SEALING THE CRACKS

Using graduation data, policy, and practice to keep all kids on track

November 2015

Executive Summary

In the last decade, high school graduation rates have improved significantly across the country—a monumental success. An important factor in this success was the implementation of a high-quality, comparable cohort graduation rate across states, made possible by statewide longitudinal data systems. The rate, which tracks students from freshman year to graduation, provides a more accurate picture than ever before of the number of students who graduate—and who fall through the cracks—because a common metric was developed collaboratively across states.

As more analysis is done with these data, though, questions have been raised about state practices that may diminish comparability and about whether the data can be trusted and used as they were originally intended. To better understand state successes and areas for improvement, the Data Quality Campaign and the Chalkboard Project examined nine states' practices and identified recommendations for policymakers seeking to improve student outcomes.

To reach the remaining one in five students who do not graduate further state action is needed. Continued efforts to improve the quality and comparability of the data in cohort graduations rates are critical, as they will build utility and trust in the metric. States must lead the way by focusing on ensuring both the quality of the data they collect and that data are used to support students.

To keep kids from falling through the cracks, states should take the following steps:

Motivate Action through Leadership

- State leaders at the highest level must set improved graduation rates as a priority.
- State education agencies should create internal structures and capacity to support increased graduation rates.
- States must clearly report graduation rates as part of a **high-quality state report card**.
- State leaders should use existing forums to collaboratively agree on needed clarity and guidance for implementing the cohort graduation rate.

Support Data Use at the Local Level

- Support districts in meeting graduation rate goals.
- Provide districts information about which students are included in their cohort.
- Use on-track or **early warning data systems** to identify students who are at risk of not graduating.
- Prioritize policies and practices to support educator and administrator **data literacy**.

Prioritize Data Quality and Comparability

- Train school and district staff on the proper collection and use of student data to improve quality.
- Include as many students as possible in ninth grade cohorts.
- Regularly and systemically audit school and district data collections and provide support as needed.

A decade after all 50 governors agreed on a new way to calculate graduation rates, state leaders should use these recommendations to take stock of progress within their states and apply lessons learned from high-performing states to their own policies and practices. It is foremost an opportunity to dig into the data and seal the cracks to ensure that no child falls through again.

DQC DATA QUALITY CAMPAIGN

CHALK BOARD PROJECT

Introduction

In the last decade, high school graduation rates have improved significantly across the country—a monumental success attributed in part to state and national leaders prioritizing quality, comparable data about which students actually graduated and which fell through the cracks. Policymakers have set ambitious goals; provided actionable data; funded necessary interventions; and held schools, districts, and states accountable for results. The outcome has been a boost in graduation rates across the nation.

Significant to this success was the implementation of a single high-quality, comparable cohort graduation rate across states. The rate provides a more accurate picture than ever before about the number of students who graduate because a common metric was developed collaboratively across states. The demonstrated increase in the number of students graduating from high school has naturally led many to ask how states were able to graduate so many students. As stakeholders dig into the data, they are seeing enough differences across states to lead to questions about the degree of comparability and whether this metric is useful in measuring student outcomes. Understandably, stakeholders want to be sure that the numbers are a real depiction of student success.

To this end, the Data Quality Campaign and the Chalkboard Project looked at the success stories to better understand the landscape and the remaining challenges as policymakers at all levels seek to improve student outcomes. This paper lays out work that can be done by state and national leaders to improve the quality of the metric and build trust that the cohort graduation rate is a reliable measure of student outcomes and provides a path forward to support individual students.

The Development of the Adjusted Cohort Graduation Rate

In the past trying to compare two states' graduation rates was like trying to compare apples to kumquats. Graduation rates were not comparable across states or even across districts within a state. It was impossible for a state leader, community member, or employer to decipher the meaning of a 90 percent graduation rate in one district and an 80 percent rate in another—and comparing across state lines was even more challenging.

In 2005, driven by a desire to more accurately assess their individual state's progress and to create a more transparent, reliable, and comparable measure across states, all 50 **governors signed a compact agreeing to establish a new methodology** for calculating high school graduation rates. Three years later, the US Department of Education (ED) adopted this common metric and created a set of regulations that added specificity to how states would define and calculate graduation rates. This new and improved graduation rate policy was called the adjusted cohort graduation rate (ACGR), and it required states to follow the progress of every student by assigning them to a cohort in the ninth grade and reporting the percentage graduating in four years. According to the ACGR, students can leave the state's cohort during the four years for reasons such as moving to another state, moving to a private school, or exiting to home school.

A recent AL.com article explained the ACGR succinctly.[1] "A school is responsible for measuring the performance of all incoming 9th graders. If 100 students enter your high school in 2015, their status in 2019 determines the school's graduation rate. If 85 students graduate and 15 either repeat a year or drop out, the graduation rate would be 85 percent. Students who transfer to other school systems or pass away do not negatively affect the graduation rate. Also, the school is responsible for tracking those same 100 students they started the year with. If a school has 20 students drop out but 15 students transfer in, the school is still responsible for the loss of 20 students." This metric was game changing as the use of this rate shifted schools away from focusing on overall percentages and got them focused instead on individual students.

The ACGR created a more comparable and accurate four-year rate than any previously used by states and ED. To put this groundbreaking comparability into context, **prior to 2011** states used any one of a number of methodologies, including a *leaver rate, a completer rate, an average freshman graduation rate, or a nonregulatory cohort rate,* to report the percentage of graduates within their state and to ED.[2] Those rates did not follow the progress of individual students. They were essentially *estimates* of how many students graduated and could not effectively capture who dropped out. States concluded that they could not effectively improve student outcomes if they could not first accurately identify and report those outcomes.

1 Hammontree, John. "How Has Your School's Graduation Rate Changed Since 2010?" Accessed October 29, 2015 on AL.com.
2 See data notes for provisional "SY2010–11 Four-Year Regulatory Adjusted Cohort Graduation Rates."

Essential to the success of the implementation of this metric are states' statewide longitudinal data systems. These systems enable states to track when students leave a school or district and transfer to a new one within the state—which in turn is important to understanding whether a student dropped out of a school or simply left to go to a new one. With an agreed-upon rate and new tools at their disposal, states were finally positioned to get to the hard work of using these data to support students.

Data infrastructure and cohort methodologies may not seem particularly energizing, but in reality they have changed the national conversation and allowed leaders, communities, and the media to examine successes—and failures—in promoting high school graduation.

State Graduation Rate Success

Between 2011 and 2013 graduation rates nationwide **increased from 79 percent to a national average of 81.4 percent**, and some states have seen even more dramatic increases. Some states demonstrated their commitment to using the graduation rate as a metric for educational success by setting ambitious goals for graduation. Alabama, for example, saw its graduation rate rise more than 6 percentage points (from 80 to 86.3 percent) between 2011 and 2013, attributed in part to setting a 90 percent goal and having more accurate data at the state level.[3]

As part of their Elementary and Secondary Education Act waivers, eight states set graduation rate goals at 95 percent or higher, with Georgia committing to an ambitious 100 percent graduation rate.

At the same time, many districts saw their dropout rates fall. Unlike districts, states are able to use enrollment data to follow students across district lines; therefore, students who might have previously been considered dropouts simply because they changed schools are now able to have their individual outcomes accurately captured. As a result, districts have a reduced burden in tracking students, and everyone has access to higher quality information.

The ACGR has also helped states arrive at another important metric for measuring student outcomes—postsecondary success. The need to calculate cohort graduation rates required states to build critical data infrastructure to follow individual students as they progressed through school. But the return on these data investments was not only the ability to calculate the ACGR. As of 2014, 41 states also now produce a **high school feedback report** that shows how high school graduates fare in postsecondary on measures like enrollment and remediation. Now states are able to see not only how many students graduated but also whether their high school experiences prepared them for life after high school.

With Success Comes New Questions about Comparability

As one of the only pieces of data that is comparable nationwide, the ACGR is a powerful tool for understanding how students are doing both within and across states. As more analysis is done with these data, questions have been raised about the degree of comparability and whether the data can be trusted and used as they were originally intended.

The 2015 ***Building a Grad Nation*** report cited practices that may limit the comparability of the rates across states. The report raised several critical issues that must be addressed, including the need to better define a "regular diploma" (particularly as it relates to students with disabilities), the importance of an early cohort assignment date, and the quality of the documentation of students who transfer out of state and out of the country.

A recent **National Public Radio report** questioned several aspects of the ways states are including students in a cohort and how that affects their overall graduation rate. For instance, the report cited documentation practices in Texas for students who have moved out of the country as an example of a way that state rules may not provide the most accurate count of students in a cohort.

Examining Current State Practice to Improve the ACGR

To learn from state success and dig into emerging questions about graduation rates, we set out to discover how states were improving the quality of graduation data and using those data to help more students graduate. To this end, we interviewed leaders in six states—Arkansas, Indiana, Iowa, Kentucky, New Jersey, and Texas—that either have had consistently high graduation rates or have seen substantial growth over the last few years. We included another three states—Louisiana, New Mexico, and Oregon—to provide a comparison with states that have had lower graduation rates over the last several years. The lessons we learned from these nine states are referenced throughout the paper and informed our recommendations for state and federal leaders.

3 Carsen, Dan. "On Track to a 90 Percent Graduation Rate in Alabama." Accessed October 29, 2015 on NPR.org.

The recommendations we have identified for improving the comparability, quality, and utility of graduation rates are not unique to the high-performing and high-growth states, and at least some of these practices are in place across all states interviewed. It is also evident from our analysis that these recommendations alone will not improve graduation rates, as specific educational and political contexts vary across states.

Policymakers should use these recommendations in three ways. First, if your state is not implementing these recommendations, identify the obstacles to implementation and look to overcome them. Second, if your state is implementing these recommendations, examine the context and quality of the implementation to look for areas of improvement. Finally, if your state is already implementing these practices with high quality, it is time to look to other strategies to continue to improve the quality and comparability of graduation data to keep all students on track. (For more on the data and analysis that informed this report, please see the Appendix.)

State Practices in Implementing Cohort Graduation Rates

The federal regulations for the ACGR provide a common set of rules for states to follow in calculating their graduation rates, which is key to comparability among the states. States overwhelmingly report that they are following the federal guidelines in good faith. However, not all terms are explicitly defined within the regulations, and the federal guidelines contain some flexibility for state decisions on certain aspects of the graduation rate. The decisions states make within this flexibility can lead to variation in the way graduation rates are calculated that in turn lessens comparability.

Our interviews with states identified four specific policy decisions within the allowed flexibility that could contribute to variability in states' calculated graduation rates. However, our analysis shows that some of these practices contribute to variability more than others.

Ninth Grade Cohort Assignment Date

One of the most important decisions a state makes is in determining the point during the school year to assign students in the ninth grade to a cohort. States that account for enrolled ninth graders early in the school year will capture more students in their cohort than states that account for students later in the school year, as some students may have already dropped out or left for other reasons. Therefore, the date of cohort assignment appears to make a difference in the final reported graduation rate.

The majority of states interviewed for this report include students in that year's cohort on the first day in which they enroll in ninth grade or on the first day in a subsequent grade if they come to a school after ninth grade. This approach is a means to ensure that the highest number of ninth graders possible is assigned to the cohort.

Of the interviewed states, only Texas and New Mexico use an alternative timeline for establishing which students to include in their ninth grade cohort. Texas counts students in the cohort differently than other states by beginning its cohort in the spring; New Mexico requires a student to be enrolled for two concurrent semesters before he or she is considered part of the cohort.

Auditing and Quality Control Practices

The overall quality of states' graduation rate calculations can be affected by how the state chooses to ensure the quality of documentation provided when students leave the cohort.

Interviews revealed that states with high graduation rates and states with low graduation rates tended to have similar procedures in place to conduct random or semirandom audits of the documentation on removal of students from the cohort. However, the specifics of these audits varied, with practices ranging from flagging districts and schools with high rates or large shifts of particular types of departures (such as out-of-state or out-of-country withdrawals) to random audits across districts and schools. Whereas Texas does extensive audits of up to a quarter of all district documentation on students leaving the cohort, only Iowa reported that it did not conduct any audits of documentation.

Despite the variation in state practices, auditing practices in high- and low-performing states were not notably different, and (despite concerns raised by external sources) these practices do not appear to be a significant source of the variability in state graduation rates.

Accounting for Different Diploma Types

Even within a single state, public schools may award students one of several different types of diplomas. (See **Achieve's report** for further information on the implication of state diploma types.) In particular, the types of diplomas given to special education students may greatly affect a state's

graduation rate. In awarding different diplomas to special education students, states may struggle to both be inclusive of students' individual learning pathways and ensure the rigor of their high school completion requirements.

In most of the interviewed states, graduation requirements for special education students can be tailored for individual students and developed by their individual education plan teams (usually comprised of parents, teachers, and other relevant stakeholders). Depending on the level of oversight from the state agency and school districts, qualifications for graduation for special education students can vary widely both within and across states, which could lead to variation in graduation rates across states.

Including Students in Alternative Schools and Programs

When students leave a traditional public school to attend an alternative public school or program, states have some leeway under **federal regulations** to determine if those students will remain part of the original school's cohort when calculating the state's graduation rate. Whether the student is included in the cohort of his or her original school or the public alternative school or program he or she transferred to, the student must be counted in the state's graduation rate calculation as long as he or she remains in a public school program.

Depending on the state definition of alternative schools or programs and whether they are primarily public or private, some states' graduation rates may be more affected by these transfers than others. While the size of the impact of student enrollment in alternative schools and programs is unclear, estimates suggest that these programs may affect the graduation rate by up to 4 percentage points.[4]

These four policy decisions are important considerations when analyzing state graduation rates. The independent decisions that states make about how to calculate their graduation rates have an impact on comparability across the nation and determine the data's usefulness in stakeholder understanding of student outcomes. However, the significant increases in graduation rates nationwide in recent years cannot be explained only by these implementation decisions. Our analysis of state practice indicates that states can improve the quality, comparability, and utility of their graduation rate data through further clarification of the implementation policies and practices associated with the data's collection and analysis.

Policy Recommendations for Improving High School Graduation Rates

Everyone Has a Job to Do: State, Federal, and District Roles

Cohort graduation rates have informed the national conversation about high school graduation and have provided a high-quality, comparable look at the numbers of students who graduate from high school in this country. While improving the quality of the data is tremendously important, the work does not stop there. States, the federal government, districts, and schools all have a unique role to ensure that more young people nationwide graduate high school prepared for success.

State role: To increase the number of students graduating from high school, state education agencies can (1) set graduation goals and lead through policy and practice; (2) provide data and systems to inform efforts to improve graduation; (3) provide information to the public on progress toward graduation goals; and (4) provide oversight for districts to ensure that cohort graduation rates are accurate.

Federal role: Federal leaders can set the tone and provide clarity by (1) using their bully pulpit to emphasize the importance of high school graduation and (2) providing guidance and monitoring implementation to ensure comparability of the rates across the country.

District role: While state and federal focus on policy related to graduation rates is critical, schools and districts have the important role of using data to support students and increase the number of graduates. School districts should (1) provide their educators the data and resources needed to identify and intervene with struggling students who are at risk of dropping out and (2) accurately track and input the correct data for state calculations.

Each of these actors must fully embrace their responsibility to take action to graduate all students ready for college and career. The goal of having high-quality, comparable graduation data is not an end in and of itself—rather it should be viewed as one critical tool to improving outcomes for students.

4 Vevea, Becky. "Behind CPS Graduation Rates, a System of Musical Chairs." Retrieved from http://www.wbez.org/series/front-center/behind-cps-graduation-rates-system-musical-chairs-111786.

Recommendations: State Policy and Practices to Keep Kids from Falling through the Cracks

Continued state efforts to improve the quality and comparability of the data in cohort graduation rates are critical, as they will build utility and trust in the metric. But the most important part of the cohort graduation rate is not the number alone—it is how leaders use that information to change policy and practice in support of student success. According to our interviews, states that have high graduation rates and states that have had success in raising their graduation rate over time focus on policies and practices that support students toward graduation.

To reach the remaining one in five students who do not graduate, further state action is needed. States can lead the way by focusing on both promoting the quality of the data they collect and making sure that data are used to support students. The following recommendations are based on the policy and practice challenges raised earlier in this paper, as well as our interviews with states. To keep kids from falling through the cracks, states should take the following steps:

Motivate Action through Leadership

- **State leaders at the highest level must set improved graduation rates as a priority.** States need leadership at the highest levels to create a focus on an ambitious but achievable graduation rate goal. Leaders in high-performing states in our analysis indicated that when improving graduation rates as a goal is a direct focus of the governor or chief state school officer, the ability to influence the work within the agency and beyond is increased, and states have seen movement on graduation.

STATE SPOTLIGHT

In **Iowa,** state leaders have set the graduation rate goal at 95 percent, and as a result, districts in the state are focused on supporting students in meeting that goal. Given the number of metrics that matter in education, setting graduation rate goals at the state level helps focus efforts at all levels on supporting individual students to stay on track to graduate.

- **State education agencies should create internal structures and capacity to support increased graduation rates.** Setting goals is not an end unto itself—states are best able to meet their goals when they prioritize graduation rates organizationally. States have done so by either tasking a particular division with the specific goal of increasing the number of graduates or creating a division or team to focus exclusively on graduation. To meet the goal of improving graduation rates, education agencies must have the internal capacity (people, time, and resources) to prioritize and monitor progress toward policies aimed at improving graduation rates.

STATE SPOTLIGHT

Kentucky's chief state school officer mobilized resources to create an intra-agency strategy team to focus on college and career readiness and increasing the state's graduation rate. The chief checks in on the state's progress toward the goal quarterly, based on an agreed-upon set of actions.

- **States must clearly report graduation rates as part of a high-quality state report card.** Timely, accessible, transparent information demonstrates what state leaders value and is critical to giving stakeholders a tool for evaluating education outcomes, including graduation rates. States should also include clear, easy-to-understand information about how they calculate the graduation rate on public reports that helps everyone with a stake in education understand the way that students are captured within a cohort.

STATE SPOTLIGHT

Like the annual state report card in other states, **Maryland's State Report Card** includes data on the ACGR. Beyond simply reporting the percentage of students who graduate high school with the cohort at the end of four years, the state "shows their work." The report card includes the numbers that make up the numerator and denominator of the ACGR, including the number of students who started in the cohort and the number of students who transferred in and out. This public reporting provides transparency and builds trust in the data.

- **State leaders should use existing forums to collaboratively agree on needed clarity and guidance for implementing the cohort graduation rate.** In 2005, governors voluntarily called for shared rules and methods for calculating graduation rates across states. Ten years later, state leaders, such as governors and education chiefs, can once again use existing forums for collaboration to generate a shared call for needed clarity to address some of the areas where state practice varies.

Support Data Use at the Local Level

- **Support districts in meeting graduation rate goals.** The work of getting students across the graduation stage happens at the local level, and as expectations for graduation increase, districts need support in making sure all students are on track to graduate. States can set clear expectations for improving graduation rates and should provide support—like resources, flexibility, and intervention support—for those that are struggling to meet the mark. This support is particularly important if states are including graduation rates as part of their education accountability systems.
- **Provide districts information about which students are included in their cohort.** Because states are able to account for every child enrolled in the state, even as they move across district lines, states have the most accurate roster of students in a cohort each year. When states provide information back to districts about which students have been reported as having left a high school, districts have a clearer sense of which students may have moved on and which students they need to reengage.
- **Use on-track or early warning data systems to identify students who are at risk of not graduating.** Using on-track and early warning data systems has led to effective interventions with students and tremendous gains in graduation rates. Several high-performing states have created data systems to track student progress toward graduation. Providing tools that show educators which students are at risk helps them deliver needed interventions before students drop out. States especially can support smaller and lower capacity districts that cannot build their own data use tools.

STATE SPOTLIGHT

In addition to an early warning system, **Arkansas** provides districts and schools a preliminary version of their graduation cohort and rate starting in ninth grade. This means that each year, when students enter into a cohort, districts are able to see which students are part of the cohort, which students have been identified as having left the cohort, and which students are currently identified as dropouts. Having this information at their fingertips, in addition to knowing which students are on or off track academically, gives districts in the state multiple tools to see how students are progressing and when interventions are needed.

- **Prioritize policies and practices to support educator and administrator data literacy.** High-quality data and data use tools will not support student success if teachers and leaders do not have the needed career-long training and skills to use the information.

STATE SPOTLIGHT

In **Kentucky,** the state's early warning system tracks student attendance and sends letters to principals and district attendance officers about students whose attendance patterns put them at risk of failure or dropping out.

Prioritize Data Quality and Comparability

- **Train school and district staff on the proper collection and use of student data to improve quality.** To create useful tools for monitoring student progress toward graduation, the data themselves must first be high quality. Districts have varying internal capacity to collect data, and staff need training on the mechanics of entering data and context on why those data are critical to supporting students.
- **Include as many students as possible in ninth grade cohorts.** States should assign students to a cohort early in the fall of ninth grade. Waiting until later in the year keeps students who may drop out earlier in the school year from being accounted for, diminishing the quality of the cohort graduation rate and limiting the ability of districts to reengage students.
- **Regularly and systemically audit school and district data collections and provide support as needed.** To ensure the accuracy of data across the state, states should regularly check district data collections and support districts that are making mistakes.

The federal government can support states and districts in this effort by providing states further clarity to increase comparability.

- **Federal regulations must provide needed clarity for states on key definitions,** including special education diplomas, ninth grade cohort assignment timing, alternative schools and programs, and documentation requirements (to increase trust in the metric).

Charge for Continued Work

A decade after the original governors' compact on graduation rates and almost five years into the reporting of the ACGR across states, significant progress has been made in increasing the number of students who graduate from high school. To continue to see progress, it is time to both improve this measure and invest in its use on behalf of our nation's students. Continued focus on the part of state, national, and local leaders on making sure that students are on track for graduation and using data to inform intervention and measure progress will lead to continued student success.

State leaders should use these recommendations to take stock within their states and as an opportunity to apply lessons learned from high-performing states to their own policies and practices. It is foremost an opportunity to dig into the data and seal the cracks to ensure that no child falls through again.

Appendix A: About the State Analysis

Initial Data Analysis

The initial data analysis examined whether or not relationships existed between a state's adjusted cohort graduation rates and its National Assessment of Educational Progress scores, graduation requirements, and demographics. The analysis also looked at the relationship between reported rates prior to and after implementation of the cohort formula. Finally, the analysis separated states into groups of high rate, high growth, high rate and high growth, low growth, low rate, and low rate and low growth for the purposes of conducting interviews with states to discover if any patterns emerge in both data preparation and improving student success.

Interviews

Based on the data in the initial analysis, six high-performing or high-growth states and three low-performing or low-growth states were chosen for interviews. The high-performing and high-growth states chosen were Arkansas, Indiana, Iowa, Kentucky, New Jersey, and Texas. These states were chosen in part because of their consistency and growth in rates during the transition to the cohort methodology and in part to achieve some geographic, size, and demographic diversity. Three states—Louisiana, New Mexico, and Oregon—were chosen for their generally low rates and again for geographic, size, and demographic diversity.

Interviews were conducted with staff from state education agencies as well as state nonprofit organizations. Questions for state agencies were consistent across interviews and probed the state's methodologies for constructing its cohort graduation rate and practices to improve student success. Questions for nonprofit organizations covered similar topics at a higher level and also attempted to assess how confident the organization felt about the state's graduation practices across both data and student success as well as the comparability of graduation rates.

Interviews were also conducted with staff from the US Department of Education and leaders from several national nonprofit organizations engaged in work related to high school graduation, including the Alliance for Excellent Education, Civic Enterprises, Everyone Graduates Center, and National Public Radio. Questions for these national experts generally focused on the organization's particular work, its impressions of the work of state education agencies around both data and student success, and the issue of comparability across states and with other measures of student outcomes.

Subsequent Data Analysis

Based on the interview process, a subsequent set of analyses were completed that attempted to delve more deeply into two main sets of questions raised during the interviews. First, we examined further the relationship between graduation rates and other potentially comparable measures such as census data. Second, we attempted to more fully answer the question of which factors within the graduation rate account for the greatest variation among states. These questions seem critical to both validating the increasing skepticism around comparability of graduation rates and beginning to determine the scope of the issue. While some believe that lack of comparability is common wisdom, the dearth of other nationally normed or even comparable data for high school students makes proving or disproving these theories difficult.

Appendix B: What Do the Data Say about Comparability of Graduation Rates and Other Measures?

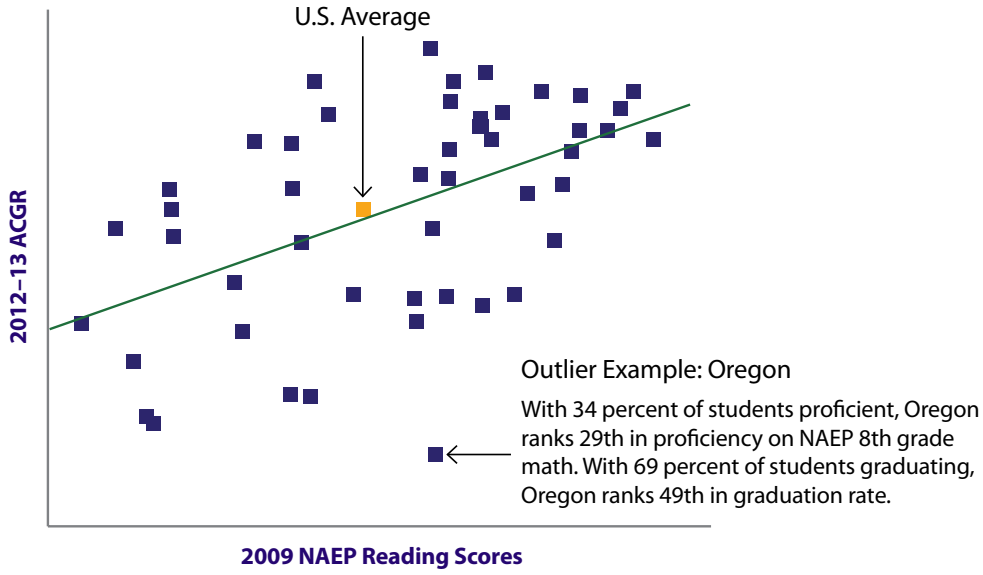
Analysis of relationships between graduation rates and a variety of assessment, demographic, and policy factors revealed few relationships of statistical significance. The three available measures used in this analysis are the previous adjusted freshman graduation rates, eighth grade National Assessment of Educational Progress (NAEP) proficiency, and census data on the percentage of 19- to 25-year-olds with high school diplomas.

The data analysis indicates the following:

- There is a strong correlation between graduation rates and NAEP scores and between graduation rates and the percentage of adults with a high school diploma.
- However, there are notable outliers in the correlations between graduation rates and other measures such as NAEP and the percentage of adults with a high school diploma.
- There is not a correlation between high school diploma requirements and graduation rates.
- There is not a correlation between a state's percentage of students with disabilities and graduation rate.

These analyses reveal that while generally there is a correlation between high school graduation rates and other measures such as NAEP and adults with a high school diploma, outliers do exist. In addition, as Oregon demonstrates, variation among outliers may be relative to implementation of cohort methodology, including how particular states define graduates.

Average Cohort Graduation Rate and NAEP Reading Scores



Source: ECONorthwest/NCES/ACS

Appendix C: State Characteristics

State	Percentage of the total population[1]							Percentage of 8th graders[2]		Percentage of 19- to 25-year-olds[3]	Adjusted cohort graduation rate[4]
	18 years and older	Black	White	Hispanic	Asian	Female	Male	Proficient or above in math	Proficient or above in reading	High school graduates	
ALABAMA	76.8%	26.4%	69.1%	4.0%	1.2%	51.6%	48.4%	20%	25%	30.3%	80%
ALASKA	74.2%	3.5%	66.5%	6.3%	5.5%	47.8%	52.2%	33%	31%	35.4%	72%
ARIZONA	75.3%	4.2%	79.0%	30.1%	2.9%	50.3%	49.7%	31%	28%	31.3%	75%
ARKANSAS	75.9%	15.5%	78.1%	6.7%	1.3%	50.9%	49.1%	28%	30%	32.8%	85%
CALIFORNIA	75.8%	6.0%	62.3%	38.2%	13.4%	50.3%	49.7%	28%	29%	28.8%	80%
COLORADO	76.2%	4.0%	84.2%	20.9%	2.8%	49.8%	50.2%	42%	40%	25.7%	77%
CONNECTICUT	77.9%	10.2%	77.7%	14.3%	4.1%	51.3%	48.7%	37%	45%	27.2%	86%
DELAWARE	77.7%	21.6%	69.5%	8.6%	3.4%	51.6%	48.4%	33%	33%	35.0%	80%
DISTRICT OF COLUMBIA	83.0%	49.4%	40.2%	9.9%	3.6%	52.7%	47.3%	19%	17%	22.6%	62%
FLORIDA	79.2%	16.1%	76.2%	23.3%	2.5%	51.1%	48.9%	31%	33%	30.6%	76%
GEORGIA	74.9%	30.8%	60.6%	9.1%	3.4%	51.1%	48.9%	29%	32%	29.6%	72%
HAWAII	78.0%	2.0%	25.2%	9.6%	37.9%	49.7%	50.3%	32%	28%	33.4%	82%
IDAHO	73.3%	0.6%	91.9%	11.6%	1.3%	49.9%	50.1%	36%	38%	34.8%	NA
ILLINOIS	76.2%	14.4%	72.6%	16.3%	4.8%	50.9%	49.1%	36%	36%	27.7%	83%
INDIANA	75.7%	9.1%	84.3%	6.3%	1.7%	50.8%	49.2%	38%	35%	31.3%	87%
IOWA	76.5%	3.1%	91.4%	5.3%	1.9%	50.4%	49.6%	36%	37%	24.6%	90%
KANSAS	74.9%	5.8%	85.4%	11.0%	2.5%	50.3%	49.7%	40%	36%	26.1%	86%
KENTUCKY	76.7%	7.9%	87.8%	3.2%	1.2%	50.8%	49.2%	30%	38%	33.5%	86%
LOUISIANA	75.8%	32.1%	62.9%	4.6%	1.6%	51.1%	48.9%	21%	24%	31.4%	74%
MAINE	80.1%	1.1%	95.1%	1.4%	1.1%	51.0%	49.0%	40%	38%	30.6%	86%
MARYLAND	77.1%	29.5%	58.0%	8.7%	5.8%	51.6%	48.4%	37%	42%	28.0%	85%
MASSACHUSETTS	78.9%	7.0%	80.0%	10.2%	5.7%	51.6%	48.4%	55%	48%	28.3%	85%
MICHIGAN	77.0%	14.0%	79.3%	4.6%	2.6%	50.9%	49.1%	30%	33%	27.4%	77%
MINNESOTA	76.2%	5.4%	85.2%	4.9%	4.3%	50.3%	49.7%	47%	41%	26.1%	80%
MISSISSIPPI	75.1%	37.4%	59.4%	2.8%	0.9%	51.4%	48.6%	21%	20%	27.3%	76%
MISSOURI	76.7%	11.4%	82.9%	3.7%	1.7%	51.0%	49.0%	33%	36%	30.0%	86%
MONTANA	77.8%	0.4%	89.2%	3.2%	0.7%	49.8%	50.2%	40%	40%	30.1%	84%
NEBRASKA	75.1%	4.6%	88.3%	9.7%	1.9%	50.3%	49.7%	36%	37%	22.8%	88%
NEVADA	76.0%	8.3%	69.9%	27.2%	7.5%	49.6%	50.4%	28%	30%	35.0%	71%
NEW HAMPSHIRE	79.1%	1.2%	93.8%	3.0%	2.3%	50.7%	49.3%	47%	44%	30.2%	87%
NEW JERSEY	77.0%	13.5%	68.7%	18.6%	8.8%	51.2%	48.8%	49%	46%	29.5%	88%
NEW MEXICO	75.4%	2.1%	72.9%	47.0%	1.3%	50.4%	49.6%	23%	22%	29.4%	70%
NEW YORK	78.2%	15.6%	65.0%	18.1%	7.7%	51.5%	48.5%	32%	35%	25.6%	77%
NORTH CAROLINA	76.6%	21.5%	69.8%	8.7%	2.3%	51.3%	48.7%	36%	33%	29.2%	83%
NORTH DAKOTA	77.7%	1.4%	89.4%	2.5%	1.1%	49.1%	50.9%	41%	34%	27.2%	88%
OHIO	76.9%	12.1%	82.7%	3.3%	1.8%	51.1%	48.9%	40%	39%	30.5%	82%
OKLAHOMA	75.4%	7.2%	73.4%	9.4%	1.8%	50.5%	49.5%	25%	29%	32.0%	85%
OREGON	77.9%	1.8%	85.2%	12.1%	3.9%	50.5%	49.5%	34%	37%	30.3%	69%

State	Percentage of the total population[1]							Percentage of 8th graders[2]		Percentage of 19- to 25-year-olds[3]	Adjusted cohort graduation rate[4]
	18 years and older	Black	White	Hispanic	Asian	Female	Male	Proficient or above in math	Proficient or above in reading	High school graduates	
PENNSYLVANIA	78.5%	10.9%	81.9%	6.1%	2.9%	51.2%	48.8%	42%	42%	31.8%	86%
RHODE ISLAND	79.4%	6.4%	81.2%	13.2%	3.1%	51.6%	48.4%	36%	36%	28.2%	80%
SOUTH CAROLINA	77.2%	27.6%	67.1%	5.3%	1.3%	51.4%	48.6%	31%	29%	29.9%	78%
SOUTH DAKOTA	75.4%	1.5%	85.3%	3.1%	1.1%	49.8%	50.2%	38%	36%	30.8%	83%
TENNESSEE	76.9%	16.8%	78.0%	4.8%	1.5%	51.2%	48.8%	28%	33%	35.3%	86%
TEXAS	73.2%	11.9%	74.8%	38.2%	4.0%	50.3%	49.7%	38%	31%	31.2%	88%
UTAH	68.9%	1.1%	87.9%	13.2%	2.1%	49.7%	50.3%	36%	39%	28.5%	83%
VERMONT	80.1%	1.0%	95.1%	1.6%	1.3%	50.7%	49.3%	47%	45%	30.3%	87%
VIRGINIA	77.3%	19.3%	69.3%	8.4%	5.7%	50.9%	49.1%	38%	36%	31.6%	84%
WASHINGTON	76.9%	3.6%	78.2%	11.7%	7.5%	50.1%	49.9%	42%	42%	29.2%	76%
WEST VIRGINIA	79.3%	3.2%	93.7%	1.3%	0.7%	50.7%	49.3%	24%	25%	36.3%	81%
WISCONSIN	77.0%	6.3%	86.8%	6.2%	2.4%	50.4%	49.6%	40%	36%	30.8%	88%
WYOMING	76.1%	1.0%	90.8%	9.4%	0.9%	49.0%	51.0%	38%	38%	31.5%	77%

Sources:

1 US Census Bureau, 2011–13 3-Year American Community Survey.

2 US Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress, 2013.

3 US Census Bureau, 2013 American Community Survey. Includes equivalency.

4 EDFacts Consolidated State Performance Report, school years 2010–11, 2011–12, and 2012–13, http://www2.ed.gov/admins/lead/account/consolidated/index.html. This table was prepared in January 2015.

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Achieve

Alliance for Excellent Education

America's Promise Alliance

American Youth Policy Forum

Civic Enterprises

Council of Chief State School Officers

The Education Trust

Everyone Graduates Center

National Governors Association

DQC DATA QUALITY CAMPAIGN

The **Data Quality Campaign** is a national, nonprofit organization leading the effort to bring every part of the education community together to empower educators, parents, and policymakers with quality information to make decisions that ensure students achieve their best. For more information, go to www.dataqualitycampaign.org and follow us on Facebook and Twitter (@EdDataCampaign).

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CHALK BOARD PROJECT®

Chalkboard Project is an independent, nonprofit education transformation organization dedicated to making Oregon's K-12 public schools among the best in the country by empowering educators and raising student achievement. For more information go to www.chalkboardproject.org and follow us on Facebook and Twitter (@ChalkTalkers).

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