

HIGH SCHOOL ASSESSMENTS AND ACCOUNTABILITY DURING ESSA TRANSITION



As states consider how their accountability systems will change under the Every Student Succeeds Act (ESSA), they face important decisions about which high school assessments to incorporate, what content their assessments will measure, which tests all students will take, and how rigorous those assessments will be. ESSA requires that each state administer a statewide assessment to all students to assess proficiency in English language arts (ELA)/literacy and mathematics at least once in high school and include these results in school and district accountability systems as a measure of student achievement. States must also assess students in high school in science but are not required to include a measure of science achievement in their high school accountability systems.

The purpose of this brief is to examine which ELA/literacy, mathematics, and science assessments states are using to measure high school students' achievement within each state's accountability system and what specific content or grades have been assessed.¹ Achieve hopes that understanding the current landscape — and the vast variations — might push states' thinking about what future assessment requirements ought to be and how states can create a more coherent assessment and accountability system that better meets the goal of graduating all students college and career ready.

What We Did: Analysis of High School Assessments Used To Measure Student Achievement

To establish a baseline understanding of where states currently stand on these issues, we reviewed states' most recent accountability manuals, assessment administration materials, State Board of Education materials, and Elementary and Secondary Education Act waivers. We sought to use the most recent documentation we could find for each state, which means that some of the assessments will be administered for the first time in the state in 2016–17.

Specifically, we analyzed the high school summative assessments states use to measure achievement (or status) and growth in state accountability formulas. While states are engaging in discussions around the ESSA "5th indicator," academic achievement, as measured by assessments, is still the weightiest indicator and worthy of review. Our analysis also does not include testing required by school districts and schools or additional assessments administered statewide that are not used for accountability purposes.

¹While many states are not issuing school grades or necessarily "holding schools accountable" based on students' performance on 2015–16 assessments, our goal was to produce a snapshot for each state that includes the high school assessments states will be using once pauses in accountability systems are over.



Achievement Indicator vs. College- and Career-Ready Indicator

The **achievement indicator** is based on an assessment of all students' proficiency (and sometimes growth) in English language arts/literacy and mathematics (and in some states science and social studies as well). The achievement indicator accounts for the greatest percentage of a high school's grade in states' accountability systems. A recent report found that, on average, assessments that measure student achievement and growth account for 63 percent of a high school's grade in states that weight indicators in their system.²

In addition to measuring student achievement, 30 states in the past have included some version of a **college- and career-ready (CCR) indicator** to differentiate and classify high schools, some of which include additional assessment indicators.³ However, states' CCR indicators account for a much smaller percentage of a high school's rating (on average, 15 percent), and states typically use a combination of measures (e.g., qualifying scores on ACT, SAT, COMPASS, ASVAB, dual credit, Advanced Placement, or WorkKeys), which are then aggregated into one indicator. Combining multiple indicators into one masks results that should be highlighted and valued on their own and makes them harder to interpret or use for improvement. Finally, as states revise their accountability systems, whether and how they will include a CCR indicator going forward is unclear. For example, some states plan to use college admissions tests for accountability; others may build a new CCR indicator as their "fifth indicator." For these reasons, if a state accountability formula includes additional assessments as part of another indicator, we have not included that assessment in this analysis.

Which High School Assessments Do States Administer for Accountability Purposes?

The first part of our analysis required identification of which states were administering which assessments in ELA/literacy and mathematics for accountability purposes. **Twenty-three states** administer a state-developed assessment to all high school students and use proficiency ratings from these assessments to gauge student proficiency for school accountability. **Sixteen states** employ an assessment developed by the Partnership for Assessment of Readiness for College and Careers (PARCC) or Smarter Balanced Assessment Consortium. **Thirteen states** administer an assessment developed by ACT or College Board for accountability purposes.⁴

Even within these commonly administered assessments, there are differences in what content states are assessing and how they are using the assessments. For example, one state includes only the reading and mathematics portions of the ACT Aspire assessment for accountability, leaving out the English and writing portions. Other states include the writing or essay component of the ACT or SAT within their accountability systems while other states do not. Some states assess students in 9th grade, others in 10th, 11th, and/or 12th grade. Additionally, states assess very different content within subject areas.

² Center for American Progress. (2016) "Making the Grade: A 50-State Analysis of School Accountability Systems," <https://www.americanprogress.org/issues/education/report/2016/05/19/137444/making-the-grade/>

³ Ibid.

⁴ One state, Louisiana, includes both state-developed assessments and the ACT as part of the state's achievement indicator within its high school accountability system.

TABLE 1: STATE HIGH SCHOOL MATHEMATICS AND ELA/LITERACY ASSESSMENTS USED FOR ACCOUNTABILITY

Assessment*	States
State-Developed Assessment	Alaska, Arizona, Florida, Georgia, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Minnesota, Mississippi, Missouri, Nevada, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia
PARCC	Colorado, ⁵ District of Columbia, Maryland, New Jersey, New Mexico, Rhode Island
Smarter Balanced	California, Hawaii, Idaho, Iowa, ⁶ North Dakota, Oregon, South Dakota, Vermont, Washington, West Virginia
ACT Aspire	Alabama, Arkansas, Wyoming
ACT	Louisiana
ACT plus Writing	Montana, Nebraska, Wisconsin, Wyoming
SAT	Connecticut, Delaware, Maine, New Hampshire
SAT with Essay	Illinois, ⁷ Michigan

*Categories are not mutually exclusive.

Assessing High School Mathematics Achievement for Accountability

The high school mathematics assessments states have selected for their accountability systems vary in design. States are almost evenly divided between two types of assessment they use as a measure of student proficiency for accountability: **28 states** use a comprehensive (i.e., end of grade) assessment (or assessments) that is administered to all students in a cohort at the same time regardless of the courses the student has taken in high school, while **24 states** use an end-of-course (EOC) assessment (or assessments) that students take upon completion of the requisite coursework regardless of what grade they are in. The above numbers include **one state**, Louisiana, that includes both EOC assessments and the ACT within its high school accountability system.

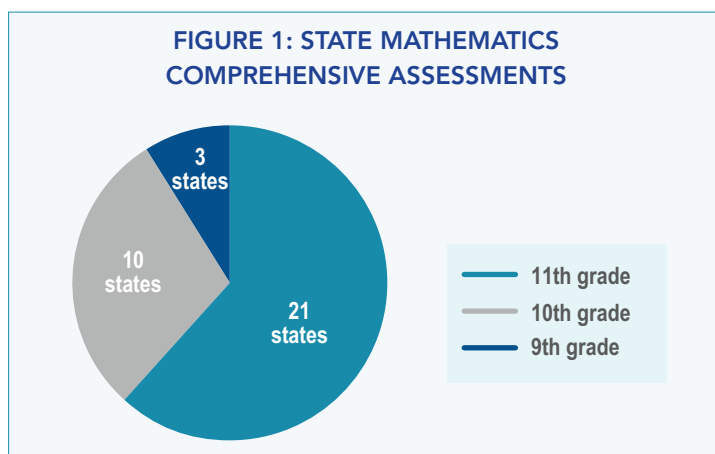
⁵ Colorado will also administer the PSAT in 10th grade and the SAT in 11th grade statewide in 2016–17 but had not yet determined as of August 2016 whether these will be included in the state accountability system.

⁶ In 2016 Iowa administered the Iowa Assessment in 11th grade for the final time. Beginning in 2017, Iowa will begin to administer Smarter Balanced as its high school assessment. For purposes of this analysis, we have included Iowa as a state administering Smarter Balanced.

⁷ In 2016 Illinois administered the PARCC assessments in high school. However, beginning in 2017, Illinois will instead administer the SAT as its high school assessment. For purposes of this analysis, we have included Illinois as a state administering the SAT.

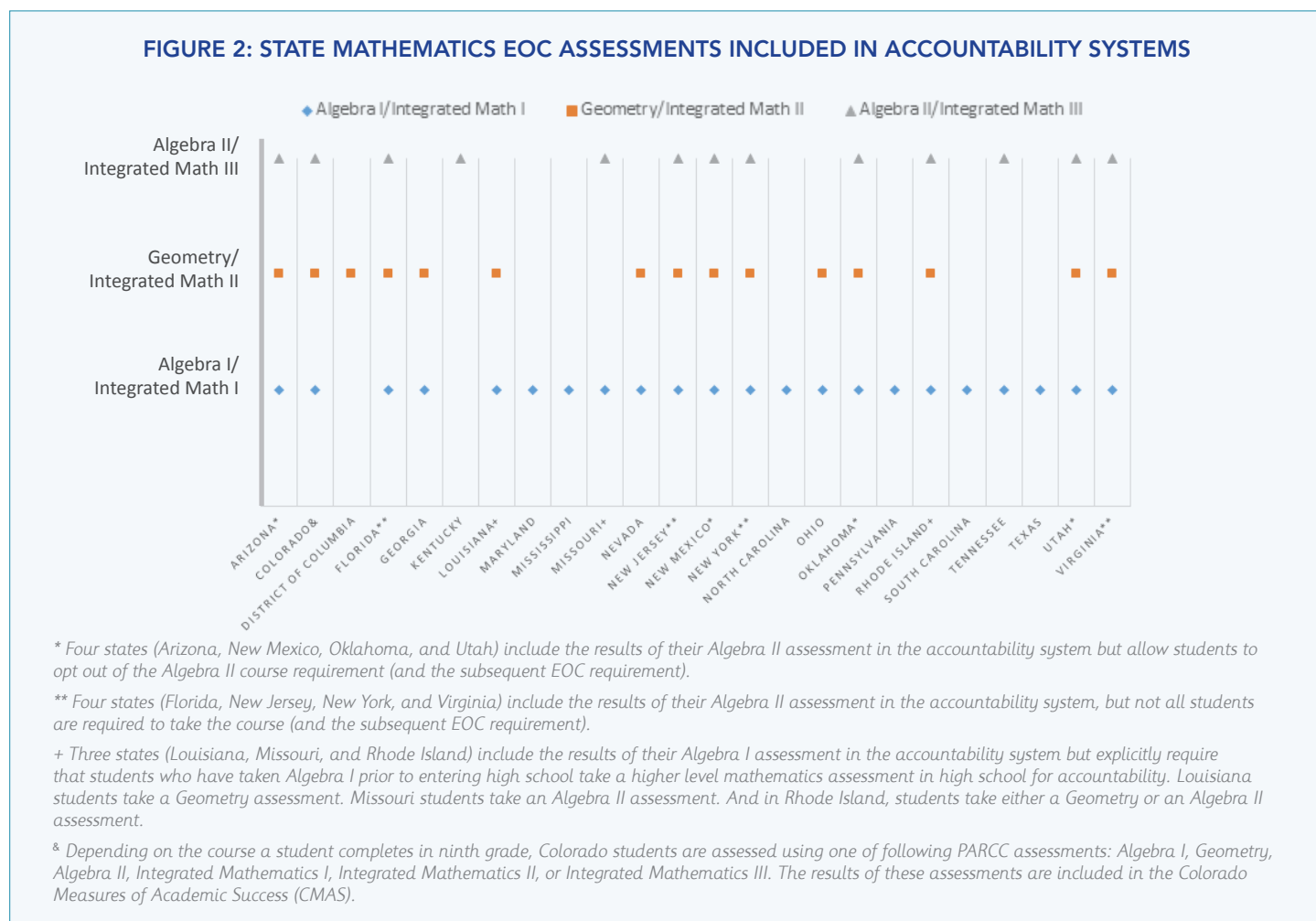
Comprehensive assessments

The vast majority of the **29 states** that administer comprehensive assessments in mathematics do so once in high school, in 11th grade. **Twenty-one states** assess 11th graders for proficiency and include those results in their accountability systems. **Ten states** assess 10th graders. **Three states** assess 9th graders, but each of these states assesses students again later in high school (two states include end-of-grade results for students in grades 9, 10, and 11, and one state includes assessment results for students in grades 9 and 10).



End-of-course assessments

Our review found great variation by state in both the content in EOC mathematics assessments and the number of EOC assessments administered to high school students that are used in the states' accountability systems.





Of the **24 states** that use an EOC assessment (or assessments) in their accountability system:

- **Eight states** use a single high school mathematics EOC assessment for accountability. Of these, six states (Maryland, Mississippi, North Carolina, Pennsylvania, South Carolina, and Texas) assess Algebra I or Integrated Math I; the District of Columbia assesses Geometry or Integrated Math II; and Kentucky assesses Algebra II.
- **Three states** use a single high school mathematics EOC assessment for accountability but explicitly require that students who have taken Algebra I prior to entering high school must take a higher level mathematics assessment in high school for accountability. In Louisiana, this is a Geometry assessment. In Missouri, students take an Algebra II assessment. And in Rhode Island, students in grade 9 who have already taken an Algebra I take either a Geometry or Algebra II assessment. **One additional state**, Colorado, also uses a single high school mathematics EOC assessment for accountability. Depending on the course a student completes in ninth grade, Colorado students are assessed using one of following PARCC assessments: Algebra I, Geometry, Algebra II, Integrated Mathematics I, Integrated Mathematics II, or Integrated Mathematics III.
- **Twelve states** include more than one mathematics EOC assessment score for students for accountability and differ in both how assessment results are included and how advanced the content of assessment(s) is.
 - > **One state**, Tennessee, assesses all students with an Algebra I and an Algebra II test and includes results from both assessments for accountability.
 - > **Eight states** administer Algebra I or Integrated Math I, Geometry or Integrated Math II, and Algebra II or Integrated Math III assessments to all students who take these courses and include the results from all three assessments for accountability. Of these:
 - **Four states** (Arizona, New Mexico, Oklahoma,⁸ and Utah) allow students to opt out of taking the Algebra II course required for graduation (and the corresponding EOC assessment). These students are not included in the accountability results as they did not take the assessment.
 - **Four states** (Florida, New Jersey, New York, and Virginia) include the results of their Algebra II or Integrated Math III assessment in the accountability system, but not all students are required to take the course and therefore do not take the assessment.
 - > **Three states** (Georgia, Nevada, and Ohio) assess all students in Algebra I or Integrated Math I and Geometry or Integrated Math II.

Assessing High School ELA/Literacy Achievement for Accountability

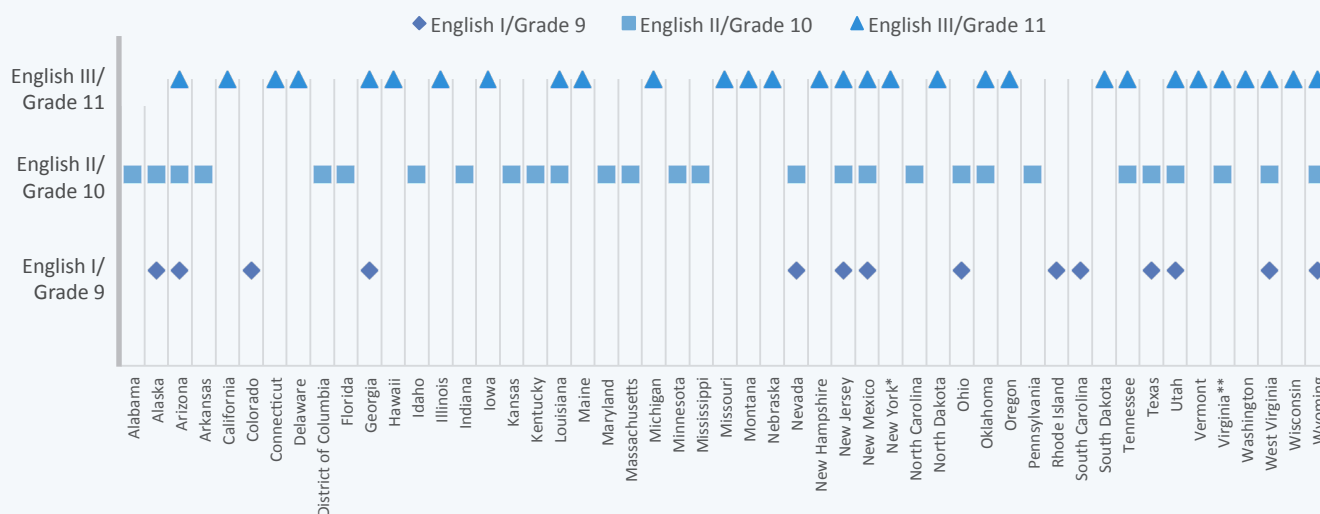
The high school ELA/literacy assessments states have selected for use in their accountability systems also vary in design, but differences are most pronounced regarding when states assess students for accountability and how many times students are assessed in high school.

After which year or course do states assess students for accountability?

First, we reviewed when states determine whether students are proficient in ELA/literacy. **Thirty states** administer an 11th grade or English III assessment for high school accountability. **Twenty-eight states** administer a 10th grade or English II assessment. And **14 states** administer a 9th grade or English I assessment.⁹

⁸The 2016–17 school year is expected to be a transition year and End of Instruction (EOI) assessments will not be administered. In their place, testing items to satisfy the new requirements will be culled from a bank of items Oklahoma owns from previous years. For fall 2017, EOIs will be replaced with 10th grade mathematics, ELA, and science assessments.

⁹Categories are not mutually exclusive. A state administering an assessment in 9th, 10th, and 11th grades is counted in all three categories; likewise, a state administering an assessment in 9th and 10th grades is counted in both grades 9 and 10.

FIGURE 3: STATE ELA/LITERACY ASSESSMENTS INCLUDED IN ACCOUNTABILITY SYSTEMS


* New York's ELA assessment is primarily administered in grade 11, but administration varies between grades 10 and 12.

** Virginia's Reading and Writing Standard of Learning assessments assess ELA 9, 10, and 11 standards; for purposes of this analysis they are considered grade 10 and 11 assessments.

Which (and how many) assessments do states use for accountability?

Next, we reviewed whether states assessed the ELA proficiency of their high school students more than once in their high school experience for accountability purposes.

- **Thirty-six states** use a single high school assessment for accountability. Of these, **19 states** assess English III or 11th grade ELA; **14 states** administer an English II EOC assessment or 10th grade ELA assessment; **three states** assess English I or 9th grade ELA.
- **Fifteen states** administer more than one ELA assessment to high school students and use these results in their accountability systems.
 - > **Six states** administer an English I, II, and III EOC (or grades 9, 10, and 11) assessment to all students who take these courses and include the results in the accountability system.
 - > **Nine states** administer two ELA assessments for high school accountability. They differ on when they assess students (e.g., 9th and 10th grade, 10th and 11th grade, 9th and 11th grade).



Assessing High School Science Achievement for Accountability

In addition to ELA and mathematics, our review found that **36 states** include results from their science assessment in their accountability formula for high schools. The remaining **15 states** assess students in high school science but do not use the results for accountability.

- **Twenty-one states** include science EOC assessments.
 - > In **16 of these states**, the Biology EOC test is the specified assessment.
 - > In the remaining **five states** — Georgia, Idaho, Massachusetts, Utah, and Virginia — the states administer multiple science EOC assessments in high school. Among these states, policies vary as to whether students are assessed in more than one science subject.
- **Fifteen states** include a comprehensive or end-of-grade science assessment. **Five of these states** assess grade 10 students and **10 states** assess grade 11 students.

Observations

Our review of the assessments included in states' high school accountability systems revealed a great deal of variation across states:

- The types of assessments states are using;
- The nature of the content assessed; and
- When and how often states are assessing students.

Taken together, these differences make it challenging, if not impossible, to interpret school, district, and state results within and across states.

The Courses Students Take vs. the Assessments Students Take for Accountability

The majority of states require that students take more rigorous courses to graduate than they assess or than they assess for accountability. A small number of states both require all students to take content through Algebra II/Integrated Mathematics III *and* assess students on that content (either using an EOC exam or a comprehensive assessment) and assess students in ELA/literacy in grade 11. Across states, there are different expectations for students — some states' expectations are set at the level of college readiness or preparation for next steps beyond high school, but many are not.

Middle School Results as a High School Measure

States have also adopted different policies around "banking" assessment scores. Some states have elected to assess middle school students who complete Algebra I on both an 8th grade (or 6th or 7th grade) math assessment *and* an Algebra I EOC assessment. The state then uses the 8th grade (or 6th or 7th grade) math assessment for accountability at the middle school level and "banks" the Algebra I score for the high school the student will attend. One drawback of the practice of banking scores is that, unless the state requires another high school math assessment, the state will not assess this student after middle school.



Participation May Vary Dramatically

Because some states allow students to opt in or out of assessed courses at the high school level, participation is not universal — and may well be far from universal. It is difficult to draw conclusions about a subset of students who self-selected into an assessment that is factored into an achievement index; results cannot be generalized to the broader population of students or to specific subgroups of students. Unless the *course and the associated assessment* are required by the state, not all students will take all offered EOC assessments, so the results from the assessments apply only to a select group of students.

Pros and Cons of the Different Types of Assessments in an Accountability System

While comprehensive assessments may reflect what a student has learned up until the point of assessment, several factors make comparisons of student results both within states and across states challenging. Because states have different graduation course requirements and students may take different courses in different orders, student outcomes will inevitably vary according to the courses they have taken and the standards they have been taught by the time they are assessed in the grade when the comprehensive assessment is required.

Comprehensive exams are typically administered only once in high school, sometimes at the end of 9th grade, other times in 10th or 11th grade; these exams should be administered at a time when they will provide the most accurate picture of learning that has occurred in high school. Assessments administered too early in a student's high school career are not likely to capture this picture.

Misalignment of School Accountability and Expectations for Student Learning

High school assessments incorporated into accountability systems in many states are poorly aligned to the state's college and career readiness agenda. To be most useful, every state needs high school assessments that:

- **Matter to students because they provide meaningful information that helps them meet their postsecondary goals.** Some high school students will not be motivated to perform well on tests whose results are not relevant to them. High school assessment systems must include tests that measure college- and career-ready (CCR) knowledge and skills and let students and postsecondary institutions know if a student is ready to enter and succeed in credit-bearing courses.
- **Are well aligned with state standards that provide a foundation for teaching and learning.** Students and teachers alike must know that the tests they take measure how well they have learned the curriculum they were taught. Assessments that are not well aligned send mixed signals about what is most important for students to learn.
- **Align school accountability with the learning expectations for students.** If we want students to master CCR standards, assessments aligned with these standards must be incorporated into the school accountability system. If, however, schools are held accountable solely for student performance on English 10 and Algebra I tests — tests that generally are not rigorous enough to measure college-ready skills — then states are setting a lower bar for schools than for the students they educate.



When viewed through the lens of the principles, relatively few states measure up.

- At most, **34 states** include assessments in their accountability systems that have the potential to be rigorous enough to measure whether students meet CCR standards in mathematics, because they administer either EOC exams in Algebra II or 11th grade comprehensive (i.e., end of grade) tests.
 - > However, of the **13 states** that factor an Algebra II/Integrated Math III assessment into high school accountability ratings, **only four** (Colorado, New Jersey, New Mexico, and Rhode Island) administer assessments that have been both independently validated as well aligned to state standards and recognized by postsecondary institutions as indicators of readiness to enter and succeed in credit-bearing courses. All three administer the PARCC Algebra II exam. New York's Regents Algebra II/Trigonometry test has also been recognized by the state's postsecondary system as a college-ready indicator.
 - > Of the **21 states** that incorporate an 11th grade comprehensive mathematics assessment in their accountability system, **only nine** (California, Hawaii, Iowa, North Dakota, Oregon, South Dakota, Vermont, Washington, and West Virginia) administer the 11th grade Smarter Balanced assessment, which has also been independently validated as aligned to state standards and recognized by many postsecondary institutions in those states as an indicator of readiness to enter and succeed in credit-bearing courses.
- Similarly, **30 states** factor an English III/Grade 11 assessment into high school accountability.
 - > However, only **12 states** incorporate assessments that have been independently validated as aligned to state CCR standards and recognized by postsecondary institutions as indicators of readiness to enter and succeed in credit-bearing courses. These include two PARCC states (New Jersey and New Mexico), New York's English Regents test, and nine Smarter Balanced states (California, Hawaii, Iowa, North Dakota, Oregon, South Dakota, Vermont, Washington, and West Virginia).
- Additionally, **five states** (Louisiana, Montana, Nebraska, Wisconsin, and Wyoming) factor (or will factor) mathematics and ELA/literacy on the ACT (or ACT with Writing) results into high school accountability achievement ratings. **Six states** (Connecticut, Delaware, Illinois, Maine, Michigan, and New Hampshire) factor (or will factor) mathematics and ELA/literacy on the SAT (or SAT with Essay) results into high school accountability achievement ratings. These assessments clearly provide useful information to students, parents, and postsecondary systems about the readiness of students for college-level work. However, to the best of our knowledge there has been no independent analysis of the extent to which the SAT or the ACT are aligned to any state's CCR standards. Consequently, their relationship to high school curriculum in each state is simply not known.