

Closing the Expectations Gap 2006

An Annual 50-State Progress Report on
the Alignment of High School Policies
with the Demands of College and Work



About Achieve

Created by the nation's governors and business leaders, Achieve, Inc., 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, work 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 post-secondary 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, 22 states 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.

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Executive Summary

In February 2005, Achieve and the National Governors Association sponsored a National Education Summit on High Schools at which governors from 45 states, business leaders and education officials addressed the preparation gap that leaves many high school graduates unprepared for success in college and the workplace. The Summit helped focus the nation's attention on how our schools, our students and our economy intersect, and it coalesced support for an action agenda to revitalize America's high schools. The agenda included raising academic standards and graduation requirements, building stronger data and measurement systems, better preparing teachers, redesigning high schools, and holding both the K–12 and postsecondary systems accountable for improved performance.

In an effort to monitor state progress toward the Summit goals, Achieve surveyed all 50 states in December 2005 on a key subset of the policies from the Summit action agenda — those focused on aligning high school academic standards, course requirements, assessments, and data and accountability systems with postsecondary and workplace expectations. In most states there is a large gap between what high schools expect and what colleges and employers demand, an *expectations gap*. This report examines progress states are making in closing the gap.

Academic Standards

Anchoring high school standards in college and workplace expectations is a critical first step toward preparing high school graduates for success. More than two-thirds of the states report action in this area, reflecting significant momentum since the Summit.

- To date, only **FIVE STATES** (*California, Indiana, Nebraska, New York* and *Wyoming*) report that they have completed the alignment process, including validation by the business and higher education communities that the high school standards reflect their skill demands. Prior to the

Summit, Achieve analyzed the standards from *California* and *Indiana* and can verify they are well aligned with the American Diploma Project (ADP) college and work readiness benchmarks. We have not reviewed the standards in *Nebraska, New York* and *Wyoming* and therefore cannot attest to their quality and rigor.

- **THIRTY ADDITIONAL STATES** report that they are taking action to align their standards, with many of them giving the postsecondary and business communities a substantial role in defining the high school standards.

Graduation Requirements

Prior to the Summit, Achieve published a state-by-state report on the courses high school students are expected to take to graduate. At that time, only two states — *Arkansas* and *Texas* — had enacted graduation requirements that include four years of rigorous English and mathematics through at least Algebra II. These are the courses that Achieve's research suggests are prerequisites for success in college or well-paying jobs.

Over the past year, there has been significant progress in the number of states moving toward requiring all students to complete a college- and work-ready curriculum:

- **EIGHT STATES** have enacted college- and work-ready graduation requirements. Six of these states (*Indiana, Kentucky, Michigan, New York, Oklahoma* and *South Dakota*) have made this change since the Summit.
- **TWELVE STATES** report to Achieve that they plan to put college- and work-ready requirements in place for all students in the future.
- **SEVEN ADDITIONAL STATES** have raised their graduation requirements since last year's Summit, though not to the college- and work-ready level.

High School Testing

While states have made progress over the past year aligning high school standards and course requirements with college and work, less progress has been made with high school assessments. Very few states have high school tests in place that are rigorous enough to signal whether students are ready for college-level work. As a result, colleges largely ignore the results of those tests and instead administer their own admissions and placement tests. This sends a mixed set of messages to students, parents and teachers.

- **SIX STATES** (*California, Colorado, Illinois, Maine, Missouri and Texas*) report that statewide assessments given to students in high school are used for college admissions and/or placement decisions. **EIGHT ADDITIONAL STATES** plan to do so.
- **EIGHT STATES** have tied college scholarships or financial aid to student performance on high school assessments, and **FOUR OTHERS** plan to establish such financial incentives.

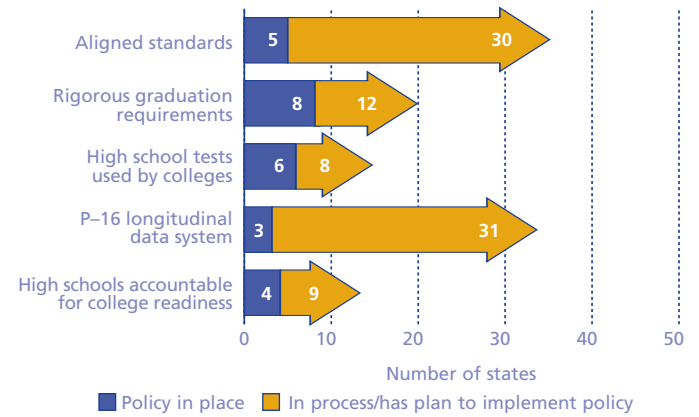
Data and Accountability Systems

At the Summit last year, governors and other education officials agreed that the overriding goal for high schools should be increasing the percentage of incoming 9th graders who graduate ready for college and work. No state has yet made this the centerpiece of its high school accountability system, although a number are moving in this direction.

The ability of states to hold high schools accountable for improving student transitions to college and work depends first on the quality of their assessments and data systems. States need P–16 longitudinal data systems with the capacity to track student progress from high school through postsecondary education.

- **THREE STATES** (*Florida, Louisiana and Texas*) report having a P–16 longitudinal data system in place today.

Growing Number of States Have Policies To Ensure That Students Graduate College and Work Ready



Source: Achieve Survey/Research, 2006.

For an overview of the policies in place in each state, see page 29.

- **THIRTY-ONE ADDITIONAL STATES** report that they are in the process of creating a P–16 data system or linking their existing K–12 and higher education data systems.
- **FOUR STATES** (*Indiana, New York, North Carolina and Oklahoma*) hold high schools accountable for improving the college and work readiness of their students. **NINE MORE** plan to do so.

Once states have longitudinal data systems and more rigorous high school assessments in place, they will be in a position to make college and work readiness a key factor in high school accountability systems.

Moving Forward

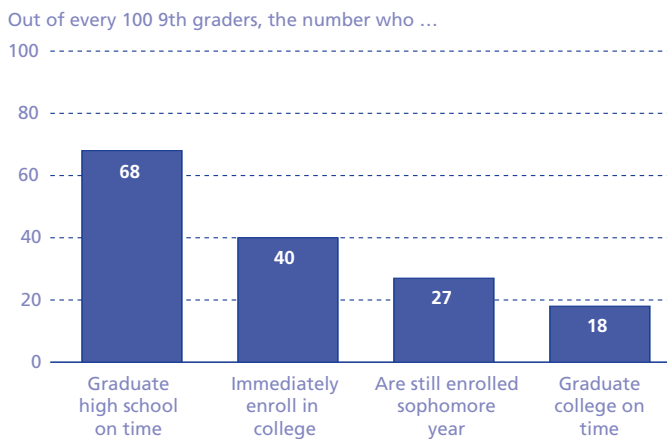
Over the past year, states have made progress closing the expectations gap. Overall, however, much work remains. In the year ahead, we expect the states that are most committed to this agenda will continue to move forward aggressively. We also hope that the example these states are setting will spur other states into action.

Introduction

In February 2005, Achieve and the National Governors Association (NGA) sponsored a National Education Summit on High Schools at which governors from 45 states, business leaders and education officials addressed a critical and growing problem in the American education system: High schools are not preparing all students for success at postsecondary institutions and in the more demanding workplace. Too many students drop out of the education pipeline, leaving high school without earning a diploma, failing to enroll in college or a postsecondary training program, or never earning a postsecondary degree or other credential.¹ A disturbingly high number of U.S. high school students — some 30 percent nationally — never even graduate. For black and Latino students, those dropout rates rise to 50 percent.² Without at least a high school diploma, their prospects for meaningful employment are slim and getting slimmer. Even if they do earn a diploma and enroll in college or enter the workforce, many high school graduates lack the knowledge and skills necessary to succeed.

The Summit helped focus the nation’s attention on how our schools, our students and our economy intersect. The U.S. economy can no longer absorb employees with inadequate educations into low-skill jobs, as it has in past decades. Those

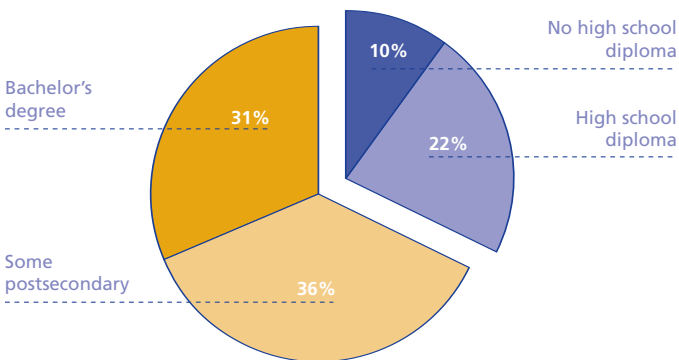
Too Many U.S. Students Drop Out of Education Pipeline



Source: National Center for Public Policy and Higher Education, Policy Alert, April 2004. Data are estimates of pipeline progress rather than actual cohort.

jobs no longer exist or are fast disappearing. Jobs that pay well and support a middle-class lifestyle require higher-level mathematics and communications skills than ever before. Even those students who attain a high school diploma will have a hard time achieving career success without college experience or postsecondary training. At least some postsecondary education is needed for about 67 percent of new jobs in today’s market, and that percentage is expected to rise in coming years.³ If U.S. workers cannot meet the demand, highly skilled jobs will go to other countries such as India and China — a move that will diminish U.S. competitiveness and affect the living standards of millions of citizens.

More Than Two-Thirds of New Jobs Require Some Postsecondary Education



Source: Carnevale, Anthony P., and Donna M. Desrochers, Standards for What? The Economic Roots of K–16 Reform, Educational Testing Service, 2003.

Entering college does not automatically put a student onto a track for success, either. Higher education institutions, businesses, and students and families themselves are spending upward of \$17 billion each year on remedial classes just so students can gain the knowledge and skills that they should have acquired in high school.⁴ Postsecondary remediation does offer a second chance to many students, but too often it cannot make up entirely for inadequate preparation in high

school. Three-quarters (76 percent) of students who require remediation in reading and nearly two-thirds (63 percent) of those who require one or two remedial mathematics courses fail to earn degrees. In contrast, nearly two-thirds (65 percent) of students who do not require remediation complete associate's degrees or bachelor's degrees.⁵ This unfortunate reality is reflected in degree completion rates. Even as more students are entering higher education, the nation's college graduation rates have remained flat for years.

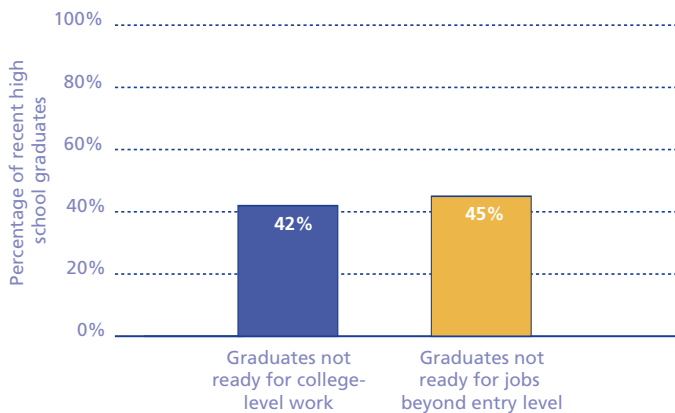
High school graduates themselves report that they were not well prepared for their next steps. Thirty-nine percent now enrolled in college and 46 percent in the workforce believe there were significant gaps in their preparation. Professors and employers agree, estimating that four out of 10 graduates are not prepared for college or good jobs. Knowing that this gap exists, two-thirds of recent graduates who went on to college and three-quarters of those who went straight to work say that if they could do high school over again, they would apply themselves more and take harder courses.⁶

The Summit Action Agenda

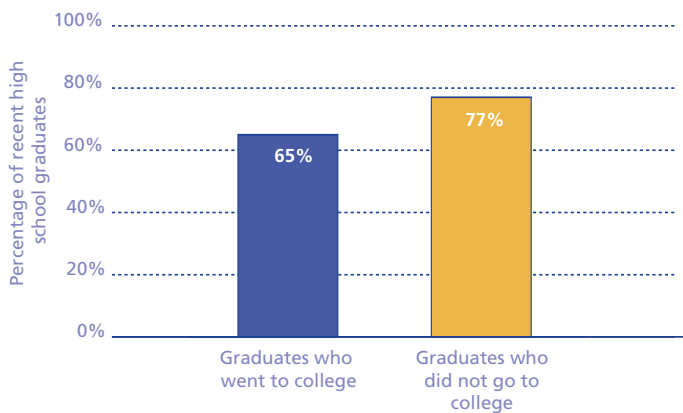
At the 2005 Summit, governors and business and education leaders agreed to an action agenda for revitalizing America's high schools. The agenda called on states to raise academic standards and graduation requirements, build stronger data and measurement systems, better prepare teachers, redesign high schools, and hold both the K–12 and postsecondary systems accountable for improved performance. The Summit sparked several multistate initiatives that reinforce each other:

- **TWENTY-TWO STATES** are working with Achieve in the American Diploma Project (ADP) Network to address the expectations gap in high schools. Achieve launched this Network at the Summit at the urging of the governors in 13 states. Since then, nine additional states have joined. These states are working to strengthen high

College Professors and Employers Report Significant Percentage of High School Graduates Unprepared



Knowing What They Know Today, Many Graduates Report They Would Have Worked Harder in High School



Source: Peter D. Hart Research Associates/Public Opinion Strategies, *Rising to the Challenge: Are High School Graduates Prepared for College and Work?* prepared for Achieve, Inc., 2005.

school standards, curricula, assessments, and data and accountability systems so that more students graduate ready for college and 21st-century jobs.

- **TWENTY-SIX STATES** are participating in NGA's High School Honor States Grant Program, which is providing \$23.6 million in grants to support governor-led initiatives to reform high schools and improve college-ready graduation rates. Recipients of these grants will follow the blueprint of the Summit action agenda to implement both comprehensive high school reforms and more focused efforts designed to increase rigor in high schools, raise participation in Advanced Placement courses and exams, and improve low-performing high schools.
- **TEN NATIONAL ORGANIZATIONS** launched the Data Quality Campaign to provide better information to state leaders on building high-quality data systems — a key component of the Summit action agenda. The U.S. Department of Education's Institute of Education Sciences also awarded \$52.8 million in grants to 14 states to assist their efforts to develop statewide longitudinal data systems.

Achieve's 50-State Survey

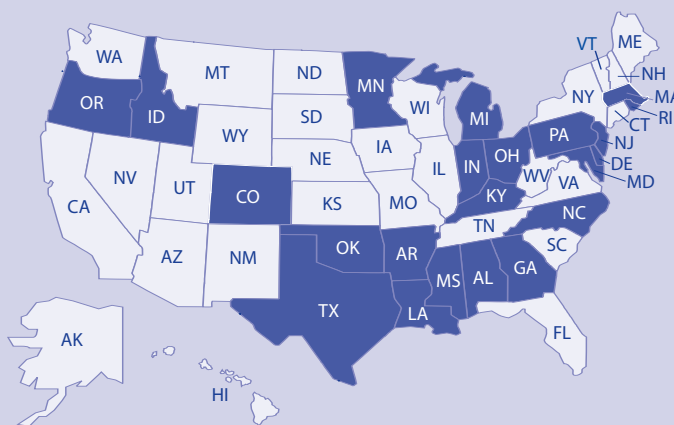
In an effort to monitor state progress toward the Summit goals and keep the nation's attention focused on improving the preparation of high school graduates, Achieve surveyed all 50 states in

December 2005 on a key subset of the policies from the Summit action agenda — those focused on academic standards, curricula, assessments, and data and accountability systems. The Summit agenda also focused on other important areas, such as redesigning high schools and improving teacher quality, but these were not part of Achieve's survey.

Achieve sent the online survey to K–12 education chiefs and governors' education policy advisers in all 50 states. The survey asked specifically about the progress states have made aligning standards with postsecondary and workplace expectations,

American Diploma Project Network

The 2005 National Education Summit on High Schools brought the importance of a solid high school education to the forefront of the nation's education and economic agenda. As a result, 22 states — which educate a total of 48 percent of the nation's high school students — now have signed on to the American Diploma Project (ADP) Network. In these states, governors, state education officials, business executives and higher education leaders are working together to raise high school standards, strengthen assessments and curriculum, and better align expectations with the demands of postsecondary education and future employment. The ADP Network's ambitious agenda promises to improve the preparation of all students for success in college and the workplace.



2005 National Education Summit on High Schools Action Agenda

To ensure that all high school graduates are prepared for postsecondary education and work, governors and business and education leaders must develop a comprehensive plan for their states to:

- Restore value to the high school diploma by revising academic standards, upgrading curricula and coursework, and developing assessments that align with the expectations of college and the workplace.
- Redesign the American high school to provide all students with the higher-level knowledge and skills, educational options, and support they must have to succeed.
- Give high school students the excellent teachers and principals they need by ensuring teachers and principals have the necessary knowledge and skills and by offering incentives to attract and retain the best and brightest to the neediest schools and subjects.
- Hold high schools and colleges accountable for student success by setting meaningful benchmarks, intervening in low-performing schools and demanding increased accountability of postsecondary institutions.
- Streamline educational governance so that the K–12 and postsecondary systems work more closely together.

requiring a college- and work-ready curriculum for graduation, developing college- and work-ready assessments, and holding high schools and postsecondary institutions accountable for students' success. *Every state but Vermont responded to the survey.* Achieve then followed up with states to clarify their responses or to get additional information. Achieve also conducted research to supplement state responses as necessary. In the end, Achieve made the decision to modify some state responses to make the data comparable.

The policy agenda that emerged from the Summit was substantial, and it will take states several years to implement. Achieve plans to conduct this survey annually, reporting on states' progress toward implementing a fully integrated set of policies that prepare students for success in college and the workplace. Achieve also will include relevant student performance data in future reports.

Align High School Standards with Real-World Expectations

For more than a decade, states have been developing and revising academic standards intended to articulate the core knowledge and skills that students should learn from kindergarten through grade 12. These standards play an important role in our education system: They provide a foundation for decisions on curriculum, instruction and assessment, and they communicate core learning goals to teachers, parents and students.

At the Summit one year ago, governors and education leaders acknowledged that their work on setting academic standards was not yet complete. Although every state had already set standards, very few had based those expectations on a careful analysis of the skills students need to be successful in freshman courses in college and in the 21st-century workplace. Without a strong connection between high school standards and the expectations of both postsecondary institutions and employers, the high school diploma will remain a credential of little value.

Aligning high school standards with college and workplace expectations can be accomplished only with the formal involvement of the postsecondary and business communities. Postsecondary institutions must clearly define the skills that high school graduates need to be ready to take credit-bearing, non-remedial courses, and business leaders likewise must articulate the skills that graduates need to be successful and advance in their careers. High school standards then need to be anchored in these real-world expectations.

What Achieve Asked

In our survey, Achieve asked the states whether their high school English and mathematics standards have been aligned with postsecondary and workplace expectations *and* whether the business and postsecondary communities have confirmed that the high school standards are in alignment. This second step is important because it signifies that business and higher education are willing to stand behind the standards and verify that the standards reflect *their* expectations.

Recognizing that anchoring standards in this way is a relatively new approach, Achieve also asked states that have not completed this work whether the groundwork for such an alignment has been laid. We wanted to know whether state postsecondary systems or institutions have clearly defined the skills required for entry into credit-bearing college courses in mathematics and English and whether leading employers or business organizations have defined the mathematics, reading and writing skills necessary for success in good jobs.

Achieve was limited in our ability to confirm state claims of alignment. We did not review the standards in each of these states to judge their rigor, nor did we poll postsecondary and business leaders to confirm that the standards meet their needs. Both steps should be undertaken in a state to ensure that the high school standards are aligned with business and postsecondary expectations. We also chose not to apply too narrow a set of criteria to the alignment processes states used. States have taken very different approaches, and although we think some have been more thorough than others, we recognize multiple pathways to this common goal. There were a few cases, however, in which the states' explanations for how they aligned their standards did not meet Achieve's criteria, and so we did not report those states as having achieved alignment.

What Achieve Found

At last year's Summit, the issue of alignment was just emerging as an important topic — very few states had taken serious steps to align their K–12 and postsecondary expectations. Over the past year, support for this work has crystallized and tremendous progress has been made. Thirty-five states report that they have aligned, are in the process of aligning or plan to align their K–12 standards to postsecondary and business expectations (see map, page 10). For an issue that only recently emerged, such widespread action represents a significant step forward in standards-based reform.

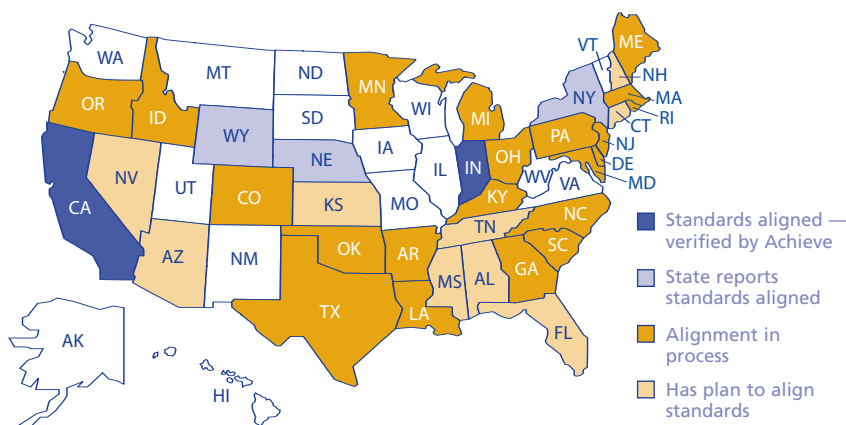
- To date, only **FIVE STATES** (*California, Indiana, Nebraska, New York and Wyoming*) report that they have completed the alignment process, including validation by the business and higher education communities that the high school standards reflect their skill demands. Prior to the Summit, Achieve analyzed the standards from *California* and *Indiana* and can verify they are well aligned with the ADP college and work readiness benchmarks. We have not reviewed the standards in *Nebraska, New York* and *Wyoming* and therefore cannot attest to their quality and rigor.

Indiana participated in Achieve’s original ADP research and has been a pioneer in standards alignment. The state undertook a thorough review of its high school standards by the business, industry, labor, postsecondary and K–12 communities and then revised those standards to align with postsecondary and workplace expectations. The Indiana Education Roundtable, co-chaired by the governor and the state superintendent, used the revised standards to reshape high school course-taking requirements and establish a new comprehensive system of end-of-course assessments. Achieve reviewed Indiana’s high school standards and found them to be as rigorous as our own ADP college- and work-ready benchmarks. (For more on Indiana’s comprehensive approach to better preparing high school graduates for college and work, see sidebar, page 16.)

The other four states have taken different and, in some cases, less deliberate or less comprehensive approaches to alignment. *Nebraska* and *Wyoming* engaged leaders in K–12 and postsecondary education, as well as business

representatives, in the task of identifying the necessary knowledge and skills students require for success in both postsecondary education and the workplace. *Nebraska* then went further and sought an external review of its standards from its postsecondary and business communities. In *California* and *New York*, postsecondary leaders and faculty were heavily involved in the K–12 standards development process to ensure academic rigor. Subsequently, these two states used their standards to develop courses

Many States Are Aligning Standards with Postsecondary and Workplace Expectations



Source: Achieve Survey/Research, 2006.

and/or assessments that explicitly link K–12 education with their postsecondary systems.

- TWENTY-ONE STATES** report having a process under way to align their high school standards with postsecondary and employer expectations. Sixteen of these states are working with Achieve on their alignment efforts, taking advantage of a collaborative benchmarking process through the ADP Network. Thirteen states are participating in Achieve’s Alignment Institutes — see sidebar on page 12 for more information about the institutes. *Kentucky, Ohio* and *Rhode Island* have undertaken their own processes, with assistance from Achieve. All 16 states have engaged with their K–12,

postsecondary and business leaders to define the skills young people need to be successful after high school, and they are filling any gaps in their high school standards to ensure alignment. These states expect to have the alignment process complete within the next six to 12 months. In each one, Achieve will conduct an external review of their standards in comparison with the ADP benchmarks.

- An additional **NINE STATES** report that they plan to begin an alignment process in the future, bringing the total to 35 states that have taken or will soon take this vital step.
- **FIFTEEN STATES** have not adequately aligned their high school standards with postsecondary and workplace expectations nor do they report plans to do so in the future. Of those states, a few may have the building blocks to initiate this process if they choose to take advantage of them. For example, *Iowa* and *New Mexico* report that their postsecondary systems have defined the knowledge and skills first-year college students need for entry into credit-bearing courses in mathematics and English. *Iowa* and *Missouri* have likewise collected information from employers about the fundamental reading, writing and mathematics skills that new employees need for success in entry-level high-skilled jobs.

Challenges States Face

Engaging Postsecondary and Business Leaders in Defining Expectations

For states that are moving through the alignment process to be successful, it is critical that they formally engage their postsecondary and business communities. The K–12 academic standards that most states have developed over the past decade generally reflect a consensus among K–12 teachers in each discipline about what is *desirable* for students to learn, but not necessarily what is *essential* for them to know to be prepared for further learning, work or citizenship after completing

high school. For this to occur, postsecondary and business leaders must step forward and define their needs, and these real-world expectations must then become the anchor for the state’s K–12 standards.

Providing a Clear Target for College Readiness

A growing number of states are giving postsecondary institutions and business a formal role in establishing an anchor for their K–12 standards. In *Kentucky*, for example, postsecondary institutions across the state — including public and private four-year institutions, the Community and Technical College System, and the Adult Education system — worked together to create a common set of college readiness standards in English and mathematics, using the ADP research as a guide. The state’s K–12 officials then used those college-ready benchmarks to revise the high school standards. Achieve reviewed a draft of the new high school mathematics standards and found them to be relatively well aligned with our own ADP college- and work-ready benchmarks, suggesting that the Kentucky alignment process has been successful.

In *Ohio*, a statewide committee of higher education faculty and campus leaders from public and private postsecondary institutions as well as K–12 representatives and state education staff is establishing mathematics and English expectations for college readiness — the knowledge and skills students need to be ready for credit-bearing courses. Coordinated by the Ohio Board of Regents, this initiative will align Ohio’s P–12 academic content standards with college-entry expectations. Once completed, this should provide Ohio high school students with clear targets for college entry and success.

Formal involvement of the postsecondary community in setting K–12 standards can be particularly difficult to accomplish in states with decentralized postsecondary systems or multiple systems. Institutions and systems in these states remain autonomous. They set their own standards for admis-

sions and placement and have little incentive to engage with other postsecondary institutions to define common readiness standards. Yet the K–12 system needs one clear set of standards for college readiness, not many.

Identifying Workplace Expectations

Most states struggle with finding an appropriate way to engage the business community in the standards-setting

process. Unlike postsecondary institutions, businesses and business organizations have expectations that may not relate well to academic standards. They can describe the skills young people need to be successful in their workplaces, but those skills often take a more applied form than that of academic standards. The states that have been most successful have found a way to elicit samples of workplace tasks that show the level of reading, writing and mathematics problem solving that employers demand.

Achieve's Alignment Institutes

All 22 states in Achieve's American Diploma Project Network (ADP) have committed to aligning their high school standards with postsecondary and employer expectations. To assist those states, Achieve launched a series of Alignment Institutes designed to bring postsecondary and business leaders from each state together with K–12 leaders to define the core English and mathematics knowledge and skills graduates need to be ready for college and work and then to revise their high school standards as necessary. Thirteen states are currently participating in these institutes: *Arkansas, Colorado, Georgia, Idaho, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Oklahoma and Pennsylvania.*

The process draws heavily from the lessons and research of the ADP, from analyses of state academic standards, and from unique state circumstances and experiences. States are using national models of college- and work-ready benchmarks to help define their own postsecondary expectations, and they are filling gaps in their high school standards to ensure they reflect college and workplace demands. State teams also are planning necessary changes to high school curricula to help students meet the new standards and to assessments to ensure that they measure the full range of college- and work-ready knowledge and skills.

The Alignment Institutes are designed to help all 13 states emerge with academic standards for college and work before the end of 2006, although some may be ready as early as the fall. State teams are working to secure commitments from postsecondary faculty and institutions to incorporate these standards into decisions about course placement, dual credit programs, scholarships and special programs. States also are soliciting input and support for the standards from the business community to obtain confirmation that they meet the expectations and demands of the labor market.

However states approach the alignment process, what matters most is that the postsecondary and business communities verify that the high school standards do indeed reflect the skills young people need to succeed in their institutions. This formal verification or endorsement adds to the credibility of the high school standards and increases the odds that postsecondary institutions and employers will give credence to the courses students take and the results on high school assessments.

Phasing In New Standards

As states revise and align their standards, they will need to be mindful of the impact those changes will have on schools, teachers and students. New standards must be phased in thoughtfully, allowing time for necessary changes in the high school curriculum, as well as for professional development and training to be provided to educators to ensure they are prepared to teach the material.

Align High School Graduation Requirements with College and Workplace Expectations

At last year's Summit, governors and state education leaders discussed the importance of raising graduation course requirements to increase curricular rigor and improve the preparation of students for postsecondary education and work. The most commonly used criterion for awarding a high school diploma in the United States today is course-taking requirements. Nearly every state requires students to study specific subjects for a certain number of years or to take specific courses to graduate.

Prior to the Summit, Achieve conducted a review of high school course requirements in all 50 states and concluded that very few states set their requirements at a level that will ensure graduates are prepared for success in college and the workplace. Achieve's research into the mathematics and English skills that students need suggests that for high school graduates to be adequately prepared, they need to have taken four years of challenging mathematics, including a course beyond Algebra II, and four years of rigorous English. Only two states' graduation requirements approached this standard one year ago.

There is clear and compelling evidence that the level of the courses students take in high school is one of the best predictors of their success in college and the workplace. This is particularly true in mathematics, where data show a strong correlation between taking higher-level mathematics courses in high school and achieving success in college and employment in high-growth, high-performance jobs.⁷ Rigorous course taking matters for all students, but it is particularly important for students from disadvantaged backgrounds. Taking a challenging high school curriculum, including but not limited to Algebra II, cuts in half the gap in college completion rates between white students and African American and Latino students.⁸

What Achieve Asked

In this year's survey, Achieve asked states whether they had made any changes in their graduation requirements since the Summit or whether they have plans to do so in the future. We were particularly interested in determining whether states plan to align their course requirements with college- and work-ready standards. Because course content matters more than a course title, Achieve also asked states about the methods they use to ensure the quality, rigor and consistency of high school courses across schools and districts.

Our focus in this report is on course requirements in English and mathematics because there is clear research that all students need a core set of skills in those subjects to be successful — whatever path they choose after high school. Achieve recognizes that a strong high school curriculum also will include challenging courses in science, social studies, the arts and foreign languages. However, in this report we focus only on English and mathematics.

What Achieve Found

Since Achieve published the findings of its first course-requirements survey prior to the 2005 Summit, there has been significant progress in the number of states moving toward requiring all students to complete a college- and work-ready curriculum. A number of states have raised graduation requirements since the Summit, with six of those states raising them to the college- and work-ready level.

- **EIGHT STATES** have enacted college- and work-ready graduation requirements. One year ago, only *Arkansas* and *Texas* had enacted graduation requirements for all students at the level of rigor that Achieve considers college and work ready — four years of rigorous English and

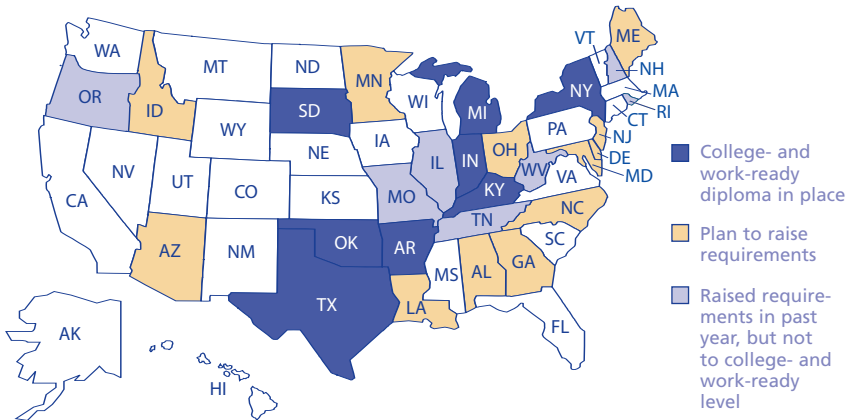
mathematics requirements through at least Algebra II. Over the past year, six more states — *Indiana, Kentucky, Michigan, New York, Oklahoma* and *South Dakota* — have put in place college- and work-ready diploma requirements.⁹

Most of these states have taken a similar approach to the new diploma requirements, following the Texas example. First, there is a phase-in period of one to two years, with the requirements first taking effect for the graduating class of 2010, 2011 or 2012.¹⁰ Second, there are provisions that allow parents to opt their children out of the college- and work-ready courses of study, provided they sign a waiver acknowledging the risks of allowing their children to study a less rigorous curriculum.¹¹ Although technically not a requirement for *all* students, this approach has a number of virtues. It sets and communi-

ence with this approach, they will be able to monitor the number and circumstances of students who opt out of the core curriculum and determine whether policy adjustments are needed.

- **TWELVE STATES** have plans to raise graduation course requirements to a college- and work-ready level in the future. If all succeed, 20 states will have aligned diploma requirements with college and work expectations.
- Since last year's Summit, **SEVEN ADDITIONAL STATES** report having raised their graduation requirements. Although their new requirements are not yet at the college- and work-ready level, these states took action after recognizing that their minimum course requirements were too low.

Eight States Require a College- and Work-Ready Diploma



Source: Achieve Survey/Research, 2006.

cates a very clear expectation for what courses students should take to be prepared for life after high school, and it removes obstacles students frequently encounter in gaining access to advanced college- and work-prep courses. It simultaneously underscores the ultimate responsibility of students and their parents for taking advantage of the opportunity. As these states gain experi-

end-of-course tests that measure student performance against a common standard.

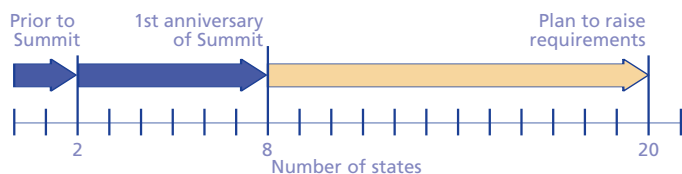
- **THIRTY-SIX STATES** report that they have developed course-based standards and/or model course curricula, and **FIVE ADDITIONAL STATES** have plans to develop them in the future.

Ensuring Course Rigor

As states raise course requirements, they will need to put safeguards in place to ensure that the content of courses taught in high schools is consistently rigorous across the state and that schools are not watering down those courses as more students are required to take them. States are taking different approaches to ensure course rigor, including establishing course-by-course standards that articulate what should be taught and learned and instituting

- **TWELVE STATES** have developed and **EIGHT** plan to develop end-of-course tests for at least some core subject courses to measure whether students have mastered the essential knowledge and skills.

More States with College- and Work-Ready Diploma Requirements Since the 2005 High School Summit



Source: Achieve Survey/Research, 2006.

Challenges States Face

States that have raised or are considering raising graduation requirements will have to address a series of issues to be successful, from academic supports for students to capacity building for teachers. States with strong traditions of local control also will need to work through the political challenges associated with moving to a set of statewide requirements.

Simultaneously Raising Graduation Requirements and Graduation Rates

Although there is significant evidence that taking more challenging courses in high school gives students a major advantage in college and the workplace, states need to ensure that as they raise graduation *requirements*, they simultaneously raise graduation *rates*. There are a number of strategies states can and should use to reach this goal. These include, for example, strengthening middle school programs to better prepare students for a rigorous high school curriculum, providing accelerated programs and support services for 9th graders who are struggling academically, and financing extended learning time to provide extra help to students who need it throughout high school. States and districts also need to create curricula that are more engaging to students who may not respond to traditional courses without sacrificing increased rigor. As states and districts move forward, their success, in part, will depend on the

accuracy and sophistication of their data systems to provide accurate measures of student progress while also providing early warning indicators of students at risk of dropping out.

Ensuring Capacity To Teach More Rigorous Courses

As states raise their graduation course requirements, they will need to plan for and address significant capacity challenges. Perhaps the most daunting challenge is ensuring there is a sufficient number of teachers who are prepared to teach more rigorous courses. Students cannot meet higher standards without dedicated, well-prepared teachers. Nationally, 25 percent of secondary school classes in core academic subjects are taught by teachers lacking even a college minor in the subject.¹² The situation is worse in mathematics and science and in high-poverty urban and rural schools; unfortunately, the schools and students who most need well-prepared and dedicated teachers are the least likely to get them. Further, more than half of entering high school students in the largest urban districts are reading at the 6th grade level or below, yet few high school teachers have been trained to teach struggling readers in their subject areas.¹³

Tackling this challenge will take investments in, and changes to, teacher preparation, compensation, recruitment, retention and assignment policies and practices. Teacher licensure requirements must reflect the more rigorous content teachers will be asked to teach, and teacher preparation programs should be redefined to reflect new teacher standards. Alternative certification programs must provide pathways into the profession for mid-career professionals with subject matter expertise who are prepared to enter the teaching force. States and districts must work together to create the incentives and policy environment that will enable school districts to attract or assign and retain the best teachers in the schools where they are needed most. States and local districts also need to reconsider how they use existing professional development dollars to ensure they are focused appropriately and used effectively.

Steps to provide all students with well-prepared teachers should be taken in tandem with steps to raise graduation requirements. They will be difficult steps to take, but their difficulty is not an argument against raising graduation

requirements. Instead, the necessity to better prepare tomorrow's students must be the driving force behind serious efforts to provide every student with a good teacher. Failing to improve the teaching force and maintaining unduly low

expectations for students is a recipe for increasing the number of students who are ill prepared for the world they will face after high school.

Indiana Advances a College- and Work-Prep System for All

Indiana has had a long-term strategy for creating a more rigorous education system aligned with postsecondary and business expectations. Beginning in the late 1980s, the state brought together business and higher education leaders and K–12 educators to identify a base of knowledge that would prepare all students for postsecondary education or the workforce. On this foundation, the state established a more challenging roster of college- and work-preparatory courses in English, mathematics, science and social studies, which was ratified in 1994 as the Core 40 curriculum. To ensure that students are learning the content in those courses, the state administers end-of-course assessments in Algebra I and 11th grade English, and it is pilot-testing assessments in Algebra II, Biology I and U.S. History.

Although participation in the Core 40 originally was voluntary, the state strongly encouraged schools to offer the courses and students to take them. Over a 10-year period, the state saw a growing number of students earning either the Core 40 or the more rigorous Academic Honors diploma: The percentage of students earning such diplomas rose from 13 percent in the 1993–94 academic year, the first year the Core 40 was offered, to 43 percent in 1997–98 and 65 percent in 2003–04. The remaining graduates received a regular diploma, with the percentage of students decreasing dramatically in one decade, from 87 percent in 1993–94 to 35 percent in 2003–04. Since the mid-1980s, when this work began, Indiana has moved from 40th to 10th in the nation in the percentage of high school graduates going to college.

Building on this success, the Indiana Education Roundtable, co-chaired by the governor and state superintendent of education, recommended that the state make the Core 40 the default high school curriculum for all students as part of the broader P–16 Plan for Improving Student Achievement. In 2005, the Indiana Legislature approved this recommendation, and the Core 40 will become the state high school graduation requirement starting with the class of 2011. That fall, the Core 40 diploma also will become an admissions requirement for public, four-year colleges and universities in Indiana.

Raising Requirements in States with a Tradition of Local Control

Raising graduation requirements is a challenge for any state, but it is particularly difficult in states with strong traditions of local control. As of one year ago, eight states delegated authority to set graduation course requirements to local school boards. Recognizing that the economy of the 21st century demands more of high school graduates than many of their school districts do, a number of these states in 2005 re-evaluated whether a state-level role in setting course requirements had become necessary.

- The governor and other leaders in *Michigan* took a bold step this past year to establish the state's first-ever graduation requirements — and they set the bar high. Michigan, with an economy historically based on heavy manufacturing, is feeling the pressure of global competition and the skills gap as much as any other state. In response, the governor launched a commission to investigate the level of preparation

high school students would need to be ready to compete for high-skilled, well-paying jobs in the 21st-century workplace. Their research indicated that all of Michigan's students need to complete a curriculum consistent with the recommendations of the ADP, and few school districts in the state required that of their students. At the encouragement of the governor and with the support of the business community, the State Board of Education passed a resolution calling for the establishment of the state's first set of graduation course requirements — the Michigan Merit Core — to go into effect for the 9th graders entering high school in fall 2006. The Merit Core curriculum includes four years of grade-level English language arts and four years of mathematics through at least Algebra II. The state board's action now awaits final approval in the Michigan Legislature.

- Officials in *Rhode Island* likewise recognized that the state must play more of a leadership role in setting graduation requirements, and they passed statewide requirements that include four years of English and four years of mathematics. These requirements provide some local flexibility by not specifying which courses students should take; districts, however, are required to ensure that the course selections align with the state standards.
- *Pennsylvania*, another state with a strong tradition of local control, has so far chosen to challenge districts to adopt more rigorous graduation requirements rather than mandate them. Through an initiative called Project 720, the state is helping a set of districts voluntarily implement more rigorous curricula and graduation requirements, hoping they will serve as models for the rest of the state. Project 720 districts will require all students to complete a rigorous college- and career-prep core curriculum that includes four years of English and four years of mathematics that include Algebra I, Geometry, Algebra II and a fourth higher-level course. Nearly 20 percent of

Pennsylvania school districts participate in Project 720, including some of the largest districts in the state. The governor has appointed a commission to study a range of additional policy options for improving performance in high schools, including how to address high school graduation requirements. The commission is expected to make its recommendations in December 2006.

- In 2003, the *Colorado* Commission on Higher Education established minimum admission requirements to enter all public four-year institutions. This has caused local school boards to revisit their high school graduation policies. The governor recently appointed an Education Alignment Council to make recommendations on aligning high school standards with college and workplace demands. Statewide graduation requirements are among the policy levers the council is considering.

In these and other states grappling with local control issues, policymakers and education officials have an important decision to make: Can school districts be relied on to raise expectations on their own? How long will it take for each district to do this, and can the state afford to wait that long? In Michigan, the governor and education leaders decided that the state could not afford to wait. They concluded that too many students are ill prepared for their futures and that the impact it is having on both their lives and the state's economy requires the state-level action. All students will need to take courses traditionally reserved for the college bound if they are going to have a chance at a good job that pays well and allows for career advancement.

The remaining local control states and the states that have set minimum course requirements at a level below college and work readiness will need to decide whether leaving such crucial decisions to the judgment of local school boards is a sufficient strategy for preparing all students for success in the new economy.

Align High School and Postsecondary Assessments

There is no shortage of testing for high school students today, particularly for those preparing to attend a postsecondary institution. The problem is that most of the tests students take are not aligned with one another. States have developed high school assessments without much regard for what colleges need, and colleges use admissions and placement exams that are disconnected from the curriculum students study in high school. The result is too many unnecessary tests and mixed messages to students, parents and teachers about which ones matter most.

As states align their high school academic standards and raise graduation course requirements to the college- and work-ready level, it is important that their high school assessment systems measure college and work readiness knowledge and skills. Unfortunately, Achieve's research shows that high school graduation tests typically measure 8th, 9th and 10th grade skills — only a subset of what students ultimately will need to be prepared for credit-bearing courses at postsecondary institutions and for well-paid, high-performance jobs. This is not to say that these tests do not have their place — they measure fundamental skills and set a basic level of performance relative to those skills that all students should meet or exceed. To help prepare students academically for a successful transition from secondary to postsecondary education and the world of work, however, states will need to go beyond these tests. They will need a component of their high school assessment systems that measures the more advanced skills that postsecondary institutions and employers value.

States should give all high school students an assessment before their senior year that is capable of measuring readiness for credit-bearing postsecondary courses and 21st-century jobs so that high schools will be able to help fill in any learning gaps before students graduate. Such interventions will reduce the need for remediation and increase the likelihood of success in postsecondary education and the workplace. In

addition, postsecondary institutions can use the tests to make placement decisions, and employers can use them in the hiring process, streamlining assessment systems and sending a clear signal to students, parents and schools that achievement at the college- and work-ready level is what matters. Unless students take tests to determine their readiness for college and work while still in high school, the first opportunity to know how prepared they are will be after they arrive on campus to take a placement exam or when looking for a job.

What Achieve Asked

Achieve's goal in this year's survey was to determine how well aligned current state high school assessments are with the demands of college and work. We asked which tests states administer, in which subjects, and in which grades or courses. To better understand how those tests are used by postsecondary institutions and employers, Achieve also asked states whether high school assessment results are reported on student transcripts and used to make postsecondary placement or financial aid decisions.

What Achieve Found

While states have made significant progress over the past year aligning high school standards and course requirements with college and work, high school assessments lag behind. Very few states currently have high school tests in place that postsecondary institutions use for course placement or financial aid purposes.

The good news is that a growing number of states are planning to build a college- and work-ready assessment into their high school testing systems. The 22 states that make up the ADP Network have committed to do this over the next several years. Some are considering a series of end-of-course tests, including tests in upper-level courses, such as Algebra II, that are prerequisites for college. Other states are considering

adapting existing 11th grade assessments to include more rigorous content. Still others are incorporating college admissions tests such as the ACT and SAT into their statewide testing system because these are measures that already have credibility in the postsecondary community.

Whichever approach states take, it is important that they complete their standards alignment work before they build new college- and work-ready assessments. With new standards in hand, they will be better positioned to develop new assessments — or modify existing assessments — to measure student mastery of the knowledge and skills valued by postsecondary institutions and employers. Just as important, the standards can help states ensure that their curriculum is aligned with these expectations.

Aligning High School Tests with Postsecondary Expectations

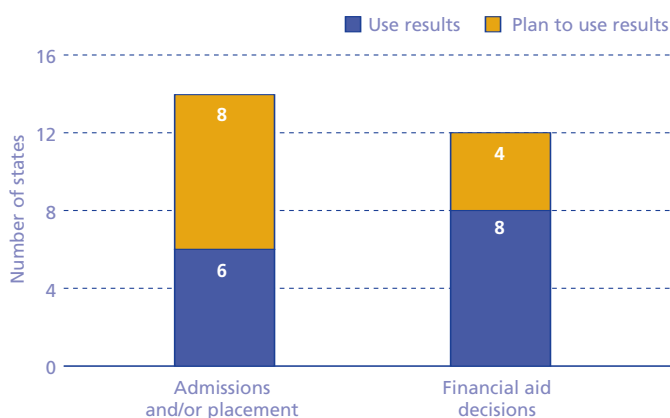
Although Achieve did not review the content of each state’s assessments, we did ask whether postsecondary institutions use the results of the high school tests for important decisions such as admissions, course placement, financial aid or scholarships. This is one of our best proxies for determining whether high school tests measure what matters to colleges and universities.

- Only **HALF THE STATES** report student high school test results on high school transcripts. Providing colleges and employers access to assessment results is the first step in encouraging them to make use of those results as a factor in placement, financial aid and hiring decisions.
- **SIX STATES** (*California, Colorado, Illinois, Maine, Missouri and Texas*) report that statewide assessments given to students in high school are used for college admissions and/or placement decisions, and **EIGHT ADDITIONAL STATES** (*Connecticut, Indiana, Michigan, Mississippi, New York, North Carolina, Pennsylvania and Rhode Island*) plan to do so. New York state is considering using the state

High School Regents exams for course placement in state community and technical colleges. The City University of New York is already using the Regents exams in mathematics and English for this purpose. To be admitted into credit-bearing courses, applicants for freshman and transfer admission must demonstrate minimum proficiency in reading, writing and mathematics by meeting threshold scores on the SAT, ACT or New York State Regents examinations.

- **EIGHT STATES** (*Arizona, Arkansas, Georgia, Maine, Massachusetts, Michigan, Missouri and Nevada*) have tied scholarships or financial aid to student performance on high school assessments, and **FOUR OTHERS** (*Mississippi, New York, North Carolina and Washington*) plan to establish such financial incentives. Because of the substantial unmet needs of low-income students, it is important that states target merit-based incentives to students with the greatest financial needs, as part of broader state efforts to increase college affordability.

Few States Use High School Tests for Postsecondary Purposes



Source: Achieve Survey/Research, 2006.

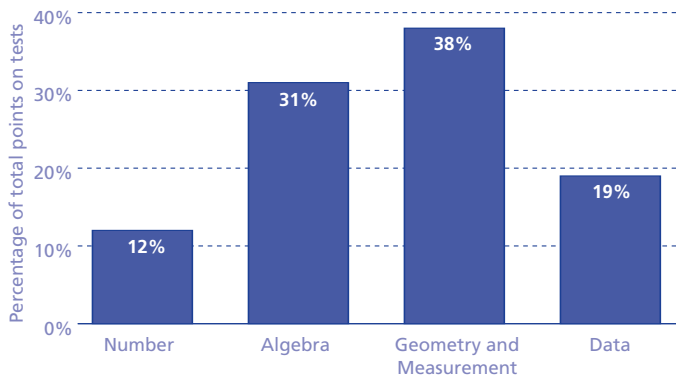
Grade Levels States Are Testing In

In 2004, Achieve analyzed high school graduation exams in six states to determine how well they measure college- and work-ready skills. We found that in their present forms these

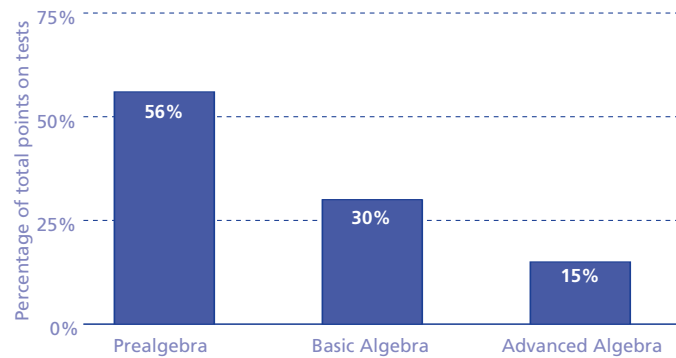
exams do not adequately do the job but were instead better measures of basic skills that students should learn early in high school. Most of these tests were given to students in 10th grade, so it is not surprising that they focused on early high school content. A few of the tests were given in 11th grade, and although they were more rigorous than the 10th grade tests, they still did not measure the full range of skills high school students need to learn to be ready for college and work.

For the results of high school assessments to be useful to postsecondary institutions and employers, states must administer

High School Graduation Tests Have Gone from Emphasizing Arithmetic to Emphasizing Algebra and Geometry ...



... But the Tests Are Tilted Heavily Toward Low-Level Skills, Not What Is Required in College and Work



Source: Achieve, Inc., *Do Graduation Tests Measure Up? A Closer Look at State High School Exit Exams, 2004.*

tests later in high school, closer to when a student would apply to college or for a job. An assessment administered in the 11th or 12th grade would allow the state to measure student mastery of more advanced content than would assessments administered earlier in high school. A true college- and work-ready assessment will be focused more on the knowledge and skills valued by postsecondary institutions and employers and less on the more rudimentary content of middle school and early high school.

The results of Achieve’s survey indicate that **21 STATES** administer an 11th or 12th grade assessment in reading, **15** in writing and **23** in math or at the end of math courses such as Algebra II. Only **11 STATES** (*California, Georgia, Indiana, Maine, Nebraska, North Dakota, Pennsylvania, Texas, Utah, Virginia and Wyoming*) administer upper-level high school assessments in all three areas.

States with 11th or 12th grade mathematics, reading or writing assessments — or Algebra II and higher end-of-course mathematics tests — have the potential of aligning these assessments with the expectations of postsecondary institutions and employers. States without assessments in the upper high school grades should consider additional measures to assess the college and work readiness of their 11th and 12th graders.

Challenges States Face

As mentioned earlier, most high school students today face a patchwork of tests that measure different knowledge and skills, are used for different purposes, and vary in their level of rigor. To create a more coherent system of assessments, states need to take stock of the tests they already administer — what they measure, their limitations and purposes, and their role in improving teaching and learning. They also need to better understand the tests that the postsecondary commu-

nity uses for placement and admissions and how they differ from the existing state high school exams. The goal should be to streamline these exams and incorporate into the high school assessment system a reliable measure of college and work readiness.

College and work readiness assessments do not need to have high stakes attached to be useful to students. They do, however, need to be recognized and valued by the postsecondary community, which is why state K–12 leaders need to involve postsecondary leaders in the assessment development process.

Modifying Existing High School Tests

States are taking several different approaches to better aligning their high school assessment systems with postsecondary expectations. Some are considering adding questions to existing high school assessments to round out those tests and make them adequate measures of college readiness. *California's* education department took this approach working with the California State University (CSU) system, adding questions to the 11th grade standards-based tests in English and mathematics to more accurately measure the skills CSU faculty say incoming freshmen need to be successful in entry-level courses. Students who score well on that 11th grade test and continue to take challenging courses in their senior year of high school are exempt from the CSU-required mathematics and English placement tests. The modified 11th grade exams also serve to alert students whether they need additional preparation for college in time to adjust their senior-year coursework.

Incorporating Traditional College Admissions Tests

Other states are incorporating traditional college-entrance exams into their high school assessment system. *Colorado* and *Illinois* have done this with the ACT; *Michigan* will begin doing so in spring 2007. *Maine* will begin administering the

SAT statewide in spring 2006. The idea is to give every student in the state these college admissions exams as part of the regular state assessment. The message to students is that the option of attending a two- or four-year college is open to all. Because these assessments already have credibility in the postsecondary community, the results can be used for placement and admissions. The challenge with this strategy is to ensure that the exam is aligned with the state high school standards and fits into the broader high school assessment system. This first requires an alignment study and may lead states to augment the ACT and SAT with additional questions.

Implementing End-of-Course Exams

A growing number of states are pursuing end-of-course tests as a strategy for measuring college- and work-ready knowledge and skills. The benefit of this approach is that these tests can be tied closely to the curriculum, providing helpful information to schools and parents about student performance in key courses. End-of-course tests also provide a way to ensure consistency of course content and rigor across the state — a big concern in states that are raising course requirements for graduation.

Going Beyond Large-Scale Assessment

As critical as they are, large-scale assessments cannot measure everything that high school graduates need to know and be able to do. Readiness for work and postsecondary education requires the ability to make effective oral presentations and to carry out research projects, but these cannot be assessed on a paper-and-pencil test. States should work with local districts to incorporate research projects, oral exams and other performance assessments into district assessment and instructional programs.

Hold High Schools and Postsecondary Institutions Accountable for Student Success

The mission of high schools is to prepare all students for college, careers and citizenship. At the Summit last year, governors and other education officials agreed that high school accountability policies should be consistent with that mission — schools and school systems should be held accountable for increasing the percentage of incoming 9th graders who graduate ready for college and work. No state had such a system in place at the time of the Summit.

The ability of states to hold high schools accountable for improving student transitions to college and work depends first on the quality of their assessments and data systems. States need more reliable measures of college and work readiness, including more robust high school assessments as discussed earlier. They also need a longitudinal data system with the capacity to track student progress from high school through postsecondary education so they can trace student success (or failure) back to their high school experience and use that information to strengthen the experience for the next class of students.

What Achieve Asked

Achieve asked all 50 states whether they have in place now or plan to develop a longitudinal data system that enables them to follow students from elementary school through middle and high school and ultimately into and through the postsecondary level. This is a prerequisite for a strong high school and postsecondary accountability system. For states that have separate K–12 and postsecondary longitudinal data systems, we asked whether they have plans to link the systems.

To better understand whether college and work readiness is a key driver in state high school accountability systems,

Achieve asked a series of questions about the data that are used to publicly report on high school performance as well as the extent to which those data are factored into high school accountability:

- Are high schools held accountable for increasing their graduation rates? What formula does the state use to calculate graduation rates?
- Are high schools held accountable for increasing the percentage of students who graduate with a college- and work-ready diploma?
- Are high schools held accountable for improving the college enrollment rates of their graduates and decreasing the percentage of graduates who go to college and enroll in remedial courses?

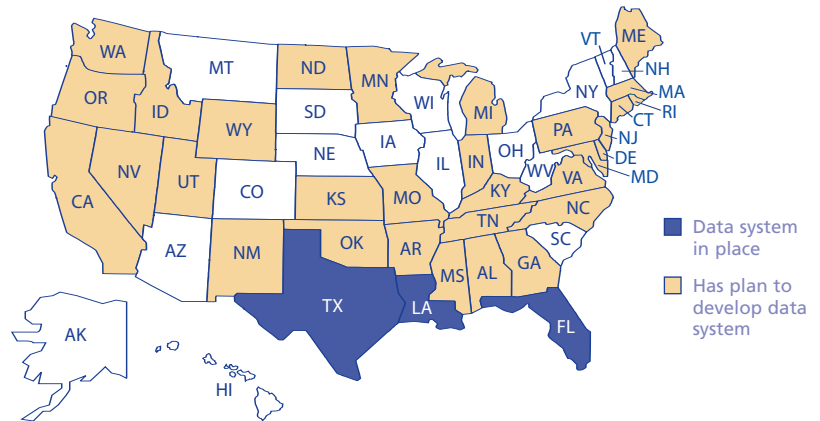
What Achieve Found

Since the Summit, there has been significant progress in the number of states that have committed to building P–16 longitudinal data systems. Three states already have such a system in place, and 31 others report that they are planning to create one. In addition, as a result of the NGA Compact on State High School Graduation Data, every state also is moving toward a common method of calculating high school graduation rates that promises to accurately portray how many 9th graders remain in school and graduate with a regular diploma four years later (see sidebar, page 25). The momentum on data systems and accuracy is welcome news. It is a critical first step toward building a more robust accountability system focused on preparing students for success after high school.

Given the work that still must be done to build college- and work-ready assessments and longitudinal data systems, it is not surprising that most states have not yet taken steps to hold high schools accountable for graduating students who are ready for college and work. A few states, however, are moving to make college and work readiness a factor in high school accountability. These states provide an early glimpse of what all states will need to do to provide high schools and high school students with the right targets to aim for.

the new formula when factoring graduation rates into high school accountability systems.

States Are Building P-16 Longitudinal Data Systems



Source: Achieve Survey/Research, 2006.

Status of State Data Systems

- **THREE STATES** (*Florida, Louisiana and Texas*) report having in place a P-16 longitudinal data system with unique student identifiers that follow students from prekindergarten through the postsecondary level.
- **THIRTY-ONE OTHER STATES** report that they plan to develop a P-16 longitudinal data system. Of these, 11 states will link existing K-12 data systems with existing postsecondary data systems that currently operate independently of one another. Fifteen states will extend their K-12 data systems to include the postsecondary level.
- **FORTY-THREE STATES** report having a unique student identifier to follow student progress from prekindergarten through 12th grade.

Status of High School Accountability Systems

- **FORTY-ONE STATES** include graduation rates in their state high school accountability formula or plan to do so in the next year or two. All 50 states have signed the NGA compact that will require states to report graduation rates using a common formula. It will be critical that states use

- Only **THREE STATES** (*Indiana, New York and North Carolina*) report holding high schools accountable for increasing the percentage of students who graduate with a college- and work-ready diploma as defined by course taking. **SEVEN ADDITIONAL STATES** (*Arkansas, Delaware, Georgia, Louisiana, Mississippi, Oklahoma and Pennsylvania*) plan to do so.
- **ONE STATE** (*Oklahoma*) reports holding its high schools accountable for the percentage of graduates who require remediation at a postsecondary institution. **FOUR ADDITIONAL STATES** (*Georgia, Maine, New Jersey and Texas*) plan to build college remediation into their high school accountability formulas as well.
- Only **ONE STATE** (*Georgia*) reports that its high schools will soon be held accountable for not only their high school graduation rates but also whether those graduates are college and work ready; whether they go on to college; *and* whether they are placed into credit-bearing, non-remedial courses.

The Challenges States Face

States are still in the early stages of building meaningful high school accountability systems. Longitudinal data must come first, linking high schools and postsecondary institutions. A majority of states report that they are on a path to putting such systems in place, although the pace in some states is slow and a sizable number are not yet moving on this.

As stated earlier, states also will need more robust assessments capable of measuring college and work readiness knowledge and skills. Very few states adequately measure these skills with their current high school assessments.

Without longitudinal data and better assessments, states will be severely limited in their ability to make college and work readiness a meaningful goal for high schools. Most of the current indicators used to hold high schools accountable — scores on existing tests, attendance and graduation rates — fall short of that goal.

Examining Promising Practices

Florida has long had the nation's most robust data system, capable of tracking students from kindergarten through postsecondary education and even into employment. By following students into college and the labor market, the state and its schools are able to answer a variety of questions about the impact of students' K–12 education on their future success.

Georgia and *Louisiana* also have made it a priority to invest in high-quality P–16 longitudinal data systems. Louisiana is one of many states that provides annual reports to feeder high schools on the performance of their graduates in the first year of college. They also are developing an early warning data and reporting system that will monitor middle and high school student progress and signal when students may be at risk for dropping out and need intensive “catch up” support. The state plans to release an annual report that tracks progress

toward its college and work readiness goals and establish a Web site to disseminate the information widely.

Georgia is developing a P–16 longitudinal data system and plans to use it to hold high schools accountable for graduating students ready for college and work. Georgia is aligning its high school standards and assessments with postsecondary expectations, and the state will factor college enrollment and remediation rates of high school graduates into the high school accountability formula. The state will be able to do this because of the proposed capacity of its data system. The P–16 Data Mart Project will allow for longitudinal analyses of student progression through high school and into postsecondary education, including high school retention, mobility, dropouts and graduation as well as preparation, remediation and performance in postsecondary institutions.

Doing More with What States Have

Most states are not as far along as Florida, Georgia and Louisiana, but many could do more with data they already have. Take graduation rates. According to The Education Trust, although every state factors high school graduation rates into their school accountability formulas — they are required to under the No Child Left Behind Act — in many cases the rate undercounts dropouts, and the improvement targets are so low they are almost inconsequential. In some states, schools can make adequate yearly progress by showing as little as 0.1 percent improvement in graduation rates.¹⁴ The NGA graduation rate compact is an important step, but unless high schools are required to show meaningful progress, not much will change.

States also must do a better job supporting and turning around the low-performing high schools that have already been identified under their current accountability systems. There are plenty of them — in some states as much as 15 percent of high schools have been identified as needing improve-

ment — but states and districts have shown a limited ability to intervene and turn these schools around.¹⁵ It is a matter of capacity, resources and, in some cases, will.

Once low-performing high schools have been identified, states and districts then must assess the strengths and weaknesses of each one before determining the right assistance. Some schools may have weaknesses in specific subjects, or with particular subgroups of students, while otherwise performing at acceptable levels. Targeted assistance, such as upgraded curricula, teacher training and changes in how students are assigned to courses of study, may be sufficient to improve their performance.

In the case of other schools, particularly those with high dropout rates and persistently low academic achievement, states and local school boards need to take more dramatic action, closing these schools and replacing them with proven models of redesigned high schools.

Strengthening Postsecondary Accountability

In the Summit action agenda, Achieve and the NGA called on postsecondary leaders to play a more active role in improving the transition of students from high school to college. As discussed earlier in this report, postsecondary institutions need to be clearer and more transparent about the academic skills young people need for success in credit-bearing courses. They also must get involved in shaping high

school assessments so they better reflect those college-ready skills and can send early signals to students about their readiness, and they need to work with K–12 leaders to create better data systems that allow for the sharing of information between high schools and colleges.

The governors and business and education leaders who attended the Summit also reviewed data on the performance of postsecondary institutions. Although the United States has one of the highest college enrollment rates in the world, our

Developing an Improved Measure of Graduation Rates

Policymakers, business and education leaders, and others frequently rely on graduation and dropout rate data as indicators of U.S. student and school performance. Yet although the majority of states collect *annual* records on individual graduates and dropouts, few states can accurately calculate the percentage of students who enter 9th grade and graduate four years later. In addition, states currently calculate dropout and graduation rates differently, making it difficult to compare rates across states and understand the scope of the issue.

Realizing that an accurate and detailed measure of high school graduation and dropout rates is a key factor in assessing the effects of high school reform efforts, the National Governors Association convened a task force after the 2005 National Education Summit on High Schools to create a more valid, reliable and consistent measure of the graduation and dropout rate. The result was a compact signed by all 50 governors to develop a standard, four-year, adjusted-cohort graduation rate.

This landmark agreement is a step in the right direction, but many states have a long way to go before they can begin using these improved data. Calculating the rate agreed upon in the compact means that states will need to be able to collect longitudinal data that track individual students over time. Yet a recent analysis of state data systems by the National Center for Educational Accountability found that only 14 states have the data in place to make accurate calculations.¹⁶

college graduation rate is average to below average among developed countries. In addition, scientists, engineers and mathematicians from countries such as China and India are quickly outpacing the supply of these professionals who are graduating from our universities.

The Summit action agenda encouraged states to set measurable goals for improving college enrollment as well as degree completion. It also urged states to begin holding postsecondary institutions accountable for student success.

Data Quality Campaign

At the 2005 National Education Summit on High Schools, governors, business leaders, and secondary and postsecondary officials discussed the importance of setting measurable goals for raising high school graduation rates, increasing the percentage of students who are prepared for college and work, and improving postsecondary enrollment and completion rates. They also acknowledged that most states need to dramatically improve their data systems to monitor progress toward these goals.

To help states put stronger educational data systems in place, 10 national organizations including Achieve, NGA, the Council of Chief State School Officers, State Higher Education Executives Organization and the National Center for Educational Accountability teamed up to launch the Data Quality Campaign. The campaign is a collaborative effort to encourage state policymakers to improve the collection, availability and use of high-quality education data from prekindergarten through the postsecondary level and to provide tools and resources that will assist them.

Last fall, the campaign released a report on the 10 essential elements of high-quality state data systems, along with the results of a 50-state survey on where states stand with their current systems. There were some notable gaps. Only seven states collect student-level high school course completion information from transcripts; just seven collect the results of SAT, ACT, Advanced Placement and other college readiness exams; and very few states have the ability to link K–12 student records with college enrollment and success.¹⁷

Achieve's Survey

Achieve was limited in the information we were able to collect on postsecondary accountability in this year's survey. We wanted to know whether states publicly report remediation, persistence and completion rates for each postsecondary institution and whether those institutions are held accountable for improving persistence and completion rates. However, this information was very difficult to collect because of the lack of common definitions of indicators such as remediation and persistence. As a result, Achieve chose not to report the state-by-state data we collected and instead make some general observations about the state of postsecondary accountability.

Observations on Postsecondary Accountability

FEW STATES report holding postsecondary institutions accountable for the academic success of the students they admit. Approximately one-fifth of states reported to Achieve that they hold postsecondary institutions accountable for the percentage of admitted students who ultimately earn a degree. A few more told us they plan to do so in the future.

Tennessee is among the states that do this. According to the Tennessee Higher Education Commission, the state's performance funding program financially rewards public colleges and universities for performance on selected student outcomes and related academic and institutional assessments. Approximately 60 percent of

the indicators are student based and include performance on general education, licensure and subject field exams, while the remaining indicators are program or institution based and include retention and graduation rates, as well as employer satisfaction. The financial rewards to institutions for high performance can reach up to 5.45 percent of state funding.

FEWER THAN HALF THE STATES told us that college remediation rates are publicly reported. This information is a critical indicator of how well high schools are preparing students for college. In *Texas*, for example, the governor recently called for the creation of a system to report higher education remediation rates on public high school report cards and a system to facilitate the transfer of high school transcripts between school districts and institutions of higher education.

A LARGER NUMBER OF STATES reported to Achieve that post-secondary persistence and completion rates are publicly reported. This is largely due to the fact that federal law

requires public institutions to provide these data annually to the National Center for Education Statistics. It is not clear how widely that information is disseminated, how it is communicated within states or how high schools use available information to improve the preparation of their students for success in college.

Setting Goals for Improving Postsecondary Access and Success

Jobs for the Future recently released a report examining how many states have set numerical targets for improving college enrollment and completion and comparing those goals on a number of important dimensions. According to the report, fewer than half the states have set measurable goals for increasing the proportion of their population with a postsecondary education. Twenty states have goals to improve college enrollment rates, 10 states have set second-year retention goals and 19 states have set degree completion goals. Only nine states have set goals in all three areas.¹⁸

Conclusion

The world that today's high school students will encounter is vastly different from the one their parents faced. The economy has changed and so have the skills young people need to be successful. Yet as the demands in the workplace and postsecondary institutions have grown, the expectations we have for high school graduates have not kept pace. The result is that the American high school diploma has lost its currency.

As we reach the first anniversary of the 2005 National Education Summit on High Schools, we are heartened that states are taking action to close the expectations gap and restore value to the high school diploma. Over the past year, states have made substantial progress in some areas, but overall, much work remains.

Momentum is strongest in the areas of standards and data systems. Most states have recognized that those areas need to be strengthened first because they create the foundation for the rest of the policies. A growing number of states also have

raised graduation requirements for all students, including some that have had to work through a complex set of local control issues. There has been less progress putting rigorous high school assessments in place and holding high schools accountable for preparing students for college and work.

Closing the expectations gap is, of course, one part of a broader agenda. There are many more reforms to put into place, such as better preparation and support for teachers and principals, targeted interventions for low-performing schools, and new curricula in which academic rigor is matched with students' interests and aspirations.

In the year ahead, we expect the states that are most committed to this agenda will continue to move forward aggressively. We also hope that the example these states are setting will spur other states into action.

Appendix A: Overview of Key Survey Results for Each State

■ Policy in place
■ Plans to implement
■ In process of aligning standards
● ADP Network state
○ NGA Honor Grant state

| State | Align High School Standards with Real-World Expectations | Align High School Graduation Requirements with College and Workplace Expectations | Use Existing High School Assessments for College Admissions/Placement | Develop a P-16 Longitudinal Data System | Hold High Schools Accountable for Graduating Students College and Work Ready |
|----------------|--|---|---|---|--|
| Alabama | ●○ | | | | |
| Alaska | | | | | |
| Arizona | ○ | | | | |
| Arkansas | ●○ | | | | |
| California | | | | | |
| Colorado | ● | | | | |
| Connecticut | ○ | | | | |
| Delaware | ●○ | | | | |
| Florida | ○ | | | | |
| Georgia | ●○ | | | | |
| Hawaii | | | | | |
| Idaho | ● | | | | |
| Illinois | | | | | |
| Indiana | ●○ | | | | |
| Iowa | ○ | | | | |
| Kansas | | | | | |
| Kentucky | ●○ | | | | |
| Louisiana | ●○ | | | | |
| Maine | ○ | | | | |
| Maryland | ● | | | | |
| Massachusetts | ●○ | | | | |
| Michigan | ●○ | | | | |
| Minnesota | ●○ | | | | |
| Mississippi | ●○ | | | | |
| Missouri | | | | | |
| Montana | | | | | |
| Nebraska | | | | | |
| Nevada | ○ | | | | |
| New Hampshire | ○ | | | | |
| New Jersey | ● | | | | |
| New Mexico | | | | | |
| New York | | | | | |
| North Carolina | ●○ | | | | |
| North Dakota | | | | | |
| Ohio | ● | | | | |
| Oklahoma | ●○ | | | | |
| Oregon | ● | | | | |
| Pennsylvania | ●○ | | | | |
| Rhode Island | ●○ | | | | |
| South Carolina | | | | | |
| South Dakota | | | | | |
| Tennessee | ○ | | | | |
| Texas | ● | | | | |
| Utah | | | | | |
| Vermont | Vermont did not answer Achieve's survey. | | | | |
| Virginia | ○ | | | | |
| Washington | | | | | |
| West Virginia | | | | | |
| Wisconsin | ○ | | | | |
| Wyoming | ○ | | | | |
| TOTAL | ■ 5 ■ 30 | ■ 8 ■ 12 | ■ 6 ■ 8 | ■ 3 ■ 31 | ■ 4 ■ 9 |

Source: Achieve Survey/Research, 2006.

Appendix B: State Education Pipeline Data
Of every 100 high school freshmen, the number who ...

| State | Graduate from High School on Time | Immediately Enter College | Are Still Enrolled Sophomore Year | Graduate from College on Time |
|----------------|-----------------------------------|---------------------------|-----------------------------------|-------------------------------|
| Massachusetts | 76 | 52 | 40 | 29 |
| Iowa | 83 | 54 | 37 | 28 |
| Pennsylvania | 77 | 47 | 37 | 28 |
| New Hampshire | 75 | 46 | 35 | 27 |
| Connecticut | 75 | 47 | 37 | 26 |
| New Jersey | 90 | 60 | 44 | 25 |
| North Dakota | 83 | 57 | 41 | 25 |
| Minnesota | 82 | 54 | 38 | 25 |
| Wisconsin | 79 | 47 | 34 | 25 |
| Rhode Island | 72 | 40 | 33 | 23 |
| Nebraska | 78 | 47 | 33 | 22 |
| Maine | 76 | 41 | 31 | 22 |
| Virginia | 74 | 41 | 31 | 22 |
| South Dakota | 78 | 44 | 30 | 21 |
| Vermont | 77 | 36 | 28 | 21 |
| Indiana | 68 | 41 | 31 | 21 |
| Delaware | 64 | 38 | 30 | 21 |
| Illinois | 72 | 43 | 30 | 20 |
| Colorado | 70 | 42 | 29 | 20 |
| Missouri | 73 | 40 | 27 | 20 |
| Wyoming | 73 | 38 | 23 | 20 |
| Maryland | 75 | 45 | 32 | 19 |
| Kansas | 75 | 43 | 27 | 19 |
| Ohio | 70 | 40 | 29 | 19 |
| California | 70 | 37 | 25 | 19 |
| North Carolina | 60 | 41 | 29 | 19 |
| New York | 57 | 41 | 31 | 19 |
| Michigan | 70 | 41 | 29 | 18 |
| NATION | 68 | 40 | 27 | 18 |
| Montana | 77 | 41 | 27 | 17 |
| Utah | 83 | 36 | 24 | 17 |
| Arizona | 69 | 35 | 22 | 17 |
| Tennessee | 61 | 38 | 26 | 16 |
| Arkansas | 74 | 42 | 27 | 15 |
| Kentucky | 65 | 39 | 26 | 15 |
| Oregon | 69 | 33 | 23 | 15 |
| Washington | 68 | 30 | 22 | 15 |
| Idaho | 77 | 34 | 22 | 14 |
| West Virginia | 71 | 34 | 24 | 14 |
| Florida | 53 | 32 | 24 | 14 |
| Oklahoma | 73 | 36 | 23 | 13 |
| Texas | 64 | 35 | 22 | 13 |
| Mississippi | 58 | 37 | 23 | 13 |
| Louisiana | 59 | 33 | 23 | 13 |
| Georgia | 56 | 34 | 24 | 13 |
| South Carolina | 49 | 29 | 20 | 13 |
| Hawaii | 65 | 34 | 22 | 12 |
| Alabama | 59 | 32 | 22 | 12 |
| Alaska | 61 | 30 | | 12 |
| New Mexico | 60 | 34 | 22 | 10 |
| Nevada | 62 | 27 | 18 | 10 |

Source: National Center for Public Policy and Higher Education, Policy Alert, April 2004.

Note: States are listed in descending order by number of students who graduate college on time. Data are estimates of pipeline progress rather than actual cohort.

Endnotes

- ¹ National Center for Public Policy and Higher Education, *Policy Alert*, April 2004. Data are estimates of pipeline progress rather than actual cohort.
- ² Greene, *Public High School Graduation and College Readiness Rates: 1991–2002*, Manhattan Institute, 2005.
- ³ Carnevale and Desrochers, *Standards for What? The Economic Roots of K–16 Reform*, Educational Testing Service, 2003.
- ⁴ Greene, *The Cost of Remedial Education: How Much Michigan Pays When Students Fail to Learn Basic Skills*, Mackinac Center for Public Policy, 2000.
- ⁵ National Center for Education Statistics, *Condition of Education 2004*, Indicator 18.
- ⁶ Peter D. Hart Research Associates/Public Opinion Strategies, *Rising to the Challenge: Are High School Graduates Prepared for College and Work? A Study of Recent High School Graduates, College Instructors, and Employers*, Achieve, Inc., February 2005.
- ⁷ Adelman, et al., *Postsecondary Attainment, Attendance, Curriculum, and Performance: Selected Results From the NELS:88/2000 Postsecondary Education Transcript Study (PETS), 2000*, September 2003, Table 11. Carnevale and Desrochers, Educational Testing Service, *Connecting Education Standards and Employment: Course-Taking Patterns of Young Workers*, American Diploma Project: Workplace Study, 2002. ACT, *Crisis at the Core: Preparing All Students for College and Work*, October 2004.
- ⁸ Adelman, *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, June 1999.
- ⁹ According to New York State Commissioner of Education Richard Mills, starting in fall 2007, all students in New York must take three years of math, including Integrated Algebra, which combines Algebra I and II, and two additional math courses aligned to the new state math standards. Students must take and pass at least one New York Regents math exam to graduate from high school. The Michigan Merit Core and new Kentucky requirements have received state board approval and are pending legislative approval.
- ¹⁰ The Texas requirement that all students complete the Recommended High School Program took effect starting with the graduating class of 2008. The new requirements in Arkansas, Michigan, Oklahoma and South Dakota will take effect starting with the graduating class of 2010; in Indiana and New York, with the graduating class of 2011; and in Kentucky, with the graduating class of 2012.
- ¹¹ The state board resolution creating Kentucky's new requirements does not include opt-out provisions.
- ¹² Ingersoll and Jerald, *All Talk, No Action: Putting an End to Out-of-Field Teaching*, The Education Trust, 2002.
- ¹³ de León, *The Urban High School's Challenge: Ensuring Literacy for Every Child*, Carnegie Corporation of New York, 2002.
- ¹⁴ Hall, *Getting Honest About Grad Rates: How States Play the Numbers and Students Lose*, The Education Trust, 2005.
- ¹⁵ Alliance for Excellent Education, *Progress Report on American High Schools 2003–04*, 2003.
- ¹⁶ For a PDF of the report from the NGA Task Force on State High School Graduation Data, see www.nga.org/Files/pdf/0507GRAD.PDF. For information on the National Center for Educational Accountability's analysis of state data systems, see www.DataQualityCampaign.org.
- ¹⁷ Data Quality Campaign, *2005 NCEA State Data Collection Survey Results: The 10 Essential Elements in Detail for 2005–06*, www.dataqualitycampaign.org/activities/elements.cfm, 2005.
- ¹⁸ Collins, *By the Numbers: State Goals for Increasing Postsecondary Attainment*, Jobs for the Future, 2006.

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