Measures that Matter

Making College and Career Readiness the Mission for High Schools: A Guide for State Policymakers

Achieve and The Education Trust

November 2008

Achieve

The Education Trust

About Achieve

Created by the nation's governors and business leaders, Achieve is a bipartisan, non-profit organization that helps states raise academic standards, improve assessments and strengthen accountability to prepare all young people for postsecondary education, careers and citizenship. Achieve has helped more than half the states benchmark their academic standards, tests and accountability systems against the best examples in the United States and around the world. Achieve also serves as a significant national voice for quality in standards-based education reform and regularly convenes governors, CEOs and other influential leaders at National Education Summits to sustain support for higher standards and achievement for all of America's schoolchildren.

In 2005, Achieve co-sponsored the National Education Summit on High Schools. Forty-five governors attended the Summit along with corporate CEOs and K–12 and postsecondary leaders. The Summit was successful in making the case to the governors and business and education leaders that our schools are not adequately preparing students for college and 21st-century jobs and that aggressive action will be needed to address the preparation gap. As a result of the Summit, 34 states have since joined with Achieve to form the American Diploma Project Network—a coalition of states committed to aligning high school standards, assessments, graduation requirements and accountability systems with the demands of college and the workplace.

For more information, visit Achieve's Web site at *www.achieve.org*.

About The Education Trust

The Education Trust promotes high academic achievement for all students at all levels—prekindergarten through college. We work alongside parents, educators, policymakers, and community and business leaders across the country in transforming schools and colleges into institutions that serve all students well. Lessons learned in these efforts, together with unflinching data analyses, shape our state and national policy agendas. Our goal is to close the gaps in opportunity and achievement that consign far too many young people—especially those who are African-American, Latino, American Indian, or from low-income families—to lives on the margin of the American mainstream.

For more information, visit The Education Trust's Web site at *www.edtrust.org*.

Dear Colleagues:

Over the past five years, we've made enormous progress as a country in clarifying the fundamental goal for high schools. In state after state, leaders have stepped up and said, "In the information age, it is no longer tenable for large numbers of our students to graduate from high school without the knowledge and skills that they need to be ready for college, work, and the responsibilities of citizenship. Instead of just getting some of our students to that level, we're going to make readiness for college, careers, and citizenship our core goal for all of our students."

More important, you have taken concrete actions to further that new goal. As of November 2008:

- Twenty-two states have adopted standards that define college and career readiness;
- Twenty states and the District of Columbia have adopted course requirements for a high school diploma that are aligned with those standards; and,
- Nine states administer at least one test measuring college and career readiness to all of their students.

These are hugely important steps, and many governors, state legislators, business, and education leaders worked very hard to convince the many doubters—both those who doubted the need for high standards and those who doubted the capacity of students or schools to meet them—that this step was both necessary for their states' futures and imminently doable with focused effort.

It would be nice, of course, if we could just celebrate the progress. But all of us engaged in this important work know that the job is not yet done. Simply put, changes that have been made to standards, course requirements, and tests aren't enough. In order to transform all of our high schools into engines for enabling all students to acquire the knowledge and skills that they need—and that we need them to have—states have to step up to a whole new set of responsibilities that go well beyond where most states have gone before.

This document is a guide to help committed state leaders think through this new set of responsibilities. Prepared with the guidance of outside experts, and informed by a rich set of discussions with 28 state and local leaders and experts who formed an advisory group to help us work through the possibilities, this document is formatted as a guide for broad-based discussions of next steps in every state.

Most of you already have made some progress on one or more parts of this agenda, but no state has yet taken all the necessary steps on any part of this agenda. In almost every area of needed activity, in almost every state, there are important steps that remain unaddressed. For example, getting standards that align the end of high school with the demands of college and careers is a critically important and difficult step to take, but it won't work if there are no grade-by-grade standards that provide a clear progression toward those standards—not lower standards. Nor will it work if states don't play a more proactive and significant role to ensure that every teacher has ready-access to high-quality, well-aligned curriculum and instructional tools and the support and training to use them effectively. Leaving it up to every school district to fill those gaps—under the guise of local control—won't work any longer.

And there still are hugely important roles for higher education that go well beyond just telling K-12 what to do. Those include agreeing on common placement standards, preparing more and better teachers to fill shortages, and

a careful consideration of how to improve teaching in higher education. Higher education cannot, in other words, simply sit on the sidelines.

While the steps ahead are not always easy, in almost every case the path has been paved by states—or, in some cases, localities—that are out in front and whose work gives us all powerful images of what is possible.

That, in the end, is what we hope will make this guide a powerful tool for you to use in the months ahead: the rich examples and creative thinking that so many thoughtful people have already done. By standing on their shoulders, we can all see the way ahead more clearly.

Michael Cohen
President
Achieve

Kati Haycock
President
The Education Trust

Table of Contents

Introduction

American high schools have a major gap to close—a gap that threatens not only the future of the students they serve but of our nation as well. At a time when postsecondary education or training has increasingly become a must for young people, most students continue to leave our high schools unprepared to pursue those options.

Consider: more than one out of every four students who starts high school won't finish on time. The figure is more than forty percent for students in minority groups who will soon be a majority of our public school students.[1] While most of our high school graduates are now going on to college, many of them are not prepared. Four out of every 10 new college students need to take remedial courses, including 25 percent of new students at four-year colleges and universities and 60 percent at two-year institutions.[2]

The bottom line: millions of Americans leave our high schools with diminished opportunities, unable to participate fully in our economy and democracy.

As a country, we're making progress in improving results and closing gaps in our elementary and middle schools. But somehow, we don't seem to be getting as much traction where it really counts: in what amounts to the final inning for many of our children.

Certainly, this is not because the teachers in high schools somehow aren't smart enough. On college admissions tests, school teachers perform as high as or higher than college graduates as a whole.[3]

It's not simply because of surging hormones among the students, either. While older kids in general don't grow academically at as fast a pace as younger kids do, secondary school students in other countries demonstrate considerably higher achievement than our high school students.[4]

And it's not because there is too little testing. High schools are, in fact, awash in tests.

What is clear is this: significantly improving a high school, and ensuring that its students are well prepared, requires a whole lot of effort from a whole lot of people pulling in the same direction. It requires agreement on the goal, a clear sense of the primary means for getting there (such as high-quality instruction, respectful relationships, and serious student effort), and honest yardsticks for benchmarking progress along the way.

Moreover, meeting benchmarks has to matter to everybody whose efforts are essential to achieving better results.

Until recently, though, there hasn't been an agreed-upon, overarching goal for high school. Most students see the goal as college, but many policymakers at the state and district level have been content with a more basic set of standards that leaves too many students short of college-ready. Educators vary dramatically in how they see or prioritize the goals. Some do a superb job preparing students for postsecondary opportunities. Others are focused inordinately on preparing students for tests, while others prefer not to be bothered by system-wide standards or goals and focus instead on their own favored topics and units. Still others are simply focused on getting through the year.

1 Jennifer Laird, Emily Forrest Cataldi, Angelina KewalRamani, and Chris Chapman (2008), "Dropout and Completion Rates in the United States: 2006" (NCES 2008-053), National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, *nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008053*.

2 U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2004), "The Condition of Education 2004, Indicator 18," *nces.ed.gov/programs/coe/2004/section3/indicator18.asp*.

3 ETS (1999), "The Academic Quality of Prospective Teachers: The Impact of Admissions and Licensure Testing," *ftp://ftp.ets.org/pub/tandl/225033.pdf*.

4 Organisation for Economic Cooperation and Development (OECD), Programme for International Student Assessment (2006), "PISA 2006 Results: PISA 2006 Science Competencies for Tomorrow's World," *www.oecd.org*.

Moreover, vocational programs designed to get students ready for work have traditionally set a much lower bar than college preparatory programs. These programs have operated on an assumption that "ready for work" requires fundamentally different preparation in core academics than "ready for college." We now know that is no longer true. Whether they're going to college or directly into the workforce, all high school graduates need the same rigorous preparation to be successful.[5]

So what are state policymakers to do?

For a while, many policymakers were content to ignore high schools and pour most of their energy and resources into elementary and middle schools. The core idea was that if students arrived better prepared, all of the performance problems in high school would go away. While there has been some progress in the earlier grades, strengthening the lower grades has not solved the high school problem.

The current standards-test-accountability model also has failed to prove itself to be very effective in improving high schools. These efforts have suffered from, among other things, a serious unwillingness to set very high standards, for fear too many students would be denied diplomas; from an overemphasis on sanctions, and an under use of positive incentives; from mixed and inconsistent signals to the co-producers of achievement: students and teachers; and, perhaps most of all, from inattention to what happens in the basic unit of high school: the courses students take.

States need a new approach to the system of standards, tests, and accountability in high school–one that makes college and career readiness the central driver and acknowledges where greater state leadership and state resources are essential to success.

What this guide does and doesn't do

This document is not a full recipe for improving high schools. That is a job far bigger than any one guide can address. We haven't, for example, taken on the size and structural issues that many reformers believe are fundamentally important. We haven't taken on the subject of new pay scales for teachers. We haven't described what should be done with the lowest-performing high schools. Nor have we addressed ways to build the kind of trusting relationships between teachers and students that are terribly important if we are to get more of our students to *want* to finish high school and improve their learning along the way. But we do believe that it is impossible to do any of these important things without absolute clarity about goals.

We are equally clear, though, that the old model of simply taking those goals and translating them into standards, assessments and accountability—then leaving the rest of the work to districts and schools—won't do it. The thinking behind that was correct (provide flexibility on delivery of standards, keep those decisions closer to the students, etc.) though incomplete. Most districts, it turns out, didn't have the capacity to do the rest, and even when they did, they were often overwhelmed by the sheer politics.

This is our best attempt to distill some of the key lessons from reform efforts to date, along with the thoughtful input of an advisory group of national, state, and local education leaders, into a guide for state policymakers who know that, while coherence in standards, coursework, assessments, and accountability isn't everything, it is unlikely that high schools will orient themselves toward college and career readiness for all students unless we get

5 Achieve, Inc. (2004), "Ready or Not: Creating a High School Diploma That Counts," *www.achieve.org/files/ADPreport_7.pdf*;
ACT (2006), "Ready for College and Ready for Work: Same or Different?," *www.act.org/research/policymakers/pdf/ReadinessBrief.pdf*.

these fundamentals right.

This guide is organized around what we think of as "a new set of basics" for what states have to get right at the high school level: standards, course requirements, curriculum and teacher support materials, aligned assessments, and an information/accountability system that supports real-time action from critical players. In each area there is a brief rationale and a set of questions that we hope will provide structure for the hard work of rethinking how states can create a stronger foundation for high school improvement.

We understand that states are at very different points in this work, and most will not be starting from scratch. Those that are just beginning to think about a strategy for high schools will find this guide helpful; others that have already advanced their work in areas such as standards or course requirements will want to pay particular attention to curriculum and teacher support, assessment, and accountability—areas in which very few states have made real progress to date.

How this guide fits with our previous work

Achieve and The Education Trust are certainly not newcomers to these issues. Each of us in our own way has been working on this larger improvement agenda since we were founded. In 2001, we came together to launch the American Diploma Project (ADP), along with the Thomas B. Fordham Foundation and the National Alliance of Business. The goal of ADP was to identify the skills and knowledge required for success after high school and use those to help high schools reset and anchor their K-12 goals and standards. In 2004, we published "Ready or Not: Creating a High School Diploma That Counts," which found that all students, whether they are heading to college or embarking on a meaningful career, need the same rigorous academic foundation. We also identified a series of policies states could enact to increase the chances that students would be taught and would learn those essentials.

We are heartened by the progress some states have made. When Achieve launched the ADP Network in February 2005 at the National Education Summit on High Schools, we would not have predicted that 34 states would take up the call to action. Nor did we expect such rapid progress in states raising high school standards and graduation requirements to align with the expectations of employers and higher education.

Yet even the states that are farthest along with this work are, at best, only halfway to the goal of a truly aligned system. We hope this report will help them take the necessary steps to put the full set of pieces in place.

Section One:

Set a Clear Goal: Align High School Standards with the Demands of College and Careers

The global economy is changing the nature of opportunity in America. Most of the jobs that pay a family supporting wage require education beyond high school. Young workers will need to know more, and they will also need to be able to apply that knowledge to complex issues and problems. But strong academic knowledge and the ability to apply it will be important to these young people far beyond the workplace. Whether making sound financial choices for their families or effectively exercising their rights and responsibilities as citizens in our democracy, students will require a rigorous and well-rounded K-12 education.

What this means, to put it simply, is that it is no longer reasonable to prepare some of our young people for postsecondary education and others for work. The old dichotomies of "college bound" and "work bound" no longer apply. Academic proficiency alone is insufficient; so is focusing on giving students narrow skills needed for certain jobs. Students need to know more, they need to be better equipped to apply that knowledge, and they must be prepared to tackle increasingly complex issues and problems.

Understanding how to translate this reality into clear standards for what all graduates need to know and be able to do, however, is not a simple process. The good news is that the majority of states are making this a priority. Over twenty states have revised their end-of-high-school standards to reflect college and career readiness expectations. More states are expected to do so over the next couple of years.[6]

There are at least five questions that state leaders need to answer along the way when aligning their K-12 standards:

Question 1-1: Have the two-year and four-year colleges in the state clearly articulated the baseline knowledge and skills entering students need to begin college without remediation?

To get high school students college-ready, educators first need to know exactly what college-ready actually means. In some state education agencies, staff members have tried to intuit what colleges want from their admissions requirements or from what the handful of faculty members—typically from the colleges of education, rather than from specific disciplines—who happen to sit on the state standards committee think are important. We don't recommend this approach. From long experience, we have learned that it is critically important—at the very beginning of the process—to bring faculty from two-year and four- year institutions throughout the state together around the question of what students need to know and be able to do to succeed in credit-bearing courses. To be useful for K-12, these requirements must be articulated as standards and competencies rather than just course titles or scores on admissions or placements tests.

- Have the state's public two-year and four-year institutions worked together to ensure a consistent message is being sent about what students need to know to begin college without remediation?
- If not, how can they get started?
- If so, are these college-ready expectations communicated as standards or competencies rather than as course titles or test scores?

6 Achieve (2008). "Closing the Expectations Gap," *www.achieve.org/files/50-state-2008-final02-25-08.pdf.*

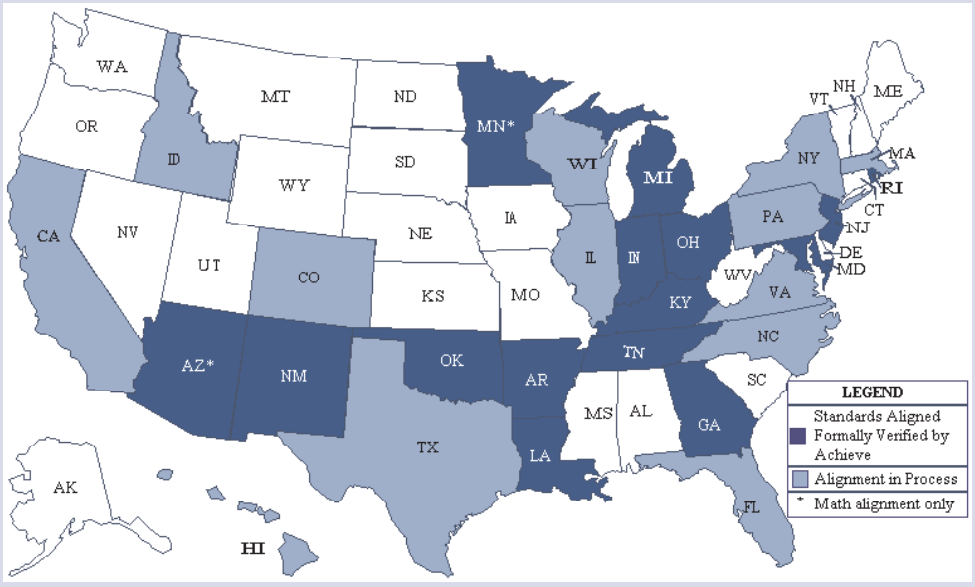
Helping States Align Their Standards to College and Career Readiness

In 2004, the American Diploma Project (ADP) released benchmark standards for college and career readiness based on several years of intensive research with college faculty and employers.[1] Since then, many states have used those standards as a guide in their own efforts to align high school standards with real world expectations.

Through the ADP, Achieve has worked with more than half the states in the nation on standards alignment. Five states, among the first to get started, worked with relatively little assistance from Achieve. Each of these states brought together high school and postsecondary faculty and employers and/or the workforce development community to define academic standards for college and career readiness and to align their high school standards with these knowledge and skills. Before presenting their new standards to the appropriate governing body for adoption, the states asked Achieve to conduct a detailed review of their revised high school standards to determine how well they aligned to the ADP benchmarks.

In response to other states that requested deeper and more sustained support, Achieve has organized a series of Alignment Institutes to provide states with tools, training, and technical assistance to align high school standards in English and mathematics with the demands of postsecondary education and careers. States participating in the Alignment Institutes send teams of high school and postsecondary faculty, key K-12 state education and higher education staff, and representatives from the business and workforce development communities to cross-state work sessions with peers. Throughout the Alignment Institute process, Achieve provides states with three separate analyses of their standards: first, a baseline review of the existing high school standards, then a review of draft revisions, and a final review of the revised standards to be submitted to the appropriate governing body for adoption. Achieve's analyses address the alignment of state standards with the ADP benchmarks, taking into account the many characteristics of quality standards: their rigor, coherence, focus, specificity, clarity, accessibility, and measurability.

Twenty-Eight States Have Worked With Achieve to Align Their Standards



1 The ADP benchmarks may found online at *www.achieve.org/node/175*. The final ADP report, "Ready or Not: Creating a High School Diploma That Counts," may be found online at *www.achieve.org/node/552*.

Question 1-2: Have employers in the state helped define what it means to be ready for careers?

It is often harder for employers than college faculty to clearly articulate the knowledge and skills that are essential for success in the workplace. But experience has taught us that employers "know it when they see it." So we have learned not only to include employers, but also to start the conversation with the core standards from the colleges in hand. Recent research from ACT confirms this approach: when experts there examined the knowledge and skills necessary for success in college and compared those with the knowledge and skills necessary to get a job that either paid a family supporting wage or provided enough on-the-job-training to get to a family supporting wage, they found virtually no significant differences.[7] While it appears that employers care a little bit more about geometry and basic statistics, and colleges care a little more about algebra, the distinctions should not obscure the larger truth: In the end, ready for college and ready for careers require the same core academic skills.

It is sometimes difficult for policymakers to accept that higher-level mathematics, such as advanced algebra, is required in the workplace. While it is true that there are plenty of jobs available that don't require advanced mathematics, the majority of the fastest growing, better-paying jobs do. This includes a lot of jobs that don't require a four-year college degree.[8]

For instance, to progress beyond entry-level maintenance jobs in the fast-growing aerospace industry, new hires will need a strong mathematics and science background. According to the FAA, aircraft maintenance technicians need to be comfortable working with complex measurement, proportions and ratios, solving equations with multiple variables, calculating volumes, and modeling with linear equations. Manufacturing is another field that traditionally has not had stringent entrance requirements but now demands advanced mathematical knowledge and skills for workers to understand and operate complex machinery based on constantly evolving technology.[9]

Question 1-3: Has the state aligned state standards for high school with these college and career readiness standards, so students who follow all the rules will be prepared for the demands of either college or careers?

Once higher education and business leaders articulate what it takes to be college- and career-ready, states must revise their high school standards to reflect these expectations.

In elementary school, children usually will learn what we ask of them without questioning whether it is important or not. In high school, that is not the case. The most effective teachers can get students to learn things in which they had no previous interest. But students typically want to know, "Why should I learn that?" or "Does it count?" There is, in other words, a persistent demand to anchor standards for high school in the real world.

We've got to get closer to where we can say, "Yes. It counts now. And it will count for the rest of your life. If you don't master this essential set of knowledge and skills, you won't succeed in college; you won't be able to get a

7 ACT (2006). "Ready for College and Ready for Work: Same or Different?," *www.act.org/research/policymakers/pdf/ReadinessBrief.pdf.*
8 Achieve (2008), "The Building Blocks of Success: Higher-Level Math for All Students," *www.achieve.org/files/BuildingBlocksofSuccess.pdf.*
9 Achieve has documented a growing number of fields where higher level mathematics is required, especially fields not requiring a four-year college degree. The Mathematics at Work series illustrates how advanced mathematics knowledge and skills are embedded in jobs that offer opportunities for advancement and are accessible to high school graduates. The series can be downloaded at *www.achieve.org/mathatwork.*

decent foothold in this economy and keep learning so you can advance; and, beyond that, whether you're trying to make sense of the terms of a lease, figure out how to vote on that complicated water quality ballot initiative, argue with the Opinion Page editor in your local paper, or decide on a savings/investment strategy that will help your kids go to college, you will simply not be successful if you don't master this stuff. Period."

The good news is that 22 states have aligned their end-of-high-school standards to college- and career-ready expectations. Achieve's analysis of a subset of those states' standards shows they are well-aligned with the ADP benchmarks and remarkably consistent across the states.[10] Most of these states have completed this work over the last two to three years, and all still have work to do to ensure those standards are back-mapped all the way down to the elementary grades so the standards throughout the system are vertically aligned.

- Do the state's end-of-high school standards reflect college- and career-ready expectations? Have they been validated by higher education and employers in the state?
- If not, what's the strategy for making this happen? Who needs to be involved?

Question 1-4: Are the state standards parsimonious?—are they restricted to what kids need to know, rather than what somebody somewhere would like them to know?

For K-12 leaders, one of the most overwhelming aspects of involving higher education and employers in K-12 standard setting is the worry that, no matter how much better high school kids get, these two major "customers" will want more. Actually, though, our experience has taught us that there is a much bigger problem in large, inclusive standard-setting processes: that people of all sorts, but especially teachers and professors who have a love for everything in their disciplines, simply get carried away. And then, to keep peace, a kind of agreement takes place: you let me add these three additional concepts, and I'll let you add your three.

When this happens, two common problems occur. One is that the list of standards is so long that it is impossible to teach all of them. Also, once the list is longer than necessary, it violates the essential pact described above that assures students that the standards cover the essential knowledge and skills they will need to be successful in the real world. Once that pact is violated, the slope is very slippery and may give way to a list of standards that has no credibility with the two players who co-produce results: teachers and students.

Standards must reflect tough choices about what is most important—a mile wide and an inch deep is no longer acceptable. The best standards are clear, rigorous, and focused on the essentials. They are notable not only for what they include but for what they leave out.

10 Achieve (2008), "Out of Many, One: Toward Rigorous Common Standards from the Ground Up," *www.achieve.org/files/CommonCore.pdf.*

Question 1-5: Has the state developed standards with enough specificity to guide instruction in the earlier grades?

Standards in some states continue to suffer from being vague about the content they expect to be taught, the level at which students need to master it, and the "when" part. State leaders should review the standards and ask themselves, "If I were a high school teacher and wanted to make sure my course was fully aligned with these standards, could I discern exactly what the state wants my students to learn?" If the answer is "no," then how is a teacher supposed to know what to emphasize among the myriad possibilities for any given course?

It is essential to articulate expectations for student learning across the curriculum. The focus in the ADP benchmarking process is on English and mathematics because students cannot gain access to credit-bearing college courses or meaningful career opportunities without demonstrating advanced skills in these subjects. While science, history, and other subjects do not play the same "gatekeeper" role, there is no question that they are essential to a well-rounded education. Standards in these subjects must convey the same clarity regarding what is expected to be taught. One of the particular challenges in high school is getting clear not only on what is expected to be taught, but in which courses and when.

Almost half the states have "clustered" standards for high schools that cover multiple grades with literally the exact same expectations.[11] Too often, states fail to articulate a progression, and then wonder why students don't progress much during the high school years. Meanwhile, the good work that states have done to align end-of-high school standards with college and career readiness won't produce the intended results unless we make it clear what needs to be learned through the high school grades (and preferably in each course) leading up to the end goal.

- Are standards sufficiently specific so that a teacher can read them and have a clear sense of the state's expectations for what is to be taught and at what level?
- Do the standards cover all areas of the curriculum in which the state has expectations for student learning?
- Are the end-of-high school standards translated into standards for what students should learn in each course or grade in high school?
- Have the standards been back-mapped from high school to elementary school so that meeting standards in each grade means that students are on a clear path to college and career readiness?

11 AFT (2008), "Common Ground: Clear, Specific Content Holds Teaching, Texts, and Tests Together," *www.aft.org/pubs-reports/american_educator/issues/spring2008/glidden.pdf.*

Section Two:

Assure that Students Enroll in a Course of Study Aligned with College and Career Readiness Standards

Once standards are agreed to, it becomes incumbent on state and local leaders to ensure that all students are actually taught to those standards. In high school, however, the terrain is a little trickier than in elementary schools. Why? American high schools are typically organized around hundreds of different courses, almost like mini-colleges. And for some reason, we seem to think it makes sense to let students choose which of those courses they should take, even though we know some sequences keep options open while others lead to a dead end.

Almost all states have course requirements for the high school diploma. But until recently, these were—at best—requirements for curricular breadth (four years of English, three years of mathematics, two years of science, etc). From a large menu, then, students could meet those requirements with a college preparatory sequence, a career-focused sequence, or, more often, a non-sequential hodgepodge that led no place at all.

Thankfully, this has begun to change. A growing number of states have now put new requirements in place that ensure every student will be enrolled in a college- and career-ready course of study explicitly designed to align to college and career readiness standards. The rest of the states need to follow suit. Rigorous course-taking matters for all students, but it is particularly important for low-income and minority students. Taking a challenging high school curriculum reduces by 50 percent the gap in college completion rates between high-income and low-income students.[12]

In doing this work, states will have to grapple with a series of questions:

Question 2-1: In what courses will students have to enroll to provide reasonable assurance that they will be taught to the standards the state has adopted?

Our research in ADP reveals that in order to be prepared to meet college and career readiness standards, students will need to take four years of mathematics, including at least the content typically taught in intermediate algebra (the equivalent of Algebra II), geometry, data analysis, and statistics. In English, students will need to take four years of rigorous courses that include opportunities for academic and technical writing, analysis of nonfiction texts, and applied communications and research skills.

But math and English alone will not prepare students for success after high school. Students need a well-rounded curriculum that also includes courses in science, social studies, arts, and foreign languages. States that have put more ambitious course requirements in place have addressed each of these subjects. For science, for example, most require at least three years of rigorous coursework, with a minimum of two of those courses laboratory-based.[13]

12 Clifford Adelman (1999), "Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment," Office of Educational Research and Improvement, U.S. Department of Education; Clifford Adelman (2006), "The Toolbox Revisited: Paths to Degree Completion from High School through College," U.S. Department of Education.

13 Achieve has developed a policy brief, "Aligning High School Graduation Requirements with the Real World: A Road Map for States." The Road Map addresses the most frequently cited challenges of policy design as well as strategies for implementation, communication and coalition building. It draws heavily on the experience of early adopter states. See *www.achieve.org/files/Achieve_PolicyBrief_Dec18v4.pdf*.

In determining the essential high school courses, it will be important for states to look at the admissions requirements of public colleges and ensure the courses line up. For example, some colleges require students to have taken foreign language courses in high school to be admitted. It is equally important to cross-walk to entrance requirements for apprenticeships or training programs. This cross-walk turns out to not be so hard because, time and again, our experience teaches us that many of the courses we historically have thought of as "college prep" (Algebra and Trigonometry, for example), are now required for entrance into a broad range of postsecondary training programs and careers.[14]

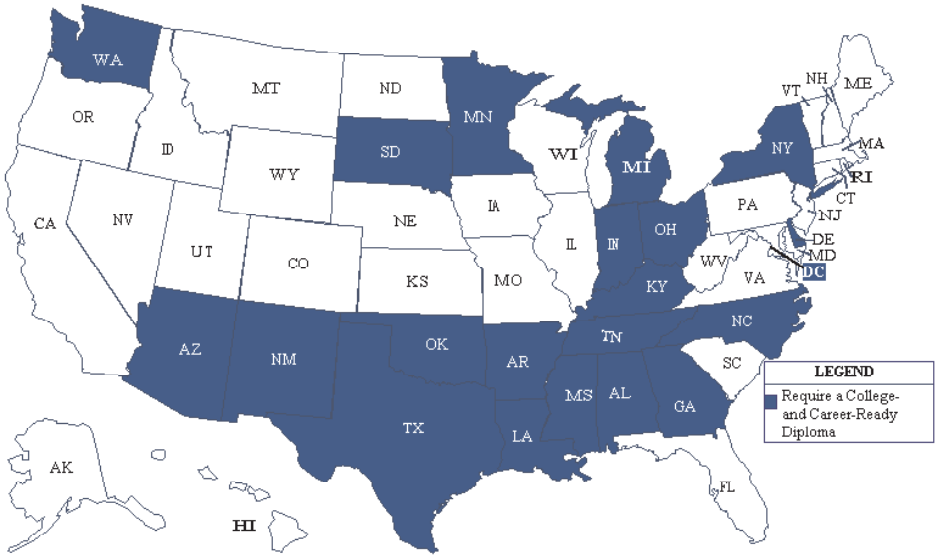
- What are the core courses that all students should take to be college- and career-ready?
- Are there courses beyond what's needed for admission to the state's postsecondary system that are important for all students to have access to?

Question 2-2: Do the state's current diploma requirements assure that all students complete those courses? If not, what changes are necessary?

Once the state has a list of courses that map to the new state standards, a simple question needs to be asked: Do the current course requirements for high school graduation assure that all students take these courses? If not, what changes would have to be made to guarantee that all students are being educated to the standards?

More and more states are aligning high school course requirements with college- and career-ready requirements. At the time of the National Education Summit on High Schools three years ago, only two states—Texas and Arkansas—had set their high school graduation requirements at a level that would ensure that all students took a course of study that prepared them for success in college and the workplace. Today, 20 states and the District of Columbia have elevated their high school diploma requirements to the college- and career-ready level.[15]

Twenty States and the District of Columbia Have Adopted College- and Career-Ready Graduation Requirements



14 For more information, see *www.achieve.org/MathatWork*.

15 For more information, see *www.achieve.org/node/332*.

Contrary to common concerns, requiring a college- and career-ready course of study does not crowd out other valuable subjects. The states that have adopted these requirements have been careful to maintain sufficient room for the arts, foreign language, and other electives. At least half require students to take at least one unit of fine arts, while several more require students to take courses from a bundle that typically includes the arts, career and technical education, and foreign language.[16]

The policies are new in all of these states so it is too early to conclude how they are working. As the requirements kick in and students move through the curriculum, it will be important to monitor the results.

- What courses are students required to complete for a high school diploma?
- Are there gaps between current state requirements and the courses students need to prepare for college and career opportunities?

Question 2-3: How many of the state's students are completing those courses now?

As states raise course requirements, policymakers need to understand how many students currently are completing the college- and career-ready course of study, and what that percentage has looked like over the past five or 10 years. That information will provide the state's baseline and rate of change without new requirements in place. States will also want to look at where the biggest holes are (in terms of courses), how many additional sections of those courses would need to be offered, and in which districts or regions the leap would be the greatest.

- How many additional sections of each course will districts in the state need to offer?
- Which schools and districts are least likely to provide sufficient course sections now? Which groups of students are least likely to be enrolled in the college- and career-ready course of study? Which courses are most likely to keep students from progressing through the college- and career-ready course of study?
- How fast can the state move all students into such a curriculum?

Question 2-4: Does the state have sufficient teachers with the right subject matter background to teach the additional courses?

In discussions about raising graduation requirements, participants are often very nervous about potential teacher shortages. In The Education Trust's work with school districts, however, we have never found the effects to be as large as people imagine. Why? Because most students already are taking close to the right *number* of courses in each discipline. The problem is that they are being offered courses in these subjects that do not cover the right *content*. For example, in 2005 the Los Angeles Unified School District (LAUSD) determined that all students should be enrolled in the curriculum required for admission to the state's public universities. When that decision was being considered, concerns were raised about whether or not LAUSD could attract all the teachers required for the additional advanced courses students would need to take. An analysis by The Education Trust–West revealed that the district needed a total of 104 new teachers out of a workforce of

16 Achieve (2007), "Aligning High School Graduation Requirements with the Real Word: A Road Map for States, 2007," www.achieve.org/files/Achieve_PolicyBrief_Dec18v4.pdf.

more than 36,000 teachers, and more than two-thirds of the additional teachers were needed to teach foreign language.[17]

That is not to say that states won't find some problem areas. The point is to get clear about those issues early, and then ramp up the supply—from either traditional or non-traditional sources, or both—as quickly as possible

- If there are shortages of qualified teachers, in what subject(s) do they occur?
- For whom are the shortages most severe? What can the state do about it—and how fast?
- Have those public colleges and universities with teacher preparation programs created measurable goals for helping fill teacher shortages?

Strategic Recruitment Can Address Shortages

If we are going to get more students to succeed in more advanced courses, we need to address shortages of highly-skilled teachers with content knowledge, especially in the areas of science and mathematics. Fortunately, we know from experience that all over the country that there are a lot of talented, ambitious Americans who want to tackle this challenge, and who have the knowledge and skills we need in our classrooms. Innovative organizations are tapping into new talent pools to recruit teachers, and traditional teacher preparation programs increasingly are stepping up their efforts, too.

Historically, public education has been passive with regard to who teaches. More recently, national organizations like The New Teacher Project and Teach for America have developed sophisticated recruitment strategies to attract highly-motivated professionals and recent college graduates who are drawn to the challenges and rewards of teaching in high-need schools. In 2006-07, The New Teacher Project recruited 3,105 teachers for 15 districts, 86 percent of whom taught in shortage areas such as science and mathematics, and 84 percent of whom taught in high-poverty, Title I schools.[1] In 2008, Teach for America placed 3,800 new teachers, 16 percent of whom had majored in math, science, or engineering.[2]

Colleges and universities still prepare the majority of new teachers, and they, too, are stepping up efforts to meet the demand for teachers in science and math. The UTeach program at the University of Texas at Austin recruits science and mathematics majors into teaching with specially-tailored pre-service preparation for a cohort of participants that includes convenient course scheduling, scholarships, advisors, and mentors. The UTeach program is being replicated nationwide and currently has more than 1,000 math and science majors preparing to go into teaching in hard-to-staff schools.[3] State university systems in North Carolina and Georgia have set goals for public colleges to do their part. Over four years, the University of North Carolina system more than doubled the number of math teachers prepared from 109 in 2002-03 to 227 in 2005-06.[4]

1 The New Teacher Project, "2008 Media Kit"; available at *www.tntp.org.*

2 For more information about Teach for America, see *www.teachforamerica.org.*

3 For more information on the National Math and Science Initiative, see *www.nationalmathandscience.org.*

4. For more information regarding the University of North Carolina and University of Georgia initiatives, see Charles Coble, "Turning the Tide: Strategies for Producing the Mathematics and Science Teachers Our Schools Need," The Education Trust, available at *www2.edtrust.org/NR/rdonlyres/7DCD6A7C-980C-4EA7-BE99-80D0EA3734AF/0/TurningTheTide.pdf.*

17 The Education Trust–West (May 2005), "Preparing LAUSD High School Students for the 21st Century Economy: We Have the Way, But Do We Have the Will?," *www2.edtrust.org/NR/rdonlyres/7AAD1563-BE27-4114-B6E2-B34A4AFD45B7/0/LAUSDAG.pdf.*

Question 2-5: Should the state require all students to complete the new course sequence for a diploma, or, for the time being at least, make that the "default" curriculum?

States can make these graduation requirements apply to all students ("mandatory curriculum") or place students automatically in the college- and career-ready graduation requirements path, while giving students the option to choose a less rigorous option ("default curriculum").

To date, among the states raising their course requirements to the level recommended by ADP:

- Seven states and the District of Columbia have adopted mandatory course requirements without opt-out provisions.
- Thirteen states require 9th-graders to automatically enroll in the default college- and career-ready curriculum, but allow students to opt-out of the requirements if their parents sign a waiver.

Both approaches are viable and will help address long-standing inequities in which low-income students and students of color are systematically given a less challenging curriculum. However, because evidence is clear that disproportionate numbers of minority and low-income students are enrolled in less rigorous courses today, we strongly recommend that states choosing the default approach make opting out as difficult as possible, monitor who is opting out and who isn't (by race, income, and geographic region), and place declining caps on the number of opt-outs allowed.

Ohio instituted a sunset clause in order to address this problem. The Ohio Core, which was signed into law in early 2007, will go into effect with the entering 9th grade class in fall 2010. The opportunity to opt-out of the Ohio Core requirements with parental consent is available only in the first four years of implementation, after which point the Ohio Core will become mandatory for all students.

States should also hold schools accountable for increasing the percentage of students who complete a core college- and career-ready course of study so that there are incentives to help students succeed in these courses rather than opt-out.

- Should all students be required to take the college- and career-ready course of study or should there be an opt-out provision?
- If the state pursues an opt-out provision, what will the less rigorous course sequence prepare students to do after they complete high school? Are the courses required for these post-high school objectives included in the less rigorous option?
- How will the state use disaggregated data to monitor which students are opting out, to ensure that opting out remains a safety net and is not abused?

Question 2-6: Does the state encourage all students to earn college credit while in high school?

High schools and school systems should be pushed not only to help students take the right courses, but to help students earn college credits while still in high school. Doing so will help students gain the momentum and confidence to succeed in high school and beyond. There is increasing evidence that exposure to college-level work can engage and challenge all high school students—and not just the highest-achieving ones.

Students should be able to take college-level classes and earn college credit through such programs as dual enrollment, early college high schools, Advanced Placement (AP), International Baccalaureate (IB), and College in the High School.

More than 40 states subsidize AP exam fees for low-income students, but participation can be ramped up even more to support many students. While some states subsidize fees for all students, only a few states, such as Arkansas, have comprehensive incentive programs and professional development programs to increase AP course-taking, exam participation, and scores.

In too many states, dual enrollment policies and funding mechanisms discourage high schools from partnering with higher education to enroll students in college courses while still in high school. States that require districts to send "their" funding to the college campuses to pay for enrolling students' tuition often find low rates of participation in dual enrollment. And the dual enrollment student profile in these cases is the accelerated or stereotypical "college bound" student; programs with high barriers, or costs, for school districts do not often enough serve many low-income students.

Early college high schools take the dual enrollment concept to the next level. Early college high schools blend high school and college in a rigorous yet supportive program, compressing the time it takes to complete high school and the first two years of college.[18] The schools are often designed so that first-generation college-goers, English language learners, students of color, and other young people who are often under-represented in higher education simultaneously can get their skills up to grade level, earn a high school diploma and complete one or two years of transferable college credit, tuition-free. More than 25,000 students are enrolled in early college high schools across the country.[19]

Nationwide, early college high schools are showing promising results in bringing low-performing students up to standard and graduating from high school in four or five years with postsecondary credits and degrees. More than 65 percent of 2007 graduates of early college high schools were accepted to four-year colleges and many more chose to earn an associate's degree by spending a fifth year in the early college high school. More than 85 percent graduated with substantial college credit.[20]

18 For more information, see *www.earlycolleges.org*.

19 Lili Allen and Lucretia Murphy (2008), "Leveraging Postsecondary Partners to Build a College-Going Culture: Tools for High School-Postsecondary Partnerships," Jobs for the Future, *www.jff.org/Documents/ToolsPSEpshipslowres.pdf*.

20 For more information, see *www.earlycolleges.org/overview.html*.

Section Three:

Provide High-Quality Curriculum and Teacher Support Materials

Getting students into courses with the right names isn't enough. State leaders also have a responsibility to make sure those courses are of high and consistent quality.

As a recent report from the National Center for Education Achievement said, "While truth-in-labeling practices in the food industry ensure that orange drink cannot be labeled orange juice without legal ramifications, schools have no such safeguards in place. Algebra I can be placed on any child's transcript without any guarantee about the content taught or learned."[21] Unfortunately, such inconsistency is widespread.

None of this is particularly surprising when we consider the content problem from the standpoint of the teacher—especially the new teacher. In a typical high school, a new mathematics teacher, for example, is told which courses he or she will be teaching (sometimes as late as the day before school begins), handed a textbook too long to teach in one year, and perhaps a copy of the state's standards. Educators rarely receive a detailed curriculum, curriculum framework, model syllabus, sample assignments, or sample student work that illustrate the state's standards.

As one California educator recently explained to the *American Educator*, "Teachers should not be expected to be the composers of the music, as well as the conductors of the orchestra."[22] Yet that is exactly what we ask most high school teachers to be. Then we fill their classrooms with scores of children, many of whom don't have even close to grade-level skills.

For teachers to be successful, state policymakers need to provide greater leadership on the issues of curriculum and instructional supports. As we think about these issues, it will be important to answer at least the following questions:

Question 3-1: Who provides detailed guidance to teachers in the state in each course on what they are expected to teach?

Many teachers report that they feel as though they are "teaching in the dark." In most states, districts are supposed to deal with curriculum, but there is often less than one full-time employee in the district's "curriculum office," and sometimes that person has multiple jobs.

In most advanced countries, teachers are not left on their own to figure out curriculum.

- Who devises the actual curriculum our teachers use? Do all teachers have access to detailed curriculum frameworks? To well-designed units, lessons, assignments, and links to supplementary resources?
- Are teachers expected both to "compose" the lessons and to "conduct" them? If so, how does the state guarantee quality and consistency?

21 Chrys Dougherty, Lynn Mellor, and Shuling Jian, (2006), "Orange Juice or Orange Drink? Ensuring that 'Advanced Courses' Live Up to Their Labels," National Center for Educational Accountability, Policy Brief No.1, Education Commission of the States, *www.ecs.org/html/Document.asp?chouseid=6762*.
22 American Educator (Spring 2008), "There's a Hole in State Standards, and New Teachers Like Me are Falling Through," *www.aft.org/pubs-reports/american_educator/issues/spring2008/newteacher.htm*.

Question 3-2: How do teachers in the state know what "good enough" student work looks like?

Countless studies have shown us that the definition of what work is "good enough" for an "A," "B," or "C" varies significantly from teacher to teacher, school to school, and district to district. Even in two side-by-side classrooms in the same school, writing that is "A" quality to one teacher may be at best a "C" to another.

The problem of watered-down curriculum and expectations is especially pronounced in classrooms with high concentrations of low-income and minority children, where students get "A's" for work that would earn a "C" or a "D" in a higher-wealth school.[23]

Unless states provide much clearer guidance on this issue, this pernicious pattern will not be interrupted. States should create a virtual library through which educators can access concrete examples of what is "good enough" to meet the state's standards, including model assignments, scoring rubrics, and examples of student work at various levels of performance. "Anchor assignments" are common prompts used by a number of teachers (that is, across a district or school) to facilitate sharing of expertise and collaboration on instructional practices; anchors provide an opportunity to ensure that students get a consistent level of content and rigor in their assignments. The Portland (Oregon) Public Schools have been using anchor assignments across the district with promising results.[24]

- Has the state created "anchor assignments," along with clear scoring rubrics and examples of scored student work, so that teachers have concrete images of the distinctions between basic, proficient, and advanced work?
- Who provides samples of student work that meet standards and how does the state ensure consistency in understanding the expected standards of performance? Is the set of exemplars sufficient to send a clear signal to all teachers about what work that meets standards actually looks like?
- If these are local responsibilities in the state, how does the state provide for teachers in districts that lack the capacity to develop high-quality materials?

Question 3-3: Who is responsible for acquiring textbooks and related teacher-support materials?

In many states, even in states that have structured processes for reviewing and approving textbooks, there often are many different options from which to choose and little information or guidance regarding differences in terms of alignment and coverage. The range of options can benefit districts with adequate expertise and time to review all the possibilities and make informed choices (assuming the state has done its job with clear, grade- or course-specific standards against which the textbooks can be evaluated). But most districts—especially small districts and underfunded ones—do not have that expertise and time. Such districts and schools are left entirely at the mercy of the textbook industry, notorious for claiming that its products are "aligned," without defining that word too carefully.

- How confident is the state that textbooks are fully-aligned with standards and don't contain pages of additional material unrelated to or extraneous to the standards?

23 Michael J. Puma et al. (1993), "Prospects: Final Report on Student Outcomes," Bethesda, MD: ABT Associates.

24 Information and examples of anchor assignments and scoring rubrics can be found on the Web site of the Portland Public Schools, Office of Teaching and Learning, at *cms9.pps.k12.or.us/.docs/pg/10609*.

- Has the state produced "textbook maps" for commonly-used texts, so that teachers can see which sections are most important, which ones map to standards, and which don't?

Question 3-4: Does the state provide support for the "redesign" of priority courses for organizing the same general content into different (and perhaps more enticing) packages?

Requiring that all students complete a college- and career-ready course of study does not that mean all students need to be taught the same rigorous content in exactly the same way. In fact, as more students enroll in these courses it will become increasingly important to provide equally rigorous applied or integrated approaches to teaching core content. The key is to ensure that no matter what the course title or delivery approach, students will emerge having met the same college- and career-ready expectations.

In higher education, there's a lot of support now for course redesign. Instead of accepting that a lot of students will fail the same difficult academic courses, faculty are redesigning those courses to deliver the same content in more accessible and applied ways. That work typically integrates technology as a primary means of instruction, as opposed to merely "tacking it on." The National Center for Academic Transformation established the first large-scale course redesign project in 1999 and has worked with scores of higher education institutions to improve teaching and learning in courses where students historically have failed at high rates. The results have been nothing short of remarkable: significant increases in students' passing rates, their performance on common assessments, and substantial cost savings across a broad array of colleges and universities.[25] This work can and should be extended to high school courses.

Some argue that this is exactly what goes on in CTE (career and technical education) courses, and surely there is the potential for CTE to do just that. But so far, what we see is mostly courses that teach part, but not all, of the core academic course they are intended to replace. That's just not good enough.

States should recognize that while all students need to learn the content, they don't all need to learn it the same way. And they'll need to invest in creative teachers who want to work with some combination of higher education and business to create high-quality alternatives that both cover the same content and produce equivalent, if not higher, levels of student learning as the courses for which they substitute.

Federal law provides a framework for evaluating whether or not CTE programs meet this standard. The Perkins law defines a CTE "Program of Study" as a set of academic and career-focused courses that have a clear progression from secondary into postsecondary education and into a career path.[26] State policymakers should ensure that CTE programs have this high level of rigor and alignment, which will demand eliminating some old vocational programs and significantly upgrading others to ensure clear pathways and meaningful opportunities for students.

- Has the state looked beyond the traditional series of college prep courses to offer a more applied or integrated approach? Are there alternative courses or course sequences available to students that teach the college- and career-ready content in an equally rigorous way?

25 For information about the course redesign work of the National Center for Academic Transformation, including evaluations, results, and write-ups of implementation efforts to date, see *www.center.rpi.edu*.
26 For a description of the Perkins Act and the elements of CTE Programs of Study, see *www.achieve.org/files/Achieve-CTEPolicyBrief-02-07-08.pdf*.

- Do any of the current CTE courses meet this standard? If not, are efforts underway to improve CTE courses? Are career academies being used to integrate high-level academic preparation with a career focus and applied learning opportunities?
- How will the state ensure that different, but equivalent, course sequences will maintain a common standard and level of rigor?

Question 3-5: Is the quality of teaching across the state reviewed regularly? By whom? How is attention paid to particular courses or disciplines? If not, what could we do to make that happen?

State leaders need to work with professional associations within and outside the education community to ensure a regular process for reviewing and updating not only content standards, but also standards of professional practice. There should be a systematic way to review periodically secondary teaching within the disciplines, with public reporting regarding the strengths and areas in which teaching needs to be improved.

In the U.S., we have small examples of this approach. The National Science Teachers Association for example, recently looked at the teaching of Physics. But while the vehicles for review—including state subject matter organizations—are often available, we rarely tap into them. States should do more to enlist disciplinary leaders in a quality assurance and improvement process.

- Who has expertise in the core content areas taught in high schools?
- How can these disciplinary experts be engaged to review and help improve teaching in high schools?

Section Four:

Measure Student Learning: A College- and Career-Ready Assessment System

Tests are essential because they provide a consistent measure of whether or not students are meeting and exceeding the standards we have set.

But tests aren't playing the role we need them to play, especially in high school. First, there are too many tests and they are often disconnected in purpose from one another. Students take high school exit exams, final exams or end-of-course exams, SAT, ACT, PSAT, AP, IB—and the list goes on. The ones that matter for students—the ones that have currency in higher education and the job market—rarely factor in school evaluations, and the ones that matter for schools often don't matter to students. Perhaps most importantly, none of the state tests are especially useful for teachers who want to evaluate student progress and make mid-course corrections.

The second big problem is that state tests don't measure college and career readiness adequately. As a consequence, students who do well on them are not necessarily prepared for their next steps. College-bound students learn this the hard way when they arrive on a college campus and take placement tests—about 40 percent of these students are told they're not ready for college-level work, even though they likely passed all the tests they were given in high school.[27]

More testing is not the answer. Smarter testing is.

There are nine core questions state leaders need to ask themselves about assessment:

Question 4-1: What tests do high school students in the state take right now?

As states evolve their assessment systems towards the goal of college and career readiness, they need to be sensitive to the fact that many educators and high school students are already feeling "over tested." Some tests are developed and administered by the state, others by school districts, and still others are taken by students as part of the college application process. The time spent preparing for these exams is not insignificant—both for students and educators—and most would agree the various assessments are not well aligned with each other, either in their content or purposes.

Before adding new assessments, we recommend that state leaders take stock of what tests students are currently taking—at both the state and local levels—and what those tests seek to measure. Taking stock will help point out gaps and redundancies in the assessment system.

As state and district leaders review existing assessments and plan for new ones they should be very clear about the purposes the assessments are designed to serve.

A coherent assessment *system* will include a combination of measures designed to meet the following goals:

- informing and improving the quality and consistency of instruction;
- indicating whether or not students are meeting mileposts that signify readiness; and

27 National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education (2004), "The Condition of Education 2004, Indicator 18," *nces.ed.gov/programs/coe/2004/section3/indicator18.asp*.

- holding schools accountable for readying students for postsecondary education and careers.

It would be unfortunate if states simply layered on more tests on top of existing tests. The irony, of course, is that everyone wants less testing but no one wants to give up "their" test. States need to fight this tendency, working hard to ensure that if some tests are added, others must be eliminated or replaced. States and districts need to work together both to streamline the volume of testing and to ensure greater coherence within the assessment system.

- What tests do high school students currently take in the state? Which are given by the state? Which by districts?
- What are the purposes of each test? Are these duplicative or complementary? Where could tests be subtracted as new ones are added?

Question 4-2: Is the state's high school testing system firmly anchored by an assessment of the knowledge and skills students need to be college- and career-ready?

Achieve has done analyses and found that most state high school tests reflect knowledge and skills students should learn by early in high school—few state tests indicate whether or not students are college- and career-ready by the end of high school.[28] As a result, students can score "proficient" on these exams and still be unprepared for life after high school.

It is therefore not surprising that the vast majority of postsecondary institutions and employers pay no attention to performance on state tests. Instead, they give their own tests to see whether or not students are ready. However, these tests are rarely well-aligned with state standards or school curriculum. We can't afford this inefficiency, or the mixed signals it sends to schools and students.

State assessments at the high school level must do a better job of measuring real world knowledge and skills that students will need to be successful after high school. And the rest of the assessment system must be aligned with the high school assessments—so that *proficient* means *prepared*—all the way up and down the line.

Every state should have an "anchor" assessment (or assessments) that measures college and career readiness. Tests given earlier in high school need to signify progress toward that standard as well.

- Does the state have a college- and career-ready anchor assessment? If so, is there a statewide readiness cut score and is it used to place incoming students into credit-bearing college courses?
- If the state has established a common readiness score, how was it established and by whom?
- Are college admissions and/or placement incentives attached to the assessment for two-year and four-year institutions? Are there additional incentives for exemplary performance (such as financial aid for low-income students or diploma endorsements)?

28 Achieve, Inc. (2004), "Do Graduation Tests Measure Up? A Closer Look at High School Exit Exams," *www.achieve.org/files/TestGraduation-FinalReport.pdf*.

Question 4-3: If the state doesn't currently administer a test of college and career readiness to all students, should the state augment the existing state tests to add the readiness dimension or design or purchase a test that is built to assess college and career readiness?

States are experimenting with a variety of approaches to incorporating college- and career-ready measures into their statewide testing systems. Three possible approaches include the following: (1) end-of-course tests (EOCs) in advanced subject areas that are validated for use by postsecondary institutions and employers; (2) rigorous comprehensive end-of-grade (EOG) 10th or 11th grade tests developed collaboratively by K-12 and higher education leaders; and (3) college admissions tests that are "augmented" so they align with or complement state standards.

The costs and benefits of each approach are relatively clear but not necessarily easy to resolve:

- College admissions tests already have currency with higher education and with students. Incorporating admissions tests into a state's assessment system as the college- and career-ready anchor may not significantly increase the overall testing burden on students, as many students were already planning to take the tests. The results are common across the country and therefore portable for students to postsecondary institutions, creating strong incentives for students to perform well. But college admissions tests were not designed to align with state standards for what will be taught and learned in high school.[29] This undermines their credibility as evaluative and accountability measures and makes it more difficult to ensure coherence with the rest of the K-12 assessment system.

- End-of-grade tests, on the other hand, were designed specifically to measure state standards. They are typically administered in 10th grade, or occasionally in 11th grade, though using these tests as a college- and career-ready anchor assessment will be significantly easier with an 11th grade test. These assessments are a known quantity in many states and, therefore, could be modified or augmented without substantially increasing testing time or costs. On the downside, these tests were not designed to measure college and career readiness and it would be a real effort to get either higher education or employers to use them.

- End-of-course exams are becoming increasingly popular across the states. The clear benefit is that these tests are tied to specific courses and therefore have the potential to be better aligned to that course content than other tests. End-of-course tests also allow for more flexible scheduling because students take the test whenever they complete the course, rather than at a set grade level. In addition, states that are putting college- and career-ready graduation requirements in place may find EOCs particularly attractive, as they can help the state monitor the quality and consistency of instruction in high school courses and guard against course title inflation or the watering-down of curriculum. The challenge with these exams is to build them so that they signal college and career readiness. This requires having EOCs in more advanced courses, such as Algebra II or English III, as well as collaboration between the K-12 and postsecondary systems in their development, so that performance on the exams opens opportunities for students. Using an end-of-course approach may increase the overall amount of testing required by a state, but is not likely to increase the

29 Achieve analyzed more than 2,000 questions from college admissions and placement exams to determine how these tests compare to one another and how well they measure the college and career readiness ADP benchmarks. The study was conducted with the full cooperation of ACT and the College Board; both organizations provided Achieve with access to their exams. See *www.achieve.org/files/Admissions_and_Placement_FINAL2.pdf*.

testing experienced by students because such exams can simply replace teacher- or district-generated exams.

We recommend that states study the advantages and limitations of these three approaches and select a strategy that will best meet the state's own needs.[30]

- Which strategy will lead to the most effective measure of college and career readiness? Which strategy will enable the strongest alignment with the state's high school standards?
- Can the state build from the assessments in place or is wholesale change required?
- How important is it for the assessments to be taken in close proximity to when students learn the material? Does the state want a system that allows for more or less flexibility in terms of when students take the tests?
- Which assessments will provide the best feedback to teachers and schools? To students and parents?

Question 4-4: Have colleges in the state agreed on a common placement standard that can guide the development of high school assessments?

In some states, colleges have come together to define common placement standards—not for admission, but for entry into credit-bearing courses. Most states, however, have yet to take that critical step.

Imagine how frustrating it is for high school faculty members in those states. They are told that we want them to prepare students for success in college, but there are many different definitions of "ready" depending on which colleges their students attend. This situation is more reflective of provincialism than principle. Achieve reviews show that actual expectations are not all that different across different campuses, even across different states. But that fact doesn't deter each college from wanting its own placement tests and cut scores.

Having different standards for placement into credit-bearing courses makes little sense in an era when so many students are transferring credits between institutions, and it makes it impossible for K-12 leaders to know what they are aiming for. As one high school principal said to us not so long ago, "I'm happy to be held accountable for getting my students college-ready. But not if there are 34 different definitions of college-ready."

The ADP standards alignment process creates a vehicle for higher education faculty to articulate the core competencies and knowledge they expect students to possess for entry-level courses. Where this work hasn't yet taken place, state higher education executive officers, system presidents, chancellors, and other higher education leaders should make it a priority.

30 For additional information, see Achieve's guide, "Transforming Statewide High School Assessment Systems: A Guide for State Policymakers."

The ADP Algebra II End-Of-Course Exam

In May 2005, leaders from the ADP Network States began to explore the possibility of working together, with support from Achieve, to develop a common end-of-course exam in Algebra II. These states were planning to require or strongly encourage students to take Algebra II (or its equivalent) to better prepare them for college and careers. State leaders recognized that using an end-of-course exam would help ensure a consistent level of content and rigor in classes within and across their respective states. They also understood the value of working collaboratively on a common test: the potential to create a higher quality test faster and at a lower cost to each state, and to compare their performance and progress with one another. From the outset, the intent was for the ADP Algebra II EOC Exam to serve three main purposes: to improve curriculum and instruction; to help colleges determine if students are ready to do credit-bearing work; and to compare performance and progress among the participating states over time.

Fourteen states—Arizona, Arkansas, Hawaii, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, New Jersey, North Carolina, Ohio, Pennsylvania, Rhode Island, and Washington—joined together to develop and use the common end-of-course exam in Algebra II. This is the largest multi-state collaborative assessment effort ever undertaken. It is a dramatic departure from past testing practices in which states developed their own tests, based on their own standards and often at considerable expense. With increasingly common end-of-high school expectations among the states, collaborative efforts to develop assessments make good policy and economic sense.

In the spring of 2008, nearly ninety thousand students across twelve of the fourteen states in the partnership took the ADP Algebra II end-of-course exam for the first time. In subsequent years, the number of exam takers is expected to grow significantly.[1]

At a time when many bemoan whether tests—and their scores—are an accurate reflection of what students need to know to succeed, these fourteen states have chosen voluntarily to raise the bar to ensure that their students graduate from high school prepared. The partnership states anticipated that this would be difficult work, but work that had to be done to ensure that students graduate from high school ready for the real world.

[1] For additional information, see *www.achieve.org/AlgebraIITestOverview.*

Question 4-5: How does the state ensure that high school assessments have the necessary credibility with higher education and employers so that performance on the assessments allows students access to postsecondary opportunities?

It won't matter how good the new and improved high school assessments are, or how good the information on student performance on those assessments is, if higher education leaders and employers continue to ignore the results. For high school exams to truly open doors for students, they must be rigorous enough to measure college-ready skills, and postsecondary institutions must actually use the results in meaningful ways. This objective can only be accomplished through close collaboration between state K-12 and postsecondary leaders.

Such a process is not the way most states are used to managing their assessments. Higher education is rarely invited into the K-12 assessment development process and state high school tests are rarely designed to be predictive of postsecondary success. But higher education is just as culpable. Faculty and entire institutions guard their placement tests as though they are an asset to be protected from the public, rather than an expectation to be shared with their K-12 partners and incoming students. This needs to change.

The fourteen states using the ADP Algebra II end-of-course exam may provide a model for collaboration across K-12 and higher education on assessment. Those states involved high school math teachers and postsecondary faculty in the review of the test questions as it was developed. Studies will also be conducted at two-year and four-year college campuses to establish the relationship between the ADP Algebra II exam and success in first-year credit-bearing college mathematics courses. These states will also examine the relationship between the ADP Algebra II exam and commonly-used admissions and placement tests. All of these data will inform setting performance levels and cut scores and enable states to be more confident that "proficient" truly means prepared.

- What will it take to get higher education to use the high school test(s) for placement decisions? What will it take to establish a college-ready cut score? To establish a common college placement standard?
- Who are the higher education leaders that need to be brought into the process? If the state does not have a few key leaders who can facilitate this process, what policies can the state enact to ensure collaboration in this process?

Question 4-6: What incentives will the state attach to the new high school assessments so that students and schools are motivated to perform well—without being overly-obsessed?

This is a tricky area to navigate. Anyone who has taught (or parented) high school students knows that if students are given a test or assignment and told it doesn't count, it will get blown off or be given only half-hearted attention. It is in light of this reality that states need to decide what type of "stakes" to attach to new high school assessments.

That said, given the current state of student readiness and school capacity, virtually no state is in a position to insist in the next year or even in the next few years that all students hit the college- and career-ready level of performance on these tests in order to earn a high school diploma. For these assessments to have credibility, especially in the postsecondary community, the test content and the cut scores have to be firmly anchored in what it takes to be successful in college and careers. They cannot be subject to the same downward pressure on standards that we have seen with graduation exams.

Instead, states might want to consider a range of stakes and incentives for student performance on the college- and career-ready anchor assessment. This could mean counting test performance for a portion of the course grade (an option that is exponentially easier with end-of-course exams than other types of assessments), providing bonuses in state financial aid programs for low-income students who perform well on the assessment, and ensuring that students who score at the college-ready level on these assessments can be guaranteed enrollment in credit-bearing (non-remedial) courses in college. States may also want to consider requiring students to perform at a lower, but still meaningful, level on the assessment in order to graduate.

One of the best examples of K-12 and higher education collaboration on assessments and student incentives is the partnership between the California Department of Education (CDE) and the California State University System (CSU). Working together, CDE and CSU created a second, voluntary section of the 11th grade high school assessment—Part B—that reflects college-ready standards in English and mathematics. Students who take the test and score at the college-ready level (and continue to take mathematics in their senior year) do not need to take the placement exams at CSU; they are automatically enrolled in credit-bearing courses. As important, students who do not score at the readiness level receive specialized curricula and support in their senior year to help get them ready. Even with the all the tests students are required to take, already more than 75 percent of California's high school juniors are deciding to take the additional Part B assessment because they want to know where they stand.

- Will there be incentives attached to the college- and career-ready tests for students? How can the test "count" in some way for students to ensure they take the test seriously?

Question 4-7: Are the state's large-scale tests assessing the full range of skills students need to be ready for college and careers? If not, does the state need to make better use of performance-based measures?

Once students enter college and the world of work, they aren't going to be asked merely to answer the kind of straightforward multiple-choice or short answer questions that dominate most state exams. They are going to need to apply critical thinking skills, solve unique problems, work in groups, and present their analyses both orally and in written form. To be sure that students are ready for these challenges, states are going to need both to improve the quality of their large-scale assessments and to consider adding other forms of evidence.

Improving Summative Tests

State assessment systems are remarkably similar to one another. Most state assessments, even in high school, rely heavily or exclusively on machine-scored responses, primarily "bubble in" multiple choice or gridded formats. Some include constructed response formats in which students write their answers, although most answers are generally short—only one or two sentences. Achieve's analyses suggest that state tests could be a lot better than they are now.

Good multiple choice test questions can measure rigorous content and analytic skills such as reasoning and problem solving; they needn't be limited to testing a student's ability to recall discrete bits of information. However, states ought not rely exclusively on multiple choice items. States need to make far better use of constructed response and open-ended questions, which are often more effective at measuring more applied skills—problem solving in mathematics and writing in English, for example. This means simultaneously increasing the quantity of these items while also making sure they are of higher quality than many are today.

Using these items costs more than using only multiple choice questions and they take more time to administer and score. Yet the payoff for students who become critical thinkers and problem solvers—and the payoff for schools in the increased quality of curriculum and teaching that such test formats encourage—make the investments worthwhile.

Using Performance Measures

Some of the essential skills that college faculty and employers value in high school graduates are very difficult to measure via on-demand tests—even good ones. For example, it is difficult in on-demand testing situations for students to demonstrate that they can engage in teamwork or perform contextualized tasks that involve extended analysis, research, or communication.

Accordingly, states should supplement their summative high school tests with performance assessments. Examples of performance measures that can capture a broader range of student skills include laboratory experiments, research papers, team projects, essays, portfolios, demonstrations, presentations, and exhibitions. Using performance-based measures will increase the range of skills and abilities on which teachers will focus their instruction—and decrease the temptation to teach only the subset of skills and knowledge that is included in the summative tests. States that have gone down this path describe it as powerful professional development for teachers, helping them to understand far more deeply what kind of work is "good enough."

Nevertheless, getting performance assessments right at the state level is tricky. States have struggled with the workload burdens on teachers and inconsistency of expectations in scoring. As a result, there are few examples of sustained large-scale efforts to implement performance assessments statewide.

If these measures are to have credibility and utility as part of the state system, the state will need to address concerns about consistency and quality. Doing this will entail establishing clear criteria, scoring rubrics, anchor assignments, and an auditing mechanism to institute reliability measures and build trust among educators and policymakers. The more the state is willing to invest in ensuring quality and consistency, the more useful the measure will ultimately be to states and to schools—and the fairer it will be to students.

Given the constraints and challenges of implementing performance-at-scale, states need to distinguish between those types of complex skills that are actually better or even only measured via performance assessment. This will enable more judicious and focused efforts.

- Has the state done a gap analysis of high school assessments and standards to determine which skills are being measured well and which are not?
- Is the state making ample use of constructed-response questions on statewide assessments or are assessments too heavily-relying on multiple choice questions?
- Which standards are most appropriate to measure through performance-based assessments?
- How can the state work with districts to initiate performance assessments? What kinds of performance measures are being used already by schools or school districts? Can these be expanded or brought to scale? Can the postsecondary system help with research and development regarding these efforts or with piloting new measures?
- What types of performances should all students demonstrate (for example, lab experiment protocols, oral argument, teamwork)? What performances should be available but optional for students (for example, completing a studio arts portfolio, building a functional robot)?
- How will the state ensure fidelity to the standards and consistency of scoring across classrooms, schools, and districts?

Oregon's Approach to Assessing Essential Skills

Beginning with the graduating class of 2012, in order to earn a high school diploma in Oregon, students must demonstrate proficiency in four essential skills (read and comprehend a variety of texts; write clearly and accurately; speak clearly and coherently; and apply mathematics in a variety of settings). The identified skills can be applied in a variety of courses, subjects, experiences, and settings. Students will have the opportunity to demonstrate proficiency through existing assessment options, including work samples that are scored using state-developed rubrics and guidelines, as well as through new options as they become approved by the Oregon State Board of Education.

Districts will maintain flexibility in the design and administration of work samples, although the state may provide examples or models of content area lessons or "tasks" that can be used by districts as they develop local assessments. The Oregon Department of Education (ODE) has released prompts, tasks, and examples of scored student work through its Web site that districts can use during task development and to monitor task difficulty. To promote both transparency and consistency, the ODE also has created a practice scoring Web site to provide teachers, students, and parents an opportunity to practice scoring student papers and to receive feedback on their scoring accuracy.

Question 4-8: Has the state made supporting instruction a high-enough priority in the assessment system? Would it be helpful to make high-quality interim assessments available to districts and schools?

States need to strike a better balance between tests that are mostly useful for accountability and tests that are useful for improving teaching and learning in the classroom. In recent years, states have focused almost exclusively on summative tests, which have limited utility for teachers throughout the school year.

High-performing schools and districts often use interim assessments, administered regularly throughout the school year, to measure student performance against curriculum standards and to provide more frequent feedback to educators, parents, and students. They use the results to strengthen instruction, to target resources, and to provide support to students and teachers who need extra help.

There are a variety of interim assessment products on the market created by textbook and testing companies, but these are of varying quality.[31] Just as we've seen with summative assessments, interim assessments will only be useful if they are high quality—well-aligned with state standards and able to provide useful feedback to districts, schools, and teachers.

It should not be left to chance if schools and districts have access to high-quality interim assessments. States should take responsibility for ensuring that all schools and districts have access to at least one full set of high-quality interim assessments. As one option, states could make an interim assessment available for district use, while the responsibility for administering, scoring, and using the assessment remains at the district level. Districts would be free to use their own interim assessments if they are determined to be of equally high quality. States may want to take a firmer approach with low-performing schools and districts by requiring those systems

31 The Aspen Institute Education and Society Program and Achieve partnered with the National Center for the Improvement of Educational Assessment to develop a policy brief to clarify how interim assessments fit into the landscape of formative assessment and to offer recommendations to districts on the appropriate use of interim assessments as part of a broader assessment system. See *www.achieve.org/files/TheRoleofInterim%20Assessments12-13-07.pdf*.

to use the state-provided tools.

States' departments of education can also serve as quality-control clearinghouses by, for example, evaluating districts' use of interim assessments; vetting potential vendors of interim assessments; and providing information to districts on the characteristics of the interim assessments that are available commercially, focusing on the quality of the items and alignment with state standards.

It is important that policymakers not confuse interim assessments with formative assessments that teachers use regularly in their classrooms. Such assessments are also a critical part of a strong instructional program, but formative assessments are most effective if they become part of teachers' day- to-day instruction and are therefore more appropriately-crafted by educators who are much closer to the classroom.

- Are interim assessments being utilized broadly across the state? Are there particular districts or schools that do not have access to a full set of interim assessments, or for which the quality of such assessments is low or unknown?
- How can the state ensure that at least one set of high-quality interim assessments is available to all districts and schools? Should the state develop a set of assessments from scratch or find high-quality ones already in use? For example, are there districts or charter schools that currently are using effective interim assessments right now? Is there a way to partner with them to make these tests available to others? Has the state determined whether or not commercially-available interim assessments are well-aligned with the state's standards?
- What can the state do to ensure that teachers get professional development on how to interpret assessment results and use them to improve instruction? Are there are any standards or requirements to ensure that teachers begin this development in pre-service preparation programs?

Question 4-9: Do tests earlier in school signal whether or not students are "on-track" to meet the college- and career-ready standards?

Just as state standards need to be back-mapped from the end-of-high school standards, so too do the assessments given in elementary, middle, and early high school need to line up with the college- and career-ready anchor assessment. The goal is to signal, at each stage of schooling, whether or not students are on a path to college and career readiness. In essence, the college and career readiness tests should become the anchor for the entire statewide system.

Once the state has a vertically-aligned set of standards, it is then possible to look at the assessments to determine what adjustments are necessary:

- Are the tests given in the lower grade levels aligned to the precursors of college and workforce readiness so we can tell if students are on-track to succeed? Are the standards vertically aligned?
- Does proficiency on the 8th grade test indicate a student is ready to succeed in a college- and career-ready course of study? If yes, how was the "readiness" level established and what studies were conducted and/or evidence collected to correlate performance on the 8th grade test with subsequent performance and success in 9th grade courses?

Special Student Populations—Students with Disabilities and English Language Learners

Students with Disabilities: Students receiving special education in the U.S. are a hugely diverse group: the great majority can achieve at the same levels as their non-disabled peers when given the appropriate support, while a small percentage have profound cognitive disabilities, and still others have health impairments that don't have any effect on cognitive ability.[1] There is clear evidence that including students with disabilities in systems of standards, assessment, and accountability accelerates improvements for these students by increasing expectations and forcing innovation in the ways these students are educated.[2]

Through the Individual with Disabilities Education Act (IDEA) and other state and federal laws, there is a substantial policy foundation for the education of students with disabilities. As states design policies to support college and career readiness, they will need to confront the tension between the individualization called for by IDEA and common readiness standards. States will need to ensure that appropriate expectations are established for all students with disabilities. They will need to keep abreast of rapid developments in the field regarding assessment accommodations and alternatives. And they will need to keep a clear eye on equity, as male students and black students are highly over-represented among secondary students with disabilities and among students who fail to graduate ready for college or careers.

Below is a set of questions to ensure that the needs of students with disabilities are addressed in the context of a college- and career-ready policy framework:

- How many students with disabilities are not expected to graduate from high school with college- and career-ready knowledge and skills? What are the goals for students who are not in a college- and career-ready course of study? Are these expectations clearly communicated to parents and students? How is the state balancing the need for individualized goals with the recognition that certain knowledge and skills are required for most jobs and for the exercise of active citizenship?
- Are there particular groups of students who are over-represented among high school students identified as having a disability? What is the state plan for reducing these disparities? In particular, how many black male students are enrolled in a course of study that will not allow them to earn a regular high school diploma? If this figure is much higher than for other groups, what is the state's plan for addressing this specific problem?
- Does the state offer accommodations and alternative assessments that are in keeping with the best practice in the field? Is there a state-level advisory group of psychometricians, other psychologists, and educators who are helping the state in this area?

English Language Learners: English-language learners (ELL) represent the fastest-growing group in public schools, and are among the lowest performing, making it a simple reality that we need to better serve these students. The challenge of improving the education of ELLs is no longer limited to traditionally high-ELL states, either: states like South Carolina, Kentucky, and Indiana saw increases of over 400 percent in their ELL population from 1995-2005, while the country as a whole saw ELL enrollment increase by 60 percent over this period.[3] Every state needs a deliberate strategy and dedicated resources for ELL students.

States have three sets of questions that need to be answered in this area:

1. Who are the ELL students in the state?

There are differences among ELL students that policymakers need to understand because the best solutions will vary based on context. Nationally, more than half of ELLs in grades 6-12 were born in the U.S. and have attended schools here their whole lives,[4] suggesting quite a different set of responses than would be appropriate for newcomer students without much exposure to formal education.

- What proportion of total students are ELLs? How has this proportion changed over the last ten years and what are the projections for growth among this population in the next decade?
- What percentage of ELLs were born in the U.S. and have attended U.S. public schools for their whole lives? What percentage are newcomers to this country? Among ELLs arriving in the U.S., how many had limited/or interrupted education in their initial language? How many are

proficient in their native language?

- Are there a multitude of languages and cultures reflected in the state's ELL population, or are they mostly Spanish-speaking? Among Spanish-speaking ELLs, are most from a particular country or region?

2. What are the resources required to teach these students, and what are the measures for knowing whether this is happening?

The most important ingredients for ELL students' success are the same things that other students benefit from: clear and high expectations, qualified teachers, and a rich curriculum.[5] Most states aren't providing educational opportunities to ELLs in equitable ways, however. For example, in seven out of eight states where ELLs represented more than 10% of the students in 2005, high-ELL districts received less in state and local resources than low-ELL districts.[6]

- Ensuring students gain full proficiency in English is essential to their academic success. Does the state track assessment results both in English-language development and academic content areas to see how these results interact and correlate with one another?
- Does the state examine disparities in educational opportunities for ELL students in terms of monetary resources, access to qualified teachers, enrollment in rigorous courses, and other measures of educational inputs? Is there a priority and a plan for addressing inequities?
- Is there adequate attention to teaching students English proficiency in all the domains needed for academic success? Are good measures in place to assess language proficiency in all domains?
- Are linguistic, psychometric, and educational scholars being consulted to help the state interpret results and design better measures and better programs?

3. How should accountability treat ELL students?

Most Hispanic parents and students (the overwhelming majority of ELLs) want to go to college and, indeed, believe college is essential. We need to ensure that accountability does not undermine these aspirations. When we think about high school measures and ELLs, there is an unfortunate and inaccurate image of students arriving at American high schools with no English and little formal education. The reality is that most ELLs, even in secondary schools, were born in the U.S. and we should expect them to be educated up to the same standards as all other students.

Having said that, states need more sophisticated ways of accounting for ELLs so that we can distinguish new arrivals with little formal education from second- and third-generation Americans.

- Does the state track ELLs in cohorts to assess how long they have been receiving ELL services and how far they have progressed toward full English proficiency?
- Does the state disaggregate grade-level content assessments by ELLs of different cohorts (that is, math results for students who have been identified as ELL for two years, three years, etc.)?
- Does the state have accountability for students' English language development? What is the state's expectation for how long it should take students to learn English, and does this vary by the grade-level at which students enter American schools?
- Would it be helpful to base accountability goals on both English-language acquisition and academic content proficiency for the first couple of years, with the weight first on language acquisition and shifting to content proficiency over time?

1 U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act data, *www.ideadata.org*.
2 For more information on students with disabilities see Margaret McLaughlin et al (November 2008), "Next Generation State High School Assessment and Accountability: Students with Disabilities," prepared for Achieve and the Education Trust at *www.achieve.org/MeasuresthatMatter*. For more information on English language learner students see Delia Pompa (November 2008), "Next Generation State High School Assessment and Accountability: English Language Learners," prepared for Achieve and the Education Trust at *www.tc.columbia.edu/centers/EquitySymposium/symposium06/resource.asp*.
3 h Capps et al. (2005), "The New Demography of America's Schools: Immigration and the No Child Left Behind Act," The Urban Institute., *www.urban.org*.
5 Claude Goldenberg (Summer 2008), "Teaching English Language Learners: What the Research Does—and Does Not—Say," American Educator, American Federation of Teachers.
6 Carmen G. Arroyo (January 2008), "The Funding Gap," The Education Trust, *www2.edtrust.org*.

Section Five:

Get Everybody Pulling in the Same Direction: An Information and Accountability System Focused on College and Career Readiness

The best accountability systems, in any field, have a few things in common. They set clear goals for people to rally around—goals that are meaningful, challenging, and achievable. They provide regular information to guide the work, both to those on the front lines and to consumers and clients. And they inspire people to aim higher and seek support—and provide them with that support—when they need help.

Most accountability systems for high schools don't do any of these things very well. The goals are too low, the measures too narrow and the incentives too weak to affect real change.

If we are serious about getting students academically prepared for life after high school, college and career readiness needs to become the central focus of our accountability systems, not an afterthought. The best high schools and the most forward thinking districts in the country operate this way; states need to as well.[32]

Question 5-1: What information do stakeholders need to support college and career readiness?

At the core of a good accountability system is information—the right information provided to the right people at the right time. As states rethink their high school accountability systems, they should start by determining what information is most important for the people whose efforts are necessary to improve student readiness.

In our vision of a system that gets the right information to the right people:

- At every point during their high school careers, students (and their parents) should know exactly where they are on the path to completing the coursework and mastering the competencies that they will need to be ready for college and careers. This information should not be gathered and shared only in high school—students should understand all through the grades where their performance places them on that readiness trajectory.
- Teachers and administrators need to know the same information about the trajectory of each student in their school and district. Moreover, they need to know it in real time, when they can still do something about it. Educators also need a variety of other important information at their fingertips—information that helps them further diagnose student needs and provides them with the necessary supports and opportunities to accelerate their learning.
- The public and the policymakers who represent them have a right to know how the schools and districts they support are performing in getting the students with whom they are entrusted to the college- and career-ready level, and whether or not their performance and progress is sufficient to merit continued confidence.

32 The Education Trust (2005), "Gaining Traction Gaining Ground: How Some High Schools Accelerate Learning for Struggling Students," *www2.edtrust.org/NR/rdonlyres/6226B581-83C3-4447-9CE7-31C5694B9EF6/0/GainingTractionGainingGround.pdf.*

Question 5-2: Are data available to meet these information needs?

State leaders have a responsibility to ensure that stakeholders at all levels have access to the data necessary to answer key questions about student readiness. While we of course cannot address all of these questions here, the list below lays out some of the most critical ones:

- How many students are taking and successfully completing a college- and career-ready course of study?

  Increasing numbers of states are either requiring students to take a college- and career-ready course of study or providing incentives for them to do so. But putting this policy in place does not ensure that all students will, in fact, be enrolled and successful in the courses they need. To do that, teachers and school administrators need to know each student's course-taking history to ensure that they are on-track to completing the required courses. District leaders need to know course enrollment patterns in each school to provide support and make decisions about resource allocation. And state leaders will need to know where the biggest roadblocks are for students to identify areas for intervention. These are critical questions, yet currently only a handful of states collect the data necessary to report how many—and which—students in the state, district, or school take the college- and career-ready course of study.

- How are students performing on assessments of college and career readiness?

  To get more students to the college- and career-ready level, teachers, and principals will need to know how individual students are faring relative to college- and career-ready standards to provide those who are struggling with tailored supports and those who are meeting them with additional challenges. District and state leaders will also need information about patterns of student achievement to evaluate progress and identify needs.

- How many students are graduating, and what happens after they leave high school?

  Despite recent state and federal actions, educators, parents, and policymakers in far too many places still do not have accurate information on how many students graduate from high school. Fewer still have information about what happens to students after they graduate. Do they enroll in postsecondary education or training or do they join the workforce? Do those who enroll in college need remediation? Do students persist in college and graduate? Do students who directly enter the workforce perform well in on-the-job training? Are they upwardly-mobile and successful in the workplace?

As important as it is to be able to answer these questions for all high schools, it is equally important to be able to answer them for all groups of students. Without data disaggregated by race/ethnicity, family income, English language proficiency and disability status, educators, parents, and policymakers will not have the information they need to close the gaps in achievement that separate some groups of young people from others.

There are, of course, many more questions that are critical to student readiness than those listed above, such as questions about the opportunities that all students are given to learn. Do all students have access to teachers who know their subject matter and are effective in the classroom? Are schools and districts provided with the funding necessary to meet the academic needs of their students? State leaders need to think carefully about the questions that are most important to them, and whether or not the data necessary to answer them are available to the right people at the right time.

It's important to keep in mind that providing data to the right people does not just mean providing data to educators and administrators. It means proving data to members of the public as well. It is through public reporting that states communicate to parents and community members about what's going on in their schools. This communication is critical to bolstering public trust in and support for schools. And it is critical to ensuring that parents are empowered to make informed decisions about their children's education. Public reporting can also serve to exert real pressure on those schools that are not meeting the needs of all students successfully.

- What indicators does the state currently collect for its high schools? Which of these indicators are publicly reported? Are all indicators disaggregated by race/ethnicity, income, English language proficiency, and disability status?
- Has research been conducted to determine the relationship between the available indicators and student success in college and careers? If so, what does the research say about what is most important for college and career readiness?
- Can the state's data system generate information about performance over time on the indicators that are most important to student readiness at the individual, group, and school levels?
- Does the higher education system report remediation rates back to high schools? If not, what will it take for this to happen?

Question 5-3: How can the state ensure that college and career readiness is central, not peripheral, in the accountability system?

If college and career readiness is the goal for all students, the indicators used to evaluate high school performance should reflect that core goal. We recommend that states build their accountability systems around three types of indicators: *completion of and success in the college- and career-ready course of study, achievement,* and *attainment*.

Readiness should not be viewed as a fixed state where students either make it or they don't. We recommend that states design their information and accountability systems in a manner that reflects a continuum of whether students are *progressing toward, achieving,* and *exceeding* college and career readiness.

By creating a continuum of indicators, states can accomplish two things that most accountability systems today do not. First, they can ensure that students who are identified as off-track get the attention and resources they need to get back on-track before it is too late. Second, they avoid a situation where the floor becomes the ceiling and instead provide incentives for students who achieve the college and career readiness standard earlier in high school to continue to strive for more.

Here is how this continuum could look in each of the key areas mentioned above:

Course completion and success

- We recommend that states include in their indicator system the proportion of students in each school that complete a college- and career-ready curriculum aligned with state standards.
- To help schools monitor student *progress toward* completing the college- and career-ready course of study

and assist those at risk of falling off-track, accountability systems should collect timely information on credit accumulation, particularly for 9th graders, since most struggling students experience problems at this time. The system should also reward schools who help off-track students recover needed credits to get back on-track.

- In order to motivate students to *exceed* the college- and career-ready standard, states should incorporate participation in AP and IB courses as well as dual-enrollment programs and other college-level courses into their indicator systems.

Identifying Students At Risk of Dropping Out

Leading researchers have identified a set of risk factors that significantly increase odds that students will drop out of high school. These risk factors fall into two categories:

1) Academic performance: Students who struggle in the classroom and fall behind academically are more likely to drop out. Low grades, low test scores, Fs in English and math, falling behind in course credits, and being held back one or more times all have been linked to lower chances for graduation.

2)Education engagement: Students who become disengaged from school and develop disciplinary problems are more likely to drop out. High rates of absenteeism, truancy, and poor classroom behavior have also been linked to lower chances for graduation.

Understanding these risk factors allows educators and policymakers to identify those students who are more likely to drop out and target supports and interventions to them and their schools. In Chicago, for example, district officials calculate, monitor, and publicly report the percentage of students in each high school who are "on-track" in 9th grade, meaning they have accumulated at least five course credits and failed no more than one semester course in a core subject by the end of freshman year.[2]

In New York City, the Office of Multiple Pathways has developed a portfolio of new schools designed to promote college and career readiness among the over-age, under-credited students who are most at-risk of dropping out from traditional comprehensive high schools.[3] While they still have a long way to go, initial evidence suggests that these new schools are more successful in graduating previously struggling students.[4]

States and districts should look closely at their data to see what factors are most predictive of dropping out, and then ensure that those data are collected, reported, and acted on at the school level.

1 Achieve (2006). Identifying Potential Dropouts: Key Lessons for Building an Early Warning Data System, *www.achieve.org/files/FINAL-dropouts_0.pdf*.
2 For more information, see "School and Citywide Reports" at *research.cps.k12.il.us*.
3 For more information, see *schools.nyc.gov/Offices/OMPG/default.htm*.
4 Education Week, "Pathways to Diploma," April 11, 1007.

Achievement

- As states phase in more challenging assessments in high school capable of measuring college and career readiness, performance on those exams should become a central factor in accountability systems. States should establish "postsecondary readiness scores" on these exams and schools should be measured based on their ability to increase the proportion of students taking the exams and scoring at the readiness level over time.

- To monitor student *progress toward* college and career readiness, states should consider the role that exams taken earlier in high school can play in the accountability system. In most states, those exams—whether cumulative tests given in 10th grade or end-of-course tests in courses such as Algebra I or English 9—are currently the *primary* vehicle for holding schools accountable. While we recommend that the college and career readiness assessment become the primary assessment for school accountability over time, we recognize the critical role that assessments given earlier in high school play in supporting students and ensuring their readiness, and recommend they continue to get factored into high school accountability systems in some manner.

- In order to encourage students and schools to *exceed* college readiness, the accountability system should take into account the percentage of students who take and score well on AP, IB, and other advanced exams.

Attainment

- While most states are moving toward calculating and reporting accurate high school graduation rates, far too few are holding schools and districts accountable for actually improving their rates.[33] This is a real problem. Meaningful graduation rate accountability is necessary not only to make clear that is it unacceptable to push out struggling students with lower test scores, but also to establish the expectation that educators, policymakers, and communities alike are responsible for improving graduation rates for all young people. States need to establish meaningful graduation rate accountability. As they do, they will need to wrestle with the evidence that outcomes are best for those students who graduate within four years and the reality that some students will take longer.[34] Accountability systems should give primary weight to the four-year graduation rate but should also give credit to extended-year rates to avoid a disincentive for schools to help those students who may need more time. To ensure that some groups of students are not disproportionately represented in the extended-year rates, states need to publicly report, closely monitor, and hold schools accountable for both four-year and extended-year rates for all groups.

- Where states have a defined college- and career-ready course of study but do not require that students complete this course of study in order to graduate, they should include both the percentage of students who earn a regular diploma and the percentage who earn a college- and career-ready diploma in the accountability system and establish an expectation that both rates will increase.

- States should consider how to incorporate data on college-going and remediation into their accountability systems. In many states, there are varying standards at postsecondary institutions for placing students into credit-bearing courses, so comparing remediation rates of students will be difficult, if not impossible, to do until higher education leaders agree on a common readiness standard.

33 The Education Trust (2007), "Graduation Matters: Improving Accountability for High School Graduation," *www2.edtrust.org/NR/rdonlyres/5AEDABBC-79B7-47E5-9C66-7403BF76C3E2/0/GradMatters.pdf*.
34 Unpublished analysis by Clifford Adelman, for The Education Trust.

Accountability systems should signal a coherent, purposeful progression of indicators on which to focus attention from the beginning of a student's high school career through graduation. The chart below presents a framework to help states organize the central college- and career-ready indicators by type and by placement on the continuum from progressing toward through exceeding readiness.

	ON THE WAY TO COLLEGE AND CAREER READINESS	MEETING COLLEGE AND CAREER READINESS	EXCEEDING COLLEGE AND CAREER READINESS
Course completion and success	-Timely credit accumulation -Credit recovery	-Successful completion of college- and career-ready course of study	-Participation in AP, IB, and dual enrollment courses
Achievement	-Performance on aligned assessments of core content and skills early in high school -Grades (when necessary quality-control mechanisms have been established)	-Meeting standards on the college- and career-ready statewide anchor assessment -Postsecondary remediation rates	-College-level performance on AP and/or IB exams
Attainment	-Graduation	-Earning a college- and career-ready diploma	-Earning credits in dual-enrollment courses -Application to and enrollment in postsecondary

To ensure that attention is paid to *all* students, it is critical that all of the indicators of progress toward and beyond college and career readiness be calculated and disaggregated by students' race/ethnicity, family income, English language proficiency, and disability status.

Question 5-4: How can the state set stretch goals for schools and ensure those goals are meaningfully tied to larger statewide goals?

There is a serious tension between the clear economic, civic, and moral imperatives to prepare all students for the demands of college and careers right now and the painful reality that many of our districts, schools, and students remain very far from this goal. Without high expectations for performance, our systems will not be pushed to make the improvements we so badly need. But with expectations that far surpass our capacity to deliver, not only do we run the risk of overwhelming our systems of support, we run the risk of overwhelming the educators serving our most disadvantaged students.

To manage this tension, states will need to adopt stretch goals that reflect ambitious expectations for the percentage of students who will graduate college- and career-ready, and then establish progress targets that communicate a clear path from where students, schools, and districts are to where we need them to be.

Progress targets should reflect the expectation that all schools and students, regardless of where they stand relative to the goal of college and career readiness, should make gains. Those schools, groups, and students starting far away should make substantial and sustained improvement toward the goal, while those meeting the goal should progress beyond it.

Louisiana—Going Beyond Test Scores

State assessments are the primary driver in most state accountability systems, and for good reason. They keep schools focused on achievement results and allow for an important level of objectivity and comparability in the performance data. But as states pursue policies to promote college and career readiness, it's necessary to broaden accountability systems at the high school level to include other meaningful indicators that schools and school systems need to focus on to improve student preparation.

Louisiana provides one example of how states can do this. The state's new high school performance targets are based in part on results on the state assessment but also on the percentage of students completing a college- and career-ready curriculum and the percentage of students graduating high school within four years. Schools earn points based on these indicators and they earn more points for students who graduate on time than those who don't and even more for those who graduate having completed a rigorous course sequence.

The table below shows how Louisiana values different student outcomes in its accountability system:

STUDENT RESULT	POINTS AWARDED
Academic endorsement (college-ready) (successful completion of college-ready course of study)	180
Tuition Opportunity Program for Students (TOPS)[1] or Career/Tech Endorsement	160
State-Approved Industry-Based Certification or TOPS Tech and Dual Enrollment OR TOPS Tech and Articulated Credit	140
Regular High School Diploma	120
GED	90
Skills Certificate/Certificate of Achievement	60
Attendee	30
Dropout	0

According to officials in Louisiana, this new system already is causing educators and school officials to pay more attention to their dropout rates and to the level of courses students are taking in their high schools.

Done correctly, a careful expansion of indicators will signal to educators, students, and parents the range of factors, including but by no means limited to test performance, that are necessary to ensure readiness.

1 For more information on TOPS, see www.doe.state.la.us/LDE/index.html

In recent years, governors and other state leaders have become involved increasingly in setting statewide goals for educational achievement and attainment that are tied to statewide goals for economic development. Such goals can serve a valuable role in garnering buy-in from state level decision-makers and they have the potential to redirect or align resource allocation. Gubernatorial goals also can serve to broaden the base of support beyond policymakers and foster dialogue between the education and workforce communities regarding the education pipeline and labor market projections. But unless these large-scale goals are translated into specific, meaningful goals for individual schools and districts, they will remain aspirational rather than becoming the expectations around which systems of instruction, support, and resource allocation are organized.

The following is an illustration of one way in which state leaders could approach the task of setting stretch goals and ambitious but practical progress targets for the percentage of students graduating college- and career-ready in their accountability system:

1) Determine the percentage of students currently enrolling in some form of postsecondary education

Percentage of high school graduates enrolling in postsecondary education within two years of graduation, 2008	**75%**

2) Determine the percentage of students who are graduating from high school ready for college and careers

Percentage of high school students graduating college- and career-ready, 2008	**37%**

Given that 75 percent of students are enrolling in postsecondary, but only 37 percent of students graduate from high school meeting college- and career-ready standards, states might set a goal of closing that gap between college-readiness rates and college-going rates within 10 years, so that 75 percent of students will graduate from high school ready for college.

Of course, college-going rates are not fixed; they are rising, and the ultimate aim is to graduate all students prepared for what is next, whether they choose to go to college or go directly into the workforce. But setting a 10-year goal of preparing at least as many students for college as are already going in a baseline year represents an expectation that is both achievable on the horizon and grounded in reality.

3) Determine trends in college- and career-ready graduation, statewide and in both high- and low-improving schools.

PERCENTAGE OF STUDENTS GRADUATING COLLEGE- AND CAREER-READY	2005	2006	2007	2008	AVERAGE ANNUAL PERCENTAGE POINT CHANGE
Statewide	31%	33%	34.5%	37%	+2 annually
Schools in the top quintile of improvement in college- and career-ready graduation	26%	29%	35%	38%	+4 annually
Schools in the bottom quintile of improvement in college- and career-ready graduation	24%	23%	25%	24%	+0 annually

The improvement seen in the schools in the top 20 percent of improving college- and career-ready graduation rates will become the progress target that all schools will be expected to meet.

With an expected annual improvement of four percentage points, the average school in the state will hit, and slightly exceed, the goal of 75 percent college- and career-ready graduation in 10 years.

	BASELINE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Percentage of students graduating college- and career-ready	37%	41%	45%	49%	53%	57%	61%	65%	69%	73%	77%

The illustration above is based on the percentage of students graduating college- and career-ready—meaning they have completed the state-defined college- and career-ready course of study and met standards on the statewide anchor assessment. States that do not yet have these components in place should not wait to set aggressive goals. For example, in a state that defines a college- and career-ready course of study but does not yet require students to complete it in order to graduate, goals should reflect an expectation that both rates—the percentage of students graduating overall and the percentage graduating who have completed the college- and career-ready course of study—should increase.

	BASELINE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Percentage of students graduating	64%	67%	70%	73%	76%	79%	82%	85%	88%	91%	94%
Percentage of students graduating college- and career-ready	37%	41%	45%	49%	53%	57%	61%	65%	69%	73%	77%

Whatever goal-setting process is put in place, annual targets should be set to reflect the expectation that schools will make progress toward, and ultimately achieve, the goal.

- Have goals been set for the state regarding college and career readiness? If so, what goals does the state currently have for the performance of districts, schools and students on these high school indicators? Are there goals for key indicators beyond test scores?
- How are the indicators used for state accountability aligned with state goals?
- What percentage of students currently graduates high school in four years? What percentage of students currently enrolls in postsecondary education after high school? Do the state's current goals respond to students' demonstrated interest in pursuing postsecondary education?
- What other outcomes or incentives are created by the state's accountability measures?
- Do progress targets expect that the schools, groups, and students who are the furthest behind will make the most improvement?

Question 5-5: How can the state set expectations for multiple indicators while maintaining focus on college- and career-ready graduation?

The task of setting accountability expectations becomes more complex as more indicators are added to the system. There's a real risk that by including too much, we can lose sight of what is most important. In a system built around college and career readiness, the indicators of whether or not students are, in fact, college- and career-ready—whether or not they've completed the college- and career-ready course of study, achieved at the college- and career-ready level on the state anchor assessment, and graduated—must remain prominent.

One way to accomplish this is to develop a performance index in which different values are assigned to different indicators and to different levels of performance on the indicators. In such a system, the indicators of achieving college and career readiness would be given the most weight, but performance on the measures of progressing toward and exceeding college and career readiness would be credited, too. For example, when considering course completion and success, the most credit would go to the percentage of students who complete the college- and career-ready course of study. But some credit would also go both to the percentage of students accumulating sufficient credits on-time and the percentage of students participating in AP, IB and dual enrollment.

In constructing an index, there are some important considerations:

- What are the most important indicators? Are those indicators weighted most heavily in the index? For example, if the ultimate goal is to graduate college- and career-ready students, then more weight should be placed on the readiness-signals than on assessments given earlier in high school.
- Where there are multiple levels of achievement on a given indicator, is the most important level weighted most heavily? For example, if there are basic, proficient, and advanced levels of achievement on the college- and career-ready assessment, is more weight given to students at proficiency than at basic levels?
- Is the performance of all groups of students—not just overall averages—accounted for? For example, does the performance of each group of students contribute to the school's overall index score?
- Should schools be allowed to compensate for lower percentages of students meeting college- and career-ready standards if they have a higher percentage of students exceeding college- and career-ready standards?
- How can the state design an index sophisticated enough to value a variety of indicators while also being straightforward enough for educators and the public to understand?

Question 5-6: What metrics of performance does the state want to evaluate? Does the state want to measure whether or not all schools have met a common target at a fixed point in time, whether or not they've shown adequate growth from year to year, or both?

There are at least three current metrics of school performance in use in accountability systems—status, growth to standards, and improvement. To illustrate these approaches, the table below provides examples of each in setting

expectations for the percentage of students meeting college- and career-ready standards. It is important to note that other important indicators of school performance, including indicators of participation and success in a college- and career-ready course of study and attainment, can be evaluated according to status and improvement. Growth to standards is specific to achievement of performance standards.

APPROACH	EXAMPLE	QUESTIONS ANSWERED	CURRENT USE
Status	The state sets targets for the percentage of students meeting college- and career-ready standards. Targets increase annually until the ultimate goal is reached.	What percentage of students is meeting college- and career-ready standards this year?	"Traditional" Adequate Yearly Progress under NCLB
Growth to Standards	The state sets targets for the percentage of students on a trajectory to meet college- and career-ready standards in three years, whether students are meeting standards in the current year or not. Targets increase annually until the ultimate goal is reached.	What percentage of students is on trajectory to meet standards by a certain date? Are students at all levels of initial achievement, including the highest- and lowest-performers, growing academically?	Tennessee's growth model under NCLB
Improvement	The state sets targets for expected improvement in the percentage of students meeting college- and career-ready standards from one year to the next. Targets culminate in the ultimate goal, with schools starting furthest behind expected to make the greatest improvement.	Are schools making sufficient year-to-year improvement in the percentage of students meeting standards to meet the goal by a set date?	California's Academic Performance Index

Too often, current accountability systems are built solely on status metrics, which do not give credit for real improvement below the target, or solely on metrics of growth or improvement, which do not necessarily reflect the expectation that students will ever actually reach a meaningful level of achievement. We recommend that states develop accountability systems that look at a combination of status and improvement/growth metrics. Looking at status gives a picture of where students are currently performing, which is especially critical for those students about to leave high school and enter the real world. Looking at growth/improvement keeps pressure to ensure that all students—from those far below to those well above the standard—progress academically.

- What are the metrics by which district, school, and student performance is evaluated in the state's current accountability system? Are both current-year performance and progress evaluated?

Question 5-7: How does the state set goals that recognize the unique role that districts play in supporting college and career readiness?

It's important that state accountability systems pay attention to the important role that districts must play in improving high school performance. Districts, as well as schools, must have incentives to graduate more students college- and career-ready, and they should face consequences when they don't.

The district role is particularly important at the high school level, where some of the indicators critical to college- and career-ready graduation are outside the control of individual high schools. Specifically, high schools that receive significant numbers of entering students who are far behind grade level face a much bigger challenge in getting them to meet college- and career-ready standards. High schools cannot be let off the hook for catching up students who enter behind, but districts must be held responsible for reducing the numbers of students who arrive behind in the first place.

There are also cases where the sheer volume of schools underperforming in some districts suggests a systemic problem that a school-by-school approach will not address.

There are two basic approaches here for state leaders to consider: for one, states can think of districts simply as clusters of schools and, consequently, mete out positive and negative consequences based on what proportion of their schools meet targets. For example, a district with half of its schools not meeting accountability goals would be in need of intervention, while a district with all of its schools meeting goals would be recognized and rewarded. The other approach is to view districts as if they are one big school, with targets (and consequences) for getting more students college- and career-ready. In this approach, the district would be held accountable based on the percentage of students district-wide meeting key readiness indicators.

Question 5-8: Are there some schools for which goals should be set differently than for most schools?

Many schools think their circumstances and burdens are so unique that they should be exempt from the state's normal goal-setting process. The actual number with a legitimate case is very small—but it is very real—for example, schools designed specifically to serve students who are over-age and under-credited. States need to be careful with these kinds of schools because the wrong goals can create huge disincentives to serve particularly vulnerable students. Florida has dealt with this potential pitfall by allowing districts to choose between traditional metrics or a set of metrics specifically designed for alternative schools. If districts choose the alternative metrics, however, the students also continue to count toward accountability determinations from their sending high school.

Where schools do have a legitimate case, such as those specifically established to educate students who chronically haven't been successful in traditional high schools, it is important to consider the unique circumstances, but not use these circumstances to water down goals to the point of being meaningless. Students who have fallen significantly behind in credit accumulation may need more time to meet standards—but they don't need a whole different set of expectations, which will curtail their options once they complete high school. New York City has created distinct accountability goals for alternative schools, which emphasize credit accumulation and extended-time graduation rates.

- Are there special cases where the core accountability goals and metrics may need to be adjusted? Is the state applying a high-enough threshold so that only a small number of schools with truly unique circumstances are being considered as special cases?
- What kind of adjustments can the state make while ensuring that students in these schools and the schools themselves are held to a high standard?

- What safeguards can the state put in place so that this exception doesn't get abused? For example, if alternative high schools are a concern, what mechanisms ensure that students will not be pushed into alternative schools prematurely or unnecessarily? Are there limits on the number or percentage of students (and percentage of students from specific groups) that can be accounted for in these schools?

Question 5-9: What are the positive incentives—for students and for educators—to work hard to reach the college- and career-ready level and beyond?

When, as is often the case right now, accountability systems are too focused on identifying and fixing failure, they fail to do enough to motivate exemplary performance. Just as students, educators, schools, and systems that are struggling should receive support, those that are meeting and exceeding expectations should realize benefits.

Incentives are important to creating an environment in which accountability goals are perceived as something meaningful to work toward, not just something to meet to avoid sanctions.

Incentives for schools that are meeting accountability indicators can include the following:

- recognition among peers and within the community;
- additional resources or increased discretion in using current resources;
- autonomy from costly or time-consuming state requirements; and
- the opportunity to play a leadership role in developing future policy and practice.

Incentives for students who are meeting college- and career-ready expectations can include the following:

- the assurance that placement tests will be waived and they will be placed into credit-bearing courses in the state postsecondary institutions they're accepted to;
- incentives/bonuses in state aid programs for low-income students; and
- diploma endorsements.

Indeed, success should not only be rewarded, it should be studied and learned from. State leaders should make a real effort to investigate and make known the practices of schools that are meeting the challenge of graduating more students at the college- and career-ready level.

Question 5-10: What is the state doing—currently and to build future capacity—to ensure that schools and districts that continually perform below expectations will not continue to operate in the same ways?

When considering accountability efforts to date, support for struggling schools and districts is perhaps the area where states have been the weakest. Many states have identified significant numbers of underperforming

schools, but most have lacked the strategies and capacity to help those schools improve. This gap has to be addressed, particularly as standards are raised to the college- and career-ready level.

For the whole system to have integrity, the state should be able to guarantee students and families that a high school education will prepare them to pursue their aspirations. Where educators, schools, and systems are not meeting expectations, there need to be meaningful consequences. When schools and districts are unable to meet the goals, the state must have the policy framework and resources in place to spur improvement, and ultimately to change the administration of the school.

State leaders are also responsible for ensuring that students are not required to attend schools that, year after year, fall short of the goal of ensuring college and career readiness. In some cases this may mean creating new schools designed to meet the demonstrated needs of students. In other cases, providing students with options may involve giving them the opportunity to transfer to schools in neighboring, higher-performing districts.

It is critical that the accountability system distinguishes between schools and districts that haven't met expectations. They are not all the same and neither are the remedies to their performance problems. Those that fall just short of their goals will require very different support and intervention than those that have consistently missed their goals by a significant amount.

Beyond the broad accountability categories, state systems need to provide additional information that pinpoints the specific areas in which schools are not meeting goals. States also need to develop the capacity to further diagnose the situations in the lowest performing schools so their problems are better understood.

States will also need to think anew about where the capacity to help underperforming schools will come from. Ultimately, it is the state's responsibility to ensure that needs are being met, but in some places external partners or districts might be in a better position to do this work than state education agencies. In such cases, the state should create partnerships but must retain final responsibility for ensuring that the work is done.

- What is the system for distinguishing among schools that haven't met expectations so that supports and/or interventions can be differentiated?
- What information, beyond what is provided by the accountability indicators, is available to diagnose challenges and needs in low-performing schools? For example, does the state have information regarding the use of instructional time and availability of structured supports in core academic subjects? Does the state collect information on teacher quality, including teachers assigned out-of-field and information on teacher turnover? What else is important to collect?
- Where does the capacity and expertise exist to first diagnose the needs in schools that haven't met expectations and then to provide support and resources to help them improve? How much of this responsibility should fall to school districts? How much to the state? If the state department of education and districts do not have this expertise, is there capacity in higher education or partner organizations that could work on their behalf?

Conclusion

The policy changes called for in this guide are ambitious; we do not underestimate the challenges states will face when implementing them.

There will be people who question whether or not students can rise to the occasion if standards are raised; some will dispute whether or not they need to be raised to begin with. There will be concerns about the K-12 system's capacity to deliver the teaching, curriculum, and support necessary for students to meet the new standards. There will be questions about the state versus district role in areas such as graduation requirements and curriculum. And there will be challenges in getting K-12 and higher education to work together in the ways we've outlined here simply because there are very few mechanisms to enable that cooperation to occur.

Overcoming the challenges and the inertia will require significant leadership. In states that have already advanced parts of this agenda, we have seen how powerful a driver leadership can be—governors, state school chiefs, legislators, state board members, and business and higher education leaders have all stepped forward. Their leadership will be even more important in this next phase of work.

The stakes are real. We are sending too many of our young people into the world after high school underprepared. It is taking a real toll on them, and on our economy and society as a whole. High schools need to change, but they will not change without a substantially different policy framework guiding the way.

Members of Advisory Group

Achieve and The Education Trust would like to thank the following advisory group members for sharing their time and expertise throughout the development of this guide:

- Arlene Ackerman, Superintendent of Schools and Interim Chief Academic Officer, The School District of Philadelphia
- Michele Cahill, Vice-President, National Program Coordination and Director of Urban Education, Carnegie Corporation of New York
- David Carter, Chancellor, Connecticut State University System
- Mitchell Chester, Commissioner of Elementary and Secondary Education, Massachusetts
- Michael Cohen, President, Achieve
- Checker Finn, President, Thomas B. Fordham Foundation and Thomas B. Fordham Institute
- William Flores, Deputy Secretary, New Mexico Higher Education Department
- Susan Fuhrman, President, Teachers College, Columbia University
- Matthew Gandal, Executive Vice President, Achieve
- Brian Gong, Executive Director, National Center for the Improvement of Educational Assessment
- Kati Haycock, President, The Education Trust
- Margaret Horn, Senior Management Consultant, Governor Bredesen's Office of State Planning and Policy
- Phyllis Hudecki, Executive Director, Oklahoma Business and Education Coalition
- Stan Jones, Commissioner of Higher Education, Indiana Commission for Higher Education
- Joe Johnson, Executive Director, National Center for Urban School Transformation, San Diego State University
- Jan Kettlewell, Associate Vice Chancellor for P-16 Initiative, Board of Regents, University of Georgia System
- Tim Knowles, Lewis-Sebring Executive Director and Senior Research Associate, University of Chicago Center for Urban School Improvement
- Howard Lee, Chairman, North Carolina State Board of Education
- Fritz Mosher, Senior Consultant, Consortium for Policy Research in Education and the Center for Continuous Instructional Improvement, Teachers College, Columbia, University
- Jeff Nellhaus, Deputy Commissioner, Massachusetts Department of Elementary and Secondary Education
- Scott Palmer, Partner, EducationCounsel
- Tom Payzant, Professor, Harvard Graduate School of Education
- Delia Pompa, Vice President, Education, National Council of La Raza
- Mark Thomas, Principal, Northview High School, Michigan
- Sharif Shakrani, Co-Director, Education Policy Center, Michigan State University
- Ross Wiener, Vice President for Program and Policy, The Education Trust
- Gene Wilhoit, Executive Director, Council of Chief State School Officers
- Duncan Wyse, President, Oregon Business Council; Chief, Oregon State Board of Education

Acknowledgments

This guide was the result of many months of hard work. Achieve and the Education Trust would like to thank those individuals whose efforts made it possible.

Matt Gandal, Executive Vice President of Achieve, and Ross Wiener, Vice President for Program & Policy at the Education Trust, provided overall leadership for this project from conceptualization through the writing of the guide. Alissa Peltzman of Achieve and Daria Hall of the Education Trust provided core research, writing, and editorial support.

We are grateful for the participation and support of the advisory group, who shared insights and provided helpful feedback throughout the process.

The following individuals wrote white papers to help inform the advisory group conversations: Mitch Chester, Brian Gong, Scott Marion, Margaret McLaughlin, Rob Muller, Scott Palmer, Delia Pompa, and Nancy Smith.

Special thanks to Jennifer Vranek of Education First Consulting for her considerable intellectual contributions and editorial assistance throughout this project.

Thanks also to the following members of the Achieve and the Education Trust staff for their guidance and feedback as the guide was written: Laura Slover, Kate Blosveren, Joanne Eresh, Kaye Forgione, Lisa Gray, Tracy Halka, Scott Jenkins, Bill Porter, Jean Slattery, Robert Triscari, Anna Habash, Dan Levin, and Valerie Begley. Tom Flavell from Achieve was responsible for the layout and design of the report.

Finally, Achieve would like to thank the Bill & Melinda Gates Foundation for providing generous funding for this effort and for the broader work of the American Diploma Project.

Measures *that* Matter

Achieve

The Education Trust