to college within two years of graduating. These educational aspirations cut across all racial and ethnic lines. Instead of supporting these aspirations, though, states have created unnecessary and detrimental barriers between high school and college—barriers that are undermining these students' aspirations and postsecondary success.
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, 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. Finance structures pit one education sector against the other, with few incentives for collaboration. Aggregated appropriations for each sector conceal expenditures and make it impossible to know the efficacy of particular funding decisions. 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. In order to remove these impediments, postsecondary education must become an active participant in preparing their future students for the rigors of college-level work. This brief addresses these issues and makes policy recommendations geared toward providing opportunities for more students to enter and complete postsecondary education.

The Problem

While there are many factors that contribute to these problems, a profound organizational, political, and cultural chasm persists in most states between the systems of K–12 and higher education. This disjuncture hinders students’ abilities to prepare for and complete postsecondary education.

The origin of this fissure between K–12 and postsecondary education in the U.S. stems, in part, from the laudable way the nation created mass education systems to deliver curricula for both K–12 and higher education. The U.S. comprehensive high school was designed for many often conflicting purposes, and it did not focus primarily on college preparation. College preparation was offered to a minority of students in a track of challenging courses.

The two education sectors also operate in separate professional worlds. Within each state—and at the federal level as well—a division exists that is based on the historical and pervasive assumption that K–12 schools and postsecondary institutions should be guided by policies exclusive to each sector. As a result, the public policy "tools" that influence one sector—funding, accountability, assessment, and governance systems, for instance—have little in common with the policy tools that influence the other. Moreover, there are separate state boards of education for each level, separate legislative committees, and boards that coordinate one level without involving the other.

The issues of sector disjuncture and college readiness lack an immediate audience or constituency, and remain largely invisible because they fall between the cracks of separate governance and policy systems. Research indicates that connecting the systems and ensuring that they work together closely can improve college preparation, readiness, and completion. But
we have scant research showing how these fractured systems can overcome huge obstacles to policy integration.

Many states have begun to organize councils or commissions that include representatives from both K–12 and higher education to resolve cross-sector issues. But simple cooperation is not sufficient to create the reforms that are needed. As one state commissioner for higher education said recently at a meeting of K–12 and higher education policy makers, "It was naïve thinking that if you got the right players around the table, you'd get the right things done. It helps to have an agenda." In fact, statewide K–16 structures have in some cases become forums for discussion only, rather than drivers of change.

Effective state efforts to improve linkages between schools and colleges must extend well beyond local or regional collaborations. They must reach further than joint meetings or new memoranda of understanding. And they need to go beyond structural tinkering in schools, colleges, or government oversight groups. The educational needs of students demand changes in the fundamental policies that created and now reinforce the chasm between K–12 and postsecondary education. The recommendations below are geared to meet those challenges and demonstrate that neither level can improve the situation alone.

Recommendations

Our research shows that states must create reforms in four key policy areas and connect elementary and secondary education with postsecondary education across them all: curricula and assessment, finance, data collection, and the public reporting of student progress and success. Governance mechanisms must reinforce and sustain those efforts. Specifically, state governments can make substantial gains toward closing the longstanding gap within our education system if they:

**Stimulate high schools and colleges to align their courses and assessments in order to improve college readiness.** Right now, the standards movement in K–12 education and efforts to improve higher education are operating on different tracks. For example, a widespread strategy to improve student readiness for college has been to increase enrollment in college-preparatory courses. Yet despite some successes, remediation rates in colleges have been estimated to be more than 60 percent at two-year institutions and approximately 40 percent at four-year institutions nationally. As a nation, we are learning that the number of courses that high school students take, and the units and names assigned to those courses, are often inadequate proxies for whether or not high school graduates are prepared to succeed in college-level work. The quality and level of the coursework and instruction, and their degree of alignment with postsecondary expectations, are the key elements of effective reform. Ideally, exit standards from one education sector would equal
the entrance and placement standards of the next, while ensuring that there are multiple paths of study for high school students, since “one size” does not fit all. For example, some students might wish to follow a purely academic path while others might desire a more applied course of study; both pathways would lead toward the development of the same set of knowledge and skills. That would send a crucial signal about college readiness to all students and particularly to students whose parents did not attend college and who are navigating the systems on their own.

In addition, the benchmarks for high school assessments in most states are pegged at the 8th, 9th, or 10th grade levels. States should signal to students that they need high-level academic knowledge and skills to be prepared for any form of postsecondary education, and standards and assessment are powerful signalers. Few standards are developed for 11th or 12th grades or connected to the academic expectations of colleges. States can improve assessment alignment in several ways. The California State University (CSU) System worked with the state’s K–12 system to augment, jointly, the state's 11th grade test. This is ideal because the CSU's standards are embedded in the high school curricula and students have opportunities in their senior year to improve their level of preparation. Other states, such as Colorado, Illinois, Maine, and Michigan are including items from the ACT or SAT on their high school assessments. This decision is not without its problems, however. ACT or SAT standards might not align with states' K–12 standards, and most teachers are not trained to teach to ACT or SAT standards; consequently, the assessments will likely not connect classroom-level teaching and learning with postsecondary expectations. Also, the ACT and SAT are proxies for postsecondary expectations.

Aligning expectations and giving students information about their level of readiness while they are still in high school could also ensure that students do not waste their final year in high school. Often, high school seniors who will attend broad-access institutions view their final months prior to graduation as an opportunity to take less demanding courses and enjoy nonacademic pursuits. Many students typically do not take any college preparatory mathematics, nor are they exposed to rigorous reading and writing opportunities during their senior year. The economic and social consequences of this “senior slump” are considerable. The lack of an appropriate emphasis on academic work in the senior year is reflected in the rising cost of remediation, as more college freshmen enroll in remedial writing, math, and science classes; the high dropout rates among college students who are unprepared for college-level work; and poor academic skills among those high school graduates who move into the workforce or the military.

Provide incentives in state budgets for increasing the proportion of students who complete high school and enroll in college. Most state systems perpetuate the divide between K–12 and higher education by creating separate, aggregated, streams of financial support for each sector. State budgets lack any incentives to promote college-readiness reforms. For example, states could offer financial incentives to both systems to offer dual enrollment or to reduce remediation.
While no state has fully established an integrated K–16 finance model, Oregon may be moving in that direction. The Oregon Business Council analyzed state expenditures in 2002–03 for both schools and colleges as though they came from one budget, and found that the per student level of investment varied by grade and degree—with community colleges receiving the least state aid and K–12 special education receiving the most. It recommended to the governor that Oregon reform its system so that, among other things, budgets would explicitly decide the level of support per student for different services and the measurable outcomes anticipated. The governor of Oregon and a joint board that includes members from both the state board of education and the board of higher education have called for the establishment of a unified education system with curriculum alignment and a budget that connects all sectors. More states should follow a similar path.

State financial aid, a traditional means for broadening access to college, can also be used to leverage college-readiness reforms. Indiana’s Twenty-first Century Scholars Program is an excellent model for how a state can both broaden access to college and improve college readiness. The Scholars Program promises the future payment of college tuition for middle school students who qualify for the federal free and reduced lunch program. It targets low-income students in the 8th grade and requires each participating student to complete a pledge to finish high school, maintain at least a C average, remain drug- and alcohol-free, apply for college and financial aid, and enroll in an Indiana postsecondary institution within two years of completing high school. In return, Indiana (1) encourages the Scholars to pursue a college preparatory curriculum; (2) provides support services for them and for those who fulfill the pledge; and (3) pays their tuition and fees (after other financial aid awards) at a public institution in Indiana or contributes a similar portion for tuition at an independent college. The program pays for 80% of the approved tuition and fees for students completing a regular high school diploma; 90% of tuition and fees for students completing a more rigorous high school diploma, called a Core 40 diploma; and 100% of tuition and fees for students completing the most rigorous diploma, the Academic Honors Diploma. Through these incentives, the program sends clear signals to students regarding academic preparation for college. And the results are encouraging. In 1992, Indiana was 34th in the nation in terms of the percent of high school graduates that enrolled in college immediately after graduation; in 2002, it was 10th. It is hoped that improvements in postsecondary completion will follow. An important next step would be to align high school graduation and college entrance and placement standards.

Create data systems to track student progress across educational levels and institutions. Currently most states are unable to determine if their efforts to improve student readiness for college are having any impact. Although many states are working to improve their ability to gather information—Florida, for example, already has a model system up and running that links K–12 and postsecondary education, along with other public data—few, if any, currently link information from schools and colleges. Some states do not even collect data on the course-taking patterns of their high school students.
Consequently, in those states, it is impossible to determine the relationships between the courses that high school students take and students' persistence and success in college. Likewise, it is impossible to identify and analyze success rates for students who enter college from the workforce, students who attend part time, or students who attend multiple institutions. In short, the lack of reliable facts and figures that connect different levels of education makes it difficult to assess needs accurately, identify the worst problems, work toward finding solutions, and evaluate reforms.

States should be able to use their data systems to answer questions such as:

- How do students who take college-preparatory courses in high school perform in postsecondary education?
- Of those students who require remediation in college, what percentage took a college-preparatory curriculum in high school?
- How do students who earn a proficient score on a state’s K–12 assessment perform in college?
- What pedagogical approaches are common among high school teachers who consistently send well-prepared students to college?
- Given their students’ performance in college, how can high schools change their curricula and instruction to improve student readiness for college?

Publicly report on student progress and success from high school to postsecondary education. To be effective in improving college readiness, states should establish student-achievement objectives that require the education systems to collaborate on reaching them. Determining how to use the information to improve teaching and learning is an ideal area in which high schools and colleges should collaborate. For example, high schools should use data about their graduates' performance in college to improve their curricula, instruction, and grading practices.

Requiring educational institutions to report data to state departments of education, however, will not suffice in making the systems more accountable for student achievement. States need to work with educational leaders to develop clear student achievement targets that will require K–12 and postsecondary systems to achieve them jointly. Ultimately, primary outcomes for state accountability systems should include the percentage of the young population completing high school prepared for college (college readiness), the percentage enrolling in college (participation and access), the percentage staying in college (persistence), and the percentage graduating (completion). In addition, key indicators at various stages can include, for example, high school graduation and transfers from community colleges to four-year institutions.

Connect governance structures across the education sectors. To carry out the reforms that we have recommended, states need to provide incentives to integrate governance structures
across the education sectors. They should establish and support cross-sector commissions, charge them with specific responsibilities based in part on the preceding recommendations, provide the requisite resources, give them enough influence and authority to make real change, and hold them accountable for their performance. The agencies and groups involved with education within each state must also collaborate. Finally, strong leadership from both governors and legislative leaders, depending on the state, is needed to frame the college readiness issue to build public support.

The federal role. The federal government should play a role in this area as well. It can:

- expand the focus of federal programs to include not just access to college but access to success in college—access to the resources and information students need to prepare well for college;
- expand the 12th grade National Assessment of Educational Progress to include state-level data and link its standards to college readiness standards;
- amend No Child Left Behind to provide more focus on rigorous coursetaking in the 11th and 12th grades, while not creating incentives that could increase the high school drop-out problem;
- explore the possibility of using Indiana’s Twenty-first Century Scholars Program as a model for a federal financial aid program that combines need and incentives for rigorous course-taking;
- create incentives for states to collect and connect K–12 and postsecondary data, establish voluntary data collection standards, and provide technical assistance to help states develop high-quality data systems; and
- ensure that all federal education policies and grants encourage the sectors to work together whenever possible.

Conclusion

In many ways, the U.S. produces the college outcomes its systems of education were designed to produce. Its K–12 system was developed to provide education to everyone; its college and university systems were developed when only a few were expected to attend and complete college. Today, the vast majority of high school students aspire to attend college, but only about half of the students who enroll in college are prepared for college-level academic work. And less than 40% of the young workforce (ages 25 to 34) has a postsecondary degree. The era of providing postsecondary education for only a small group of students is over, yet our educational policies remain locked in a former era.

But improving the transition from high school to college is crucial, given the convergence of demographic changes throughout the nation, current educational inequalities, student aspirations,
and a global economy that requires higher levels of knowledge and skills than ever before. This imperative requires new resolve and reform within and across the postsecondary and K–12 communities. For the benefit of not only students and parents but all citizens, every state and the federal government can and should help close the divide between our nation's schools and colleges.

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