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# POLICY BRIEF



## Aligning High School Graduation Requirements with the Real World: A Road Map for States

The link between strong academic preparation in high school and success in college and careers is clearer than it has ever been. Whether high school graduates go directly to college or into the workplace, they need advanced knowledge and skills if they are going to be successful. In fact, what once was considered the “college preparation” level is now the standard that all students need to meet to be successful after high school.

Recognizing that the standards students have to meet in the “real world” have become more demanding, governors and policymakers in a growing number of states are taking action to increase the requirements for earning a high school diploma, thus ensuring students graduate with the skills they need to be successful. Over the past two years, 15 states have passed legislation or state board policy raising graduation requirements to the level that Achieve considers necessary to prepare students for success in postsecondary education and well-paying jobs. An equal number of states have indicated to Achieve that they are seriously contemplating raising graduation requirements.

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Each of the states that have put new requirements in place has faced a series of difficult decisions in designing and implementing its policy. The issues are fairly consistent across the states, though the strategies for addressing them are varied.

Achieve developed this policy brief to capture lessons learned by states that have put higher requirements in place. It addresses challenges of policy design as well as strategies for implementation, communication and coalition building. We hope it proves helpful to all state policymakers considering taking action to restore value to the high school diploma. Additional information — including sample legislation and administrative code, a compendium of research that supports raising graduation requirements, and downloadable sample state communications and advocacy materials — is available at [www.achieve.org/gradforum2007](http://www.achieve.org/gradforum2007).

## Determining the Parameters of the Graduation Policy

As states undertake the process of instituting new high school graduation requirements, they will face a number of strategic choices about the parameters of the policy. The key decisions involved in establishing the policy framework include:

- What courses do students need to take to be well prepared for success in college and careers?
- Are the courses anchored in college- and career-ready expectations?
- Will the new requirements be mandatory for all students, or will there be an opt-out provision?
- How will the state ensure consistent rigor in courses across the state?
- Will students be able to earn credit by proficiency?
- Will the state create multiple but equally rigorous curricular pathways to graduation?
- Will the state establish an honors and/or technical honors diploma?
- How will the new requirements be phased in to ensure equitable access and participation?

### *Identifying which courses students should be required to take*

When defining graduation requirements, the most critical decision states must make is determining how many credits and which courses to require in each subject. Achieve recommends that states adopt graduation standards that include four years of rigorous English and four years of mathematics, including the content typically taught in Algebra II as well as content beyond this level. These courses are prerequisites for success in college and well-paying jobs. States also are raising science requirements, and some are addressing foreign languages. Mathematics and science typically are the most contentious subject areas. The evidence is very strong that states need to raise requirements in these subjects, but these also are areas in which schools and districts are struggling to find qualified teachers.

### Mathematics

For nearly every state, raising requirements in mathematics has been the most difficult challenge and the area in which concerns — and even downright opposition — are the most strident. The concerns boil down to a few key issues:

- Some people don't believe that all students have the ability to succeed in higher-level mathematics courses.
- Some don't believe that all students need challenging mathematics to succeed after high school.

- Some worry that there are not enough strong mathematics teachers capable of teaching higher-level mathematics to every child.

The concerns expressed on the previous page have caused states to make a number of different choices about what to require in mathematics for high school graduation. These choices deal with both the number of required mathematics courses and the level of mathematics students must complete. In terms of *number* of courses, some states require only three; others require three but specify that students take mathematics during their senior year; and still others require students take four years of mathematics. Achieve recommends four years. In terms of the *level* of mathematics, most states with college- and career-ready diplomas require all students to complete Algebra II, while a few require a course beyond Algebra II. Only **Arkansas** requires four years of mathematics *and* one course beyond the level of Algebra II.

States that have been able to adopt four years of mathematics through at least the level of Algebra II have done so through the help of their business community and by bringing the K–12 and postsecondary communities to the same table to align the mathematics standards across the two systems in an active, formal way. This alignment can begin prior to legislative or rulemaking action — as with **Ohio** — or as mandated by the outcome that jumpstarts the requirement change — as in the case of **Texas** and **Michigan**.

When Achieve began its research into state graduation requirements, only two states — **Texas** and **Arkansas** — required students to take mathematics at the level of Algebra II to graduate. Today, 17 states have set their mathematics requirements at the Algebra II level or higher.

## Science

Debates about the rigor of science requirements also have taken place in states, though they are usually not as heated as the mathematics debates. The discussion tends to center less around how many years of science to require — most states that have pegged standards to college and career readiness levels require three years — and more about which courses. All of the states with newly adopted requirements require students to complete either three or four credits; however, there is little consistency in the specification of required science courses, including whether or not laboratory experience is mandated. Eight of the 17 states — **Georgia, Indiana, Louisiana, Oklahoma, South Dakota, Michigan, Minnesota** and **Texas** — explicitly require students to complete Biology and Chemistry and/or Physics (or an integrated Chemistry-Physics course).

## English

Four years of English is the standard requirement in most states, and states that have raised their requirements typically have not changed them in English. The challenge in this subject is defining what is most important for students to learn. Unlike mathematics and science, course titles in English do not carry much meaning. To provide clearer guidance, some states have specified the core skills that English courses should cover. These usually are addressed in the state standards, and the graduation requirements in English make specific reference to them. The American Diploma Project (ADP) benchmarks provide useful guidance as to what students should learn by the end of their high school years, and those standards are being backmapped to suggest what a progression of courses might look like. These tools should be useful to states as they seek to put more definition around expectations in English.

## Civics/history/social studies

Of the 17 states that have raised graduation course requirements, all have included a U.S. History requirement and an Economics and/or a Civics/U.S. Government requirement. Eleven states have a specific World History requirement,

and three states have a state-specific history course requirement. Of the 17 states, 11 require students to complete three credits in social studies; two require 3.5 credits; and four require four credits.

### Electives, arts and foreign languages

Given the importance of subjects outside the traditional academic core and the concerns that these subjects may get short shrift as requirements are revised, states should think carefully from the beginning about how to address these areas. States with college- and career-ready diploma requirements have approached electives in a variety of ways. Some specify that students complete electives chosen from a set of prescribed courses or subjects that may include fine arts and foreign languages. Others bundle electives into various course sequences or concentrations from which students choose. Finally, some states simply require students to take a number of electives without any structure or specificity. A number of states combine these options, requiring several prescribed elective courses or a choice from among several elective concentrations while also providing students with flexibility in how they fulfill the remaining electives.

**Arkansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, New York, South Dakota** and **Texas** require students to take at least one course in the fine arts. **Arizona, Georgia, Indiana, North Carolina** and **Ohio** require students to take at least one course from a bundle that typically includes the arts, career tech and foreign languages. The rest of the states with college- and career-ready diplomas allow students to pursue the arts as part of the electives.

States similarly have taken different approaches to foreign languages. Some states require all students to take one or two years of a foreign language; other states build foreign languages into the elective requirements; and some states do not have foreign language requirements at all. A few states, such as **Texas and Louisiana**, have included foreign languages as part of the new expectations from the beginning. Other states, such as **Delaware** and **Michigan**, have scheduled a slightly delayed implementation date for the foreign language component to increase the number of available teachers. **Ohio** has empanelled groups of K–12, higher education and business leader experts to examine how best to teach foreign languages across the P–16 system, with an expected implementation date set in statute.

### Career and technical education

One of the challenges states face when raising graduation requirements is determining how career and technical education (CTE) fits into college- and career-ready graduation requirements. This endeavor requires states to encourage 21st-century CTE coursework while discouraging “old school” vocational courses. States have to review the CTE courses of study and their relationship to preparing graduates for entry-level positions with career advancement opportunities and family-supporting wages.

Several states have innovative requirements and options for students to pursue both college-prep academics *and* CTE concentrations. In **Arkansas**, all students must take three career-focused credits to graduate. **Delaware** requires all students to complete three “career academic pathways” courses. All **South Dakota** and **Indiana** students choose from computer studies, CTE, additional mathematics and science, foreign languages, or arts to earn two to 2.5 of the required diploma credits, respectively. **Texas** specifies a year of computer science/applications; many CTE courses are eligible for this credit.

Applied and hands-on courses should be every bit as rigorous as traditional college-prep courses. Many states have CTE programs that correspond to such in-demand fields as biotechnology, health care, landscape architecture, teaching, architecture, engineering, carpentry and plumbing. Developing course descriptions and model syllabi, including ones that incorporate the same content and performance expectations into more integrated approaches — such as interdisciplinary courses or courses with a strong applied focus — can help promote consistent depth and challenges, as well as local innovation. To be successful, state educators need to develop partnerships with industry-based

organizations to ensure that course content is relevant to current work requirements and to build a bridge to future employment opportunities for students.

**Indiana** goes so far as to offer the “Core 40 with Technical Honors” diploma. Students earn the standard Core 40 diploma’s 20 credits and also:

- Earn a C or above in all diploma-required classes and at least a B average overall;
- Complete a career/technical program resulting in four to five additional credits; and
- Earn a state-recognized certification or certificate of technical achievement in the career/technical program.

In the process of raising graduation course requirements, **Minnesota** directly addressed the requirements’ impact on CTE, with a specific focus on mathematics courses. The Minnesota Department of Education worked with the University of Minnesota to examine how mathematics was being taught in CTE courses in six industrial fields. The study evaluated the possibility and effectiveness of co-teaching those mathematics courses — bringing together traditional and CTE teachers in the same classroom. This effort led to professional development opportunities for participating mathematics teachers to strengthen both pedagogy and practice. Instead of reinventing the courses, this approach provided teachers the opportunity to build upon their strengths while integrating industrial concepts into academically rigorous courses.

The challenge in each of these states will be building mechanisms to ensure that applied and CTE courses cover the core content and are as rigorous as the traditional academic courses. Otherwise, these pathways will become less rigorous alternatives that will not adequately prepare students for success after high school.

### ***Anchoring courses in standards that are aligned with college and career expectations***

To ensure that the courses outlined in higher graduation requirements translate into rigorous educational experiences for all students, states need a strong foundation of academic standards to guide what should be taught and learned in those courses. And those standards must be aligned with the expectations of employers and postsecondary institutions.

Aligning high school standards and course requirements 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. Likewise, employers must articulate the skills that graduates need to be successful and advance in family-supporting careers.

The 30 states in Achieve’s ADP Network have all committed to align their high school standards with what it takes to succeed in postsecondary education and the workplace. Since February 2005, Achieve has worked with 23 of those states to help them meet this goal. These states have brought together K–12, higher education and business leaders to define new end-of-high-school standards, and all have used the ADP benchmarks as a target in their work.

The goal in each state is to create standards that are:

- Adopted by the State Board of Education as defining the knowledge and skills in mathematics and English that all students should acquire by the end of high school;
- Adopted, endorsed or otherwise recognized by state postsecondary systems and institutions as defining the knowledge and skills necessary for placement into credit-bearing courses; and

- Verified or endorsed by employers and the business community as constituting skills necessary to enter and succeed in the 21st-century workplace.

## BENCHMARKS FOR COLLEGE AND CAREER SUCCESS

To help states align their educational expectations, ADP spent two years analyzing the knowledge and skills high school graduates need to be successful in college and careers. ADP research is based both on statistical analysis of employment data and extensive research involving more than 300 faculty members from two- and four-year postsecondary institutions, front-line managers and high school educators. ADP's key findings: Employers' and colleges' academic demands for high school graduates have converged, yet states' current high school exit expectations fall well short of those demands.

This research led to the creation of the ADP college- and work-ready benchmarks, which concretely define the English and mathematics skills that graduates need to succeed in credit-bearing college courses and high-performance, high-growth jobs.<sup>1</sup> ADP benchmarks are being used by 30 states to re-examine and align high school standards and graduation requirements.

- **ADP benchmarks require four years of grade-level English, including literature, writing, reasoning, logic and communication skills.** The English benchmarks demand strong oral and written communication skills because these skills are staples in college classrooms and most 21st-century jobs. They also contain analytic and reasoning skills that formerly were associated with advanced or honors courses in high school. Today, however, colleges and employers agree that all high school graduates need these essential skills.
- **ADP benchmarks call for four years of mathematics, including such content as geometry, data analysis, statistics, advanced algebra, reasoning and problem solving.** This content can be covered by a traditional course sequence that includes Algebra I, Geometry and Algebra II, as well as considerable data analysis and statistics. However, an integrated approach could work just as well, and some states are moving in that direction.
- **ADP stresses the importance of students taking mathematics in their senior year.** One of the significant issues states face is the definition of appropriate content for the fourth year of mathematics. Both college professors and employers stress the importance of students taking mathematics in their senior year. Many students who complete a three-course sequence — such as Algebra I, Geometry and Algebra II — go on to take Precalculus and Calculus. However, for those students who do not, there is a dearth of rich and meaningful course options for that fourth year. For students not intending to pursue mathematics-intensive majors, we urge states to consider allowing students to select from a number of fourth-year “capstone” courses (with Algebra II or its equivalent as a prerequisite).

<sup>1</sup> *Ready or Not* is available at [www.achieve.org](http://www.achieve.org).

## ***Deciding whether new requirements should be mandatory for all students or the default curriculum with an opt-out provision***

States raising their course requirements to the level recommended by ADP have taken one of two approaches: creating a “default diploma” with an opt-out provision or making the requirements mandatory for all students. Both approaches are designed to do away with the type of tracking that has existed for a long time in American high schools and continues to leave many students unprepared for the world they enter after high school.

- Eleven states have a default diploma: **Arizona, Arkansas, Indiana, Louisiana, Michigan, Mississippi, New Mexico, North Carolina, Oklahoma, South Dakota** and **Texas**.
- Six states have a mandatory diploma: **Delaware, Georgia, Kentucky, Minnesota, New York** and **Ohio**.

As states decide whether to create a policy that permits students to opt out of the college- and career-ready curricula, they must confront two competing concerns. Some students arrive in high school unprepared for rigorous courses. The opt-out provision provides a safety valve for those students, allowing them to take a different set of courses and still earn a diploma. On the other hand, policymakers worry that an opt-out provision may encourage tracking; some schools or educators may counsel struggling students out of the rigorous courses rather than provide them with the support and encouragement needed to aim higher and succeed. This is a particular concern with disadvantaged students and others who have traditionally been held to lower expectations.

### **The default strategy**

Students in the 11 states with a default diploma are or will be automatically enrolled in the state’s rigorous course of study when the student enters 9th grade but may choose to opt into a lower curricular track, if the student’s parents — and often school principal — sign a waiver to that effect. The opt-out process generally requires the student, as well as a parent or guardian, to meet with an educator, guidance counselor or administrator. It is incumbent upon the school to articulate the disadvantages of opting out and the likely effects it will have on the student’s choices and quality of life as an adult. Typically, the student and parent/guardian are required to sign paperwork that acknowledges the school has done its best to communicate the importance of a rigorous curriculum in preparing for life after high school. This approach has a number of virtues. It sets and communicates 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 also simultaneously underscores the ultimate responsibility of students and their parents to take advantage of the opportunity to graduate ready.

As mentioned earlier, the challenge with this approach is to ensure that the opt-out provision is not abused and that “opting out” does not become a new form of tracking. States with opt-out provisions are watching carefully to see how many and which students opt out as they enter high school. For example, 13 percent of incoming 9th grade students in **Oklahoma** opted out of the college-prep track in the first year of implementation. In its first year, about 10 percent of **Arkansas** high school students opted out of Smart Core. **Arkansas** now is considering removing the opt-out provision and making the Smart Core curriculum a requirement for all high school students. Officials argue that eliminating the opt-out provision would send a clear signal to students and parents about what is needed to succeed in the workplace and would ensure that all students are prepared for college and work.

**Michigan** — as well as more recently **New Mexico** and **North Carolina** — adopted opt-out provisions specifically targeting mathematics. Students can opt out of Algebra II with their parents' permission, while requirements in the other subjects remain mandatory. **Michigan** has created a personal curriculum modification plan option for students who are opting out of the math requirement, exceeding the current requirements, as well as for students with disabilities who need to modify the curriculum requirements to meet the specification of the student's Individualized Education Plan. **Arizona's** personal curriculum option provides an exemption from Algebra II in limited circumstances, and the State Board of Education will monitor districts to ensure they are permitting modifications only in appropriate circumstances. **Mississippi** also allows students with parental consent to opt into an earlier — and lower — version of graduation requirements, which include four years of math through Algebra I. States that adopt a default policy permitting students to opt out of specific courses, while still earning the standard high school diploma, should ensure transparency around student course-taking through the use of transcripts and other reporting strategies. This is particularly important for postsecondary institutions and employers so that they understand which students are completing the full set of college- and career-ready course requirements by the end of high school.

### The mandatory strategy

Four of the nine states that have adopted a college- and career-ready curriculum in 2006–07 — **Delaware, Georgia, Minnesota** and **Ohio** — have made a single set of course requirements mandatory for all students without any opt-out provisions. The Ohio Core, which was signed into law in early 2007, will go into effect with the entering 9th grade class in fall 2010. The opportunity to opt out of the Ohio Core requirements with parental consent is available only in the first four years of implementation, after which point the Ohio Core will become mandatory for all students.

**Minnesota** has mandatory diploma requirements but has created a unique opt-up provision. This provision gives the local school district the discretion to exempt students from the new graduation requirements if they are participating in an even more rigorous course of study. These exceptions include advanced placement (AP) courses or international baccalaureate (IB) programs; a learning opportunity outside the curriculum of the district, area learning center or charter school; or an approved preparatory program for employment or postsecondary education that is equally or more rigorous than the corresponding state or local academic standard required. This option is available if the student otherwise would be precluded from participating in the rigorous course of study.

## THE LOCAL CONTROL CHALLENGE

Raising graduation requirements is a challenge for any state, but it is particularly difficult in states that have traditionally left graduation requirements up to local school districts. Policymakers in these states 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 effect it was having on both their lives and the state's economy required state-level action. Historically, Michigan had a strong tradition of local control. High school diploma requirements were at the discretion of local boards of education. However, in 2006, Michigan policymakers took a bold step and decided to require a minimum set of 16 courses — and eventually 18 — as the new basis for a high school diploma. The requirements were set at a level of rigor consistent with ADP recommendations.

**Massachusetts** has taken a different approach. The state already has a graduation exam — Massachusetts Comprehensive Assessment System (MCAS) — that all students must pass to graduate. With that common standard in place, the state has decided to encourage — not mandate — a rigorous common core curriculum in high school. The K–12 Department of Education, in partnership with the Board of Higher Education, has developed a voluntary course of study called “MassCore.” MassCore exceeds minimum mathematics higher education entrance requirements at state colleges and the University of Massachusetts, as it requires four years of math, including and beyond Algebra II.

If the state's goal is for all students to succeed in a rigorous core curriculum but the strategy at this point is for the core curriculum to be voluntary, then the state should provide a strong combination of incentives and encouragement to spur widespread adoption and effective implementation.

**Indiana** and **Texas** both started with a voluntary college-preparatory diploma. Leaders in these states communicated widely about the benefits of a rigorous core curriculum, and they tied incentives — such as financial aid for college — to completion of the recommended program of study. Both states saw such progress in getting students to complete the program of study that policymakers later made the college- and work-ready diploma the default requirement.

## ***Ensuring consistent rigor in courses across the state***

As states raise graduation requirements, they will need to promote and ensure consistent depth and challenge in the new course of study — without stifling decisionmaking and innovation at the local level. States 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 consistent course content and rigor:

- **A majority of states with college- and career-ready diplomas are pursuing end-of-course testing.** This is the most direct and reliable way to determine whether courses are being taught at a consistently rigorous level across schools and districts and whether students are mastering the core knowledge and skills. It is important that states build end-of-course tests not only in the courses students take earlier in high school — Algebra I, for example — but also in the more advanced courses — such as Algebra II — that signal readiness for postsecondary education and careers.
- **Most states are producing course-level standards or model curricula.** State standards can be an effective mechanism for communicating the core content and skills that should be covered in high school courses. States that are putting new graduation requirements in place should revisit their high school standards and ensure that they clearly articulate course-by-course content and that they are broadly accessible.
- **A few states are auditing or reviewing local curricula to ensure rigor and alignment with state standards.** **Rhode Island** has created a statewide approach to validating local district courses as aligned with the state high school standards. Beginning this spring, the state will review all district high school curricula to determine whether they are adequately aligned with state standards. The state will endorse the diplomas only in districts whose curricula meet state standards. This approach may be more practical in smaller states — **Delaware**, for example, requires all districts to submit their course content for review — while larger states may consider targeted audits or creating tools to allow districts to conduct their own review of course content in their high schools.

## ***Offering credit by proficiency***

An inherent challenge in using course requirements as the key lever in a graduation policy is that course completion often is measured only by seat time, without a method for students to demonstrate that they have learned the core content and acquired the skills from those courses. To create a more performance-based system, some states are designing processes to stress the demonstration of skills and knowledge more than the accumulation of Carnegie Units. In **Indiana**, students can earn credit toward the Core 40 diploma by any of the following methods:

- Receiving a score that demonstrates proficiency on a standardized assessment of academic or subject-area competence that is accepted by accredited postsecondary institutions;
- Receiving a high proficiency level score on an end-of-course assessment for a course without taking the course;
- Successfully completing a similar course at an eligible institution under the postsecondary enrollment program; and
- Receiving a score of three, four or five on an AP examination for a course subject area.

In **Ohio**, offering credit by proficiency was an important policy option to allow students the opportunity to demonstrate skills in academic areas, even when those skills are taught in a contextualized course. The legislation passed requires the State Board of Education to work with the Board of Regents and Partnership for Continued Learning to adopt a statewide plan for students to earn high school credit based on demonstration of subject-area competency, instead of or in combination with completing hours of classroom instruction. This plan, which must include a standard method for recording demonstrated proficiency on high school transcripts, must be adopted by March 31, 2009.

**Rhode Island** has built existing credit by proficiency options into the state's recently modified graduation requirements, allowing students to earn credit in a variety of ways. To earn a high school diploma, all students must demonstrate proficiency in applied learning skills — critical thinking, problem solving, research, communication, decisionmaking, interpreting information, analytic reasoning, and personal or social responsibility — in all six core content areas. Students can demonstrate applied learning through portfolios, exhibition or capstone projects or performances, end-of-course assessments, or the Certificate of Initial Mastery. Proficiency assessments and scoring criteria are determined locally, though the state is invested in ensuring rigor, reliability and validity across schools within the state.

In **Michigan**, students are required to demonstrate they have met the subject-area content expectations for the Michigan Merit Curriculum. This can be accomplished through traditional course sequences as well as through integrated sequences, dual enrollment and advanced courses, project-based learning, work-based learning, and CTE programs. Regardless of the manner in which the course is taught, the assignment of credit must be based, in part, on student performance on a subject-area assessment or one that is developed or selected by the local school district.

### ***Determining how to create multiple but equally rigorous pathways***

States should carefully consider how the new requirements can allow districts and schools to look beyond a traditional series of college-prep courses to those that take a more applied or integrated approach. This has been the source of significant discussion in most states that have instituted higher requirements. The debates have sometimes focused narrowly on whether to require students to complete one contentious course — typically Algebra II or its equivalent — or more broadly on the different pathways students can take to earning a diploma. These diploma pathways may focus on college-prep (usually emphasizing more advanced mathematics plus fine art and foreign languages) or tech-prep (usually emphasizing clusters of courses that constitute a career “major”). Within mathematics, these different pathways may challenge states to develop differentiated course sequences: college-prep that includes a traditional sequence of Algebra I, Geometry, Algebra II and more advanced courses, such as Trigonometry, Precalculus or an AP mathematics course; or tech-prep that may include integrated or contextual courses that align well with academic content standards. The challenge for states is to set requirements that allow students to choose from among different pathways and course sequences while maintaining a common standard and level of rigor across the sequences.

**Kentucky** allows school districts to substitute “integrated, applied or interdisciplinary” courses *if the content is equally rigorous* to the state standards. The state has created curricula and assessments for 10 integrated courses that can fill academic course requirements. **Indiana's** six required mathematics and science credits can be met by “integrated” sequences, which were carefully designed to cover the same core content and at a similar level of rigor as the traditional Core 40 course sequence. In **Texas**, the State Board of Education was delegated the authority by the state Legislature to determine what the fourth year of mathematics can look like after students take Algebra II.

### ***Honors and technical honors diplomas: Going beyond the minimum requirements***

Several states offer advanced academic diploma distinctions or CTE endorsements to encourage students to aim higher. Indiana offers both. In **Indiana**, students can earn the Core 40 Technical Diploma by completing the Core 40 requirements and an additional seven semesters of instruction. Included among these requirements are eight to 10 semesters of a CTE program. Students pursuing this distinction also must demonstrate that they have mastered the content of their CTE program through some combination that includes passing WorkKeys exams, completing a set of requirements at a technical college for a two-year technical degree or earning a state-approved, industry-recognized certification. Students can earn the Core 40 with Academic Honors Diploma by completing the Core 40, an additional seven semesters of instruction and a fourth year of mathematics and by demonstrating “honors work” in another fashion, such as earning college-level credits through AP courses and exams or a dual enrollment program or demonstrating that they are college ready by earning high scores on the SAT or ACT.

**Kentucky’s** college-prep diploma, the Commonwealth Diploma, requires students to complete the minimum requirement plus two years of foreign language, three years of rigorous or core courses, and an additional two years of open electives. Students also must take at least four AP or IB courses in any subject of their choice, including a number of courses considered electives.

### ***Phasing in the new requirements and ensuring equitable access to and participation in rigorous courses***

Once a policy is passed, it is very important that states provide districts and schools with enough lead time to make necessary changes to the curricula and to ensure that teachers are adequately prepared to help students meet the new requirements. Most states have established a phase-in period of two years from the time the law passed. This means that two years later, the entering 7th grade class would be the first graduating class held responsible for the new requirements. In effect, it will take eight years before the first cohort of students graduates under the new requirements.

One step that states can and should immediately pursue is ascertaining a more nuanced picture of course-taking to determine both how many schools offer rigorous courses and how many students participate in these courses. This will aid in the assessment of current teacher capacity as well as student access to challenging courses. Efforts to undertake such an analysis may be hampered by lagging data systems since very few states currently collect course-taking data from districts. This is something that should be considered a very high priority to change.

## Designing an Accountability System That Provides Schools with Incentives To Graduate Students College and Career Ready

When designing the state graduation policy, states need to consider changes that will need to be made to the assessment and accountability systems to ensure that schools and educators are provided with incentives to help more students graduate college and career ready. Otherwise, all of the stakes will be on the students. States need to consider the following:

- How will the high school assessment system need to change to accurately measure whether students are learning the core concepts and skills reflected in the more rigorous course of study?
- How will the school accountability formula need to change to motivate schools to increase the overall percentage of students meeting the new graduation requirements and to mitigate against an increase in dropout rates?
- What postsecondary incentives will accompany this policy to encourage all students, especially low-income and disadvantaged students, to enroll and succeed in the college- and career-ready course of study?

### *Assessments to measure college and career readiness*

As states align high school graduation requirements with the demands of college and careers, they must build assessments capable of measuring college and career readiness. Achieve’s research suggests that few states currently have such assessments in place. Most high school tests measure knowledge and skills taught early in high school. A robust and comprehensive state assessment system needs to include components that measure early high school material as well as the content and skills taught in the later grades.

States are pursuing several different strategies to measure college and career readiness: administering end-of-course exams in the key courses required for graduation; giving cumulative exams at the end of 11th grade; and incorporating traditional college admissions tests into the state testing system.

End-of-course assessments have emerged as the most commonly used strategy. In 2007, 18 states reported to Achieve that they are planning to develop end-of-course assessments in advanced high school courses that will measure college readiness. One reason end-of-course tests are growing in popularity is that they can be tied much more easily than cumulative exams to the curriculum standards and courses students are required to take to graduate. The tests also have the potential to be more sensitive to instruction because they are taken right after a student completes a course. In some states, the end-of-course tests will count toward a portion of students’ course grades. End-of-course tests also allow states to monitor rigor and consistency in courses taught statewide, which is critical in states with high graduation standards.

Achieve is working with a consortium of states to develop and administer a common Algebra II end-of-course test. The test is being developed based on a set of content specifications that were created jointly by the states — and are aligned with the ADP benchmarks. The test will promote consistency and rigor in Algebra II courses within and among states, which is important for equity across diverse schools. The test also will serve as an indicator to students that they are prepared for college-level work and can be used by postsecondary institutions to place students into credit-bearing mathematics courses. (For more information, go to [www.achieve.org/node/842](http://www.achieve.org/node/842).)

**Texas** will administer 12 end-of-course exams in Algebra I, Algebra II, Geometry, Biology, Chemistry, Physics, English I, English II, English III, World Geography, World History and U.S. History. Beginning with the graduating class of 2012, **Oklahoma** will administer seven end-of-instruction exams in English II, English III, Algebra I, Algebra II, Geometry, Biology I, and U.S. History. The **Michigan** Department of Education plans to create interim benchmark assessments

aligned to units of instruction for each of 16 required courses/credit areas and summative end-of-course assessments. The legislation provides the Department of Education three years (until April 2009) to develop or select these assessments for at least each of the following credits: Algebra I, Geometry, Algebra II, Earth Science, Biology, Physics, Chemistry, World History and Geography, U.S. History and Geography, Economics, Civics, and English in grades 9–12. This language still exists in school code; however, due to budget constraints, this item was not funded in the 2007–08 fiscal year.

In **California**, the State Department of Education worked with California State University (CSU) to augment the statewide 11th grade exam to include additional items that CSU felt were necessary to measure college readiness. Students interested in attending CSU take those additional items when taking the state’s 11th grade exam. If they achieve a high enough score and continue to take rigorous courses in 12th grade, they automatically are placed in credit-bearing courses in CSU and are not required to take the placement exam.

### ***School accountability indicators that place greater value on graduating all students college and career ready***

As states raise graduation requirements, they need to give schools and educators incentives for getting more students over the bar. Current high school accountability systems will not be sufficient because they do not place enough value on meeting higher standards necessary to prepare for postsecondary pursuits.

High school accountability formulas today place the greatest emphasis on test scores, and the tests used for these purposes almost always fall short of measuring college and career readiness. States will need to build additional indicators into the accountability formula to motivate schools to prepare all students to meet college- and career-ready standards. Schools should be accountable for increasing the percentage of students who successfully complete the more rigorous course of study and pass end-of-course tests or other assessments tied to the course of study. Schools also should be accountable for the readiness of students when they arrive in postsecondary institutions (e.g., whether they need remedial courses). The challenge for states will be ensuring that sufficient weight is given to these indicators and that the targets are set high enough.

As requirements are raised, states also must ensure that there is not an unintended incentive for schools to push out struggling students who might not meet standards and therefore could hurt the school’s accountability rating. Achieve recommends that states measure the cohort graduation rate — the percentage of 9th graders who graduate four years later — and make it an important factor in the school accountability formula. Giving significant weight to graduation rates in the accountability system will provide educators with incentives to keep students in school and help them meet the new requirements. **Louisiana** recently added the cohort graduation rate to its high school accountability formula, and it appears to be having the intended effect of making schools pay closer attention to students who might drop out. Schools get more points for students who graduate having taken the more rigorous curriculum and zero points for students who drop out.

Operationalizing such a policy will require states to invest in P–20 longitudinal data systems. At a minimum, to reward and recognize schools that hold onto struggling students and graduate them college and career ready requires states to have unique student identifiers to accurately calculate the cohort graduation rate.

Achieve is in the formative stages of work that will help states move beyond the traditional set of high school assessments and accountability indicators to include an expanded set that are focused more heavily on college and career readiness. With the help of a national advisory group, Achieve is analyzing the options available to states and will emerge with recommendations in spring 2008.

## ***Postsecondary incentives to encourage all students to enroll and succeed in the college- and career-ready course of study***

Postsecondary institutions send powerful signals to high school students about the expectations they need to meet to be successful; those signals need to be harnessed and aligned with states' new graduation requirements. There are three particularly effective actions for state postsecondary systems/institutions to consider: (1) aligning admissions requirements to public colleges and universities with the more rigorous high school diploma; (2) tying need and merit-based financial aid to completion of the higher requirements; and (3) waiving placement tests at postsecondary institutions for students who earn a college- and career-ready diploma.

Connecting K–12 and higher education systems with incentives for students successfully completing the core to financial aid and scholarships, college admissions, or placement demonstrates that postsecondary institutions value more rigorous and aligned graduation requirements. Requiring the completion of the core with guaranteed access to financial resources or for automatic acceptance to four-year colleges has the power to motivate struggling/disinterested high school students to work harder, complete more rigorous coursework and become better prepared for college.

**Arkansas'** Department of Higher Education offers an Academic Challenge Scholarship to students who complete the Smart Core curriculum and meet a set of eligibility requirements, including demonstrated financial need and a minimum grade point average and ACT score. The Arkansas Department of Higher Education provides these scholars an award of \$2,500 for the first year of attending an approved Arkansas college or university in a program that leads to an associate, associate of applied science or baccalaureate degree or a nursing school diploma. The amount increases to \$2,750 for the second year, \$3,000 the third year and \$3,500 the last year, provided the student remains in the program.

**Indiana's** four-year colleges have aligned their admissions requirements with the state's Core 40 curriculum, sending a clear signal that the K–12 and higher education systems are working together to increase preparation. In addition, students who complete the Core 40 curriculum and meet income eligibility financial aid requirements can receive up to 90 percent of approved tuition and fees at eligible colleges. Students who graduate with a Core 40 Academic Honors Diploma can receive up to 100 percent of approved tuition and fees. Additionally, some colleges in Indiana offer their own scholarships specifically for students who earn the Academic Honors diploma.

The **Texas** Legislature established the TEXAS (Towards EXcellence, Access and Success) Grant for students who complete the Recommended High School Program or Distinguished Achievement Program and enroll in a non-profit public college or university in Texas within 16 months of graduation. The grant amount is equal to the student's tuition and required fees. For 2006–07, the state amount was approximately: \$2,375 per semester for public universities and state college students; \$735 per semester for public community college students; and \$1,325 per semester for public technical college students. In 2005–06, 61,086 students received awards in this program.

## Planning for Successful Implementation

As the high school graduation policy is designed, states need to plan for its successful implementation. Raising standards is a powerful lever to increase student success, but additional actions are needed to prepare teachers to teach rigorous courses and to ensure students receive the extra time and support they need to be successful.

### *Investing in targeted support for teacher training and capacity building*

Perhaps the most daunting challenge is ensuring a sufficient number of teachers who are prepared to teach more rigorous courses, especially in mathematics and science. Students cannot meet higher standards without dedicated, well-prepared teachers. Tackling this challenge will take investments in and changes to teacher preparation, hiring and assignment policies and practices. States and districts will need to work together to create the incentives and policy environment that will enable school districts to attract, hire, assign and retain the best teachers in the schools where they are needed most. For example, teacher licensure requirements should reflect the more rigorous content that teachers will be asked to teach. Teacher preparation programs should be redefined to reflect new teacher standards. Alternative certification programs can provide pathways into the profession for midcareer professionals with subject-matter expertise eager to enter the teaching force. States and local districts also need to reconsider how they use existing professional development dollars to ensure they are focused appropriately, used efficiently and evaluated for effectiveness.

**Ohio** packaged a teacher capacity plan with the Ohio Core graduation requirements. In fact, this legislation passed before the Ohio Core as a means to support efforts to raise expectations for all students. The five-year \$120 million plan includes programs to train midcareer professionals in technical disciplines to become mathematics and science teachers through an intensive one-year experience; provide loan forgiveness and cash awards for new teachers who choose to teach in areas of greatest need; provide current high school students with early experiences in exploring teaching science, mathematics and world languages as career options through summer Regents Academies; invest in an online curriculum for students and virtual facilitation training for teachers; and provide funding for new models of dual enrollment programming to assist high schools in providing rigorous options for students.

**North Carolina** recently raised its graduation course requirements. In preparation for the teacher capacity challenges the state anticipates, the Department of Public Instruction is creating a Virtual Public School. This will simultaneously work to address teacher capacity challenges — particularly for remote areas of the state — and provide a potential mechanism to ensure consistency of rigor.

### **A SUCCESSFUL CASE STUDY: SAN JOSE UNIFIED SCHOOL DISTRICT**

San Jose is a diverse district with historically low achievement and low college enrollment rates. Fifty percent of the students are Latino, and 40 percent receive free or reduced-price lunch. Beginning with entering 9th graders in 1998, the district began requiring all students to complete the University of California's minimum subject-area requirements (commonly known as A–G) to earn a high school diploma. Students were automatically enrolled in these courses and required to complete the whole sequence to graduate. Since implementing A–G, there has been an upsurge in the number of students experiencing academic success. The grade point averages for graduating seniors are rising, as are test scores on state and national exams, including the California Standards Tests, the California High School Exit Exam and the Scholastic Aptitude Test. In 2004, 65 percent of San Jose graduates completed all of those courses with a C or better, up from just 37 percent in 2001. Statewide, only 34 percent of

graduates have reached that benchmark. Forty-five percent of Hispanic graduates are university eligible right out of high school, compared to 21 percent statewide. Enrollment of Hispanic students in AP courses has more than doubled as well. Achievement scores and grade point averages also have risen across the board in San Jose.<sup>2</sup>

Success hasn't come at the expense of higher dropout rates as many feared. The district's four-year graduation rates actually improved slightly over the same period, while the state's declined.

Several key strategies contributed to San Jose's success. The district established an array of intensive academic supports and offered schools the ability to be creative with school schedules to maximize time for instruction. Instead of continuing to define courses in a six-period day, the district lengthened the school day, provided principals with flexibility in how that time is used and built in extra time for struggling students to get help. For example, it created shadow classes that would immediately follow such rigorous classes as Algebra I and II so students could have concepts reinforced. It also offered after-school tutoring and Saturday classes, and thanks to partnerships with the business community, it expanded summer school opportunities beyond what the district school budget would allow.

The education leaders in the district went to great lengths to build support among educators and the community as a whole. The district involved educators, parents, students, and business and community leaders in a dialogue about why expectations needed to be raised and how best to get that done. The superintendent recognized the need to assess and potentially modify the district's teacher support and recruitment policies and programs. In addition to relying on the traditional path, the district went out to the business community, particularly the high-tech industry, to find people with mathematics and science expertise who were interested in becoming certified teachers. They also changed the way teacher professional development was done, driving it down to the school site and providing subject-specific coaches and mentors for new and struggling teachers. The district partnered with San Jose State University to provide training for teachers to learn different methods to teach diverse groups of students Algebra at higher levels. The emphasis on professional development in mathematics also brought together middle and high school teachers during summer institutes to develop and practice new techniques.

Since the beginning of this policy effort, San Jose Unified has had a concerted effort to collect and use meaningful data and has used those data, in part, to elevate the level of awareness and make the case for why the policy change was necessary. Simultaneously, the district incorporated data into its planning processes and ensured teachers had easy access to student-level data to improve teaching and learning in their own classrooms. The support and commitment of the professional educational community was critical to implementing a policy that expects all students to be college and career ready.

Support for this policy has been built and sustained over time through strategic and thoughtful engagement efforts. Since the beginning of this effort, the district has sponsored a series of annual community conversations to go deeper into understanding what it takes for all students to be college and career ready.

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<sup>2</sup> San Jose Unified School District's Report to the Community. Fall 2005.

## **Implementing mechanisms to support student success**

States raising requirements need to consider what it will take to provide academic supports to students so they are prepared for and successful in the more rigorous course sequence. States and school districts will need to use data to monitor student progress, focus on transitions into high school, and create a system of intensive and sustained student supports.

### **Early warning data systems to keep students on track to graduation**

Using data to identify struggling students and trigger targeted interventions — particularly for students at risk of dropping out — plays a critical role in student success. A growing body of research indicates that there is a small set of highly predictive early warning data indicators that include failing mathematics and/or English courses, attending school 80 percent or less of the time, and/or receiving a poor final behavior mark. These early warning indicators can be tracked beginning in 6th grade through high school and can help target resources where they are most needed to keep students on track to graduate. States and districts can identify not only the high schools that are low performing, but also the students within those schools who are struggling and “off track” to graduation. Recent studies of data from the Chicago Public Schools, conducted by Elaine Allensworth and colleagues at the Consortium on Chicago School Research at the University of Chicago, showed that an “on-track” indicator that signals when 9th graders are falling seriously off the track to earning a diploma is 85 percent predictive of future dropping out.<sup>3</sup> This new knowledge base makes it more possible than ever for school districts to target interventions and supports to the students who most need them. For additional information, see Achieve’s white paper on early warning indicator systems.<sup>4</sup>

In spring 2006, **Indiana** enacted comprehensive dropout prevention legislation that will improve schools’ attention to students who are at risk of dropping out — and ultimately improve high school graduation rates. The legislation requires schools and districts to report the number of students who are “off track” to graduation — that is, the number of 9th graders who do not have enough credits to be promoted to 10th grade — and to advise such students about ways to recover missing credits and/or remediation options. Being “off track” during the first year of high school is a strong predictor of future school dropouts. Addressing this problem early in high school is consistent with research on ways that students disconnect with school on the path to dropping out. It also gives schools and districts the opportunity to provide timely and targeted support. The legislation specifies the use of state dual enrollment funds in supporting “fast track to college programs,” which are high school and college “blends” that offer older dropouts — over age 18 — a way to earn both a high school diploma and an associate degree. The legislation taps a prominent community college in the state as the lead for this work. This provision positions the state as one of few in the country leveraging dual enrollment to jumpstart attainment for young people who have left high school without a credential.

### **Preparing for the transition to high school**

It is vital for students to begin thinking about educational and career goals at an early age. As students reach the middle grades, it is important for them to both determine and understand the level of effort and educational preparation needed to meet those goals. Students who work with guidance counselors and mentors within school can plan a program of study for high school and beyond to reach their goals. Often, connecting education to the relevant issues in students’ lives and to their goals for the future in a concrete way is exactly what is needed to keep them in school and learning.

<sup>3</sup> A student is considered on track at the end of 9th grade if he or she has earned at least five full-year course credits and no more than one F (based on semester marks) in core academic courses.

<sup>4</sup> [www.achieve.org/files/FINAL-dropouts\\_0.pdf](http://www.achieve.org/files/FINAL-dropouts_0.pdf)

**Virginia's** Algebra Readiness Initiative (ARI) intervention model for students in grades 5–8 provides small-scale tutorials for students (1:10 ratio) with the goal of preparing students to be successful in Algebra in the coming years. Students who participate in ARI also are required to participate in the Algebra Readiness Diagnostic Testing (ARDT) program, which consists of an online computer-adaptive pre- and post-test to measure the impact of ARI. Funding is allocated as a block grant by the General Assembly and distributed using a composite index formula taking into account multiple factors, such as student achievement and socioeconomic characteristics. Virginia spends \$7.4 million per year on ARI.

**Kentucky's** Individualized Graduation Plan (IGP) became a requirement for high school graduation in 2002 and focuses on the connection between coursework and goals after high school. These plans capture information that includes academic and career assessment, career goals, a four-year high school plan, student interests and hobbies, school and community activities, and work experiences. The IGP also is intended to serve as a tool for high school staff to gauge students' progress toward meeting the learning standards embraced by the high school. As such, it is necessary for parents, counselors and advisers to review and adjust the IGP annually as guided by the student's academic performance, career goals and personal interests.

### Supporting students in high school

As more students take challenging courses in high school, states and districts will need more creative and effective ways to support students who may need extra help to be successful. Unfortunately, this is not an area that is replete with strong examples of policy. Determining the state role in providing student supports has been a particular challenge. A few states have put successful programs together that combine state leadership and provide examples of how states can take more responsibility in this area while recognizing that districts and schools bear the greatest responsibility.

**Massachusetts** provides competitive and allocation grants to fund the development and implementation of programs aimed at helping students pass the MCAS 10th grade graduation tests. Local districts receive funding to support a wide range of interventions, including after-school and out-of-school-time learning opportunities. Statewide, more than 75 percent of students who participated in remediation in English and 67 percent of those who participated in remediation in mathematics passed subsequent MCAS tests. Participating students passed the MCAS re-test at rates of 25 to 30 percentage points higher than non-participants. Local districts and community organizations are eligible to apply for competitive grants, while allocation grants are formula based, taking into account MCAS failure rates and enrollment by grade level. The funding has fluctuated over the past several years: It began at \$20 million in fiscal year 1999, though, at its height in FY2002, the Massachusetts Academic Support Services Program spent more than \$45 million. The FY2008 conference budget appropriates approximately \$13 million to support students with low MCAS scores.

The **Massachusetts** Department of Education and Massachusetts 2020, a non-profit organization committed to broadening educational and economic opportunities for children and families across the state, have partnered on the Expanded Learning Time Initiative that calls for participating schools and districts to demonstrate a commitment and capacity to expand school hours for all students in the school and to reconsider the use of time during the whole day, not just the after-school hours. Selected schools receive additional funding to support a longer and redesigned school day that allows for more time on core academics, as well as enrichment opportunities and social and emotional development. Professional development also is embedded in the school day and includes a focus on using student data to help improve instruction.

In the course of its high school redesign efforts, **Louisiana**, in addition to raising graduation requirements, has started putting in place several mechanisms to raise academic performance and attainment. Louisiana is piloting “double doses” of reading and mathematics instruction to accelerate student learning in a subset of high schools. The state is offering technical assistance and professional development aligned to this effort to educators in these schools.

**Texas** passed comprehensive high school reform legislation that includes a provision of \$275 per high school student to districts to prepare students to be college and career ready by encouraging and supporting students to take advanced and rigorous academic courses. The Texas legislation also stipulates that schools serving students who are at risk of dropping out or are using an approved innovative pathway or school can take advantage of flexible school hours and days to maximize student attendance.

## Building Support for the Graduation Policy

Early in the process, states should coordinate policy development with outreach and coalition-building strategies to identify, engage and mobilize critical leaders and stakeholders in support of new graduation requirements. This is not a blanket outreach strategy but rather one of identifying key groups who can assist — or block — legislative efforts and engaging them to understand their concerns and factor those concerns into the policy development process. Once the new policy is adopted, states will need to broaden their communication and outreach to engage students, parents, educators and others whose ongoing support will be needed.

### ***Focus initial efforts on getting the policy enacted***

It is tempting to identify a long list of audiences to reach out to when a state proposes a new and/or more rigorous course of study — and many communications experts will advise state leaders to implement comprehensive communications plans. However, time and money are limited and should be focused *initially* only on the communications and outreach that are essential to enact the policy. In some states, this will be a relatively small group of policymakers and stakeholders; other states will need to reach out to a more diverse audience. As soon as the policy is passed or adopted, the underlying goals of the communications effort need to shift to increasing visibility and transparency in an effort to broaden the base of support for the policy across the state.

This early communications effort should have these objectives:

- Raise awareness of the research supporting the proposed course of study;
- Identify those opponents, supporters and messengers who are most likely to enter the public debate about raising graduation standards;
- Provide these key individuals and organizations with appropriate outreach and information while listening to their goals and concerns;
- Generate constructive feedback from the most well-known education and business organizations, as well as from influential opinion leaders and students, parents and educators; and
- Use the input and feedback to inform the state's ultimate adoption of the proposed course of study.

States that have successfully raised graduation requirements have done so largely by bringing all of the relevant stakeholders together — either through commission structures (in legislative, state school board or higher education hearings) or at convenings of specially commissioned report releases. Through these mechanisms, stakeholder groups have the opportunity to air their concerns and be engaged in discussions that lead to refinements in the policy.

### ***Get out front with consistent messages and materials***

As in any sophisticated advocacy effort, it is critical to use consistent messages that clearly and concisely articulate the importance of raising graduation requirements and to consider who the key audiences are at any given time. Stakeholders need to understand both the *why* — the urgency of raising requirements — and the *how* — the details of the proposed course of study.

States that recently have raised graduation course requirements — including **Michigan, Delaware and Ohio** — have created position papers to clearly communicate the goals of and reasons for the policy change. These position papers were brief — five to 10 pages — and included details about the proposed course of study as well as the national research base for raising graduation requirements, state-specific achievement data and public opinion data. These concept papers should get wide circulation. Ensuring everyone has access to concise and consistent answers can help prevent the spread of misinformation that occurs when no information is shared. In addition to creating a sense of urgency, these documents become tools to guide conversations among various constituencies.

Other essential communications materials include fact sheets, frequently asked questions, talking points, summaries of local public opinion research (including polls and focus groups), and earned media, especially supportive editorials and op-eds. Depending on resources and the visibility of the campaign to raise standards, public service announcements on television and radio also can be useful. Television ads can be very expensive to produce and air, and donated air time is usually at ineffective hours. A radio ad campaign can be conducted for a sustained period for under \$100,000 in midsized states.

### WHY RAISE GRADUATION REQUIREMENTS?

Thirty years ago, earning a diploma guaranteed young people access to good jobs and viable career pathways. Today, a diploma offers no such guarantee. The diploma has lost its value because the world young people are entering after high school has become much more complex, and the skills required for success have increased significantly. In 1950, 73 percent of jobs were classified as unskilled — attainable by young people with high school diplomas and even high school dropouts. In 2002, only 30 percent of jobs were unskilled, while the other 70 percent were skilled or professional jobs that required higher levels of education and training. Advancements in technology have increased the skill levels required to obtain and retain jobs that pay well and support a middle-class lifestyle — including those that were traditionally called “blue collar” jobs. These jobs require much higher levels of mathematics and communications skills than ever before. As the economy continues to change and new jobs emerge, researchers agree that what once was perceived as “college preparation” level is now the level of preparation all students need to be successful after high school. In fact, research by the ADP and ACT back this up: There is no longer a distinction between the skills graduates need to be ready for college and for good jobs that pay well and allow for upward mobility.<sup>5</sup>

Historically, graduation requirements have offered a floor — a minimum standard — set well below the college readiness level. As a result, most high schools tend to have a special track for those students who are deemed “college-bound” and less rigorous tracks for everyone else. The research is clear that this needs to change. All students need a challenging academic course of study to be successful and to have options available to them when they graduate from high school.

For a complete set of facts, figures, slide presentations and links to research studies on why graduation standards need to be raised, go to [www.achieve.org](http://www.achieve.org).

<sup>5</sup>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.

## Identify and use persuasive data

Beyond compelling national data in support of raising graduation requirements, states should use state-level data — especially data showing how students who graduate under the existing requirements struggle in college. Remediation figures for the state’s graduates provide solid support for increasing the rigor of the high school curriculum and incentives for more demanding course requirements.

In April 2007, **New Mexico** adopted rigorous graduation requirements for all students. The Secretaries of Public Education and Higher Education collaborated to undertake and publicly release *Ready for College? A Report on New Mexico High School Graduates Who Take Remedial Classes in Higher Education*.<sup>6</sup> The report found that approximately 49 percent of postsecondary students took one or more remedial classes. Disaggregating these data revealed significant achievement gaps. While 36 percent of white, non-Hispanic students enrolled in at least one remedial course, that number rose to 55 percent for African American, non-Hispanic students; 58 percent for Hispanic students; and 66 percent for Native American students. The percentage of graduates from an individual high school who required remediation ranged from a low of 16 percent to a high of 83 percent. The Legislative Education Study Committee, a permanent committee in the Legislature, used these data to launch a college and workplace readiness agenda in New Mexico. A joint taskforce convened by the New Mexico Public Education Department and Higher Education Department was charged with analyzing the alignment between the K–12 and postsecondary sectors. Working closely together in jointly convened meetings, these two groups examined graduation course requirements and worked to enact change. Using state-level data — data that were easily understood and relevant to both state investment and student outcomes — New Mexico was able to build the support needed for higher graduation requirements.

## Find champions to carry the message

States that have been successful in their initial advocacy efforts have relied on a handful of leaders — for example, the governor, the state commissioner of education, state board members, key legislators and business leaders — to deliver the key messages and the details of the proposal. These “key messengers” have spoken at events, engaged with other state policymakers and stakeholders, made a series of editorial board visits, and signed op-eds for local newspapers.

In **Michigan**, one of the strongest advocacy voices came from the Michigan Association of Secondary School Principals. Its leadership was a powerful voice in passing the Michigan Merit Curriculum in 2006 and remains critical to the thoughtful implementation of the policies today. The principals’ organization in Michigan also is part of a larger alliance of K–12 education organizations representing teachers and local superintendents. This alliance joined forces with business and higher education to provide instrumental support and input for the legislation.

**Ohio’s** proposal to raise graduation requirements and align K–12 with postsecondary education was crafted by the Partnership for Continued Learning, the state’s P–16 council chaired by the governor. The proposal was publicly unveiled in former Governor Taft’s State of the State Address in February 2006. From there, a series of education roundtables were held in cities across the state to gauge reaction and gather input from key constituent groups. The Ohio Business Roundtable (OBRT), a strong education advocacy group in the state, was a key supporter from the beginning. OBRT mobilized a group of chief executive officers (CEOs) and produced *The Talent Challenge*, a document that framed the importance of the issue for legislators, business leaders and others. Most important, the OBRT created Tapping Ohio’s Potential, a group of committed business and education leaders dedicated to ensuring all students

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<sup>6</sup> The study is based on records from New Mexico Public Education Department and New Mexico Higher Education Department for 43,784 students who entered a public two- or four-year institution of higher education at age 18 or 19 in 2000–04. Students at tribal and private postsecondary institutions were not included.

complete a rigorous high school curriculum and doubling the number of science, technology, engineering and mathematics college graduates in the state. Led by former Ambassador John Ong and Nationwide Insurance CEO Jerry Jurgensen, this group played a critical role in the passage of the Ohio Core in late 2006. This group has moved on to supporting investment in and a state strategy for science, technology, engineering and mathematics that complements the Ohio Core implementation.

When **Oklahoma** passed comprehensive legislation to raise graduation requirements in 2005, the Oklahoma Business and Education Coalition (OBEC) was a key driver. OBEC is a non-profit organization created by CEOs from the state's largest companies that works to improve public education in Oklahoma. OBEC advocated for the state to raise its standards and expectations for all students. OBEC used research to illustrate how the state stood to benefit from increasing the quality and level of education of its citizens: Higher levels of educational attainment lead to a decrease in crime and increases in both taxable income and civic participation. In 2005, Governor Brad Henry signed into law the Achieve Classroom Excellence (ACE) legislation. The main objective of the legislation was to raise high school standards so that all graduates are prepared for success in both credit-bearing college courses and the workforce.

OBEC succeeded in large measure due to the commitment of its leadership. The organization has been both persistent and patient in its efforts to raise standards and broaden the base of supportive stakeholders. The leadership of OBEC has “stayed on message” in continually speaking about the need for higher standards and articulating the role for the business community to implement higher standards. By staying focused and reminding others of the long-range goals regarding business and economic development, OBEC has been able to garner a broad base of bipartisan support for its efforts. OBEC's leaders invested the time and energy to meet with the executive director of every education organization in the state. They recognized the value of these individual conversations and understood that they provided an opportunity to demonstrate that the business community understands the obstacles and challenges facing educators in Oklahoma. Through an open dialogue, politicians from both parties had the chance to air their concerns about the legislation and talk through the most prudent way to shape the policy. With a Republican speaker of the House and a Democratic governor in the state for the first time since 1920, soliciting and maintaining bipartisan support for the ACE legislation was key to its success.

Champions need not be limited to traditional ones: Parents and students have powerful insights on what happens in schools and what is needed. In the Los Angeles Unified School District, for example, it was students who publicly advocated that a more rigorous curriculum become available to all students. Their voices, and the voices of the adult family members who care about their futures, relentlessly — and effectively — made the case for higher graduation requirements in one of the largest districts in the country. Labor leaders who manage apprenticeship programs — for example, electrical, plumbing, drafting and advanced construction trades — also can speak eloquently about the skills and knowledge needed to succeed in demanding and high-paying trades.

## ***Reach out to communities, schools, students and families***

Ultimately, successful communications efforts are not geared for the sole purpose of pushing through legislation or adopting new administrative code. Rather, these efforts also must build support for the implementation of the effort itself. To accomplish this, the underlying goals should be visibility and transparency. Once new requirements are adopted, policymakers, business leaders, educators and community members should work together to communicate widely about the new options available to students. Whereas the initial communications campaign was targeted at getting the policy enacted, now the message needs to go out to all those who are affected:

- Middle and high school students;
- Middle and high school teachers and principals;
- Central office and school board leaders;
- Local media that will cover the implementation of the requirements; and
- Higher education and businesses and community groups that can partner with school districts for success.

Collectively, states, districts and schools need to do a much better job of informing students what they need to get into college or to get a well-paying entry-level job. This is especially important if a state has policies or statutes that allow students and their families to have a choice of rigor. For example, if the state has an opt-out policy by which students may pursue a pathway with less rigor, communication about why a rigorous curriculum matters for students' futures is critical. Districts and schools need support from the state to reach students in the middle — between the high achieving and the most at risk — to convince them not to take the “path of least resistance” during their high school career. Often with this middle set of students, it is communication that matters most. They already may be capable of doing the work required but will make other choices unless an argument for something better or different reaches them and their families in ways that are clear and persuasive.

In making the case for higher graduation requirements, it is powerful to engage the voices of students and parents. Ultimately, implementation will be more successful if students, parents and educators feel this policy was adopted by them as opposed to forced onto them. One strategy to pursue is to speak with recent graduates who have directly entered postsecondary education as well as those who went immediately into the workforce. Ask them about their level of preparation. Many recent graduates soon realize how much they should have done while they were still in high school. Achieve's surveys of high school graduates (college bound and not), college professors and employers provide useful national opinion research on the preparation gap.<sup>7</sup> States should consider replicating this opinion research in their state.

While the core message should be clear and consistent for all audiences — as in any effective communication and marketing campaign — the benefits of “buying the product” must be framed with the intended audience in mind. In making the case for why all students need to be college and career ready, employers will latch on to data about readiness in regards to the skills needed to fill existing and to attract new jobs, whereas college remediation rates will resonate particularly well with postsecondary institutions. However, in this case, “readiness” in and of itself is not necessarily the argument that will persuade most high school students to work harder. It must truly be about the jobs they can get, the colleges they can succeed in, the choices they will have and the money they can make if they prepare now — while in high school — for their own future success. Making concrete, real-world appeals that show what students can do if

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<sup>7</sup> 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.

they do the hard work in high school is much more persuasive to students. Packaging this messaging in ways that will resonate with teenagers is critical. Conducting teen focus groups and working with communication and marketing professionals is key to making these appeals effective.

**Arkansas** created a comprehensive communication strategy with several impressive features. There has been a significant and concentrated effort to reach out directly to students. Efforts to market Smart Core have included public service announcements and radio ads designed to connect with teenagers and deliver the message that taking the

### **SUCCESSFUL WEB-BASED CAMPAIGNS IN STATES WITH COLLEGE- AND CAREER-READY DIPLOMAS**

States across the country are working hard to communicate changes in both traditional and unique ways. Increasingly, the Web is providing a vehicle for disseminating targeted materials.

**Next Step Arkansas** offers multiple portals for educators, students, businesses and parents to learn more about the need for raising requirements for all students in Arkansas so that they are able to meet the demands of college and work.

[www.nextsteparkansas.org](http://www.nextsteparkansas.org)

**Learn More Indiana** offers a wide variety of information written for student and parent audiences on each step of the education pipeline to ensure successful transitions from early education through higher education and into careers.

[www.learnmoreindiana.org](http://www.learnmoreindiana.org)

This site, created by a partnership of the **Massachusetts Department of Education** and **Massachusetts State Board of Higher Education**, identifies the steps students need to take to be successful in postsecondary education.

[www.readysetgotocollege.com](http://www.readysetgotocollege.com)

The **Michigan Department of Education** has posted a wide variety of resources to help students, parents and educators understand the new high school graduation requirements. In coordination with the Michigan Association of Secondary School Principals, the department has produced a DVD featuring students talking about the new requirements.

[www.michigan.gov/mde](http://www.michigan.gov/mde)

**Oklahoma's Gaining Early Awareness and Readiness for Undergraduate Programs** initiative is a comprehensive statewide social marketing effort designed to ensure that all students are prepared to succeed in postsecondary education by building awareness about the importance of postsecondary education, early planning and the potential for financial support. The campaign is aimed at students from 5th grade through high school, parents, teachers, counselors, education policymakers, legislators and the general public.

[www.okhighered.org/gearup](http://www.okhighered.org/gearup)

The **Texas High School Project** provides support and resources for students whether they plan to enter college, the military or the workforce after college. Online tools available through the Texas Business Education Coalition allow students to plan for the future. This Web site targets students and helps them to plan for high school and beyond, using an interactive interface.

[www.myroadmapforsuccess.org](http://www.myroadmapforsuccess.org)

challenging Smart Core curriculum will open doors in their future. At the same time, the state has reached out to the education community. Through regional convenings and partnerships with local organizations, there has been a concerted and visible effort to increase awareness of the new policies and why they are important. Arkansans for Education Reform and the Arkansas Department of Education created a Web site for educators, parents, students and businesses called Next Step Arkansas at [www.nextsteparkansas.org](http://www.nextsteparkansas.org). The Web site is easy to navigate. It synthesizes the case for higher graduation requirements, describes state data in a user-friendly way and provides targeted information regarding

### **TEXT FROM COMMUNICATION MATERIALS ABOUT INDIANA'S CORE 40**

Students: It's all about YOU. Your success. Your future. You know what you want out of life. So how are you going to get there? The answer is Core 40.

**Core 40 helps you more.** You need Core 40 — a set of rigorous high school courses — because with it, you'll be better prepared for college, the workforce and the real world.

**Core 40 pays you more.** By completing Core 40, you'll have a better chance of getting to college and earning a degree. And higher education pays: On average, college graduates earn \$1 million more over a lifetime than high school graduates.

**Core 40 gives you more:**

- Career options;
- Skills for the jobs of the future;
- Preparation for college success; and
- Opportunities for scholarships and financial aids

Don't settle for anything less than Core 40 to get the future you want and deserve. For more information, contact your counselor and visit [www.learnmoreindiana.org](http://www.learnmoreindiana.org).

### **TEXT FROM COMMUNICATION MATERIALS ABOUT ARKANSAS' SMART CORE**

We're not talking about next weekend or even next year; when we say your future, we mean the life you're working toward 10, 20, even 30 years down the road. Yeah, it's hard to get your head around something so far away, but it's important. If you want to be able to have the freedom to do what you want with your life in the future, that means making the right choices now, starting with Smart Core ...

It's an unfortunate fact that the high school diploma is losing relevancy in today's world. It used to be that a diploma was enough to take you pretty far in the business world, sometimes even to the top, but now it's barely enough to get you into any door. Higher education or vocational training is a must for almost any job, especially any job that would pay decent money. And who wants to go through life just barely making it? No one.

Even though you may not know what you want to do with your life once you're out of school, it doesn't mean that you can't start preparing. You're young. It's hard to imagine making a commitment to the rest of your life right now. And no one is asking you to do that. Smart Core doesn't limit anything about your future; it only opens more doors, giving you the tools you need to build your life.

frequently asked questions to specific stakeholders. For example, the Web site includes a study of what college professors said about the readiness of freshmen for their classes and a summary of focus groups conducted within the business community to ascertain both the needs of local employers and the perception of the state's high school diploma.

**Oklahoma** has implemented a sustained communication program over many years in an attempt to reach kids with a message about the importance of college. Specific outreach over new expectations is not a shock to the system but a refinement of messaging that has been in place over a long period. **Indiana's** campaign has been in place since the Core 40 was developed in 1994. Today, the materials reflect the latest expectations and what students need to know to get there, and the materials are crafted specifically for them.

As states formulate messaging for students and families, they should consider leveraging existing national campaigns that support college readiness and access. For example, the State Scholars initiative, Academic Competitiveness Grants, National College Access Network and Gaining Early Awareness and Readiness for Undergraduate Programs sites, as well as campaigns like those funded by the Lumina Foundation in various states, can be tapped to get more bang for the buck in the message, deeper penetration in the market and greater geographic distribution. In addition, individual colleges focus a tremendous amount of resources on student recruitment and institutional marketing. Linking to this work in ways that also benefit individual institutions is a powerful way to focus scarce resources. Finally, businesses often are looking for ways to visibly demonstrate their commitment to being good community partners. Campaigns can attract more resources as well as important messengers if they have openings for corporations to sponsor messaging and communications efforts in ways that also visibly recognize their contributions.

## Conclusion

Rigorous courses lay the foundation for success in both the workplace and college, and states that adopt college- and career-ready graduation requirements are taking a major step toward providing students with the knowledge and skills they need to be successful after high school. Raising graduation requirements is not easy, but it is notable that a significant number of states have pursued this strategy in a relatively short period of time. As more states consider moving in this direction, they can benefit greatly from the experience of the states that preceded them.

## State College- and Career-Ready High School Graduation Requirements

	AZ	AR	DE	GA	IN	KY	LA	MI	MN
<b>Name of Diploma</b>	Arizona HS Diploma	Smart Core	State of DE Diploma	GA HS Diploma	Core 40	Minimum Diploma	Core 4 Curriculum	Merit Curriculum	MN HS Diploma
<b>Year New Requirements Passed</b>	2007	2004	2006	2007	2005	2006	2007	2006	2006
<b>1st Expected Graduating Class</b>	2013	2010	2011 (2013: foreign language added)	2012	2011	2012	2012	2011 (2016: foreign language added)	2015
<b>Requirement</b>	Default	Default	Mandatory	Mandatory	Default	Mandatory	Default	Default	Mandatory
<b>Required Courses</b>	22	22	24	23	20	22	24	18	21.5
<b>Change in Total Required Courses</b>	+2	0	+2	+1	0	0	+1	+18	0
<b>Name of Diploma</b>	MS HS Diploma	NM Diploma of Excellence	NY Regents Diploma	NC Future-Ready Core	OH Ohio Core	OK College Preparatory — Work Ready Curriculum	SD Advanced HS Program	TX Recommended HS Program (RHSP)	
<b>Year New Requirements Passed</b>	2006	2007	2005	2007	2007	2005	2005	2005	2003/2006 <sup>8</sup>
<b>1st Expected Graduating Class</b>	2011	2013	2010	2013	2014	2010	2010	2010	2008/2011 <sup>9</sup>
<b>Requirement</b>	Default	Default	Mandatory	Default	Mandatory	Default	Default	Default	Default
<b>Required Courses</b>	24	24	22	21	20	23	22	26	
<b>Change in Total Required Courses</b>	+4	+1	0	+1	0	0	0	+4	

<sup>8</sup> The Texas RHSP was first established as the requirement for all students (as the default diploma option) in 2003 — effecting the class of 2008 — and included three math credits through Algebra II. In 2006 — effecting the class of 2011 — a fourth year of math was added to RHSP; in 2007, the state board is expected to clarify what that fourth year should include/cover.

<sup>9</sup> Ibid.

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**State College- and Career-Ready High School Graduation Requirements (cont.)**

	AZ	AR	DE	GA	IN	KY
<b>English</b>	4 [including 0.5 unit that incorporates the principles of speech and debate]	4.5 [including 0.5 Oral Communication]	4	4	4 [including Literature, Speech and Composition]	4
<b>Mathematics</b>	4 [including Algebra II or its equivalent and a fourth course covering significant math content]	4 [including one beyond Algebra II]	4 [including Algebra II]	4 [including Mathematics 1, Mathematics 2, Mathematics 3 or their equivalents]	3 [including Algebra II; all students must take mathematics or Physics in 11th or 12th grade]	3 [including Algebra II; students must be engaged in mathematics all four years of high school]
<b>Science</b>	3	3 lab-based physical sciences	3 lab sciences [from Biology, Chemistry, Physics, Earth Science or another integrated science program]	4 [including one Biology; one physical science or Physics; one Chemistry, Earth Systems, Environmental Science or an AP/IB course]	3 [including one Biology and one Chemistry or Physics; all students must take mathematics or Physics in 11th or 12th grade]	3 [lab-based courses that are aligned with content strands in biological sciences, physical sciences, earth and space sciences and unifying concepts]
<b>Social Studies</b>	3 [including one American History, including AZ History, one World History/ Geography, 0.5 American Government, including AZ Government, and 0.5 Economics]	3 [including one American History, one World History and one Civics/U.S. Government]	3 [including History, Geography, Civics and Economics]	3 [including one U.S. History, one World History, 0.5 American Government/ Civics and 0.5 Economics]	3 [including one U.S. History, one World History/ Civilization or Geography, 0.5 U.S. Government, and 0.5 Economics]	3 [including U.S. History, Geography, Government/ Civics, Economics and Culture/Societies]
<b>Foreign Language</b>	0	0	2 [beginning class of 2013]	3 [taken from Career/Tech, Fine Arts and Modern Languages/Latin]	2.5 [students must choose from Fine Arts, Career/Tech and World Languages]	0
<b>Other</b>	1 Fine Arts or Career/Tech 7 electives	1.5 PE/Health & Safety 0.5 Fine Arts 6 "Career Focus"	1.5 PE/Health 3 "Career-Academic Pathway" courses 3.5 electives	1 PE/Health 4 electives	1.5 PE/Health 2.5 [students must choose from Fine Arts, Career/Tech and World Languages] 3 ["Career-Academic Sequence" recommended]	1 PE 1 Visual or Performing Arts 7 [four of which must be within students' academic or career interests, based on students' Individualized Learning Plans]
<b>Total Required</b>	22	22	24	23	20	22

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**State College- and Career-Ready High School Graduation Requirements (cont.)**

	LA	MI	MN	MS	NM	NY
<b>English</b>	4	4	4	4	4	4
<b>Mathematics</b>	4 [including Algebra I, Geometry, Algebra II and an additional approved course]	4 [including Algebra II]	3 [including Algebra, Algebra II, Geometry and Statistics/Probability]	4 [including at least two beyond Algebra, such as Geometry, Algebra II and any course beyond Algebra II]	4 [including one equal or higher than Algebra II]	3 [all students must pass course and end-of-course test in "integrated Algebra" that combines Algebra I and II]
<b>Science</b>	3 [including one Biology, one Chemistry and two additional approved courses]	3 [including one Biology and one Chemistry or Physics]	3 [including one Biology and one Chemistry or Physics]	4 [including Biology and at least one lab-based physical science]	3 [2 lab-based]	3 [including one physical science and one life science]
<b>Social Studies</b>	3 [including 0.5 Civics or Government, 0.5 Free Enterprise, one U.S. History and two additional approved courses]	3 [including one U.S. History and Geography, one World History and Geography, 0.5 Civics and 0.5 Economics]	3.5 [including U.S. History, Geography, World History, Government/Citizenship and Economics]	4 [including one World History, one U.S. History, 0.5 Geography, 0.5 U.S. Government, 0.5 Economics, and 0.5 Mississippi Studies]	3.5 [including U.S. History and Geography, World History and Geography, Government and Economics, and 0.5 New Mexico History]	4 [including one U.S. History, 0.5 Government Participation and 0.5 Economics]
<b>Foreign Language</b>	2	2	0	0	1 foreign language OR career cluster or workplace readiness	1 [or demonstrated proficiency]
<b>Other</b>	2 PE/Health 1 Arts 3 other required electives	1 PE/Health 1 Visual Arts 0 ["online learning experience" required]	1 Arts 7 Other required electives	0.5 PE/Health 1 Fine Arts 1 [including one Computer Discovery, or 0.5 Keyboarding and 0.5 Computer Applications] 5.5 other required electives	7.5 electives 1 PE All students must earn at least one credit in AP, honors, dual credit or distance learning	2.5 PE/Health 1 Fine Arts 3.5 other required electives
<b>Total Required</b>	<b>24</b>	<b>18</b>	<b>21.5</b>	<b>24</b>	<b>24</b>	<b>22</b>

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## State College- and Career-Ready High School Graduation Requirements (cont.)

	NC	OH	OK	SD	TX
<b>English</b>	4	4	4	4 [including 1.5 Writing and Communications, 1.5 Literature — with 0.5 American Literature and 0.5 Speech]	4.5 [including 0.5 Speech]
<b>Mathematics</b>	4 [including Algebra I, Geometry and Algebra II OR three years of Integrated Mathematics I–III and a fourth year of mathematics aligned with student’s post-high school plans]	4 [including Algebra II or its equivalent]	3 [Algebra, Geometry, Algebra II and any courses above Algebra that are approved for college admission requirements]	3 [including Algebra II]	4 [including one mathematics beyond Algebra II]
<b>Science</b>	3 [including Biology, physical science and environment/earth science]	3 units with inquiry-based laboratory experience [including physical science, Biology and advanced study in one or more of the following sciences: Chemistry, Physics or other physical science; Advanced Biology or other life science; Astronomy, Physical Geology or other earth or space science]	3 lab sciences [including Biology, Chemistry and Physics]	3 [including one Biology, one Chemistry or Physics, and another lab-based science]	4 [including Biology and Chemistry or Physics]
<b>Social Studies</b>	3 [including one World History, one U.S. History and one Civics and Economics]	3 [including 0.5 credit in American History and American Government each]	3 [including 0.5 U.S. History, 0.5 Oklahoma History, 0.5 U.S. Government]	3.5 [including one U.S. History, 0.5 U.S. Government, 0.5 Geography, 0.5 World History and 0.5 Economics]	4 [including one World History, one World Geography, one U.S. History, Post-Reconstruction, 0.5 U.S. Government and 0.5 Economics]
<b>Foreign Language</b>	6 [at least two electives must be any combination of CTE, arts or second language]	5 [students must choose from foreign language, Fine Art, Business, CTE, Family and Consumer Sciences, Technology, Agricultural Education, or other academic courses]	2 foreign language OR Computer Technology	2 [students must choose from foreign languages, CTE, Computer Studies, or additional mathematics or science courses]	2
<b>Other</b>	1 PE/Health 6 [at least two electives must be any combination of CTE, Arts or Second Language]	0.5 PE and 0.5 Health 5 [students must choose from foreign language, Fine Art, Business, CTE, Family and Consumer Sciences, Technology, Agricultural Education, or other academic courses]	2 foreign language OR Computer Technology 1 Fine Arts OR Speech 1 CTE OR academic course 6 other required electives	2 [students must choose from foreign languages, CTE, Computer Studies, or additional math or science courses] 1 Fine Arts 5 other required electives	2 PE/Health 1 Fine Arts 1 Technology Applications 3.5 other required electives
<b>Total Required</b>	<b>21</b>	<b>20</b>	<b>23</b>	<b>22</b>	<b>26</b>

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## 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 postsecondary leaders. The Summit was successful in mak-*

*ing 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, 30 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](http://www.achieve.org).*

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