Over the past two decades, college and career readiness became a priority in K-12 education. And while graduation rates have been rising, far too many high school graduates are not ready to succeed in college or a job. Employers note that freshly minted employees too often need additional training to perform their roles, many are ineligible for military service because they fail to get adequate scores on the entrance exam, and first-year college students across the country must pay to take no-credit remedial classes on content they should have learned in high school. The U.S. economy depends on these graduates, so it is urgent that state boards of education figure out why so many students remain unprepared.

Many states are ill equipped to do so. There is an astonishing lack of publicly reported data on student performance in grades K-12, and the information that is reported varies widely across states. The fact is that state policymakers cannot make good education policy and practice decisions—and ultimately cannot improve student performance—without basic information about how students are performing along the way. To fix this problem, state boards and state education agencies (SEAs) must know their starting point and be able to measure progress and change over time.

**Qualities of Transparent Data**

Transparency in education data reporting is critical to improving student outcomes. Needless to say, data should also be easy to find and be displayed in a manner that stakeholders—students, families, educators, and policymakers, among others—can easily understand. It is not enough that states merely report data on one or more indicators of college and career readiness. To be fully useful in facilitating change, data must be broken down by student subgroups such as income status and race/ethnicity, reported in a timely manner (preferably from the most recent school year), and reported in a way that ensures all students are counted.

**Student Subgroup Reporting.** While aggregate figures are useful in painting an overall picture of student performance in a particular state, data are more directly impactful if they are broken down and reported by student subgroups. Important subgroups include race/ethnicity, English learner status, students with disabilities, and low income status. This additional layer of data detail empowers decision makers at the state and local level to know which groups of students are struggling, which are succeeding, and where resources should be targeted (see Ryan Smith and Lillian Lowery’s article in this issue for more on this point). These data can also reveal “bright spots,” which policymakers and educators might want to replicate.

**Timely Reporting.** Data are only as useful as they are accurate, and old data cease to be directly relevant to current students. To the extent possible, states should prioritize the sharing of data from the most recent school year. Timely data releases also help policymakers consider the impact of proposed changes in state education policy.

**Counting All Students.** Denominators matter. To present a complete picture of college and career readiness in a state, data must not be calculated in a way that leaves some students out of the equation. The adjusted ninth grade cohort is the ideal denominator to use in these calculations, as it captures all students who entered ninth grade in a particular year.
However, putting all 11th graders, graduates, or completers as denominators can also be useful in calculating certain data.

Using denominators that are more selective—such as only those who enrolled in AP courses or those who took AP exams—creates the appearance that more students are earning college credit in high school than really are. These denominators take into account only a percentage of the adjusted ninth grade cohort when determining student outcomes.

Public education data reporting varies widely across the country, and many state policymakers face yawning information gaps. Some are even using multiple denominators to report student data—meaning that the state’s own data are not comparable. Yet there are hopeful developments. As the importance of reporting becomes clearer and as some states become more sophisticated in their data systems, best practices and state exemplars have begun to emerge.

Achieve, which is an education nonprofit, recently released a new set of transparency reports examining data reporting in every state, and it has identified indicators of college and career readiness that states should report beyond a simple graduation rate (see map). Some states are already setting strong examples for transparent reporting in many of these indicators.

Every state that is serious about preparing students should include these indicators of college and career readiness in its public reporting system:

- college- and career-ready assessment scores
- college- and career-ready course of study completion
- on track to graduate, based on credit accumulation
- earning college credit while in high school
- postsecondary enrollment/remediation/persistence of high school graduates

States can collect more measures of college and career readiness, but they should use at least these.

### College- and Career-Ready Assessment Scores

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anchored to college- and career-ready academic standards. These assessments include a performance level or cut score that lets high school students know they are ready for first-year mathematics and English courses at postsecondary institutions, and two- and four-year colleges and universities use them for placement into first-year, credit-bearing courses. While many more states have college- and career-ready assessments in place than did a few years ago, the quality and transparency of results reporting vary. Nonetheless, a handful of states have emerged as good examples of quality and transparency in reporting:

**New Jersey**, which administers the Partnership for Assessment of Readiness for College and Careers (PARCC), reports the percentage of PARCC test takers earning each of the performance levels by test taken. The state also presents these data by race/ethnicity, special populations, income, and gender. New Jersey’s reporting is different from other states that administer end-of-course assessments in that the state reports student outcomes by grade level by test. The state also clearly reports the denominator, and data are available at the district and school level. New Jersey officials have a strong understanding of when students are succeeding on the assessment by grade taken, and they can begin to understand the relationship between course grades and success on the assessments.

Thanks to this type of data reporting, New Jersey is well positioned to answer questions about how course content is delivered in the lower grades versus the upper grades (for instance, by examining the results for students who took Algebra I in eighth grade versus those who took it in ninth grade) and thus whether these differences could be leading to the discrepancies in outcomes. They can also follow how the demographics of course enrollees changes over time.

**California** reports the percentage of the 11th grade cohort earning a 3 or 4 on the Smarter Balanced Assessment in English language arts (ELA) and mathematics. The state also reports these data by subgroup.

In 2015–16, **Delaware** and **Michigan** both reported the percentage of 11th grade students meeting the redesigned SAT’s College and Career Readiness Benchmarks in Evidence-Based Reading and Writing (EBRW) and mathematics. All students in the cohort of enrolled 11th graders took the test, and the states report data by subgroup.

### College- and Career-Ready Course of Study Completion

Achieve considers states’ mathematics and ELA/literacy high school graduation requirements to be at the college- and career-ready level if students are expected to complete a course of study aligned with state-adopted college- and career-ready standards, which typically includes at least three years of mathematics that covers content through Algebra II and four years of rigorous, grade-level English. Readiness for college and careers depends on more than the mastery of ELA/literacy and mathematics content and skills, but these two content areas serve as a foundation for the study of other academic disciplines and contextualized learning.

In too many states, earning a high school diploma is not a signal that a graduate is ready to enter postsecondary education, the military, or the workforce. Rigorous course-taking is one of the strongest indicators of postsecondary success, yet many states do not expect graduates to take the classes or learn essential skills that will open doors to their next steps. In all but a handful of states, the college- and career-ready completion rate is much lower than the adjusted cohort graduation rate.

**New York**, for example, offers a college- and career-ready course of study to all students in the state, and it publicly reports the percentage of students in the adjusted ninth grade cohort who graduate having completed that course of study. Additionally, New York is clear in its reporting about how the graduation rate of Regents with Advanced Designation diploma earners compares to the overall graduation rate, as well as to the graduation rates for those who earned the state’s Regents Diploma or the Local Diploma. The state then goes one step further and provides outcomes data for students who did not graduate—whether they are still enrolled, earned a “nondiploma credential,” a GED transfer, or dropped out. The state also presents these data by race/ethnicity, special populations, income, and gender.
On Track to Graduate

It is important to know how students are faring early in high school, in hopes that educators can intervene to help struggling students before it is too late. State boards and SEAs should be paying attention to the performance of eighth and ninth grade students and not only of juniors and seniors. Timely credit accumulation is a leading indicator of students’ progress toward high school graduation.

For instance, Ohio reports the percentage of students who have five or more high school credits in ELA/literacy, mathematics, science, social studies, world languages, or fine arts by the end of grade 9 as an indicator of whether students are on track to graduate. The state reports several other on-track measures for eighth, ninth, and eleventh graders, including earning at least one high school credit in Algebra I by the end of grade 9 and the percentage of the cohort earning at least one high school credit in Algebra II by the end of grade 11. Importantly, Ohio reports results against the most comprehensive denominator, the adjusted ninth grade cohort. The state also presents these data by race/ethnicity, special populations, income, and gender.

Earning College Credit While in High School

The rates at which students are earning college credit in high school—whether through Advanced Placement (AP) or International Baccalaureate (IB) classes or dual enrollment programs—are another useful indicator of the readiness of students for success after high school. Students who earn college credits while in high school become familiar with

Making Dashboards Clear for All Education Drivers

State and local governments are developing online dashboards to increase transparency and improve communications between schools and their communities. A key challenge is making the data accessible and comprehensible to the average community member.

Michigan’s dashboard includes a comprehensive set of indicators, including six primary metrics: proficiency, growth, graduation rate, English learner progress, assessment participation, and school quality/student success. There will be six more: postsecondary transition and readiness, access/equity, school climate/culture, student factors, educator engagement, and achievement gaps. Slated for completion in fall 2019, the dashboard presents values relative to the state average and an average from a set of peer schools. The state is surveying parents and other stakeholders, as well as hosting workgroups and doing usability testing, to make the information as clear as possible.

California is field testing its own dashboard. Unlike Michigan’s, California’s tool shows district as well as school performance. It differentiates indicators based on how they are collected. State-level metrics include academic performance, English learner progress, chronic absenteeism, graduation rates, suspension rates, and college- and career-readiness; local metrics include basic services, implementation of state standards, parent engagement, and school climate. Districts can use self-reflection tools to display chosen strengths on the dashboard. Guides on the homepage help acquaint users with the dashboard. There are also glossary and translation features to help users who are unfamiliar with education policy terms and nonnative speakers.

Dashboards have also been created locally. Launched in June 2016, New York City’s includes student population, percentage of high-need students, framework scores, citywide percentile rank, impact and performance, student achievement metrics, and multiyear data tables. Like Michigan’s, data are contextualized by use of comparison groups of similar students across the system, as well as comparison to other districts and cities. The site’s layout is simple, and reports are a short two pages. A tutorial appears when users first visit the site, and there is an accessible form for comments.

—Grace Hill
postsecondary expectations, academic behaviors, and habits of mind. Evidence also points to an impact on postsecondary enrollment, performance, persistence, retention, and attainment.

As part of Ohio’s Prepared for Success measure, the state reports the percentage of students in the adjusted ninth grade cohort who scored a 3+ on an AP exam, a 4+ on an IB test, or who earned three or more dual enrollment credits, and it does so discretely for each indicator. Ohio is the only state to report their results on college credit attainment against the adjusted ninth grade cohort. The state also presents these data by race/ethnicity, special populations, income, and gender. Aggregate data are also available at the school and district levels as part of the state’s school report cards.

Indiana publicly reports the percentage of the state’s high school graduates earning early college credit through dual credit, AP, or both dual credit and AP. The state offers a quick-glance one-pager with these data and a number of additional compelling data points and visuals, and its commission for higher education reports a breakdown of college readiness measures by students’ dual-credit status, in addition to AP exam status.6 This report takes an in-depth look at dual-credit students, specifically those who earn only dual credit and not AP exam credit as a way to better understand dual-credit student characteristics. The following questions are addressed: How many and what types of students are earning dual credit only? How do the dual-credit-only students compare? The data also look at postsecondary outcomes associated with earning college credit in high school (postsecondary enrollment, GPA, persistence). Indiana is one of only three states that reports subgroup results for dual enrollment.

**Enrollment, Remediation, Persistence**

Of course, one of the clearest ways to understand how well a state’s K–12 education system prepared students for life is to look at their actual performance after high school. Postsecondary enrollment, remediation, and persistence are all useful ways to quantify how students have fared.

Colorado’s reporting of these three measures is noteworthy. The state has a law that requires the reporting of these three on a yearly basis, and the reporting includes the results of the preceding six high school graduating classes. The state also presents these data by race/ethnicity, income, and gender. The state reports all data as an aggregate state number but then disaggregates by two-year institutions and four-year institutions. Further, in the cases of postsecondary enrollment and persistence, Colorado’s reporting also includes graduates who attend out-of-state institutions; the reporting is therefore more comprehensive than most states’ reporting. The reports also include district- and high school-level outcomes for postsecondary enrollment, remediation, and persistence, along with outcomes data by higher education institutions.

While states are beginning to publicly report a more nuanced, useful picture of college and career readiness, much work remains. Simply reporting the statewide data for a particular indicator is not always useful. Instead, states should strive to break data down by subgroups, release it in a timely manner, and report it in a way that includes all students. Students, families, educators, and policymakers need transparent information. Without it, there can be no informed decisions about policy and practice. Transparency is especially critical for state board members. They need to know—in real time—how students are performing and whether their state is meeting goals that have been set around college and career readiness. Only with good data can board members promote policies that will ensure that students graduate from high school ready for postsecondary success.


2See Data Quality Campaign, “Show Me the Data” (Washington, DC, December 2016), http://dataqualitycampaign.org/showmethedata/. This online resource offers analysis of the information that is easily findable on state report cards from all 50 states and the District of Columbia, how it was displayed, and whether it was accessible to and understandable by a broad public audience.

The adjusted cohort graduation rate indicates the percentage of ninth graders who graduate from high school in four years or less with a regular high school diploma. This percentage is calculated by dividing the number of graduating students by the number of students who entered high school four years earlier, adjusting for transfers in and out, émigrés, and deceased students.


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Sandra Boyd is chief operating officer at Achieve.
What are your expectations for ESSA plan implementation?

State Superintendent Smith: At the beginning, there were people who did not really believe that their input would show up in the plan. But we kept showing up, and the drafts changed based on stakeholder input. We were trying to change the relationship between the field and the state agency to build trust and relationships so that we could do the real work of implementing. Conversations are ongoing on how the plan works, and it is going to take feedback from the field to implement this plan. How we are going to eliminate performance gaps and pay attention to equity are going to take dialogue. We believe we have built some relationships to be a part of that dialogue. It is the relationship that makes it possible to transform outcomes so we can create more opportunities for kids.

Board Member Jacobson: Next steps are really important to D.C. We know our plan is not perfect and plans should evolve over time. At our immediate meeting after the approval of the state plan, we considered a resolution to set up a task force that is broader than the board’s previous committee. We started our work on ESSA with just board members around the table. Although we did go out into our communities, we did not involve some communities as robustly as we could in the crafting of the plan and in our daily engagement. Our board set up a working group that will include members of the public charter sector and traditional schools, parents, students, business groups, teachers, and others. We are going to start conversations immediately about technical changes that need to be made to the plan and how we can think bigger.

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1Comments from state leaders were collected from NASBE’s May 9, 2017, webinar on ESSA state plans and from the U.S. House of Representatives Workforce and Education committee hearing on ESSA Implementation held on July 18, 2017. Plotting a New Course... cont’d from page 14 flexible program approval strategy that ensures high program quality standards while encouraging innovation.)

States boards have a number of options for encouraging teacher preparation programs to improve, even in the absence of federal requirements. These recommendations, in their most basic forms, propose that state boards pursue a simple strategy: Figure out how preparation programs are performing, help program “consumers”—specifically districts—make better “purchasing” decisions, and give high-performing programs flexibility to innovate.


Transparency... cont’d from page 29