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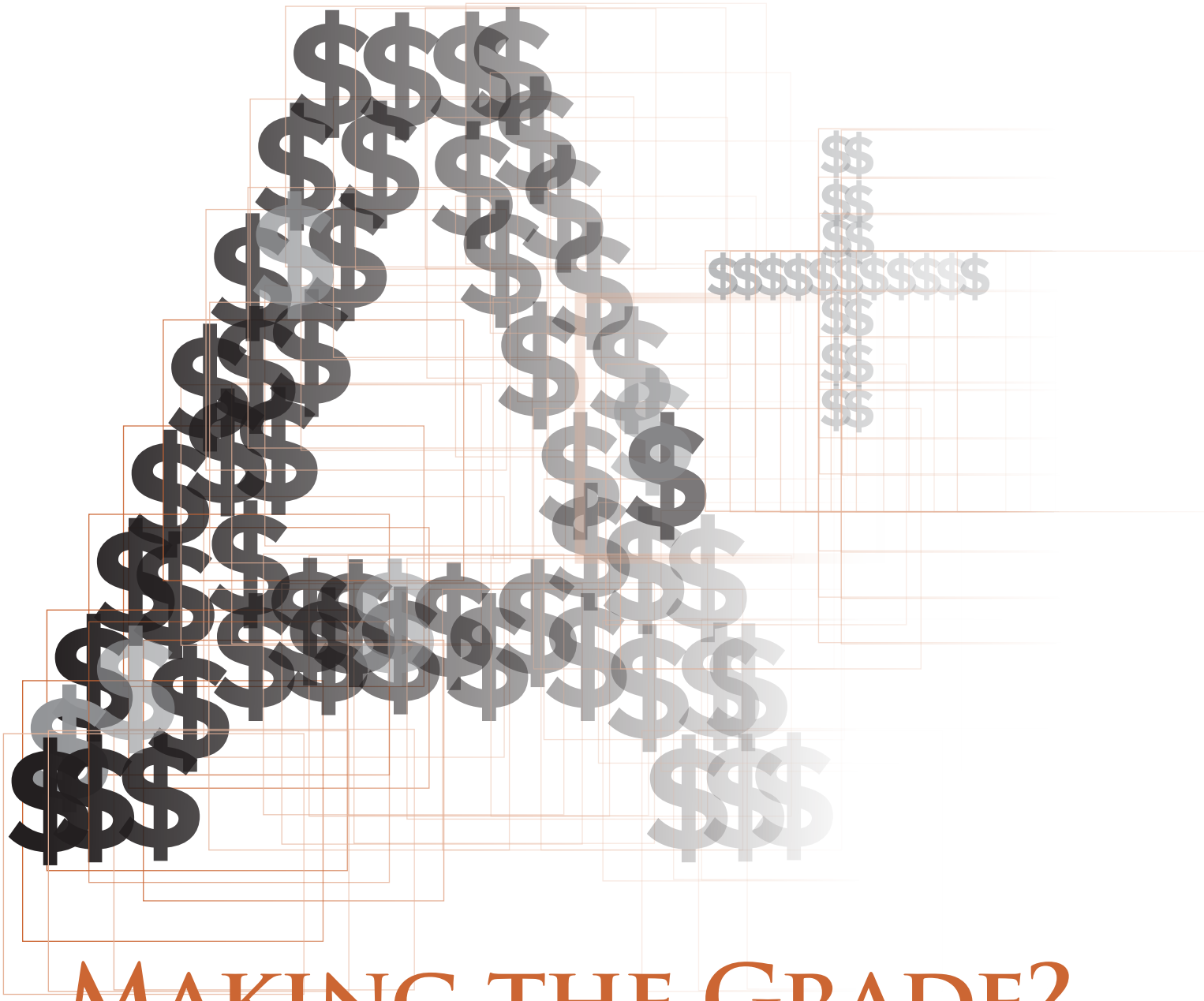

MAKING THE GRADE?

K-12 Outcomes and Spending in Utah

MAKING THE GRADE?

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INTRODUCTION

K-12 educational success is important to students and their families, but success is also important to the states and local taxpayers who fund education systems. Their investment is expected to pay dividends in producing an educated citizenry and a potent workforce. One way to determine educational success is with national rankings.

Rankings of states' educational systems can grab headlines, either for their positive or negative results. And there are many publications that produce these rankings, from the U.S. News & World Report[1] to WalletHub[2] to Education Week.[3] Utah seems to rank in the top half of the states; not the best, but not too bad. But how useful are such rankings?

This report looks beyond subjective national rankings, instead using the best available data related to quantifiable student outcomes. It details Utah's computer-adaptive assessment results, and then reaches beyond the state's borders using national measures to detail Utah's educational outcomes compared to the nation's average.

Some assessments show that Utah compares well against the national average. However, the U.S. as a whole may not be an appropriate comparison for Utah's educational outcomes since this favorable comparison is likely due – in part – to certain socioeconomic and demographic factors. For a better comparison, Utah Foundation compares Utah both to other Mountain States and to selected educational peer states to account for socioeconomic and demographic differences.

The report also examines Utah district data, as available, and looks at the United States in comparison with its peers internationally. Finally, the report examines outcomes in the context of spending.

METHODOLOGY AND SOURCES

This report includes comparisons using the Utah State Board of Education's SAGE test results, the U.S. Department of Education's National Assessment of Education Progress

KEY FINDINGS OF THIS REPORT

- In examining student outcomes overall, Utah compares well nationally and with Mountain States, and is about average when compared with peer states, which Utah Foundation determined using statistical analysis of five student demographic factors.
- Utah students improved over time on a statewide annual assessment, with an increase in proficiency during the five years that the test was administered. However, less than half of Utah's students were proficient or better on the English, math and science tests.
- Utah compares very well on ACT scores. Utah ranks third among the 19 states that test most of their high school graduates.
- In terms of high school graduation rates, Utah is among the top tier of Mountain States and in the middle of its peer states.
- Utah districts show a wide range of outcomes on the state's annual assessment, student ACT scores and graduation rates.
- While Utah spends less – and in most cases far less – per pupil than the other Mountain States and its peer states, it performs respectably overall in terms of outcomes. And while higher-spending states tend to outperform the rest of the states, Utah outperforms higher-spending states collectively on several measures.
- While higher spending has limited links to better education outcomes, at some level spending can become decisive. Utah is the lowest in the nation in per-pupil K-12 operational education spending and therefore may fall short of its potential.

(NAEP) test scores, the ACT standardized test scores, graduation rates, and the international TIMMS, PISA and PRLS tests.

It should be noted that the data used in this report measure specific school outcomes for students – not including students that opt out of assessments. Further, the data do not measure all of the benefits students may gain from their preschool, elementary and secondary education. These data do not indicate how well students perform in other subjects and do not necessarily measure the educational progress in soft skills, such as communication, critical thinking, teamwork and leadership. And as with any measurement, there are dangers of accuracy and reliability. (See, for instance, the sidebars on pages 6 and 11.) Ultimately, however, they are the best measures available for comparison.

This report includes outcomes comparisons between Utah and its neighboring Mountain States as well as peer states.

An important comparison group for Utah is other Mountain States, which are Utah's bordering states of Arizona, Colorado, Idaho, Nevada, New Mexico and Wyoming, as well as Montana. These states share multiple similarities, but most importantly they have seen similar levels of population growth.[4] As noted in Utah Foundation's April 2019 research report *Apples to Apples: How Teacher Pay in Utah Stacks up to the Competition*, population growth can results in an inadequate number of available teachers to fill vacancies, as well as a younger teacher corps with less experience in the classroom.

While the Mountain States might be a good comparison for Utah, there are definite demographic differences between Utah and its neighbors that tend to be correlated with educational outcomes. For instance, Idaho's racial and ethnic student makeup is very similar to Utah's, but the former has a far higher student poverty rate and lower parental educational attainment. Further, while Wyoming's race and ethnicity is very similar to Utah's, and it has similar poverty rates, Wyoming has far lower parental educational attainment. An analysis of a set of peer states, determined through key criteria that correlate to achievement, provides a critical comparison when considering educational outcomes.

The peer states chosen for this report are those most closely related to Utah in five demographic and socioeconomic measurements: race and ethnicity, English learners, childhood poverty, two-parent households and parental educational attainment. The rationale for choosing these particular measures are detailed in Appendix A.

Utah's top peer states chosen for this report based upon statistical analysis are Minnesota, New Hampshire and North Dakota. This analysis is detailed in Appendix B. Seven additional states are similar to Utah, but can be thought of as the second-tier peers because at least one of their five demographic and socioeconomic measures is much different that of Utah (see all the peer states in Figure 1). Utah Foundation uses the median state of these seven states to create a sort of composite state for comparison in this report.

Utah's education peer states share certain demographic and socioeconomic similarities.

Figure 1: Utah's Educational Peer States and Second-Tier Peers, in Order of Similarity

Peer States
Minnesota
North Dakota
New Hampshire
Second-tier Peer States
Iowa
Maine
Hawaii
Vermont
New Jersey
Connecticut
Colorado

Source: States determined by Utah Foundation.

UTAH'S ANNUAL ASSESSMENT

Between the 2014-15 and 2017-18 school years, Utah's schools tested students using the Utah-specific Student Assessment of Growth and Excellence – or SAGE – to assess student proficiency in the following:

- English Language Arts for grades 3 through 11
- Math for grades 3 through 8, as well as Secondary Math I, II and III for older grades
- Science for grades 4 through 8, as well as Biology, Chemistry, Earth Science and Physics for older grades

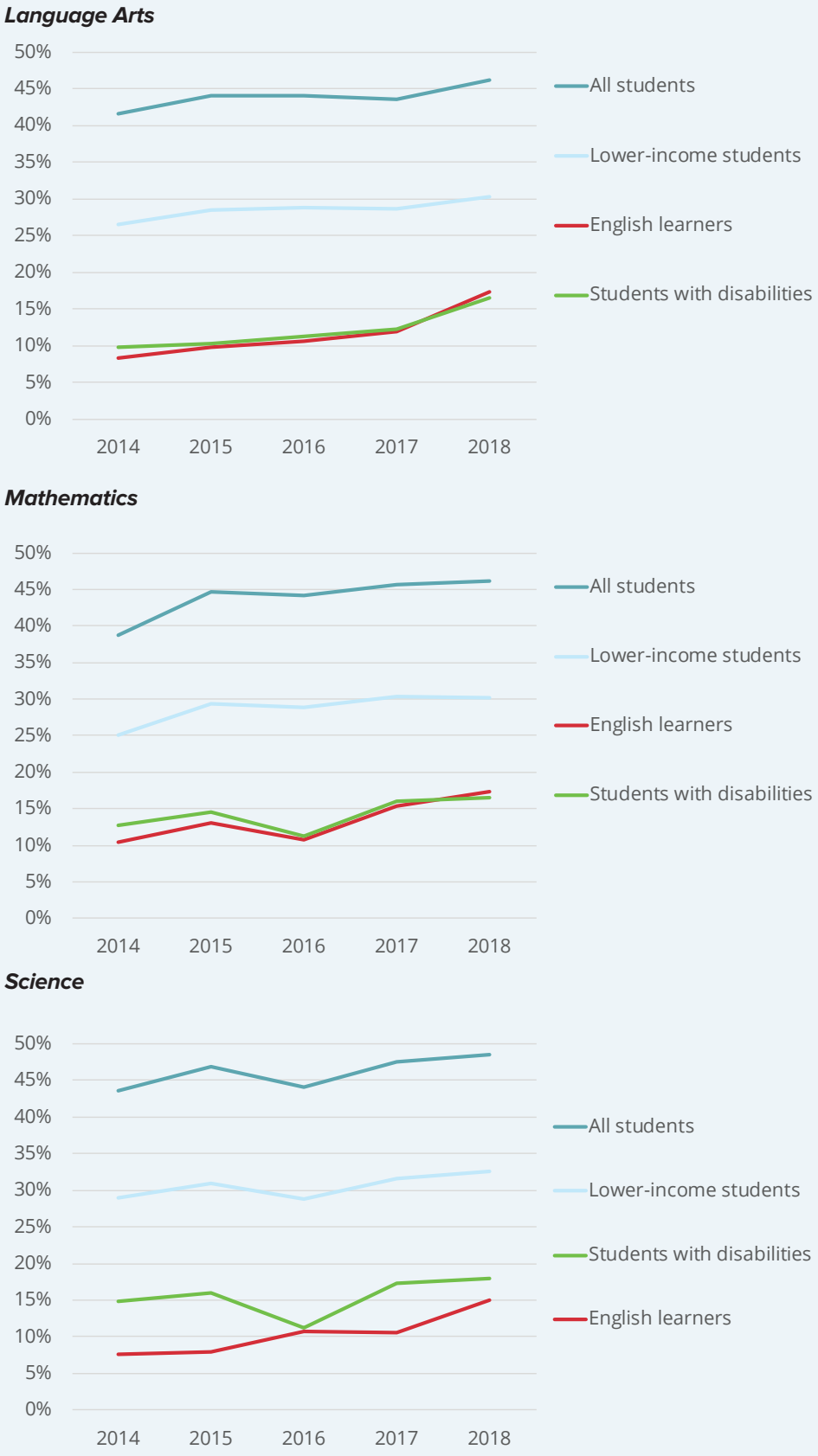
Test results are divided into "below proficient," "approaching proficient," "proficient" and "highly proficient" based upon students' demonstrated knowledge in the tests' subject material.

Utah students have improved on the SAGE test, with an increase in proficiency during the five years that the test was administered. However, less than half of Utah's students were proficient or better on the English, math or science tests.[5] (See Figure 2.)

In 2018, Utah Foundation looked specifically at students who tend to face particular challenges in the report, *A Level Playing Field? Funding for Utah Students at Risk of Academic Failure*. Only about one-third of lower income students are proficient or better. When considering whether

Utah is improving over time across the board.

Figure 2: SAGE Results for State by Demographic Group, All Grades, % proficient



Source: USBE Data Gateway. Utah Foundation calculations.

Utah students' annual assessment results show large gaps between all students and certain groups at risk of poor academic outcomes.

Figure 3: SAGE Test Percent Proficient, 2018

Test	All students	Lower income	Students w/ disabilities	English learners
4th Grade Language Arts	43%	28%	18%	15%
8th Grade Math	44%	28%	9%	8%

Source: Utah State Board of Education.

students are English Learners or have disabilities, only about one in seven are proficient or better. On the bright side, along with Utah's students as a whole, all of these groups have seen an increase in proficiency since 2014.

While SAGE is administered in most grades, this report focuses on data from younger-grade English test scores and middle-school math. This is because students tend to fall behind their cohorts more quickly if they do not read well by third or fourth grades, and tend to struggle with more advanced mathematics courses if they are not adept at their foundational math skills before entering high school.[6]

Proficiency results are similar in Utah's fourth-grade languages arts and eighth-grade math test to the overall language arts and math results. Just under 43% of fourth graders are proficient in language arts. But this compares to only about 28% proficiency for lower-income students – which means that well over half of higher-income students are proficient. Under 20% of students with disabilities and English learners are proficient.[7] (See Figure 3.)

The gap in proficiency is even wider on the eighth-grade math test. Just over 44% of all students are proficient, compared to under 28% of lower income kids and under 10% of students with disabilities and English learners.

District Comparisons

In fourth-grade languages arts and eighth-grade math, stark differences appear among school districts.

A few districts stand out in terms of the percentage of students who are proficient on their fourth-grade language arts test, with Beaver School District the only one with more than 60% of students proficient, followed in the mid-50% range in the Cache, Canyons, Park City and Rich school districts. Two districts have fewer than 30% proficiency in 2018.

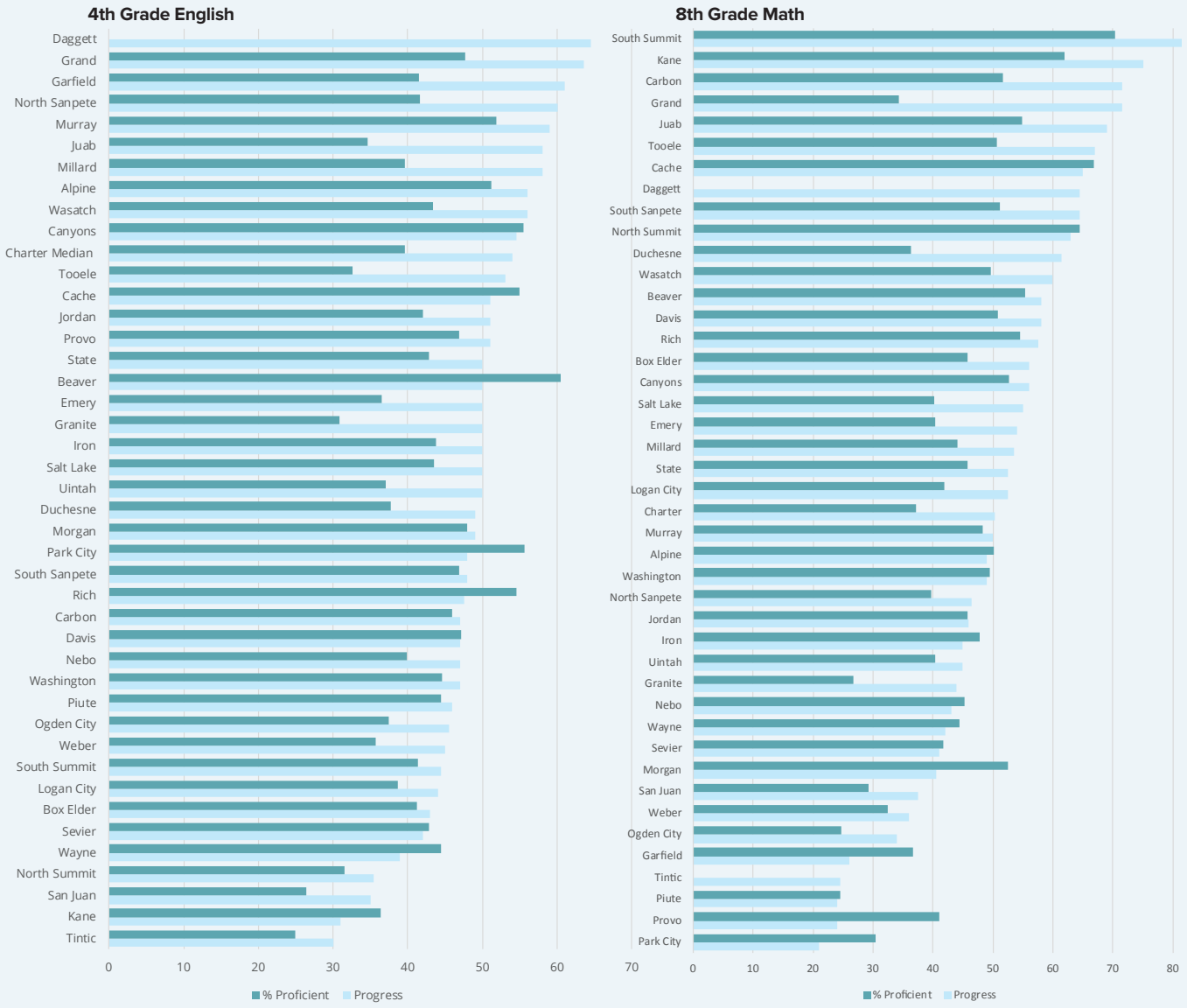
And on the eighth-grade math test, four districts are over 60% proficient: Cache, Kane, South Summit and North Summit. Four districts are below 30%. See fourth-grade and eighth-grade charts in Figure 4 (on the next page) for district proficiency.

These differences could be related to demographic and socioeconomic differences. This could also suggest that students in some districts are not currently receiving the same levels of education as their counterparts in other districts.

It is also important to analyze the progress students are making over time. Progress (referred to as "median growth percentile") is calibrated so that the average progress in the state is a score of 50; districts with scores over 50 are advancing more quickly than districts with scores under 50. On the SAGE fourth-grade English test, students in 15 of the state's 41 school districts are progressing more quickly than average, and students in another seven districts are progressing at an average rate.

Districts' progress does not necessarily align with proficiency on state assessment results.

Figure 4: SAGE Test Proficiency and Progress from Previous Year by District, 2018



Note: Daggett proficiency percentage is not available.

Note: Daggett and Tintic proficiency percentages are not available.

Source: Utah State Board of Education.

Students in 19 districts are falling behind. On the SAGE eighth-grade math test, students in 22 of the state's 41 school districts are progressing more quickly than average, and students in another two districts are progressing at an average rate. See Figure 4 for districts organized by their progress score.

Proficiency levels and progress do not go hand in hand; some districts have high proficiency but low progress, and vice versa. In fact, two districts with above 50% proficiency on the language arts test are below a score of 50 in progress.

THE TROUBLE WITH USING NAEP FOR RANKINGS

NAEP results are analyzed by averaging state scores and by calculating the percentage of students who are proficient in each subject area. As such, one could rank Utah's scores nationally. That said, NAEP does not recommend ranking states based on its results. Since the test uses a small sample of students in any given state and the states' average test scores are close together, it is impossible to determine with confidence that one state is performing better than, say, the five-to-20 states that typically have a score near it. In addition, the U.S. Department of Education cautions researchers to take into account educational and socioeconomic factors – such as race and ethnicity, poverty and parental educational attainment – when analyzing scores, not just each state's score or proficiency percentage.

NAEP SCORES

The National Assessment of Education Progress – or NAEP – has been administered to students around the nation by the U.S. Department of Education for decades. It is billed as the "largest nationally-representative and continuing assessment of what America's students know and can do in various subject areas," including the arts, civics, geography, mathematics, reading, science, U.S. history and writing.[8] NAEP data are available at the state level for grades four and eight. NAEP is administered each odd-numbered year for the mathematics and reading exams and less often for the writing and science exams. Based upon the scores achieved, students are measured as "advanced," "proficient," "basic" or "below basic."

In 2017, 41% of Utahns rated "proficient" or higher on the fourth-grade reading test, leaving 59% at "basic" or below.[9] That same year, 39% were "proficient" or higher on the eighth-grade math test, leaving 61% "basic" or below.[10]

National Comparison

In 2017, Utah outperformed the nation on both of that year's two administered major tests – reading and math – for both fourth and eighth grades. (See Figure 6 in the peer states comparison section.)[11] Utah also outperformed the nation on the most recently administered eighth-grade science test (from 2015). Utah was not significantly different from the nation at large on the fourth-grade science test.

However, when disaggregating – or separating – students into demographic and socioeconomic subgroups, Utah is ahead of the U.S. average only in the eighth-grade science test scores.[12] Utah is behind the U.S. average for Hispanic/Latino fourth graders in math. There are no significant differences in terms of Utah's and the nation's white students or Hispanic/Latino students on other tests, or when accounting for whether students receive Free/Reduced-Price Lunch – which is a common measure related with to whether students are from lower-income households.

Mountain States Comparisons

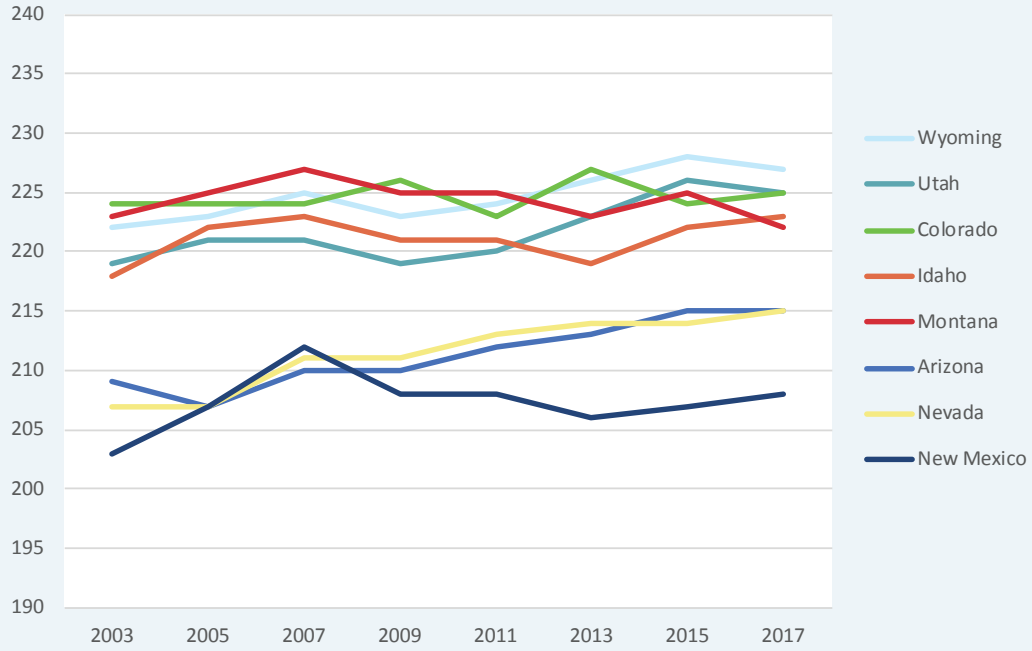
In 2017, Utah scored close to four other Mountain States (Colorado, Idaho, Montana and Wyoming) on the fourth-grade NAEP reading test. However, Utah's average score appears to have made more progress than the other four states since 2003. (See Figure 5.) Utah's students performed better than three other Mountain States on the fourth-grade test: Arizona, Nevada and New Mexico. But since 2003, Arizona and Nevada appear to have improved significantly. (See Appendix C for scores and statistical differences.)

On the 2017 eighth-grade math test, the student averages played out similarly among the Mountain States. Again, Arizona, Nevada and New Mexico performed statistically lower than Utah (see Appendix C), but Arizona and Nevada have improved since the early 2000s. On both tests, Utah's student average landed in the second spot, just below Wyoming.

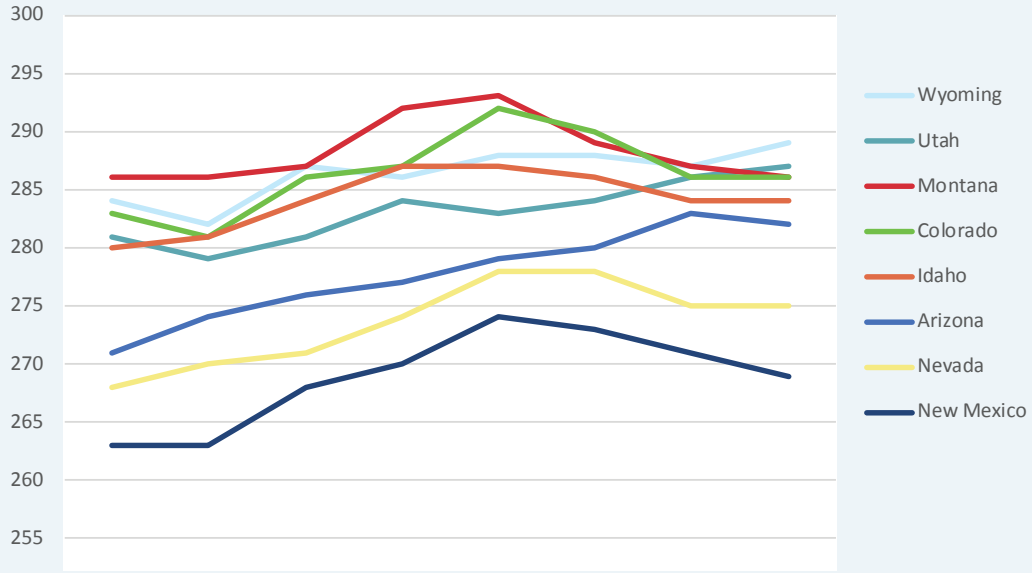
Utah compares well with neighboring states on national reading and math tests.

Figure 5: NAEP Test Scores for Utah and Neighboring States

4th Grade Reading



8th Grade Math



Source: National Center for Education Statistics.

Peer State Comparisons

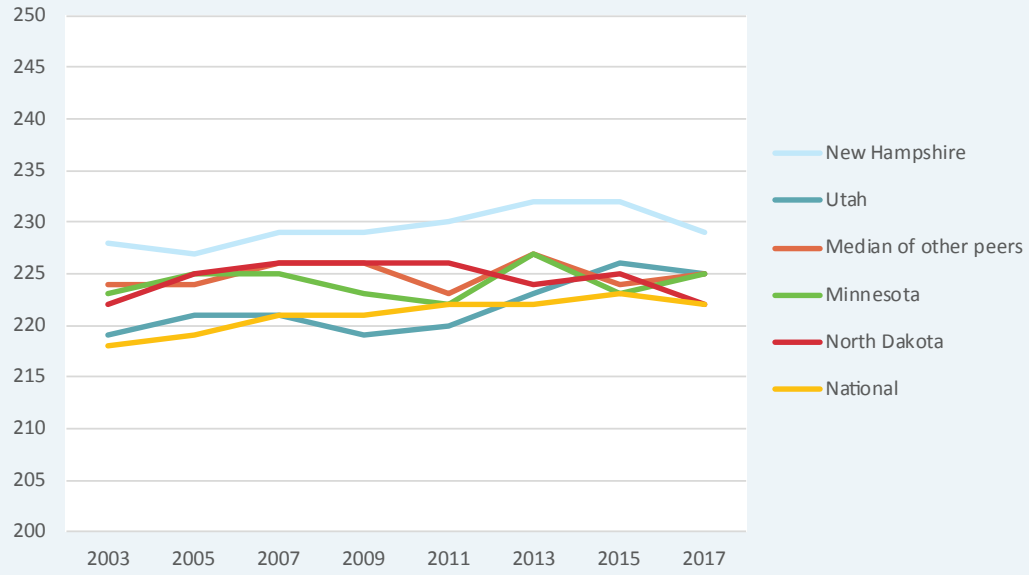
In 2017, Utah was tied with Minnesota and the median of the other seven peer states on the fourth-grade NAEP reading test. Utah's students performed better than their peers in North Dakota, but below those in New Hampshire. (See Figure 6 and Appendix D.)

Utah has trended upward on the fourth-grade reading test since 2009. In fact, it was behind its peers in both 2009 and 2011. However, Utah's score declined somewhat between 2015 and 2017, along with New Hampshire and North Dakota.

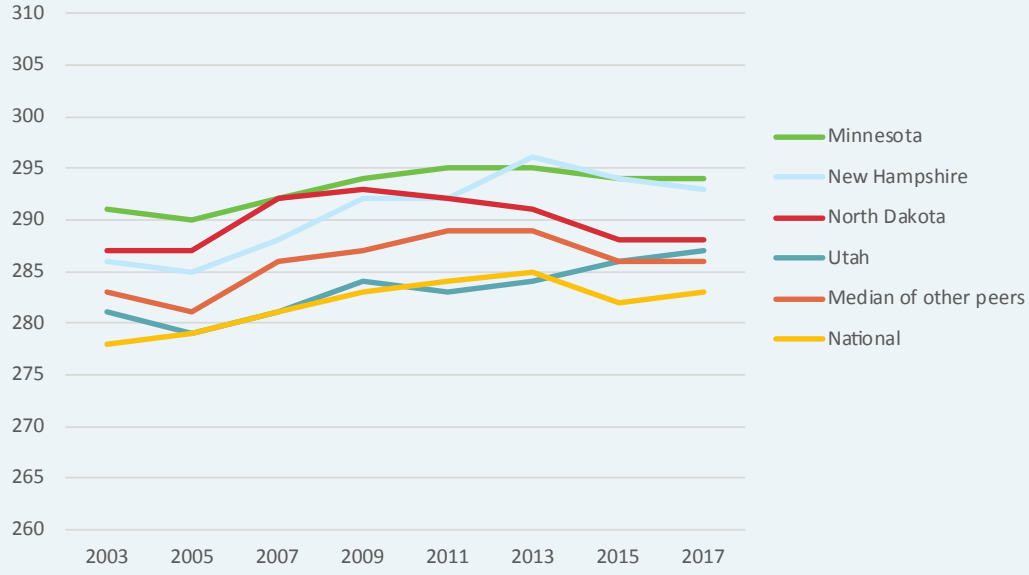
Utah is in the middle of its peers for the national reading test, but at the lower end of its peers for the national math test.

Figure 6: NAEP Test Scores for Utah and Peer States, 2017

4th Grade Reading



8th Grade Math



Source: National Center for Education Statistics.

Utah does not compare quite as well to its peers on the 2017 eighth-grade math test; it is behind both Minnesota and New Hampshire, but similar to North Dakota and the median of the other seven peer states. However, Utah has trended upward on the eighth-grade math test. Since 2005, Utah has improved more quickly than any of its peers.

District-level NAEP data are unavailable.

ACT SCORES

The ACT is a standardized test produced by a nonprofit organization of the same name. Nearly two million high school students in the 2018 graduating cohort took the test. The test is used to measure high school achievement as well as provide a measure for college admissions. The three-hour test focuses on English, reading, math and science. Each of these is graded on a scale of 1 to 36. The composite score is the average of these four area scores.

An important measure within the ACT is the "benchmark" for each of these tests, which is measured to determine college readiness, as each subject area test corresponds to a first-year college course. In 2018, the benchmark for English is a score of 18, for math and reading is 22, and for science is 23.[13]

National Comparison

Utah falls just behind the national average for the ACT composite score. The average score in Utah was 20.4 compared to 20.8. Utah was also between two and four percentage points behind the U.S. in the percentage of students who met the benchmarks in 2018.

However, it is important to note that in Utah, 100% of students took the test in 2018, compared to 55% of students in the nation. Only 17 states had 100% of their seniors take the ACT in 2018, while two other states had more than 98% of their students take the test. In many states, only those students who intend to enroll in college take the test. Accordingly, these states tend to have better average ACT scores.

When comparing Utah just with the 19 states that test almost all of their students, Utah fares better. Compared to the median composite scores of the remaining 18 states that test more than 98% of their graduates, Utah is higher than the median: 20.4 compared to 19.6. (See Figure 7.) In fact, Utah ranks third among the 19 states that test more than 98% of their graduates.[14] Utah is also higher than the median state for the percentage of students who have met benchmarks in each of English, reading, math and science – by as far six percentage points on the latter.

Mountain State Comparison

Along with Utah, 100% of students in Montana, Nevada and Utah took the

In every subject, Utah ACT scores are above the median of those states that test all students.

Figure 7: Average Composite Score, Percent of High School Graduates Tested, and Percent Meeting Benchmarks by Subject, 2018

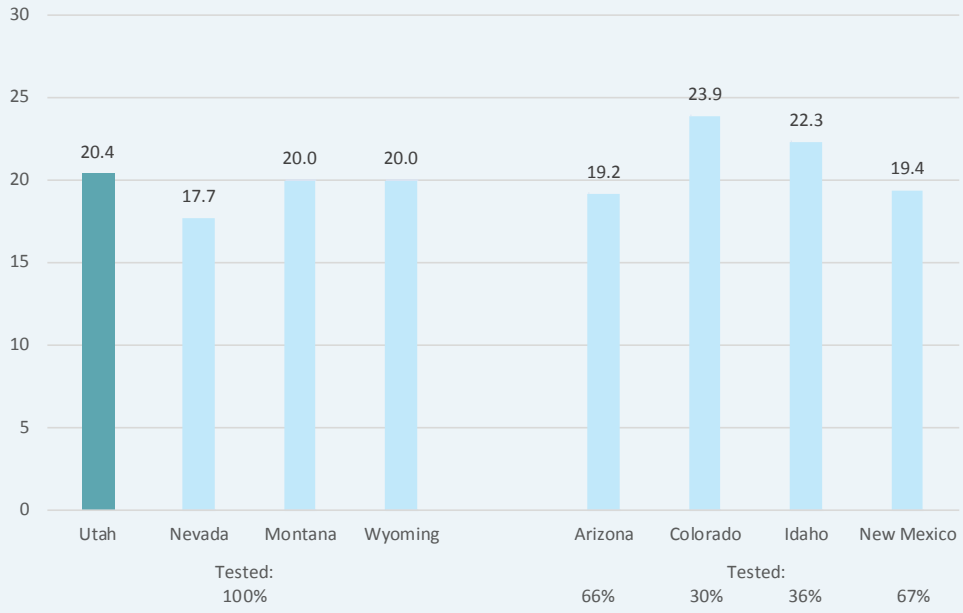
	Utah	U.S.	Median of states with more than 98% tested
Average Composite Score	20.4	20.8	19.6
% of Graduates Tested	100%	55%	100%
Met the benchmark in:			
English	58%	60%	53%
Reading	43%	46%	39%
Math	36%	40%	31%
Science	34%	36%	28%

Note: The 2018 table includes median of states with 98% or more tested. This includes Minnesota and North Dakota, two states with 99% and 98% students tested respectively.

Source: ACT.

Utah performs well on the ACT compared to neighboring states.

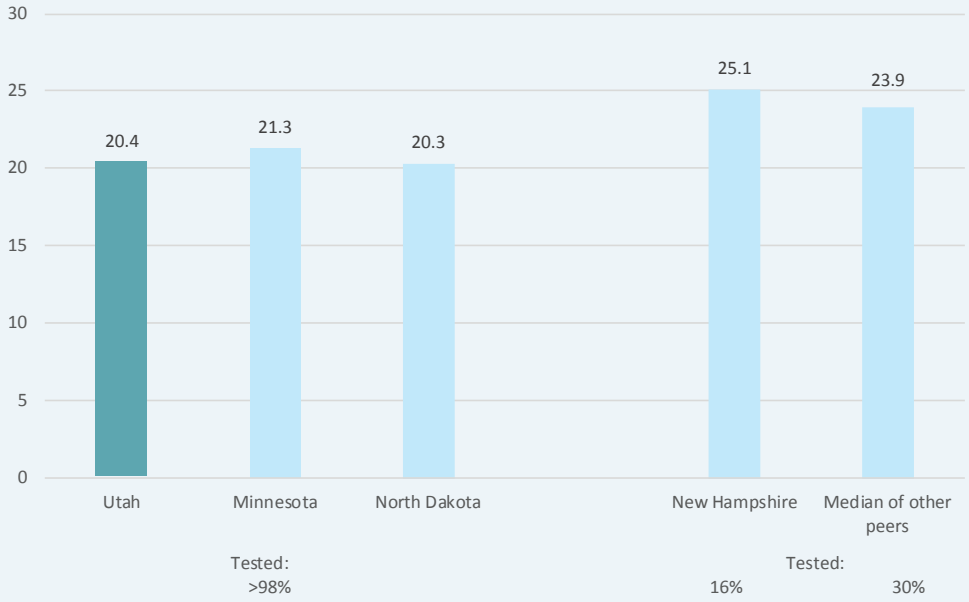
Figure 8: Average Composite ACT Scores, Mountain States, 2018



Source: ACT.

Utah is at or below its peers on the ACT test.

Figure 9: Average Composite ACT Scores, Peer States, 2018



Source: ACT.

ACT test in 2018. In terms of the average composite score, Utah was slightly higher than Montana and Wyoming, and all three were considerably higher than Nevada. (See Figure 8)

The other Mountain States saw between 30% (Colorado) and 66% (Arizona) of their students taking the test. Of the states with lower ACT participation, Utah students performed better than Arizona and New Mexico, but had a lower composite score than Idaho and Colorado.

Peer State Comparison

Two of Utah's peer states, Minnesota and North Dakota, had more than 98% of students take the ACT test in 2018. Minnesota's average composite score was higher than Utah's, and North Dakota's score was slightly lower (see Figure 9). Only 16% of New Hampshire's graduates took the test; as might be expected, they scored far higher, as did the median of the other seven peer states, which had only about a third of students take the test.

District Comparisons

The average composite ACT score in Utah for 2018 was 20.4, with average district scores ranging from 16.9 to up to 22.5 – more than a 30% difference.[15] (See Figure 10.) Again, these differences could be related to demographic, socioeconomic and other district-level differences.

The median charter school ACT score is in line with the state's average.

GRADUATION RATES

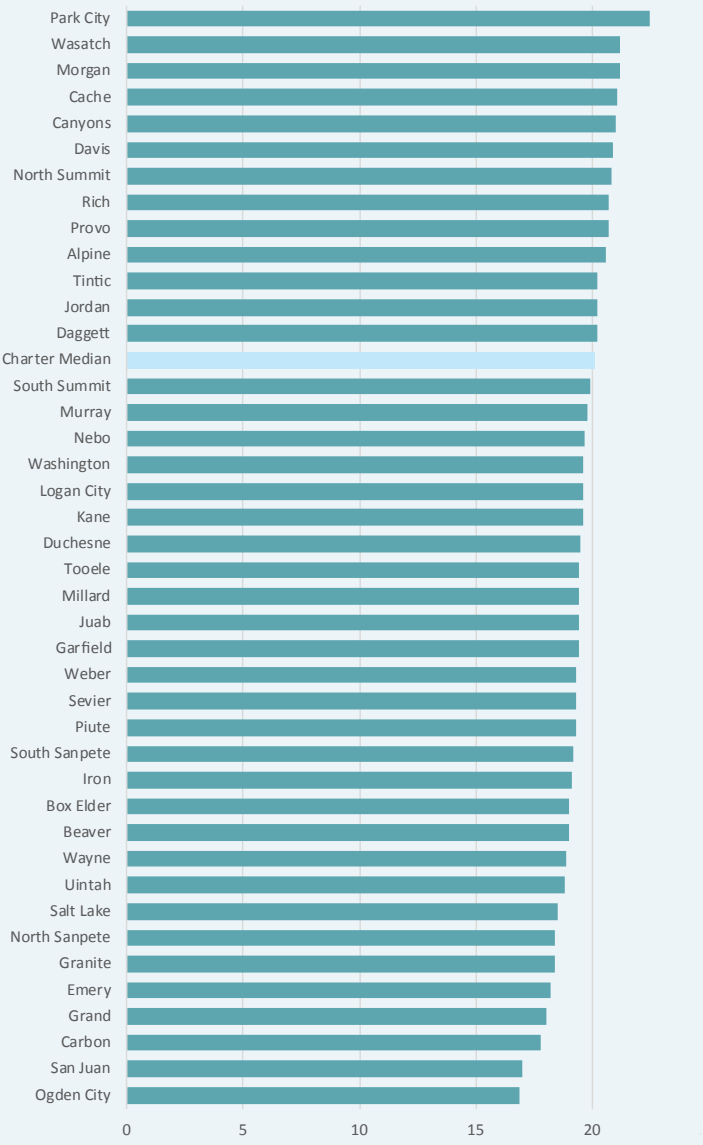
The U.S. Department of Education mandates that states collect the four-year "adjusted cohort graduation rate" so that data are comparable between schools, districts and states. This is the number of students who graduate on time divided by the "adjusted cohort." This cohort is the number of students who start high school (whichever is the earliest high school grade) plus students who transfer into the cohort, minus students who transfer out.

National Comparison

For the 2016-2017 school year, Utah had a graduation rate of 86%, compared to the national rate of 85%. Utah had been

ACT scores in Utah's districts range from 17 to 23.

Figure 10: Average Composite ACT Score, 2017



Source: Utah State Board of Education, www.schools.utah.gov/data/reports.

A NOTE ON GRADUATION RATES

Graduation rates are measured fairly consistently across the nation per a U.S. Department of Education mandate. As such, it is a useful measure for comparing rates across the states.

However, there is some concern in comparing states' rates since high school starts at different times in different states, and there are differences in how some states calculate the adjusted cohort with regard to children with disabilities. In fact, some schools, districts and states have lower graduation requirements than others.

Further, graduation rates are susceptible to inaccurate reporting. Campbell's Law explains that when a data source is used to quantify social progress, especially when that statistic determines receipt of benefits such as funding, reporting of the measure tends to become distorted. Graduation rate reporting has followed that trend, as states such as Alabama and Florida have shifted the definition of who counts as a high-school graduate in an effort to improve their numbers. Other states have created "credit-recovery" programs to allow failing students to quickly bypass traditional requirements and graduate. In addition, an investigation by a nonprofit newsroom revealed that many failing students were transferred to "alternative" schools in order to maintain reporting numbers.

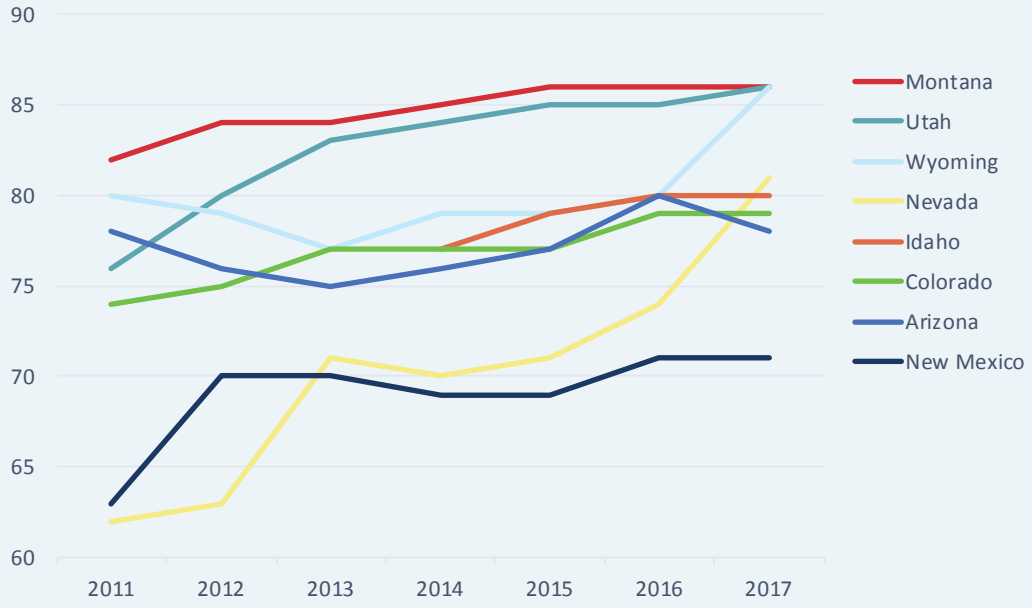
For this and other reasons, graduation rates do not correlate with closely with the tests included in this report. For instance, districts with higher SAGE test scores and states with higher NAEP and ACT scores might show lower graduation rates, and vice versa.

Nonetheless, the current graduation rate measure is better than the one used in previous decades.

Sources: Mark Dynarski, "Is the High School Graduation Rate Really Going Up," Brookings, May 3, 2018, www.brookings.edu/research/is-the-high-school-graduation-rate-really-going-up/ (accessed August 18, 2018). Heather Vogell and Hannah Fresques, ProPublica, February 21, 2017, www.propublica.org/article/alternative-education-using-charter-schools-hide-dropouts-and-game-system (August 18, 2018).

Utah tops its neighbors on percentages of high schoolers graduating.

Figure 11: Graduation Rates, Utah and Neighboring States, 2011-17

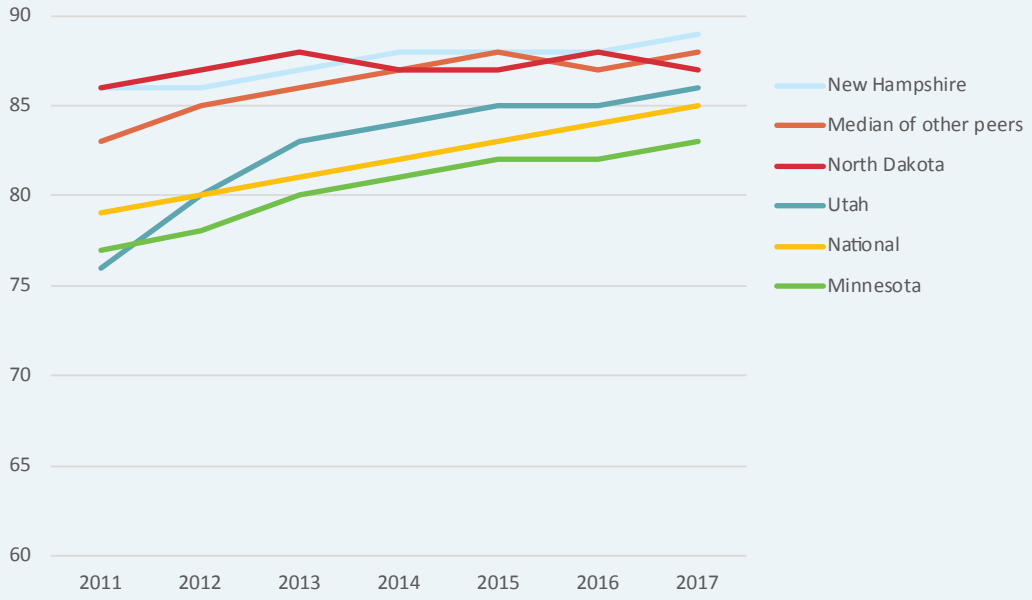


Note: Idaho data unavailable for 2011-2013. Montana and New Mexico data unavailable for 2011 and 2012.

Source: EDFacts.

Utah is in the middle of its peers for the percentage of high schoolers graduating.

Figure 12: Graduation Rates, Utah, Nation, and Peer States, 2011-17



Source: EDFacts.

trailing the nation but surpassed it in 2012. (See Figure 12.)

Mountain State Comparison

Utah continues to lead on percentages of high schoolers graduating, alongside Montana and Wyoming.[16] (See Figure 11.) Two states in the region saw larger graduation improvements in 2018, as Utah saw a modest improvement.

Peer State Comparison

Utah had a better graduation rate than one of its peer states in 2017: Minnesota.[17] Utah was behind New Hampshire, North Dakota and the median of the seven second-tier peer states. However, Utah has seen more rapid improvement in recent years.

District Comparisons

As with SAGE and ACT test results, there is a wide range of graduation rates across Utah districts, from 76% of high-schoolers in Granite and Sanpete districts to 97% in Juab School District.[18]

Again, these differences could be related to demographic, socioeconomic and other district-level differences. For instance, Granite School District's graduation rate is low in part because it includes students in the YESS pro-

gram for youth in state custody. These students have a graduate rate of 11%. While their home districts may be in districts across the state, they are counted in their custody district – Granite.

INTERNATIONAL TESTS FOR EDUCATIONAL OUTCOMES

The United States makes a substantial financial commitment to K-12 education – about 10% of the cost of education in Utah. They do this in part to equalize the playing field for students at risk of poor academic outcomes (see Utah Foundation's report *A Level Playing Field? Funding for Utah Students at Rick of Academic Failure*).

The federal government is also concerned about education in terms of U.S. global competitiveness. In fact, U.S. leaders have for decades called for greater focus on education for the purpose of competing on the international stage.[19]

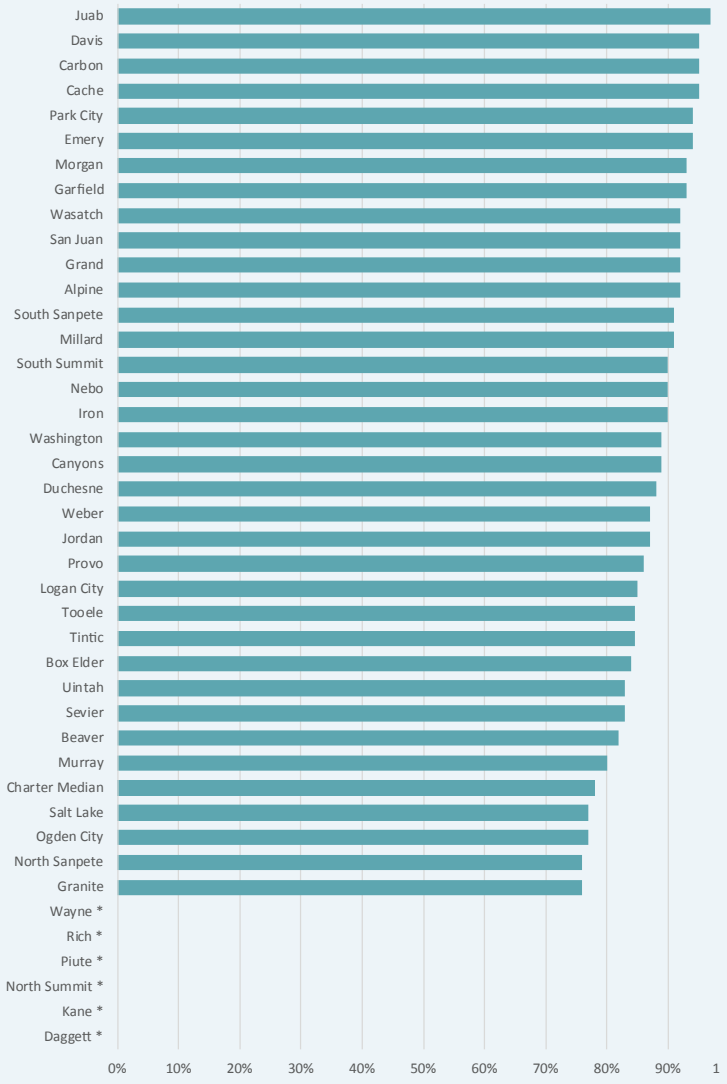
So how does the U.S. measure up internationally? There are a few international tests for comparison: TIMMS, the PISA and PIRLS.[20]

TIMMS Test

The Trends in International Mathematics and Science Study, also known as TIMMS, is an international study that provides data on the math and science achievement of 10- and 14-year-old students.

ACT scores in Utah's districts range from 17 to 23.

Figure 13: Graduation Rates Utah, 2018



** Precise data unavailable due to small student population.*

Source: Utah State Board of Education.

TIMMS has been administered to a large selection of countries every four years since 1999, and most recently administered in 2015. The U.S. has participated in every administration of TIMMS for the eighth grade (14-year olds) and all but 1999 for the fourth grade (10-year olds).[21]

TIMMS allows for an analysis of the progress of the United States students and how they compare to students around the world – or 57 countries in 2015.

The 2015 TIMMS report found that the United States' scores were average compared to the other nations. There has been long-term improvement on the mathematics assessment and intermittent improvements for the science assessment for both age groups.

EDUCATION ELEVATED GOALS

In its 2017 report Education Elevated, the Utah State Board of Education presented five-year, statewide education goals for high-school students. The state will use three, quantifiable indicators to measure progress.

First, the high-school graduation rate for all students must increase to 90% from the 2015 rate of 84.2%. These rates are calculated annually using the federal, four-year-adjusted cohort guidelines. The report acknowledges that, while difficult, attaining this goal is realistic, as graduation rates have steadily increased from a rate of 69.2% in 2008. Since the report's release, the graduation rate has increased by 3% to 87%.

Secondly, Utah aims to increase the number of students earning at least an 18-composite score on the ACT. Specifically, the goal is to have 76.8% of all students achieving this score by 2022. Approximately 65% of 11th graders obtained at least an 18 in 2015. This decreased to 63% by 2018.

Finally, the Board wants to increase access to advanced coursework. While this includes offering more courses and increasing passing scores for Advanced Placement and Concurrent Enrollment courses, it also encompasses facilitating access to expedited, career-specific education. These "Career and Technical Education Pathways" and "Course Completers" increase employability of graduates and decrease the drop-out rate, and the Board aims to increase their participation rate to 40% and 75% respectively.

Sources: Utah State Board of Education, Education Elevated, 2016. Utah State Board of Education, Utah 2018 Graduation Rates, December 2018. Utah State Board of Education, https://www.schools.utah.gov/data/reports.

PISA Test

The Programme for International Student Assessment, also known as PISA, is administered every three years by the Organisation for Economic Cooperation and Development – or OECD.[22] It evaluates 15-year-old students in the subjects of science, mathematics, reading, collaborative problem solving and financial literacy.

The math and science tests in PISA are different from the TIMMS in that TIMMS askes students to solve math equations using math concepts, while PISA asks questions requiring in-depth analysis and application; PISA is a skills test to see if students can take classroom knowledge and apply it to real world scenarios.[23]

The results are taken to evaluate education systems worldwide. In 2015, over a half-million students participated in the assessment from 72 countries.

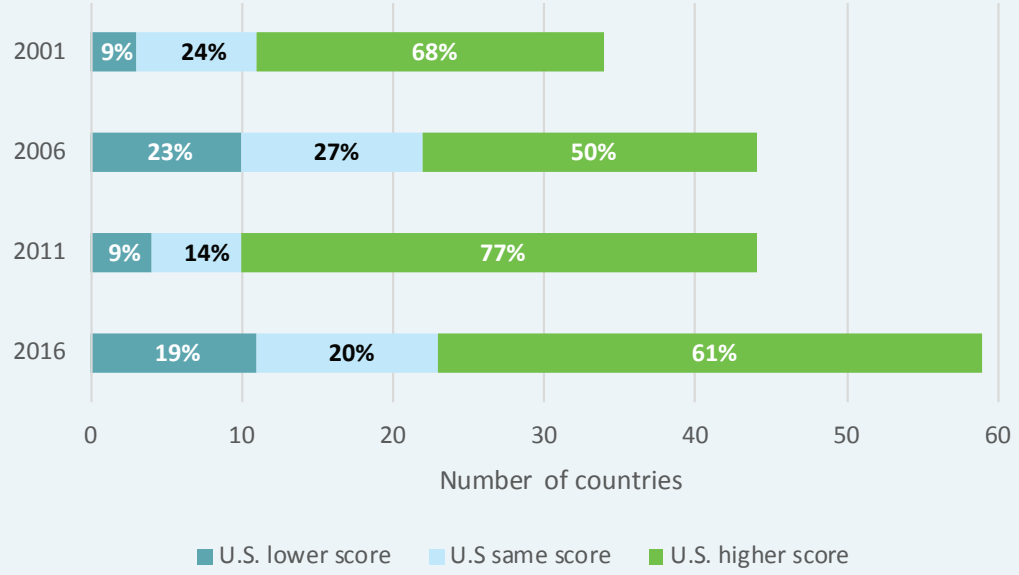
The PISA report showed that the United States' scores were not significantly different from the OECD average in the subjects of science and reading.[24] The United States scored four points above the average score for both subjects. However, the United States scored 20 points below the OECD average on the math test – a 4% difference.

PIRLS test

The Progress in International Reading Literacy Study, or PIRLS, is an international comparative assessment measuring student learning in reading. It has been administered every five years since 2001.[25] The assessment is "designed to assist partici-

The United States performs well internationally on reading literacy testing.

Figure 14: Progress in International Reading Literacy Study, U.S. Compared to Other Countries



Source: National Center for Education Statistics.

pating countries in monitoring the reading literacy of their fourth-grade populations in comparison to other countries."[26] It also "measures reading abilities at a time in students' schooling when most have learned how to read and are now using reading to learn."[27]

United States students were above the overall reading average score (scaled to 500 points) of fourth-grade students (see Figure 14).[28]

Compared with OECD nations, education spending in the U.S. is higher: $12,800 compared to an average of $9,500 in 2015.[29] However, when adjusting for gross domestic product per capita, the U.S. is just under the international education spending average.[30] A closer examination of spending within the U.S. can help clarify how it impacts educational outcomes.

The PISA report showed that the United States' scores were not significantly different from the OECD average in the subjects of science and reading. The United States scored four points above the mean score for both subjects. However, the United States scored 20 points below the OECD average on the math test – a 4% difference.

Utah spends less than half of what Wyoming spends per pupil.

Figure 15: Current Education Spending in Utah and Mountain States, 2017

	Per Pupil Spending
Wyoming	$16,537
Montana	11,443
New Mexico	9,881
Colorado	9,809
Nevada	9,320
Arizona	8,003
Idaho	7,486
Utah	7,179
Mt. State median	9,809
U.S. median	$11,554

Source: U.S. Census Bureau. Utah Foundation calculations.

Utah spends less than any of its peer states, and far less than its three closest peers.

Figure 16: Current Education Spending in Utah and Peer States, 2017

	Per Pupil Spending
Connecticut	$19,322
New Jersey	18,920
Vermont	18,290
New Hampshire*	15,683
Hawai'i	14,322
North Dakota*	13,760
Maine	13,690
Minnesota*	12,647
Iowa	11,461
Colorado	9,809
Utah	7,179
Peer median	$14,041

**** Utah's primary peer states.***

Source: U.S. Census Bureau. Utah Foundation calculations.

DOES SPENDING MATTER?

Utah remains last in the nation for operational per-pupil spending at $7,179 per student in 2017 (the most recent year that state-level data are available for national comparison).[31]

The median of the Mountain States is $1,754 less than the median of the U.S. states. In fact, only Wyoming spends more than the U.S. median. (See Figure 15.) Utah, meanwhile, spends less than two-thirds of the national median.

Utah spends far less per pupil than most of its peer states as well. (See Figure 16.) In fact, it spends just over half of the median spender (which is the average of North Dakota and Hawai'i).[32] Three of Utah's second-tier peers are among the top five in spending of the U.S. states (Connecticut, New Jersey and Vermont). Utah also spends far less than any of its three closest peers, Minnesota, New Hampshire and North Dakota.

These spending differences are based on many factors. Cost of living has a big effect; since most of per pupil spending is directed toward teacher pay and benefits, more expensive states – like Connecticut, Hawai'i, New Hampshire and New Jersey – require higher pay in order to attract highly effective teachers. The size of districts and schools is also important, and Utah has relatively large school districts, which drive down administrative costs. Size is also often the result of how rural a state is; Utah has one of the more urbanized populations in the nation, and so costs should be lower due to the economics of scale that come with urban populations (such as having lower transportation costs and the flexibility to have larger class sizes).

Per-pupil spending can have a significant impact on outcomes if the money is well-spent, but the efficacy of funding depends on the type and target of additional revenue.

In the following discussion, Utah Foundation looks at outcomes in the context of spending among both low-spending states and the highest-performing states. It takes the findings on outcomes thus far in this report and places them in the context of spending. It also

States that spend in the top third tend to have higher 4th grade reading scores than lower spenders.

Figure 17: NAEP Test Scores by Spending, 4th Grade Reading, 2017

Source: NCES. Utah Foundation calculations.

State spending	Score
Top third	223.4
Middle third	219.6
Lowest third	219.0
Utah	225.2

States that spend in the top third tend to have higher 8th grade math scores than lower spenders.

Figure 18: NAEP Test Scores by Spending, 8th Grade Math, 2017

Source: NCES. Utah Foundation calculations.

State spending	Score
Top third	284.0
Middle third	282.2
Lowest third	278.8
Utah	287.0

includes statistical analyses of how important money is on the outcomes detailed in this report.

Performance Among States by Spending

When categorizing states by spending (or the top-funded 16 states and Washington D.C., the middle 17 states, and the lowest 17), Utah Foundation's analysis shows that higher spending states generally show higher results on 2017 fourth-grade NAEP reading scores. (See Figure 17.) Nonetheless, scores among that higher-spending group are lower than Utah's fourth-grade reading score. In other words, the lowest spending state – Utah – is outperforming the higher-spending states collectively.

Higher spending states tend to have higher results on 2017 eighth-grade NAEP math scores. (See Figure 18.) Again, scores for that higher-spending group are lower than Utah's eighth-grade mathematics score.

Higher spending states show only slightly higher results on average ACT scores. Utah's ACT score is higher than the higher-spending group of 98%-100% test takers.

States that spend in the top third have only slightly higher ACT scores than lower spenders.

Figure 19: ACT Scores by Spending, and Percent of Test-taking Student, 2017

Source: ACT. Utah Foundation calculations.

State spending	ACT score, by percent of test-taking students		
	98%-100%	41%-89%	7%-36%
Top third	20.2	21.4	23.9
Middle third	19.4	21.3	23.3
Lowest third	20.0	20.1	22.9
Utah	20.4	n/a	n/a

States that spend in the top third seem to have higher graduation rates than lower spenders.

Figure 20: Graduation Rates by Spending, 2017

State spending	Rate
Top third	87%
Middle third	84%
Lowest third	84%
Utah	86%

Source: NCES. Utah Foundation calculations.

Lastly, higher spending states seem to have higher graduation rates than middle and lower spenders. Utah's graduation rate is near the top third.

Utah Foundation also performed statistical analyses of these data. In an analysis of the most recent one year of data accounting for population differences with each of the five demographic factors included in this report (parental educational attainment, poverty, two-parent households, race and ethnicity, and English language learners), per-pupil spending was not statistically linked with fourth-grade reading scores, eighth-grade math scores or graduation rates.[33] This is due in part to the small sample size – with only 51 observations (the states and the District of Columbia). However, higher per-pupil spending was linked with higher ACT scores.

Academic Research on Spending and Outcomes

Utah Foundation performed somewhat basic analyses on a small subset of Utah data, finding only limited relationship between spending and outcomes. In addition, of 163 studies conducted prior to 1995, only 27% found that increased school funding had a statistically significant, positive impact on student achievement, while 66% were inconclusive.[34]

However, more recent analyses suggest a more direct linkage between money and outcomes. These findings incorporate more robust datasets and school finance reform data with a look at increases in school spending in lower-income districts, finding a strong correlation between spending and outcomes.[35] One analysis that looks beyond state funding toward revenue directed at districts with more lower-income students finds that a 10% increase in per pupil spending each year for all years of public-school led to an estimated increase of 0.31 years of completed education,

OTHER STATISICAL ANALYSES

Utah Foundation performed certain statistical analyses on the data included in this report. In an analysis of the most recent year of data accounting for population differences with each of the five demographic factors, Utah Foundation found that having one or more parents with bachelors' degrees was tightly linked with higher fourth-grade reading and eighth-grade math NAEP scores. Tested on their own, each of the other four demographic factors were also linked with higher fourth-grade reading and eighth-grade math scores. School spending was not linked.

The percentage of students taking the ACT is most tightly linked to ACT composite scores (the higher the percentage of students, the lower the score). The second tightest linkage was having one or more parents with bachelors' degrees. The percentage of white students in the state was also linked with ACT scores. Tested on their own, each of the other three demographic factors were also linked with ACT scores. Unlike on the NAEP statistical analysis, spending was linked with ACT scores.

While there are some differences in graduation rates based upon income, Utah Foundation's statistical analysis shows that money does not have a discernable relation to graduation rates. Additionally, the five demographic factors were also unrelated to graduation rates. See the sidebar on page 11 for an additional examination of graduation rates as an outcome measure for state comparison.

Note: Using SPSS, Utah Foundation found that parents with bachelors' degrees was statistically significant at greater than 99% for NAEP and ACT scores, while the percentage of white students and spending was statistically significant at greater than 95% for ACT scores.

a 7% increase in adulthood wages, a reduction in adult poverty of 3.2 percentage-points, and a 7% increase in college enrollment.[36] Similarly, studies show test score benefits from increased investments per pupil of $750 to $1,000.[37]

Many new, district-level studies have found a statistically significant, positive relationship between spending and educational outcomes.[38] They have also suggested that increasing school funds has a greater impact on school budgets that are more dependent on state revenue, as demonstrated by their substantial decrease in test scores and graduation rates during the Great Recession.[39] Another study suggests that impacts were greatest in areas with low initial spending and in areas with higher unionization, as funds are directed toward teacher compensation on a near dollar-to-dollar rate.[40] However, a separate study found that, while higher teacher wages are associated with higher student achievement, additional research is needed to demonstrate that increasing wages increases achievement.[41]

Programs that focused on textbook spending were more effective at improving student success than similar capital and construction programs. Additionally, funding targeted at helping low-income districts and failing students in New York had mixed results on improving student performance.[42] International analysis by the World Bank also demonstrates that increasing funding in low-income areas does not automatically correlate to strong educational benefits.[43] While increasing per-pupil spending generally improves student educational outcomes, different approaches to funding will have disparate impacts on effectiveness.

With that said, there is certainly a point at which funding becomes decisive. While it is obviously not necessary to spend $20,000 per pupil to reach acceptable outcomes, neither would many suggest that $2,000 per pupil would be adequate. And Utah's position as the lowest spender in the nation does raise an important question: Are we leaving significant improvements in outcomes untapped due to insufficient resources?

CONCLUSION

Utah compares well nationally and with its neighboring Mountain States on national assessments and graduation rates. And Utah is improving, both on its statewide annual assessments and on national tests. Furthermore, Utah's students compare very well on ACT scores, ranking third among the 19 states that test most of their high school graduates.

This report places outcomes within the context of spending. As a group, the states that spend the most on K-12 education outperform other states. However, it is impossible to draw a straight line from higher spending to better outcomes. Utah itself proves this point: The Beehive State fares better on multiple measures than the highest-spending states collectively, even though it spends less per-pupil than any state. And the differences in spending are not marginal. In many cases, Utah spends less than half per-pupil.

For that reason, it is important to look at Utah's peer states, particularly the three that are most tightly aligned with Utah on key demographic factors: Minnesota, New Hampshire and North Dakota. While Utah performs respectably among these states, it is spending far less than any of them.

Still, at a certain level, K-12 per-pupil spending becomes decisive. While Utah performs admirably in light of its low spending, the question arises as to whether we are leaving significant potential untapped due to insufficient resources.

Ultimately, Utahns must ask: To what standard do we aspire for our public education? Best in the West? Best in the nation? Best in the world? Once that standard is clear, the question becomes unavoidable: To what extent are additional resources necessary to reach that goal?

APPENDIX A

This appendix describes the five measures noted in Appendix B as the statistics used to determine Utah's peer states. While these are five very distinct measures, there are commonalities between them.

One of the most obvious is that the likelihood of being an English learner is related to race and ethnicity, as most English learners in the U.S. identity as being Hispanic/Latino. But all of the other measures are related as well. For example, parental educational attainment is related to poverty and to race and ethnicity. Income status is related with parental educational attainment and household makeup. And so on.

The appendix also provides state-level data by which to show comparisons between Utah and the other Mountain States, as well as Utah and its peer states.

Parental Educational Attainment

"Research has shown a link between parental education levels and child outcomes such as educational experience, attainment and academic achievement."[44] This is evident in that parental educational attainment is correlated with the 500-point NAEP test scores – a 10% difference between those whose parents did not finish high school and those whose parents finished college on eighth grade reading scores – or a total of 27 points.[45]

Past Utah Foundation peer group assessments used student-reported parental educational attainment from the National Center for Education Statistics from the NAEP test as reported by eight-grade test takers. Utah Foundation has determined that the U.S. Census American Community Survey Public Use Microsample Data is a better estimate.

Utah's rate of parents with bachelor's degrees is above all the Mountain States – just edging out Colorado. However, of Utah's peer states, it is right in the middle – or just above the median state of Minnesota. Source: U.S. Census Bureau, ACS PUMS dataset, Utah Foundation calculations.

Utah is tied with Colorado for highest parental education rate in Mountain States.

Figure A1: Parental Educational Attainment Rates in Utah, Mountain States, and U.S. Median State, 2017

	Percent of parents with bachelor's degree and above
Utah	**51%**
Colorado	51%
Montana	47%
Idaho	43%
Wyoming	39%
Arizona	37%
Nevada	31%
New Mexico	31%
Mt. State median	39%
U.S. median	43%

Source: U.S. Census Bureau, ACS PUMS dataset, Utah Foundation calculations.

	Percent of parents with bachelor's degree and above
New Jersey	55%
New Hampshire*	54%
Connecticut	53%
Utah	**51%**
Colorado	51%
Minnesota*	50%
Vermont	49%
Maine	48%
North Dakota*	47%
Hawaii	47%
Iowa	44%
Peer median	50%

Utah and its peers share similar parental education rates — higher than the nation at large.

Figure A2: Parental Educational Attainment Rates in Utah and Peer States, 2017

* Utah's primary peer states.

Source: U.S. Census Bureau, ACS PUMS dataset, Utah Foundation calculations.

Poverty

Free/reduced-price lunch eligibility is correlated with NAEP scores – a 10% difference between the two groups on the eighth-grade reading test. The average difference in scores between students who qualify and those who do not is 24 points.[46]

Researchers often use free/reduced-price lunch data to help determine socioeconomic status. It is a particularly good proxy for school-level poverty since other poverty data are not typically available. However, it is not an ideal proxy for state-level analysis, particularly since families can opt in to the free/reduced-price lunch program without a check on income status – so participants do not necessarily need to be low income, and definitely do not need to be experiencing "poverty." Accordingly, poverty status is a better data point.[47]

	Poverty rate of 5- to 17-year-olds
New Mexico	28%
Arizona	23%
Nevada	19%
Montana	17%
Idaho	17%
Colorado	14%
Utah	**12%**
Wyoming	12%
Mt. State median	17%
U.S. median	18%

Utah is just above Wyoming for youth poverty rate – second lowest in the Mountain States.

Figure A3: Student Poverty Rates in Utah, Mountain States, and U.S. Median State, 2017

Note: Wyoming is a five-year average, other data are one-year.

Source: U.S. Census Bureau, ACS, Utah Foundation calculations.

Utah and its peers share similar poverty rates — with Utah just below the peer median rate.

Figure A4: Student Poverty Rates in Utah and Peer States, 2017

	Poverty rate of 5- to 17-year-olds
Maine	16%
New Jersey	15%
Iowa	14%
Vermont	14%
Colorado	14%
Minnesota*	13%
Hawaii	13%
Connecticut	13%
Utah	**12%**
North Dakota*	12%
New Hampshire*	9%
Peer median	13%

* Utah's primary peer states.

Source: U.S. Census Bureau, ACS, Utah Foundation calculations.

Utah Foundation considered poverty data for 5- to 17-year-olds from the one-year 2017 sample of the U.S. Census Bureau's American Community Survey for its analysis.

Utah's peer states are within 2.1 percentage points from Utah's rate, which is 5.3 points lower than the national average.

Two-Parent Households

The percentage of all births to unmarried women rose steadily from below 5% in 1950 until it peaked at 41% in 2009.[48] As of 2016, the percent of all births to unmarried women was back below 40%. Single-parent households are related to poorer educational outcomes – and the rate of single-parent households is much higher for lower-income families than for higher-income ones. However, when controlling for other factors, the influence of single-parenthood is diminished.[49]

Utah tops the Mountain States for percentage of children in two-parent families.

Figure A5: Percent of Children in Two-parent Families in Utah and Mountain States, 2017

	Children in two-parent families
Utah	**83%**
Idaho	80%
Montana	76%
Wyoming	76%
Colorado	75%
Nevada	72%
Arizona	71%
New Mexico	64%
Mt. State median	75%
U.S. median	72%

Source: U.S. Census Bureau, ACS PUMS dataset, Utah Foundation calculations.

	Children in two-parent families
Utah	**83%**
North Dakota*	80%
Minnesota*	78%
New Hampshire*	78%
Iowa	78%
Maine	76%
Hawaii	76%
Vermont	76%
New Jersey	75%
Colorado	75%
Connecticut	73%
Peer median	76%

Utah also tops peer states for percentage of children in two-parent families.

Figure A6: Percent of Children in Two-parent Families in Utah and Peer States, 2017

Source: U.S. Census Bureau, ACS PUMS dataset, Utah Foundation calculations.

Nonetheless, research suggests that household structure has a strong influence on educational outcomes, even when factoring in income.[50] This is good news for Utah. Utah ranks far higher than most of the Mountain States and its peer states in the proportion of children in two-parent households.

Race and Ethnicity

Race and ethnicity correlate with educational outcomes. This can be seen in analysis of the 500 point NAEP test scores – there is a more than 10% difference between kids who identify as Hispanic and/or Latino and kids who identify as white on the eighth-grade reading test. The average difference between the two is 27 points.[51]

There is large variability between Mountain States in race and ethnicity.

Figure A7: Student Race and Ethnicity in Utah, Mountain States, and Median State, 2016

	Hispanic/ Latino	Black/ African American	White	Asian	Hawaiian Native/ Other Pacific Islander	American Indian/ Alaska Native	Two or more races
Utah	17%	1%	75%	2%	**2%**	1%	2%
Colorado	33%	5%	54%	3%	0%	**1%**	4%
Montana	**4%**	**1%**	**79%**	**1%**	0%	**11%**	3%
Idaho	18%	1%	76%	1%	0%	1%	2%
Wyoming	14%	1%	78%	1%	0%	4%	2%
Arizona	45%	5%	39%	3%	0%	5%	3%
Nevada	42%	**10%**	34%	**5%**	1%	1%	**6%**
New Mexico	**61%**	2%	**24%**	1%	**0%**	10%	**2%**
Mt. State median	33%	2%	54%	1%	0%	4%	3%
U.S. median	14%	10%	60%	3%	0%	1%	3%

Note: Highest and lowest rates are noted.

Source: NCES.

There is large variability between Utah's peer states in race and ethnicity.

Figure A8: Student Race and Ethnicity in Utah, Peer States, and Median State, 2016

	Hispanic/ Latino	Black/ African American	White	Asian	Hawaiian Native/ Other Pacific Islander	American Indian/ Alaska Native	Two or more races
Utah	17%	**1%**	75%	2%	2%	1%	2%
Minnesota*	9%	10%	69%	7%	0%	2%	4%
North Dakota*	5%	4%	79%	**1%**	0%	**9%**	2%
New Hampshire*	5%	2%	87%	3%	0%	0%	3%
Iowa	10%	6%	78%	2%	0%	0%	4%
Maine	2%	3%	**92%**	2%	0%	1%	2%
Hawaii	12%	2%	**13%**	**30%**	**30%**	0%	**12%**
Vermont	**2%**	2%	91%	2%	**0%**	0%	3%
New Jersey	27%	**16%**	46%	10%	0%	**0%**	**2%**
Connecticut	23%	13%	56%	5%	0%	0%	3%
Colorado	**33%**	5%	54%	3%	0%	1%	4%
Peer median	10%	4%	73%	3%	0%	0%	3%

Note: Highest and lowest rates are noted.

* Utah's primary peer states.

Source: NCES.

These differences are due in part to the differences in races and ethnicity factors like poverty rates and parental educational attainment levels.

What are race and ethnicity, and what are the differences between them? Racial categories or those set by the U.S. Office of Management and Budget which are intended to "reflect a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically." Ethnicity relates more to national origin – specifically whether or not people are of Hispanic or Latino origin. Race and ethnicity identification are independent of each other.

Utah Foundation used race and ethnicity data from the U.S. Department of Education's National Center for Educational Statistics for its analysis.[52] Utah Foundation chose to determine peer states by including students who identify as Hispanic and/or Latino and white, since these two subgroups are the largest proportion of Utah residents by race and ethnicity. Each of Hispanic/Latino, white and Black or African American student subgroups vary across states by more than 60%. These racial/ethnic groups are far more variable than other racial and ethnic groups, even when considering Hawai'i for its Asian population and its Hawaiian Native/Pacific Islander population, and when considering Alaska for its American Indian/Alaskan Native population. A vast majority of the states have less than 5% of any of these latter populations.

English Learners

Often referred to as English language learners, these are students with a non-English mother tongue who are at risk of academic failure due to a lack of proficiency in English. It roughly means that a student has limited English skills.

The federal definition states that an English learner was either born outside of the U.S. and has a non-English native language, or is Native American, migratory or otherwise, and whose English language proficiency is thereby diminished. Importantly, the student is one "whose difficulties in speaking, reading, writing or understanding the English language may be sufficient to deny the individual the ability to meet … state academic standards; the ability to successfully achieve in classrooms where the language of instruction is English; or the opportunity to participate fully in society."

Utah's rate of English learners is just higher than the Mountain State median. (See Figure A9.)

	English learners
Nevada	17%
New Mexico	16%
Colorado	12%
Utah	**7%**
Arizona	6%
Idaho	5%
Wyoming	3%
Montana	2%
Mt. State median	6%
U.S. median	7%

Utah is near the middle of the Mountain States for its proportion of English learner students.

Figure A9: English Learner Rates in Utah, Mountain States and U.S. Median State, 2016

Source: NCES.

	English learners
Colorado	12%
Minnesota*	8%
Utah	**7%**
Hawaii	7%
Connecticut	7%
Iowa	5%
New Jersey	5%
North Dakota*	3%
Maine	3%
New Hampshire*	2%
Vermont	2%
Peer median	5%

Utah is also near the middle of its peer states for its proportion of English learner students.

Figure A10: English Learner Rates in Utah and its Peer States, 2016* Utah's primary peer states.

Source: NCES.

APPENDIX B

Utah Foundation chose the report's three peer states and seven second-tier states based upon statistical analysis of three discrete categories of relationship: education, finances and culture/language. The five measures in these three categories were weighted as follows:

- Education
    - parental ed attainment - 33.3%
- Finances
    - poverty - 16.7%
    - two-parent households - 16.7%
- Culture/language
    - race/ethnicity - 16.7%
    - English learners -16.7%

All of these factors can mark significant differences in educational outcomes. Parental educational attainment was weighted the heaviest at 33.3%, because it is a strong indicator for student educational outcome due to influence, economic and social capital – but also because it was the only education-related factor. Two factors – poverty and percentage of two-parent households – are indicators of socioeconomic status and social class. Race/ethnicity and the proportion of English language learners are indicators of language ability designation and have some relation to the cultural importance/attainment of better educational outcomes.

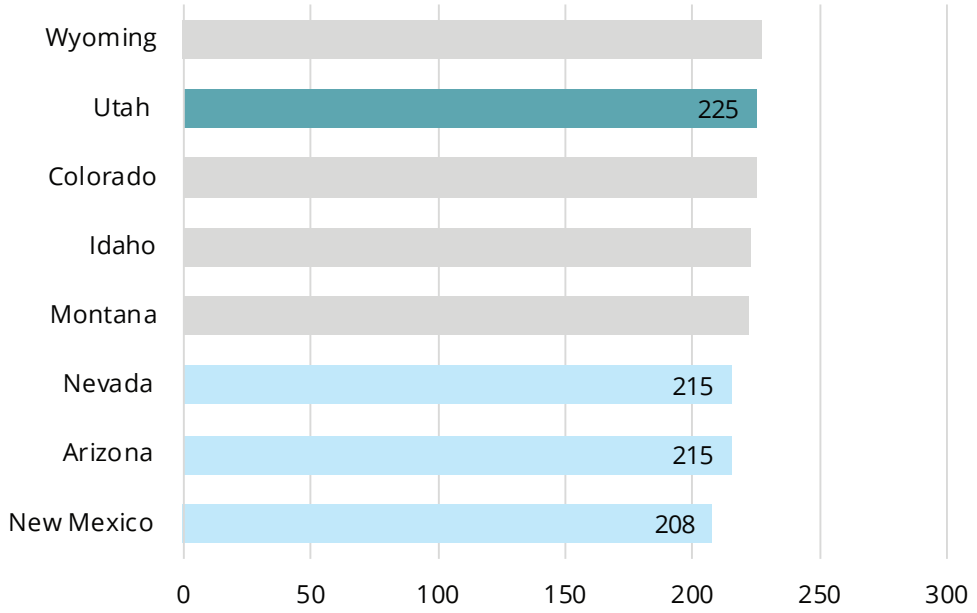
The data are all standardized (i.e. the measure of each state minus the average measure of the states divided by the standard deviation of the states) and then the difference between Utah and each state is squared (so that all summed numbers are positive, and to emphasize larger differences from Utah). Those with the smallest total are most similar to Utah. Minnesota, New Hampshire and North Dakota are all very similar. There is a gap between New Hampshire (the third most similar state) and Iowa (the fourth most similar state), as well as between Colorado (the tenth-most similar state) and Virginia (the eleventh-most similar state). Accordingly, Utah Foundation determined that the most relevant comparisons were the top three, but then the median state of the fourth through tenth most similar states.

APPENDIX C

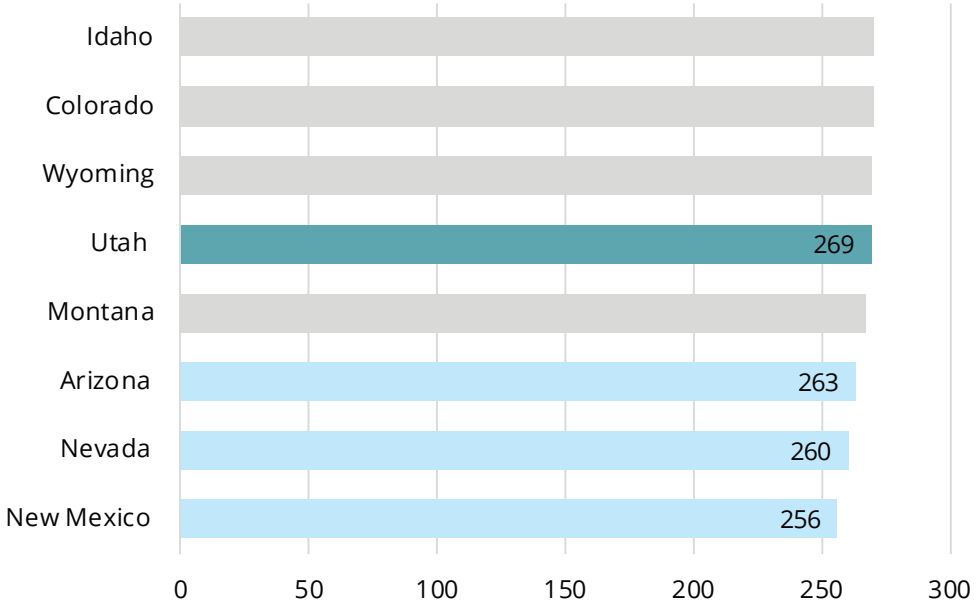
NAEP Test Score Statistical Comparisons of Utah to Mountain States.

Figure A11: NAEP Test Score of Mountain States, with Score Labeled when Statistically Significant Difference from Utah

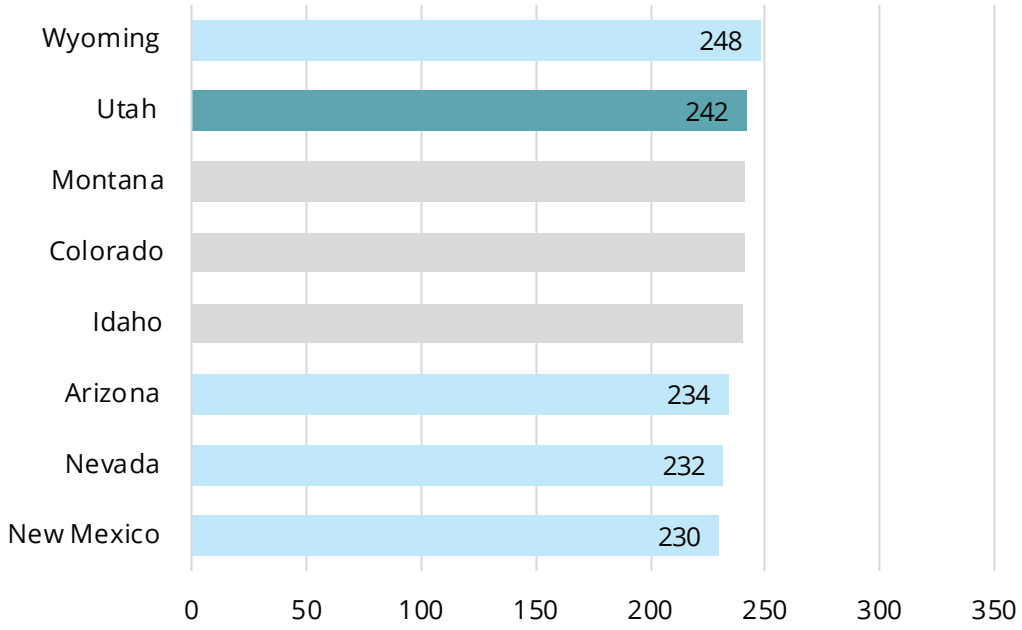
Reading 4th Grade, 2017



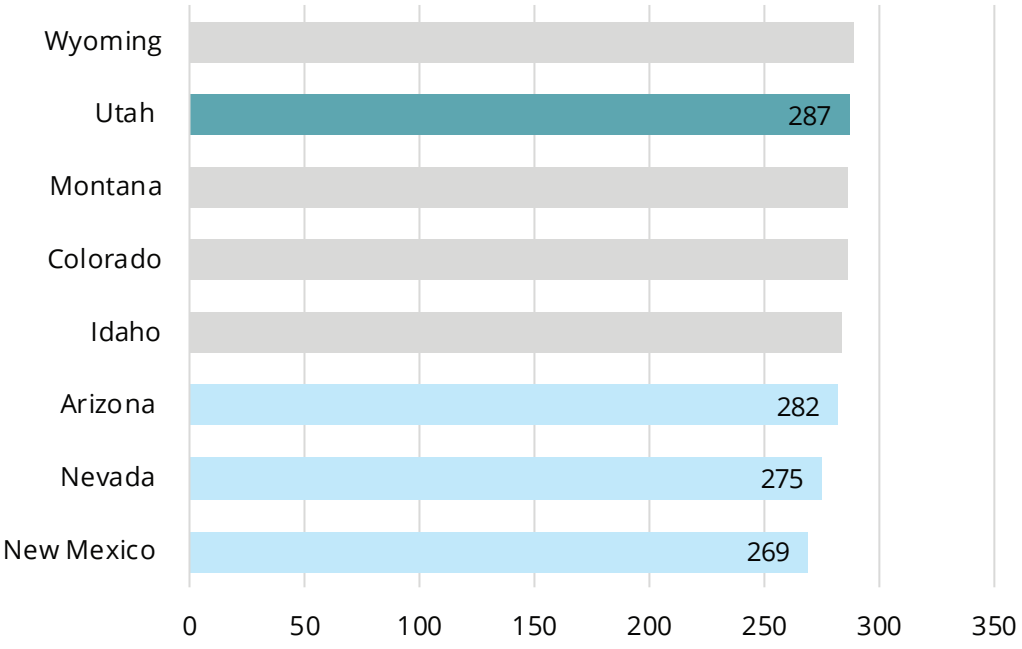
Reading 8th Grade, 2017



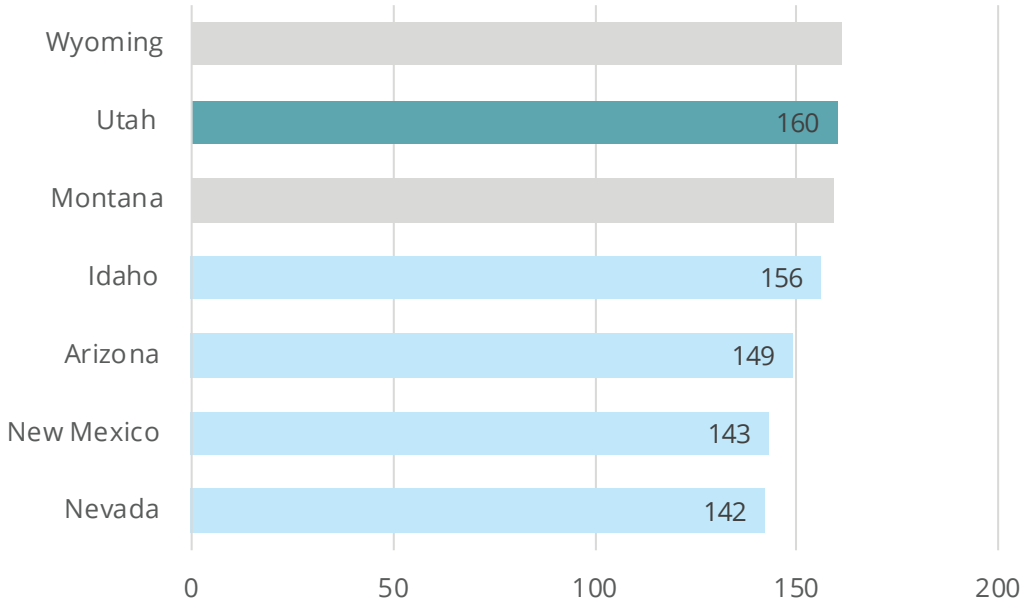
Math 4th Grade, 2017



Math 8th Grade, 2017



Science 4th Grade, 2015



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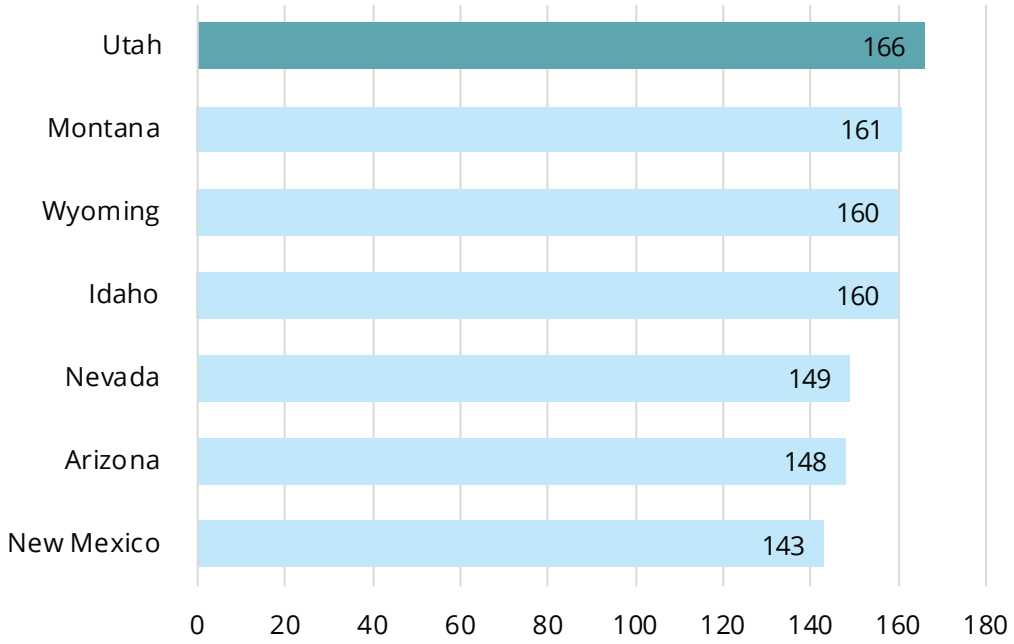


Note: Scores for Colorado are unavailable for the 4th and 8th grade science tests

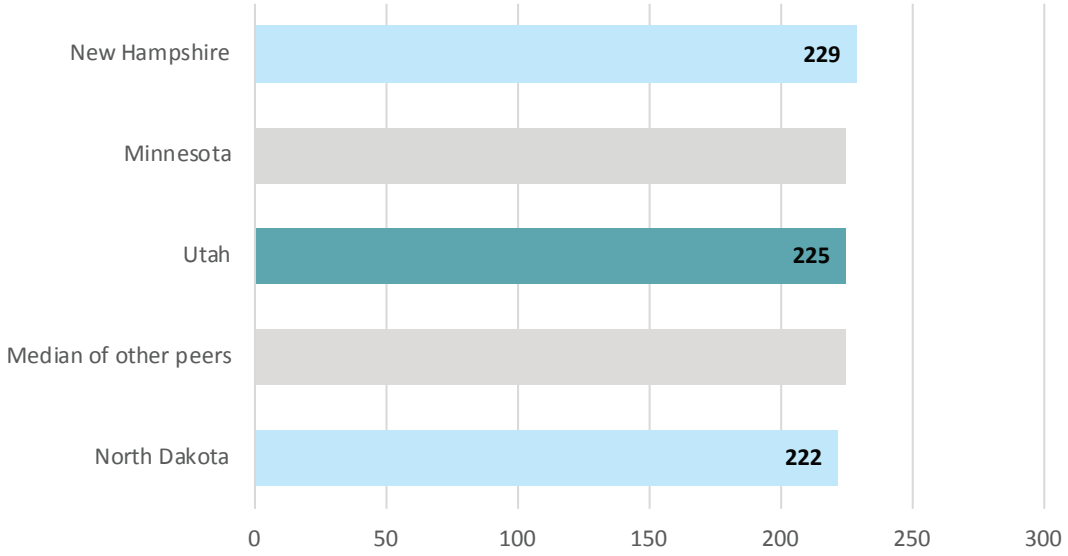
Source: National Center for Education Statistics.

APPENDIX D

NAEP Test Score Statistical Comparisons of Utah to Peer States.

Figure A12: NAEP Test Score of Peer States, with Score Labeled when Statistically Significant Difference from Utah

Reading 4th Grade, 2017



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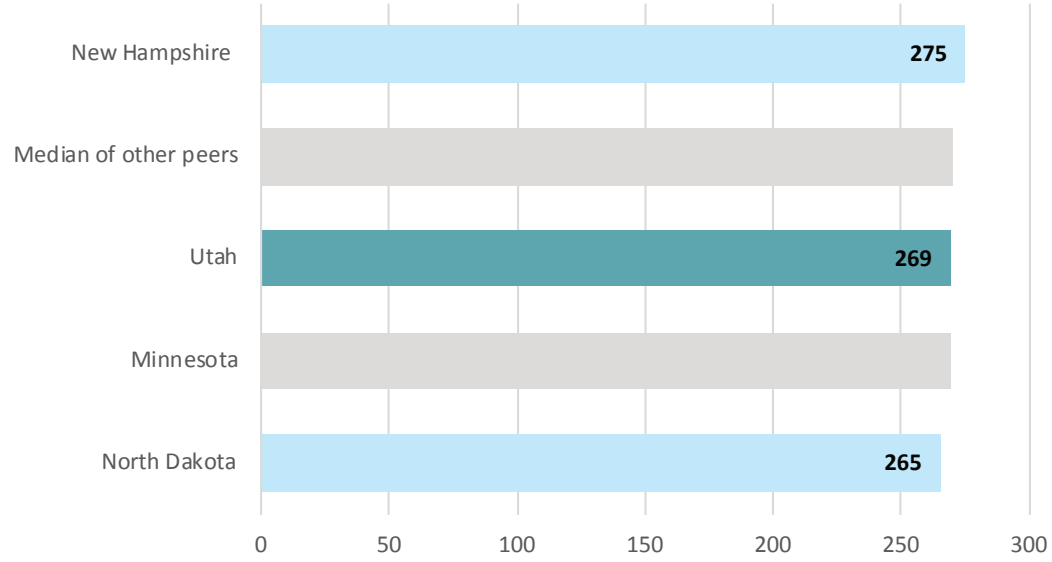
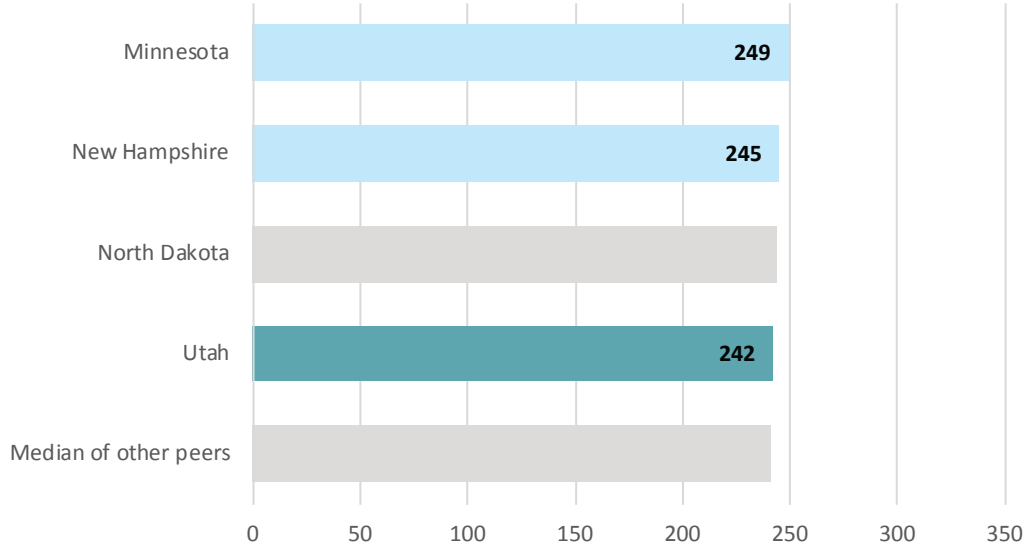
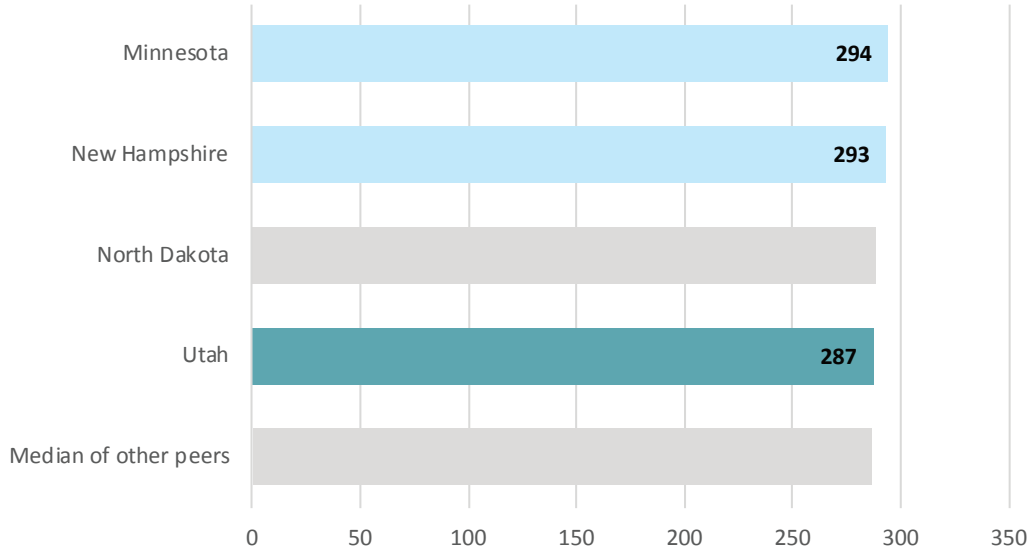


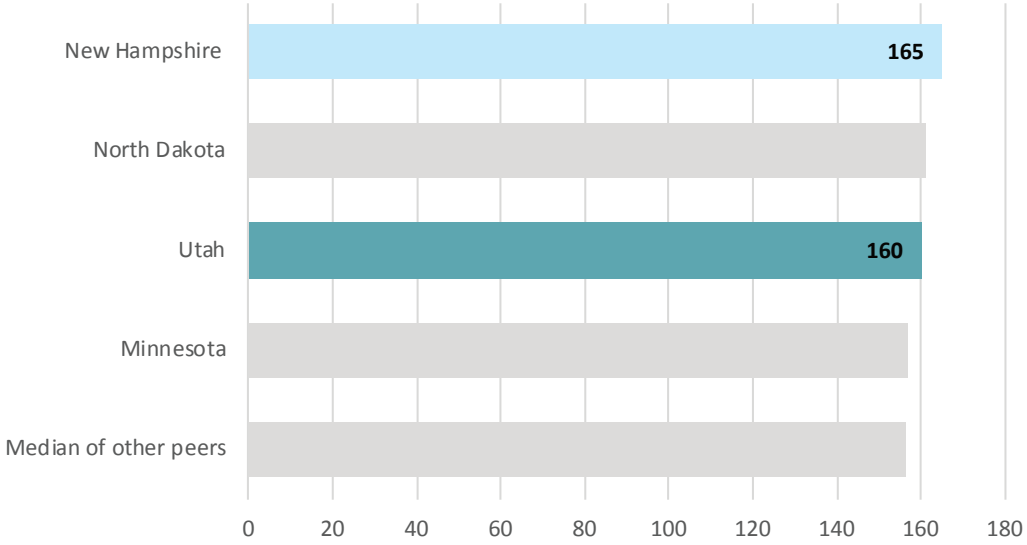
Math 4th Grade, 2017



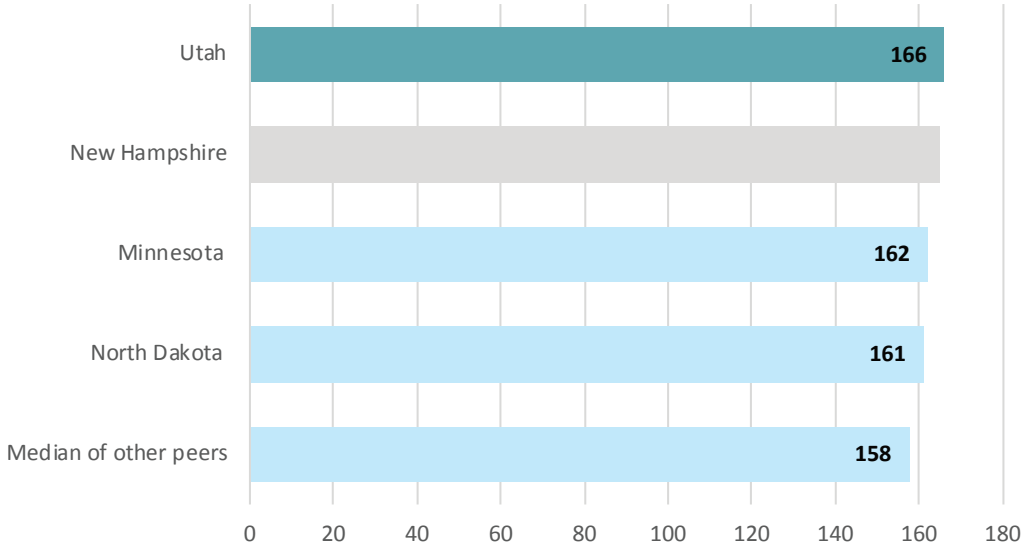
Math 8th Grade, 2017



Science 4th Grade, 2015



Science 8th Grade, 2015



Notes: Scores for Colorado were unavailable. 157.5 Median – between Connecticut and New Jersey.

Source: National Center for Education Statistics.

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