

# SCHOOL TESTING RESULTS: HOW UTAH COMPARES TO STATES WITH SIMILAR DEMOGRAPHICS

## HIGHLIGHTS

- Based on comparisons to national averages in school test scores, it is commonly stated that Utah's education system performs well, despite having low funding. However, Utah is much different than the average state, with low poverty, many college-educated parents, and a small minority population. Those factors should lead to higher-than-average test scores.
- Using the National Assessment of Educational Progress to compare math, reading, and science scores over two decades, Utah is underperforming compared to states with similar demographics. Among these peers, Utah most often ranks last in these tests.
- In addition to persistently low peer-state rankings over the past two decades, Utah's national ranking on these exams has fallen significantly.
- Utah's math scores have increased over the years, but other states' scores have risen faster, leading to a lower ranking for Utah. Reading scores have been flat for Utah during this period. Utah's science scores are higher than the national average but at the bottom of peer states.
- Minnesota is the one state that remains Utah's peer over all of the years studied, and its test scores far outpace Utah's. The gap between Utah and Minnesota has widened in recent years.

The mission of Utah Foundation is to promote a thriving economy, a well-prepared workforce, and a high quality of life for Utahns by performing thorough, well-supported research that helps policymakers, business and community leaders, and citizens better understand complex issues and providing practical, well-reasoned recommendations for policy change.

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In 2007, Utah Foundation published a research report analyzing how Utah students' standardized test scores compared to national averages.<sup>1</sup> The report also determined and analyzed how Utah's 8th grade students scored on the National Assessment of Educational Progress (NAEP) in math, reading, and science compared to 8th grade students in demographic peer states—states with similar levels of student poverty, similar education levels of students' parents, and similar ethnic profiles. The research showed that, although Utah's 8th grade students typically achieved above the national average on standardized tests, Utah's demographic characteristics indicate Utah students should score significantly higher than national levels. The report illustrated that Utah was the lowest-achieving state in its demographic peer group, scoring well below what would be expected for a state with its demographic and economic profile.

While the 2007 report was a useful starting point for the discussion of comparative achievement levels, the analysis was brief and limited in scope. Utah Foundation only reported on data for 8th graders for the years 2005 and 2007. To better understand how Utah compares to its demographic peer states, this report looks at NAEP data from five periods between the early 1990s through 2009, using scores from both 8th and 4th grade tests in math, reading, and science.<sup>2</sup> By examining a larger sample of test scores over a longer period of time, one can obtain a greater sense as to the overall trajectory of Utah student performance in relation to national and demographic peer group achievement levels. Expanding the scope of the 2007 study shows that Utah has been falling in the national rankings with respect to student performance on NAEP. Compared to its demographic peer states, Utah has consistently ranked poorly for the last two decades.

## DESCRIPTION OF STUDENT ACHIEVEMENT DATA

The National Assessment of Educational Progress (NAEP) is the “largest nationally representative and continuing assessment of what America’s students know and can do in various subject areas.”<sup>3</sup> Assessments are given periodically to 4th, 8th and 12th grade students in mathematics, reading, science, writing, the arts, civics, economics, geography, and U.S. history. This report looks at test scores in math, reading, and science, the same subjects addressed in Utah Foundation’s 2007 report, and the subjects with the most years of data available. 12th grade scores were not used in this analysis, because they do not provide a good representation of the total student population due to students graduating early or dropping out before 12th grade. The source for all data in this report is the National Center for Education Statistics operated by the U.S. Department of Education. The Data Explorer for the National Assessment of Educational Progress served as the primary data tool in these assessments.<sup>4</sup>

The earliest year state-level NAEP data are available for both reading and math is 1992. The five periods evaluated in this report (1992, 1996, 2000, 2005, and 2009) were selected because they provide the most consistent available data for mathematics test scores across grades and states. Four-to-five year intervals were used to maximize the number of years analyzed, but to still allow enough time between each comparison for changes in scores to be evident. Reading data were not available in 1996 and 2000, but were available in 1998 and 2002, and thus 1998 and 2002 reading data are presented in combination with 1996 math and science data and 2000 math and science data respectively in this report. This thorough analysis provides a better understanding of the overall picture of education in Utah and how its students have performed compared to students in Utah’s demographic peer states over the past two decades.

### NAEP Achievement Levels

Based on recommendations from policymakers, educators, and members of the general public, NAEP’s Governing Board has set specific achievement levels for each subject area and grade.<sup>5</sup> Achievement levels are performance standards showing what concepts students should know and be able to complete. NAEP contains test score cutoffs for three achievement levels: Basic, Proficient, and Advanced. Students achieving the Basic level show partial mastery of prerequisite knowledge and skills that are fundamental for Proficient work at each grade. Students achieving the Proficient level show solid academic performance by demonstrating competency over challenging subject matter. Students achieving the Advanced level show superior academic performance.

NAEP achievement levels are cumulative; therefore, students performing at the Proficient level also display the competencies associated with the Basic level, and students at the Advanced level demonstrate the skills and knowledge associated with both the Basic and the Proficient levels. The score cutoffs for each level vary by subject and grade and are presented in the figures. More information about the specific mathematical and reading concepts that are achieved at each level can be found online at the National Center for Education Statistics website.<sup>6</sup>

## UTAH’S DEMOGRAPHIC PEERS: WHAT CONSTITUTES A DEMOGRAPHIC PEER?

In the 2007 report, Utah Foundation used three criteria to determine demographic peer states: poverty levels, parental education levels, and ethnic profiles. These “non-school” criteria were selected because of the significant impact non-school factors have on student achievement levels. Family incomes, the education level of parents, and ethnicity have all been found to be significantly correlated with academic achievement. Researchers suggest that wealthier and more educated parents provide children with academic advantages because they are more likely to be involved in their children’s schools, more likely to read with children, help with homework, communicate high academic expectations, and act as role models for academic achievement.<sup>7</sup> Furthermore, educational research on the achievement gap between white and minority students shows that ethnicity has an impact on academic achievement even after disadvantages such as familial income and parental education levels are considered. The educational achievement of minorities is influenced by several factors; including 1) the fact that minority students more often attend schools with concentrated poverty, 2) an unequal distribution of school resources, and 3) institutional barriers such as low expectations and a deficit view of minority students.<sup>8</sup> Furthermore, for many minority students whose families have immigrated to the U.S. during the last generation, English is not the primary language at home, and these students will probably confront a language barrier when they enter school as English Language Learners rather than native speakers of English.

Because of the significant impact these non-school factors have on student achievement, comparing Utah to states with similar demographics in these three areas leads to a more relevant comparison than using state versus national education achievement measures. Therefore, Utah Foundation identified eight peer states for each of the three criteria: the four states that rank above Utah and the four states that rank below Utah according to the measurement of each non-school factor. These demographic peer states were determined for each of the five time periods examined in this report (1992, 1996, 2000, 2005, and 2009).<sup>9</sup> Reassessing Utah’s demographic peer states for each time period accounts for changing demographics over time and allows Utah to be compared to states that are similar demographically for a given snapshot in time. Data showing how Utah compares to demographic peer states for individual non-school factors are located in the appendices to this report.

### Demographic Peer States

#### *States with similar poverty levels*

National School Lunch Program data, as reported in the National Assessment of Educational Progress (NAEP), are used to determine states with similar poverty levels. NAEP reports regularly show the percent of students who qualify for free or reduced-price lunch. Using this measure allows a focus specifically on poverty affecting school children, rather than poverty rates for the overall population. The tables in this report list Utah’s set of poverty level peers from 1996 to 2009; 1992 information was not available from the National School Lunch Program (see Figures 1-A, 1-D, 1-G, 1-J, Appendix I). The four states both above and below Utah (in terms of the percent of students who qualify for the National School

Lunch Program) constitute each set of peer states with respect to student poverty.<sup>10</sup>

Utah's set of poverty-level category peers changed from 1996 to 2009 as Utah's student-poverty levels increased over time. In 1996, 20% of Utah's students were eligible for the National School Lunch Program. This percent peaked in 2005 at 31%, before falling to 27% in 2009 (See Figure 1-J, Appendix I).

The figures in Appendix I illustrate that Utah usually scores in the middle or bottom half of its poverty peer states in math and reading. For 2009 (the most recent data available), Utah performed the worst compared to its poverty peers of any of the time periods examined: 9th out of 9 states (8 peer states plus Utah) for math and reading in both the 8th and 4th grades. However, in science, Utah students scored in the middle or top half of the set of poverty peer states. For 2005 (the most recent data available for science), Utah students performed 3rd out of 7 states in 8th grade science and 2nd out of 7 states in 4th grade science (2 peer states did not have science scores available for 2005).

#### *States with similar parental education levels*

The second criterion used to determine Utah's demographic peer states is parental education levels or, more specifically, the percent of students that have at least one parent who graduated from college. These data are also from the NAEP archives. The tables in Appendix II show the four states that rank directly above and below Utah in terms of the percentage of students with at least one parent who is a college graduate for the various assessment years (see Appendix II: Figures 2-A, 2-D, 2-G, 2-J, 2-M).

The percent of Utah's students that have at least one parent who graduated from college remained relatively stable between 1992 and 2009. Out of the five years examined in this report, the lowest percent occurred in 2000 with 50% of students in Utah having at least one parent with a college diploma. The highest percent occurred in 2009 with 55% of students having one college-educated parent. While this increase indicates a positive trend, Utah slips from 2nd to 11th place in terms of its national ranking of parental education levels from 1992 to 2009. This means the average parental education level of students increased more rapidly in other states than it did in Utah. It should also be noted that these data are derived from questions asked of the students about their parents' educational attainment. Errors could exist because students may not actually know their parents' education levels, but using the NAEP data was the most consistent method of specifically measuring the education levels of parents with children in school. The trend of Utah's lower ranking compared to other states over time is consistent with other Utah Foundation research on this topic.<sup>11</sup> Data on the other two non-school factors (student poverty and student ethnicity) are reported on NAEP by the school, rather than by the students.

Overall, Utah scored in the bottom half of the parental-education peer states in math, reading and science. For 2009, Utah scored last of the parental-education peer group in 8th grade math and reading as well as 4th grade reading, and next-to-last in 4th grade math. In science, the most recent time period available (2005), Utah 8th grade students ranked 5th out of 9 parental education peer states and 4th graders ranked 5th out of 7 states (2 peer states did not have science scores available for 2005).

#### *States with similar ethnic profiles*

States with a similar ethnic makeup constitute the third criterion used to determine Utah's demographic peer states. Utah's ethnicity peers were determined by comparing the percentage of white students. As with the previous two set of demographic peers, Utah's set of ethnicity peer states is made up of the four states that rank above and below Utah in terms of the criterion (see Appendix III: Figures 3-A, 3-D, 3-G, 3-J, 3-M).

Examining Utah's ethnic profile from 1992 to 2009 highlights a significant change that occurred in Utah over the past two decades: Utah's Hispanic population grew rapidly. From 1992 to 2009, the percentage of Hispanic students in Utah schools increased from 4% to 14%. During this same period Utah's white-student population decreased from 93% to 80%. However, Utah still has a significantly higher percentage of white students (and a significantly lower percentage of ethnic minority students) than the nation overall. Nationally, 61% of students were white in 2009.

Figures in Appendix III show how Utah students consistently scored in the bottom half of the ethnic profile peer group for 8th and 4th grade reading, math and science. In 2009 Utah's students ranked last place in 8th and 4th grade math as well as 4th grade reading (see Appendix III: Figures 3-N and 3-O). In the most recent time period available for science (2005), Utah 8th graders ranked 6th out of 8 peer states (one peer state did not have 8th grade science scores for 2005) while 4th graders ranked 7th out of 9 states.

#### **Overall Demographic Peers**

States that were demographic peers with respect to at least two of the three non-school factors were selected as Utah's overall demographic peers. Again, because the purpose of this report is to analyze how Utah compares to its peer states over time, Utah Foundation determined Utah's overall demographic peers for each of five time periods (1992, 1996, 2000, 2005 and 2009) evaluated in the report. Reassessing Utah's peer states for each time period ensures Utah is always being compared to those states that are most similar to it at a given moment in time in terms of the three non-school factors (poverty, parental education, and ethnicity) addressed in this report. Because the number of states that are identified as Utah's demographic peers in more than one factor varies from year to year, the total number of Utah's overall demographic peer states varies from year to year. In 1992, for example, Utah has only 3 overall demographic peer states, while in 1996 Utah has 6 overall demographic peers.

Utah's overall demographic peers for each period are as follows. In 1992, the overall demographic peer states were Idaho, Minnesota and New Hampshire. In 1996, the overall peer states were Connecticut, Minnesota, North Dakota, Nebraska, Vermont and Wyoming. In 2000, the overall peer states were Idaho, Minnesota, Montana, Nebraska, Virginia and Wyoming. In 2005, the overall peer states were Minnesota, Montana, Nebraska and South Dakota. In 2009, Utah's overall peer states were Minnesota, New Hampshire, New Jersey, South Dakota, Vermont and Wyoming. The remainder of this report is an analysis of how Utah's 8th and 4th grade student achievement compares to the student achievement in its overall demographic peers from 1992 through 2009.

**NAEP TESTING SCORES DATA: OVERALL DEMOGRAPHIC PEER STATES AND THEIR TEST RESULTS**

Figures 1-10 show that Utah’s overall demographic peers consistently outperform Utah students in NAEP testing. In 2009, Utah’s 8th and 4th grade students ranked last among these peers in math and reading (see Figures 9 and 10). In the most recent time period available for science (2005), Utah’s 8th and 4th graders also ranked last (See Figures 7 and 8). The average performance of Utah’s 8th and 4th graders remains at the Basic achievement level and has not reached the Proficient level in math, reading, or science. However, for both the 8th and 4th grades, with very few exceptions, almost all states are scoring at the Basic level for math, reading, and science.

**Math Trends**

Utah scored last or second-to-last place in the overall peer rankings for 8th grade math in all five years included in this report. The gap between Utah and the leader of the overall peer group for 8th grade math has varied from about 7 to 14 points during the years examined. For perspective on how significant that gap is, the difference between the Basic and Proficient levels of performance in 8th grade math is 37 points. Nationally, Utah’s 8th grade students went from being ranked 10th in the U.S. in math in 1992 to 28th in 2009.

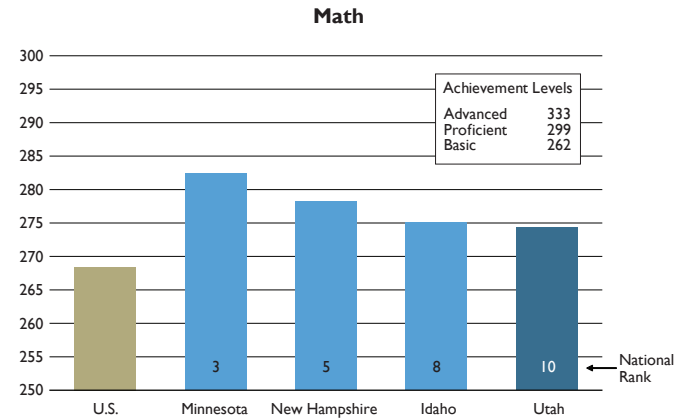
The time series shows mixed results for 4th grade math scores. In 1992, Utah students place second-to-last in the overall demographic peer state comparisons. In both 1996 and 2000, Utah students climbed to third-to-last place. Unfortunately, in the most recent available comparisons for 4th grade math results (2009), Utah students ranked in last place among its overall demographic peers. The gap between Utah and the leader of the overall peer group for 4th grade math has widened steadily since 1992 from about 6 to 11 points. The difference between the Basic and Proficient levels of performance in 4th grade math is 35 points. The national ranking of Utah 4th grade math scores fell from 13th in 1992 to 28th in 2009.

**Reading Trends**

In 8th grade reading, compared to its overall demographic peers, Utah students performed second-to-last in 1996, and last place in 2000, 2005 and 2009 (1992 8th grade reading data are not available). The gap between Utah and the leader of the overall peer group for 8th grade reading has stayed around 7 points during the years examined, which is about one-fifth of the difference between the Basic and Proficient levels of performance in 8th grade reading (38 points). Although Utah’s national rankings for 8th grade reading fell from 15th in 1996 to 28th in 2005, Utah’s national ranking improved from 2005 to 2009, moving up from 28th to 23rd.

In 4th grade reading, Utah has consistently ranked in the bottom half of its group of overall demographic peers. The gap between Utah and the leader of the overall peer group for 4th grade reading has varied from about 4 to 14 points during the years examined. Again, to put that gap in perspective, the difference between the Basic and Proficient levels of performance in 4th grade reading is 30 points. Utah’s national ranking fell from 15th place in 1992 to 31st place in 2009.

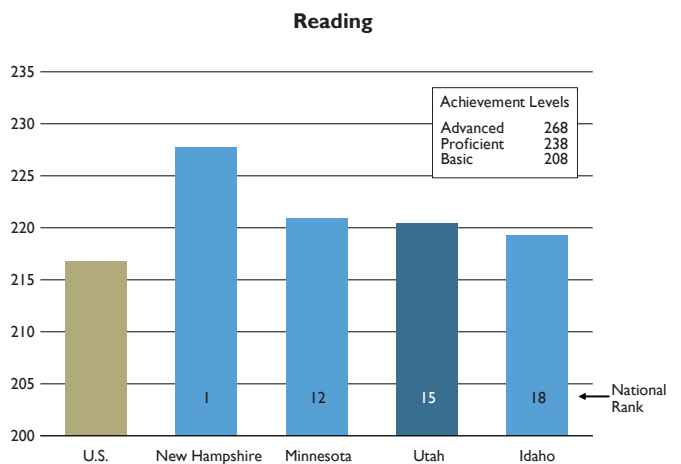
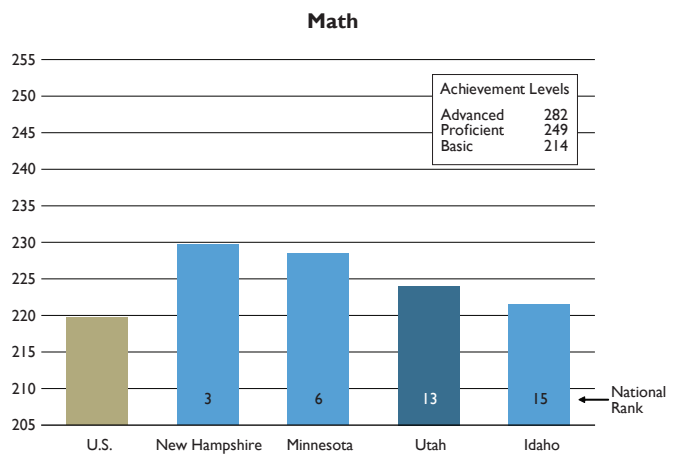
**Figure 1: 1992 Overall Demographic Peer States and Their Performance on 8th Grade Math Tests**



Note: Math score rank is based on 42 participating states, using the 1992 assessment. 8th grade reading and science scores are unavailable for 1992. The scale for the math assessment is 0 to 500.

Source: National Center for Education Statistics, National Assessment of Educational Progress.

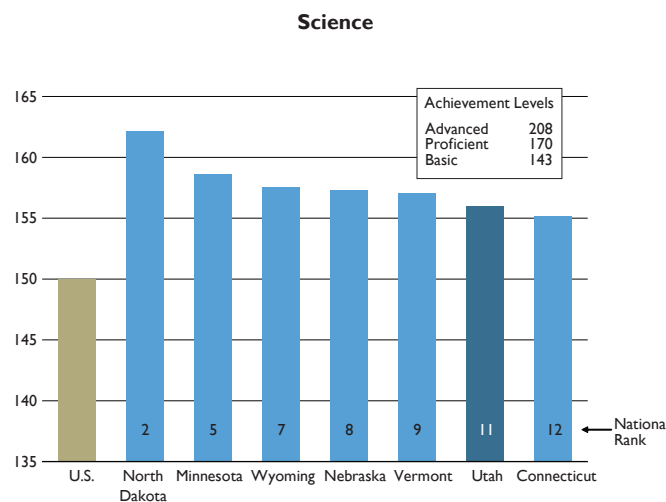
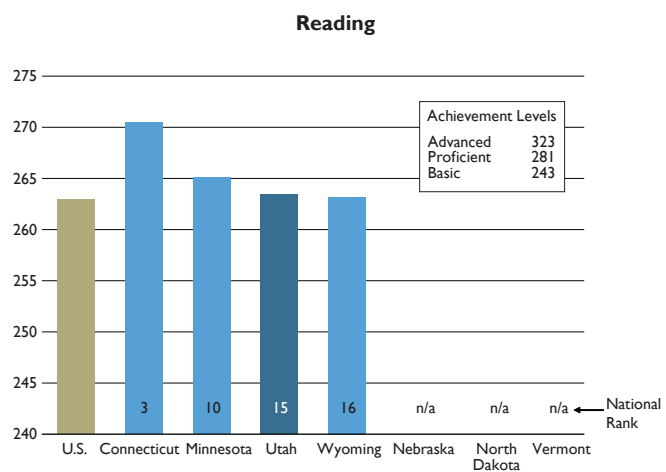
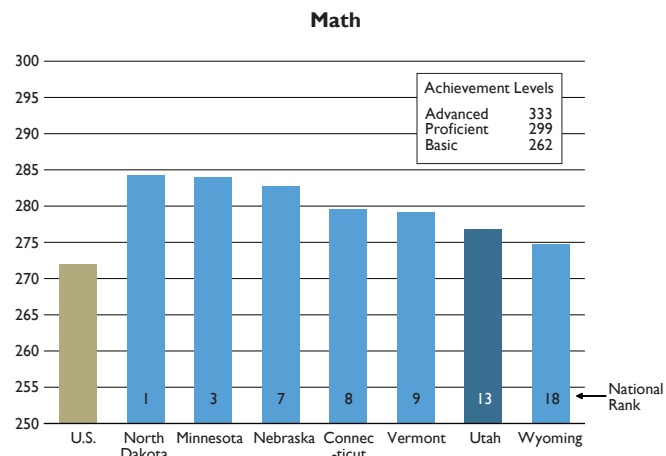
**Figure 2: 1992 Overall Demographic Peer States and Their Performance on 4th Grade Math and Reading Tests**



Note: Math and reading score rank is based on 42 participating states, using 1992 assessments. 4th grade science scores are unavailable for 1992. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

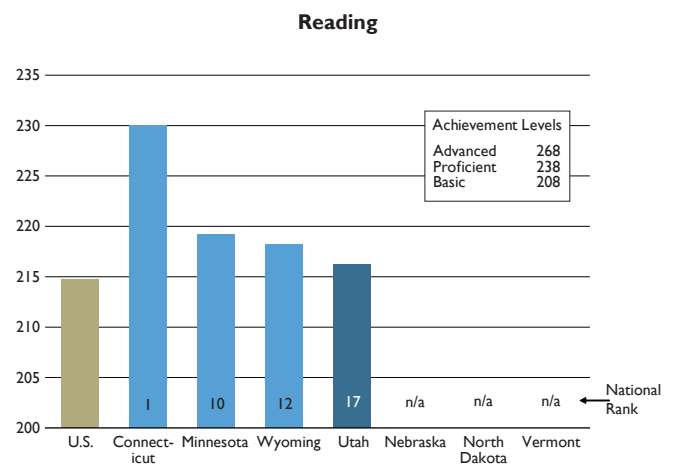
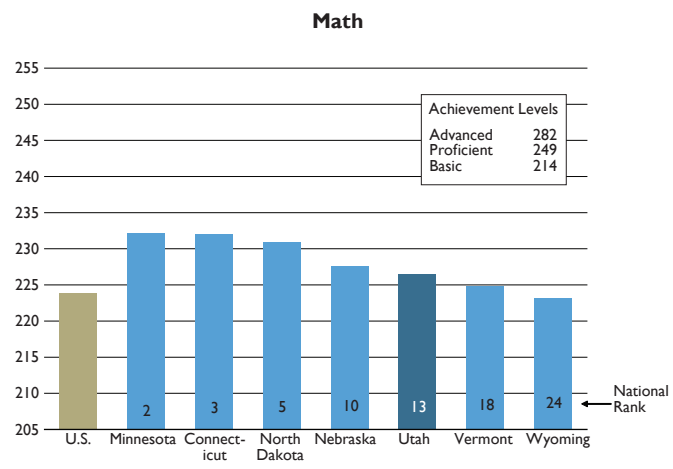
**Figure 3: 1996 Overall Demographic Peer States and Their Performance on 8th Grade Math, Reading, and Science Tests**



Note: Math and science score rank is based on 41 participating states, using 1996 assessments. Reading score rank is based on 37 participating states, using the 1998 assessment. Reading scores are from the 1998 assessment because 1996 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

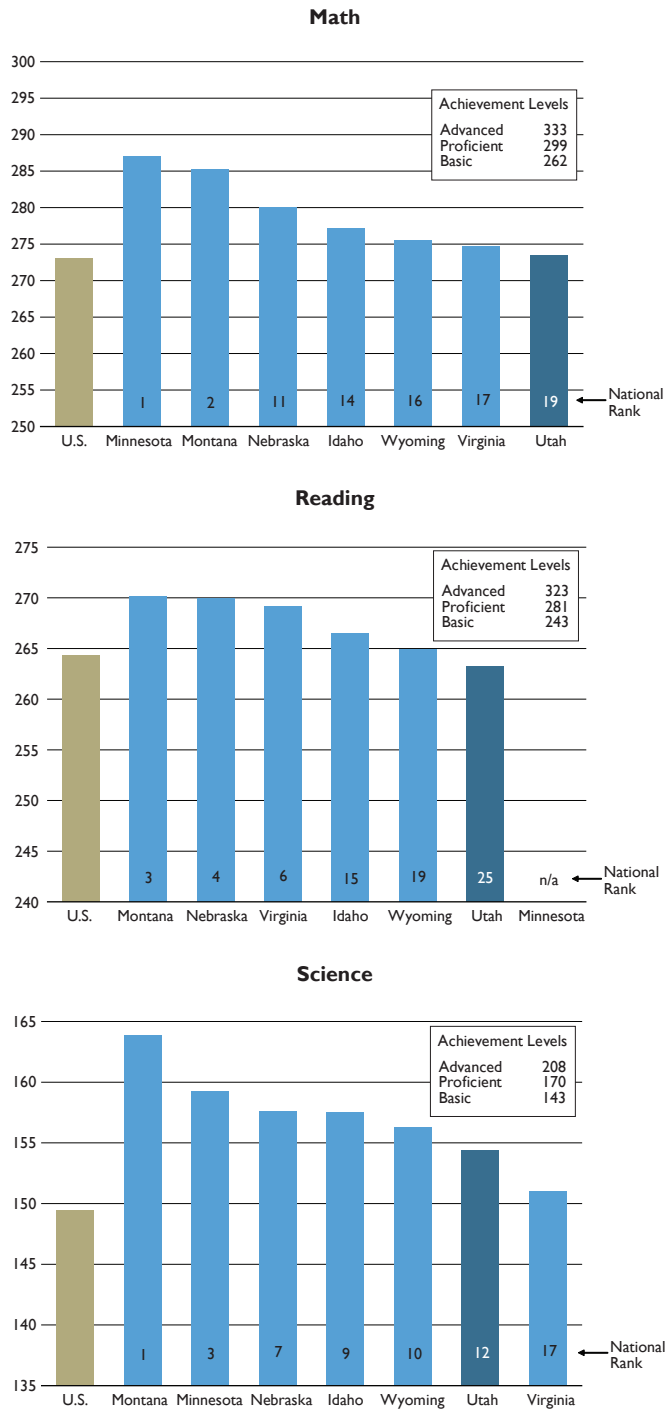
**Figure 4: 1996 Overall Demographic Peer States and Their Performance on 4th Grade Math and Reading Tests**



Note: Math score rank is based on 44 participating states, using the 1996 assessment. Reading score rank is based on 40 participating states, using the 1998 assessment. Reading scores are from 1998 assessments because 1996 data were unavailable. Science scores are not available for 1996 and 1998. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

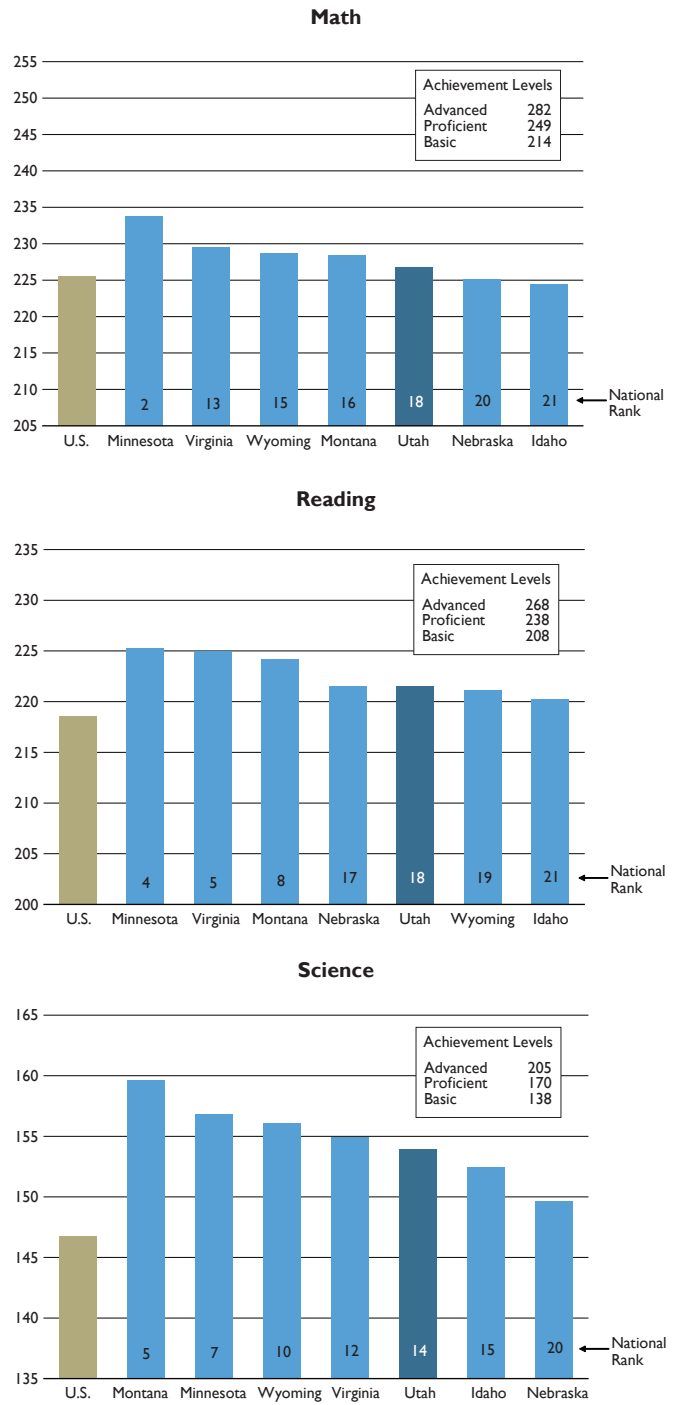
**Figure 5: 2000 Overall Demographic Peer States and Their Performance on 8th Grade Math, Reading, and Science Tests**



Note: Math score rank is based on 40 participating states, using the 2000 assessment. Reading score rank is based on 42 participating states, using the 2002 assessment. Reading scores are from 2002 assessments because 2000 data were unavailable. Science score rank is based on 38 participating states, using the 2000 assessment. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

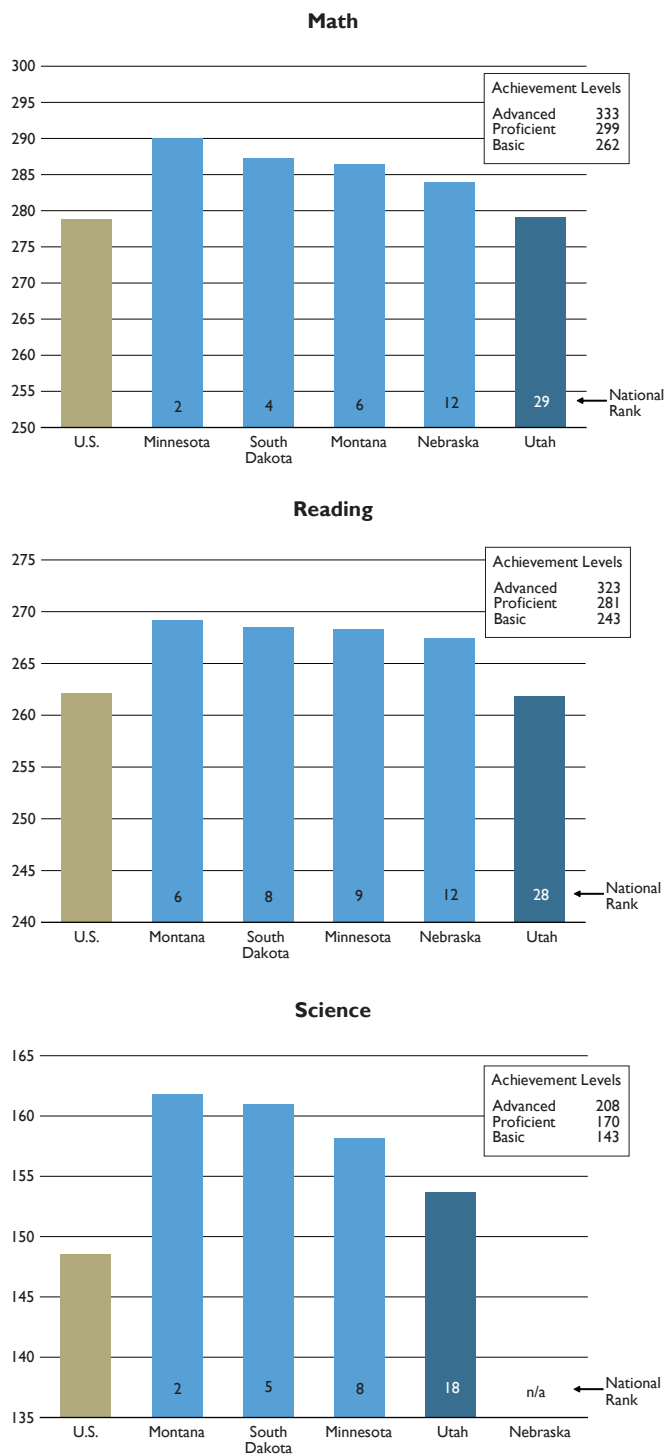
**Figure 6: 2000 Overall Demographic Peer States and Their Performance on 4th Grade Math, Reading, and Science Tests**



Note: Math score rank is based on 41 participating states, using the 2000 assessment. Reading score rank is based on 44 participating states, using the 2002 assessment. Reading scores are from 2002 assessments because 2000 data were unavailable. Science score rank is based on 39 participating states, using the 2000 assessment. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

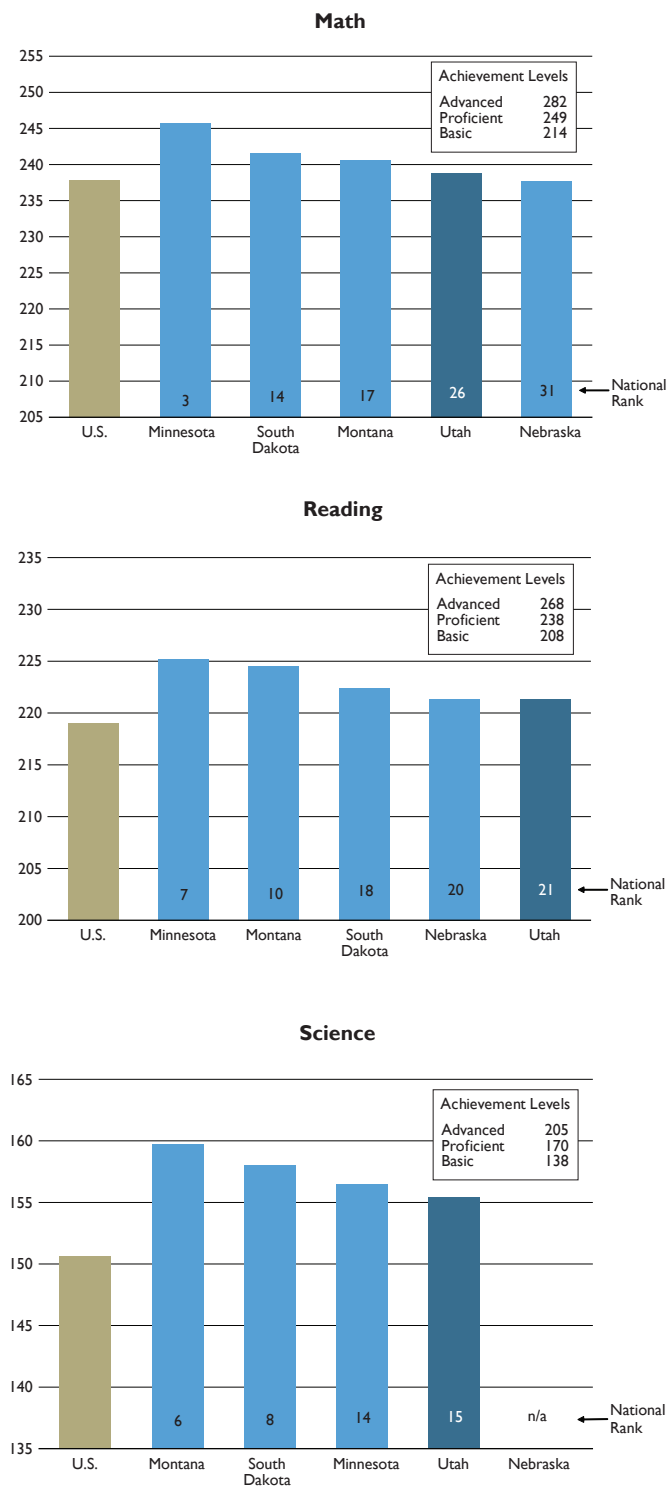
**Figure 7: 2005 Overall Demographic Peer States and Their Performance on 8th Grade Math, Reading, and Science Tests**



Note: Math and reading score rank is based on 50 states plus D.C., using 2005 assessments. Science score rank is based on 44 participating states, using the 2005 assessment. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

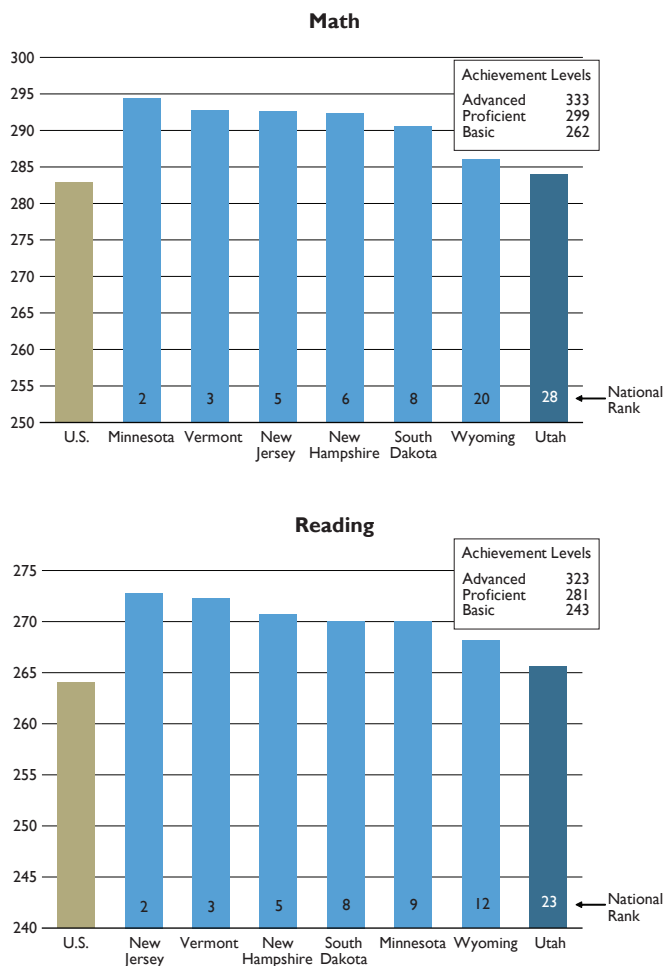
**Figure 8: 2005 Overall Demographic Peer States and Their Performance on 4th Grade Math, Reading, and Science Tests**



Note: Math and reading score rank is based on 50 states plus D.C., using 2005 assessments. Science score rank is based on 44 participating states, using the 2005 assessment. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

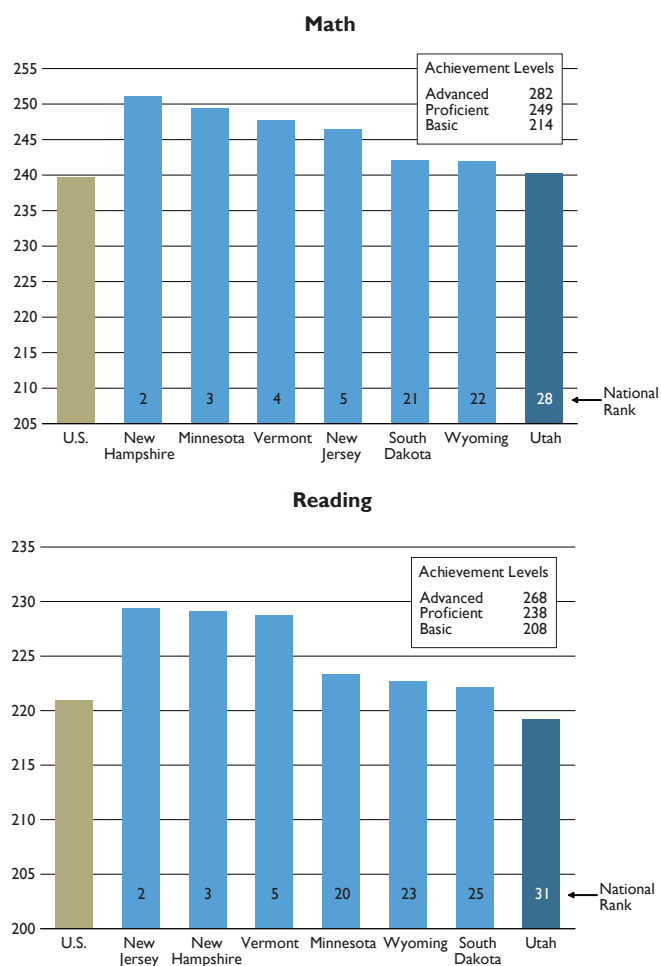
**Figure 9: 2009 Overall Demographic Peer States and Their Performance on 8th Grade Math and Reading Tests**



Note: Math and reading score rank is based on 50 states plus D.C., using 2009 assessments. Science scores are not available for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

**Figure 10: 2009 Overall Demographic Peer States and Their Performance on 4th Grade Math and Reading Tests**



Note: Math and reading score rank is based on 50 states plus D.C., using 2009 assessments. Science scores are not available for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

## Science Trends

8th grade science scores were available for 3 of the 5 years included in this report (1996, 2000, and 2005). In all three years, Utah students ranked last or second-to-last of the overall peer states with science data available. The gap between Utah and the leader of the overall peer group for 8th grade science has varied from about 6 to 9 points during the years examined, which is about one-third to one-fourth of the difference between the Basic and Proficient levels of performance in 8th grade science (27 points). In the national rankings, Utah 8th grade science scores fell from 11th in 1996, to 12th in 2000, and to 18th in 2005.

Science scores for 4th grade students are only available for two (2000 and 2005) of the years included in this report. Utah places third-to-last among overall demographic peers in 2000 and places last among overall peers in 2005. The gap between Utah and the leader of the overall peer group for 4th grade science was 4 and 6 points during the years examined. The difference between the Basic and Proficient levels of performance in 4th grade science is

32 points. The national rankings show Utah students move down one place from 14th in 2000 to 15th in 2009.

## Utah Compared to Minnesota: Utah's Consistent Peer

Only one state is an overall demographic peer to Utah in every year examined between 1992 and 2009: Minnesota. Because this state is present in every peer state comparison, it is useful to track how Utah compares to Minnesota over time. Figure 11 compares how the U.S., Utah, and Minnesota compare with respect to 8th grade math and 4th grade reading from 1992 to 2009. Student math performance at the eighth grade helps demonstrate students' readiness for secondary-level learning in math, science and technology subjects. Fourth grade is a crucial year for reading because this is when students need to begin to "read to learn" rather than "learn to read."

In 8th grade math, both Utah and Minnesota show significant gains over the 17-year span. However, while Utah increased 10 points in 8th grade math from 1992-2009, Minnesota increased 12 points to 294, thus maintaining its advantage over Utah while nearly crossing into the Proficient level of achievement. Once again, U.S. gains (15



points from 1992 to 2009) surpassed both Utah and Minnesota. In addition, while Utah has steadily moved down in the national rankings in 8th grade math (from 10th to 28th), Minnesota has held its place as a national leader despite demographic changes similar to Utah's demographic changes, ranking in the top 3 states in all years examined. With respect to science achievement, which is not included in the figure, there has been almost no change in average scores for 8th grade students from 1996 to 2005 in the U.S., Utah, and Minnesota.

Utah trails Minnesota in every year illustrated in Figure 11. Both Utah and Minnesota are relatively level for 4th grade reading from 1992 to 2009 (Minnesota gains 2 points while Utah loses 1). The gap narrowed slightly both between Utah and the U.S. and between Minnesota and the U.S. as national 4th grade reading scores increased by 4 points during this period. Both Utah and Minnesota have moved down in the national rankings in 4th grade math, Utah from 15th to 31st, Minnesota from 12th to 20th.

Another way to examine NAEP data is to look at the percent of students who perform at the Proficient (or "passing") level, rather than the average score of all students combined. Figures 11 compares how the U.S., Utah, and Minnesota compare with respect to the

percentage of students who score at the Proficient level or higher for 8th grade math and 4th grade reading from 1992 to 2009.

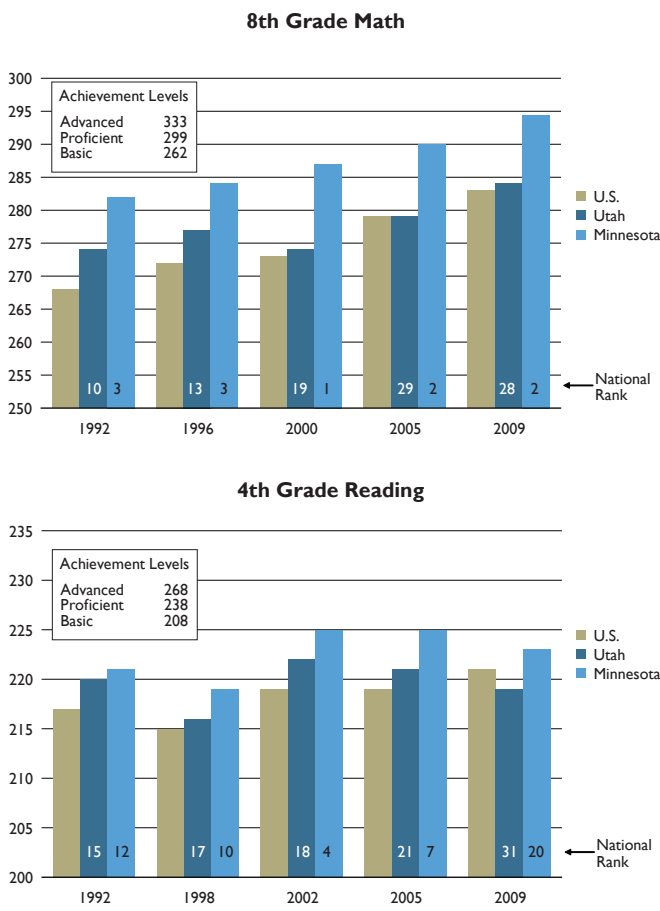
Figure 12 shows that the U.S., Utah, and Minnesota all made significant gains in the percentage of students performing at or above the Proficient level in 8th grade math. Both the U.S. and Utah gained 13 percentage points, while Minnesota gained 16 percentage points, widening its advantage over both Utah and the nation overall. By 2009, nearly half (47%) of all eighth grade students in Minnesota performed proficiently or better in math, while in both the U.S. and Utah only about a third (34% and 35% respectively) of students did.

Figure 12 also shows that the U.S. as a whole has shown small but steady growth in the percentage of students scoring at or above the Proficient level in 4th grade reading (from 29% in 1992 to 33% in 2009). During this time period, Minnesota's gains (31% of students performing proficiently or better in 1992 to 37% in 2009) outstrip U.S. gains, while Utah's recent decline causes it to fall below the national average.

### Utah's Scores Over Time

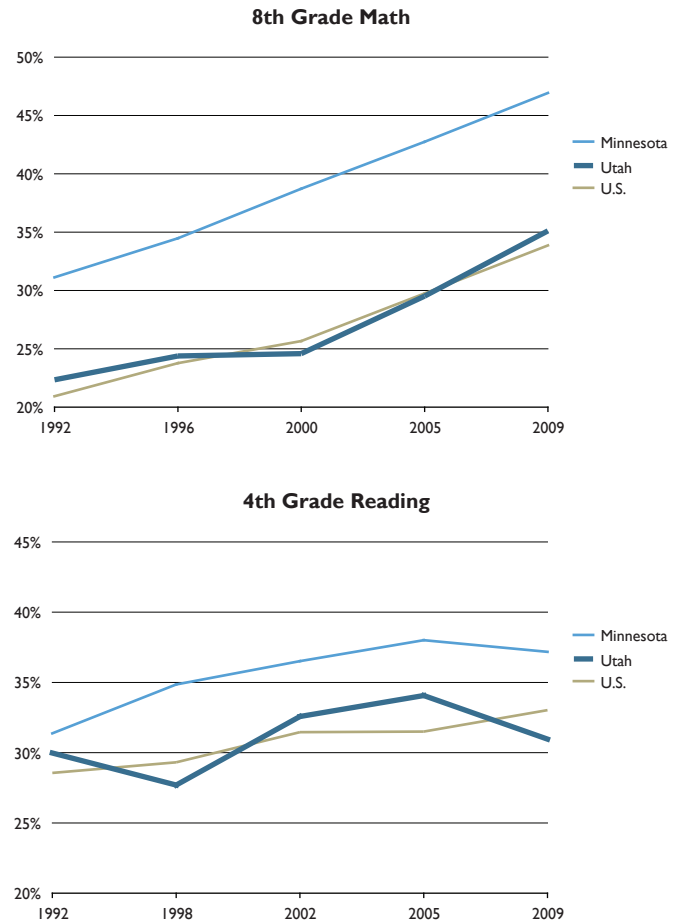
While this report has focused on how Utah compares to other states in terms of its academic achievement, it is also useful to

**Figure 11: Average Score on 8th Grade Math and 4th Grade Reading NAEP Tests, U.S., Utah, and Minnesota, 1992-2009**



Note: Math score rank is based on 42 participating states in 1992, 41 participating states in 1996, 40 participating states in 2000, 50 states plus D.C. in 2005, and 50 states plus D.C. in 2009.

**Figure 12: Percent of Students Performing at or Above the Proficient Level on 8th Grade Math and 4th Grade Reading NAEP Tests, U.S., Utah, and Minnesota, 1992-2009**



Source: NCES, NAEP.

see how Utah's scores have changed over time. Figure 12 shows the changes in 8th and 4th grade math and reading scores for both Utah and the United States over the five years of test scores examined in this report. In both 8th and 4th grade math, although over time Utah often compares less favorably with its peer states, Utah's actual scores are, in fact, improving over time. In reading, however, Utah's scores are relatively stagnant for both 8th and 4th grade students. Figure 12 also shows that although Utah's math test scores are improving, the gap between Utah scores and the national average has closed at the 4th grade and very nearly closed at the 8th grade.

## CONCLUSION

The purpose of this report has been to compare "apples to apples," or Utah's test scores to its demographic peer states rather than simply comparing to national averages, when Utah is quite different than the national average with respect to non-academic factors that affect student achievement. Unfortunately, when Utah is compared to states that have similar levels of poverty, parental education, and ethnic diversity, Utah compares less favorably than it does in comparison to national averages.

This report includes 24 separate rankings of Utah with its overall demographic peer states in math, reading, and science for 8th and 4th grade students. Utah ranks in the bottom half of its overall demographic peer group for all 24 NAEP testing comparisons. In addition, Utah ranks last in 12 of the 24 NAEP comparisons with overall peers. The average performance of Utah's 8th and 4th graders remains at the Basic achievement level and has not reached the Proficient level in math, reading, or science. However, for both 8th and 4th grades, with very few exceptions, almost all states are scoring at the Basic level for math, reading, and science for the most recent year of data available (2009 for reading and math, 2005 for science). For 8th grade math, only Massachusetts scores at the Proficient level (District of Columbia scores below the Basic level and all other states score at the Basic level). For 4th grade math, Massachusetts, Minnesota, and New Hampshire all score at the Proficient level in 2009 and all other states score at the Basic level. For both 8th and 4th grade reading, no states score at the Proficient level (the District of Columbia scores below the Basic level for both 8th and 4th grade reading while Louisiana scores below the Basic level for 4th grade reading). For both 8th and 4th grade science, no states score at the Proficient level, and 9 states score below the Basic level for 8th grade science. The gaps between Utah and the leading overall demographic peer were always less than half of the difference between the Basic and proficient achievement levels for a given grade and subject. In 4th grade math, the gap between Utah and the leader widened from 1992 to 2009, but for other grades and subjects, the gaps both widened and narrowed from 1992 to 2009.

The overriding and disconcerting fact that came out of Utah Foundation's 2007 report was that Utah students scored lowest in math, reading, and science when compared with their overall demographic peers in 2005 and 2007. This report shows that Utah has been performing at the low end of its demographic peer group for nearly two decades. Moreover, with respect to national rankings, Utah has been trending significantly downward and even scores below the national average in fourth grade reading. Additional

research would be necessary to more definitively explain possible causes of these achievement trends.

## The Trajectory of Utah Schools

This report has attempted to offer an analysis of Utah student test performance achievement through the lens of demographic comparisons. It has illustrated whether Utah is keeping pace with student performance in states with similar classroom demographics. Although the demographic peer groups across the years (1992-2009) changed, tracking the achievement path of Utah and its most recent overall demographic peers serves as a starting point in discussing the trajectory of Utah student performance. Clearly, there is room for improvement in Utah's classrooms. The fact that similar states are outperforming Utah in the classroom is an issue that policy makers, education associations, teachers, and education officials must further examine if Utah is to move forward and compete with, not only national test scores, but the test scores of the states that have some of the same demographic advantages as Utah.

## ENDNOTES

- 1 "School Testing Results, 2006 & 2007: How Utah Compares to Other States," Utah Foundation, Report 681 (2007).
- 2 For two of the years, 1996 and 2000, NAEP data for reading scores were not available. Therefore, reading scores from 1998 and 2002 were used to supplement the comparisons.
- 3 National Center for Education Statistics, "NAEP Overview," <http://nces.ed.gov/nationsreportcard/about/>.
- 4 NAEP Data Explorer, National Center for Education Studies, <http://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx>.
- 5 U.S. Department of Education, "Mathematics 2009: National Assessment of Educational Progress at Grades 4 and 8," The Nation's Report Card, National Center for Education Statistics, NCES 2010-451 (Washington, D.C.: U.S. Government Printing Office, 2010). As provided by law, NCES, upon review of congressionally mandated evaluations of NAEP, has determined that achievement levels are to be used on a trial basis and should be interpreted with caution. The NAEP achievement levels have been widely used by national and state officials.
- 6 National Center for Education Statistics, "The NAEP Mathematics Achievement Levels by Grade," <http://nces.ed.gov/nationsreportcard/mathematics/achieveall.asp>; "The NAEP Reading Achievement Levels by Grade," <http://nces.ed.gov/nationsreportcard/reading/achieveall.asp>; "The NAEP Science Achievement Levels," <http://nces.ed.gov/nationsreportcard/science/achieveall.asp>.
- 7 Ginger M. Reynolds, "Bridging the Great Divide: Broadening Perspectives on Closing the Achievement Gaps: A Research-Based Approach," North Central Regional Educational Laboratory, Viewpoints Vol. 9 (2002). Available from <http://www.ncrel.org/policy/pubs/pdfs/bridging.pdf>. Nancy Vaden-Kiernan and John McManus, "Parent and Family Involvement in Education: 2002-03," National Center for Education Statistics, NCES 2005-043 (Washington, D.C.: U.S. Government Printing Office, 2005). Available from <http://nces.ed.gov/pubs2005/2005043.pdf>.
- 8 Ginger M. Reynolds. The Education Trust, "Funding Gaps 2006," <http://www2.edtrust.org/edtrust/product+catalog/main>. Enrique Aleman, Jr. and Andrea K. Rorrer, "Closing Educational Achievement Gaps for Latina/o Students in Utah: Initiating a Policy Discourse and Framework," Prepared for Centro de la Familia de Utah by Utah Education Policy Center (Salt Lake City, UT: University of Utah, 2006). Gary Orfield and Chungmei Lee, "Why Segregation Matters: Poverty and Educational Inequality," The Civil Rights Project, Harvard University (16 January 2005). Available from [http://bsdweb.bsdt.org/district/EquityExcellence/Research/Why\\_Segreg\\_Matters.pdf](http://bsdweb.bsdt.org/district/EquityExcellence/Research/Why_Segreg_Matters.pdf).
- 9 All of the math and science data used in this report are from 1992, 1996, 2000, 2005 and 2009. Please note, however, that some of the reading data comes from the 1998 (instead of 1996) and 2002 (instead of 2000) assessments.

10 In Figures 1-J, 2-A, and 2-D Utah ranks so close to the top or bottom of the respective rankings that there were not four states directly above and below Utah.

11 “Educational Attainment: Utah Falling Behind National Trends,” Utah Foundation, Brief, (2009).

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This research report was written by Research Analyst Conrad Walsh and Research Consultant Elizabeth Escandon, with assistance from Research Analyst Laura Summers and President Stephen Kroes. Mr. Kroes may be reached for comment at (801) 355-1400. He may also be contacted by email at: [steve@utahfoundation.org](mailto:steve@utahfoundation.org).

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# APPENDIX I: STATES WITH STUDENT POVERTY LEVELS SIMILAR TO UTAH

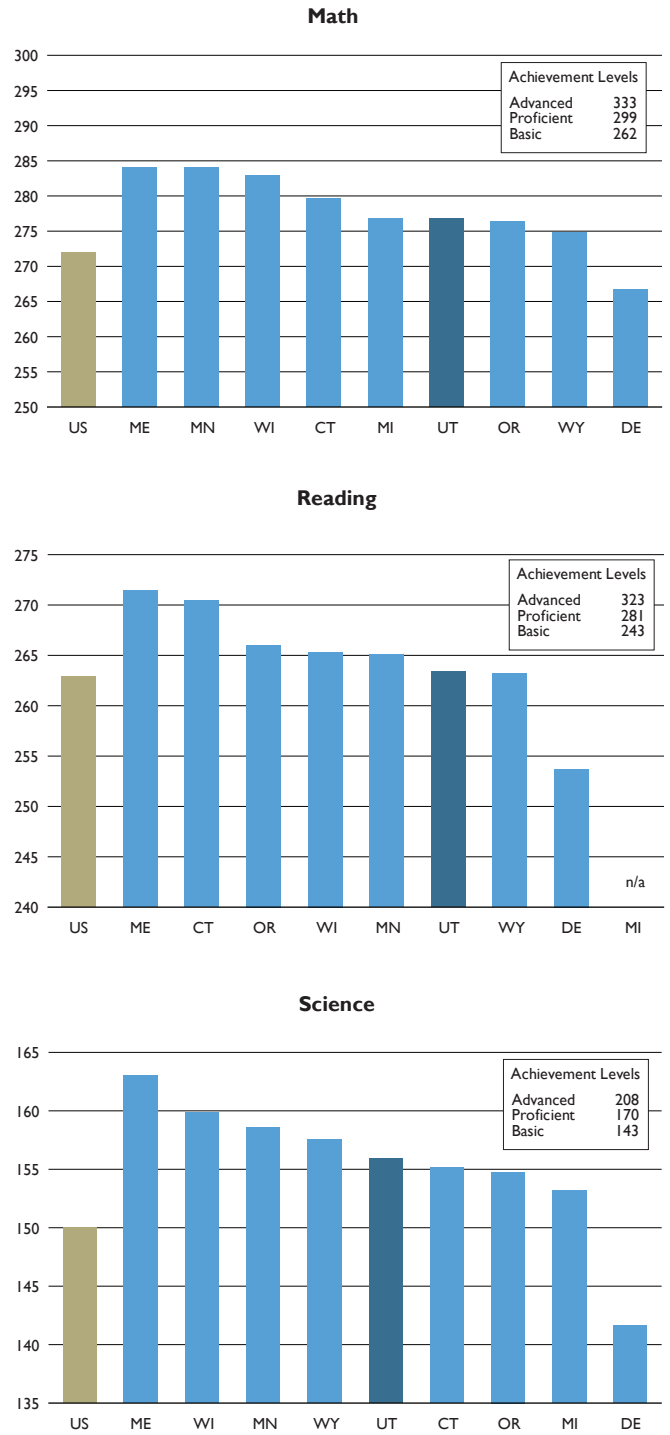
**Figure I-A: States with Student Poverty Levels Similar to Utah, 1996**

Ranked by Percent Eligible for Free and Reduced-Price Lunch

Jurisdiction	Eligible	Not Eligible	Unknown	National Rank
<b>US Average</b>	<b>27%</b>	<b>55%</b>	<b>17%</b>	
Delaware	20%	59%	21%	46
Minnesota	20%	65%	15%	45
Michigan	20%	66%	14%	44
Wisconsin	20%	67%	14%	43
<b>Utah</b>	<b>20%</b>	<b>70%</b>	<b>10%</b>	<b>42</b>
Wyoming	21%	73%	6%	41
Connecticut	21%	74%	5%	40
Oregon	22%	62%	16%	39
Maine	22%	73%	6%	38

Source: NCES, NAEP.

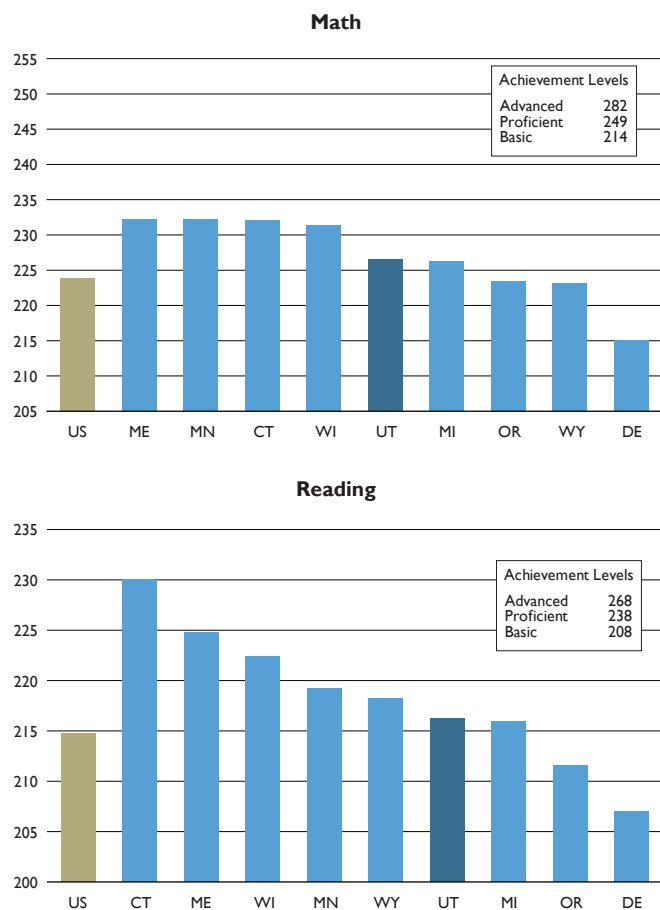
**Figure I-B: States with Similar Student Poverty Levels and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 1996**



Note: Reading scores are from the 1998 assessment because 1996 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure I-C: States with Similar Student Poverty Levels and Their Performance on 4th Grade NAEP Math and Reading Tests, 1996**



Note: Reading scores are from the 1998 assessment because 1996 data were unavailable. Science scores are unavailable for 1996 and 1998. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

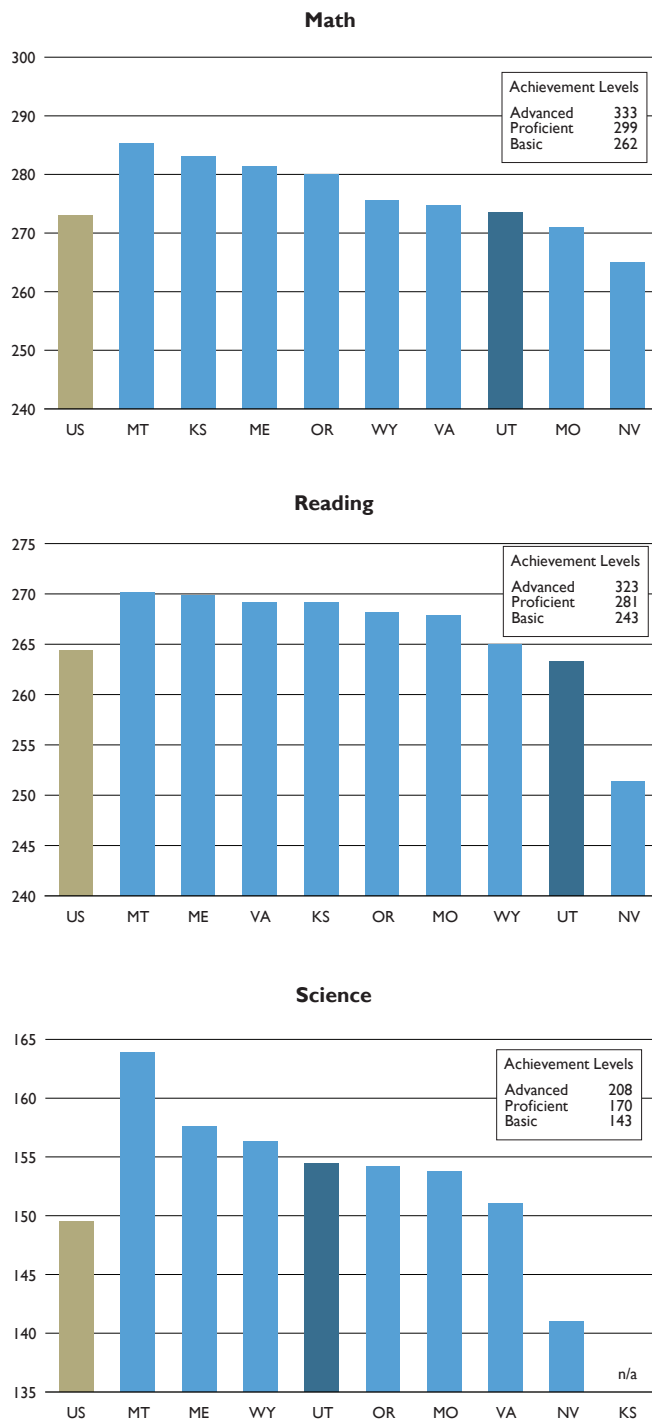
**Figure I-D: States with Student Poverty Levels Similar to Utah, 2000**

Ranked by Percent Eligible for Free and Reduced-Price Lunch

Jurisdiction	Eligible	Not Eligible	Unknown	National Rank
<b>US Average</b>	<b>29%</b>	<b>51%</b>	<b>20%</b>	
Kansas	23%	66%	11%	31
Virginia	23%	69%	8%	30
Maine	23%	71%	5%	29
Oregon	24%	60%	16%	28
<b>Utah</b>	<b>24%</b>	<b>67%</b>	<b>9%</b>	<b>27</b>
Montana	26%	55%	19%	26
Wyoming	26%	70%	5%	25
Nevada	27%	69%	4%	24
Missouri	28%	65%	8%	23

Source: NCES, NAEP.

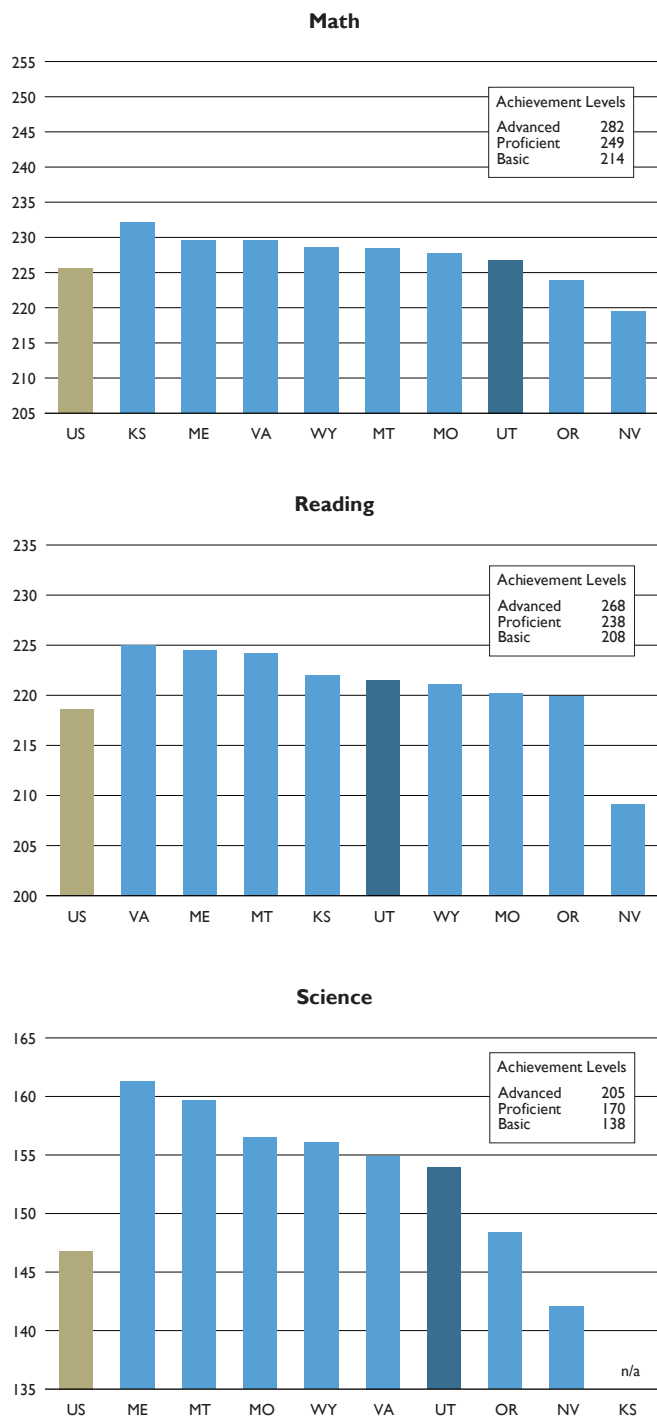
**Figure I-E: States with Similar Student Poverty Levels and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 2000**



Note: Reading scores are from the 2002 assessment because 2000 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure I-F: States with Similar Student Poverty Levels and Their Performance on 4th Grade NAEP Math, Reading, and Science Tests, 2000**



Source: NCES, NAEP.

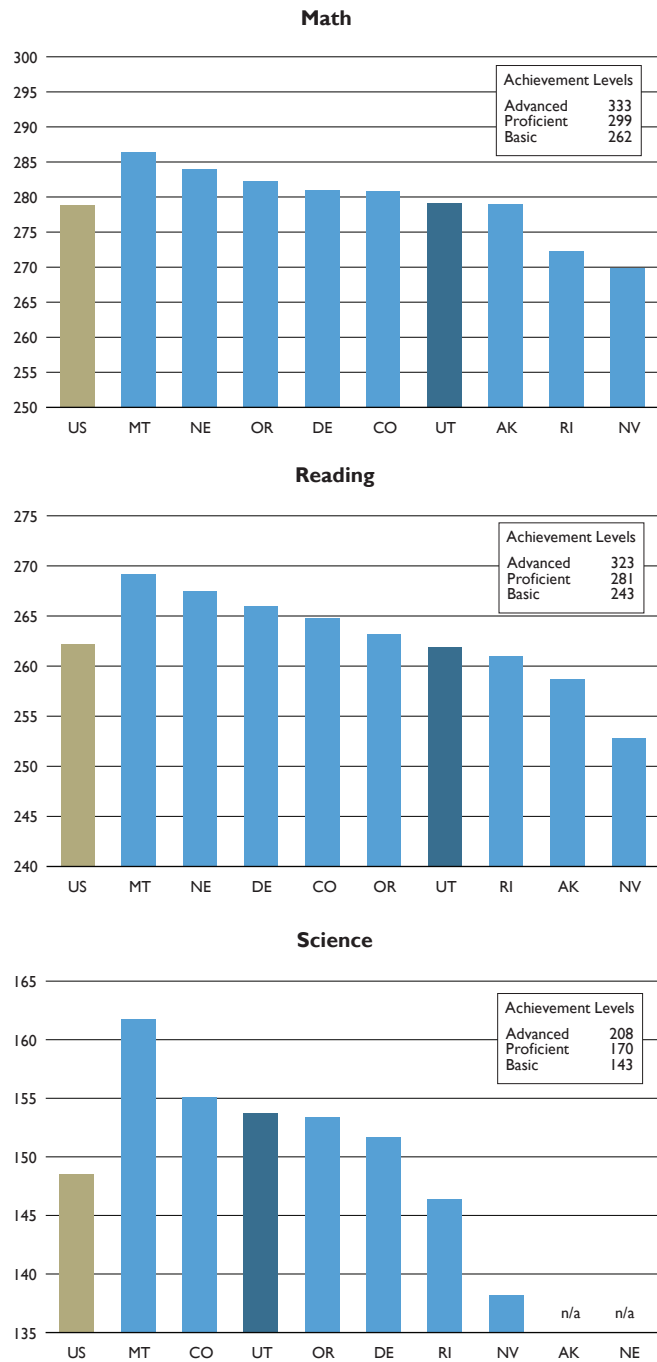
**Figure I-G: States with Student Poverty Levels Similar to Utah, 2005**

Ranked by Percent Eligible for Free and Reduced-Price Lunch

Jurisdiction	Eligible	Not Eligible	Unknown	National Rank
<b>US Average</b>	<b>36%</b>	<b>56%</b>	<b>8%</b>	
Montana	31%	67%	2%	33
Colorado	31%	68%	1%	32
Nebraska	31%	68%	1%	31
Rhode Island	31%	69%	0%	31
<b>Utah</b>	<b>31%</b>	<b>69%</b>	<b>0%</b>	<b>30</b>
Delaware	32%	65%	3%	30
Nevada	32%	65%	3%	29
Oregon	33%	63%	3%	29
Alaska	34%	64%	2%	28

Source: NCES, NAEP.

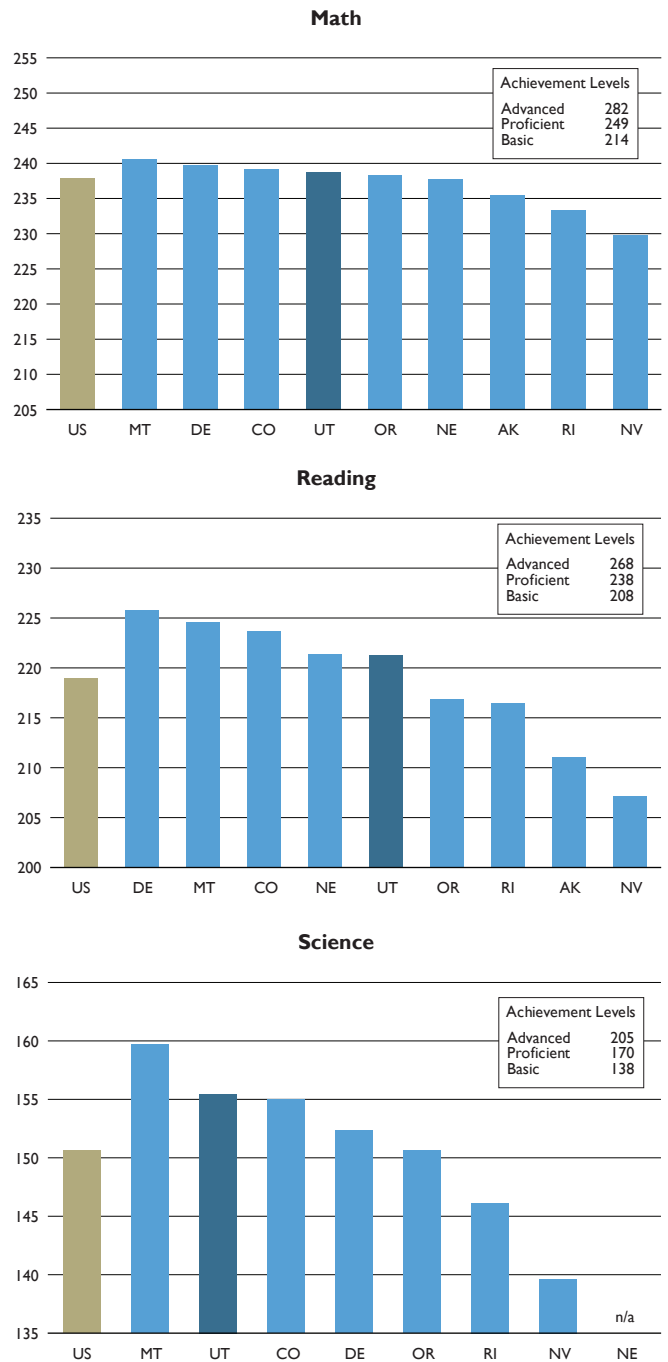
**Figure I-H: States with Similar Student Poverty Levels and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 2005**



Note: The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure I-I: States with Similar Student Poverty Levels and Their Performance on 4th Grade NAEP Math, Reading, and Science Tests, 2005**



Note: The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

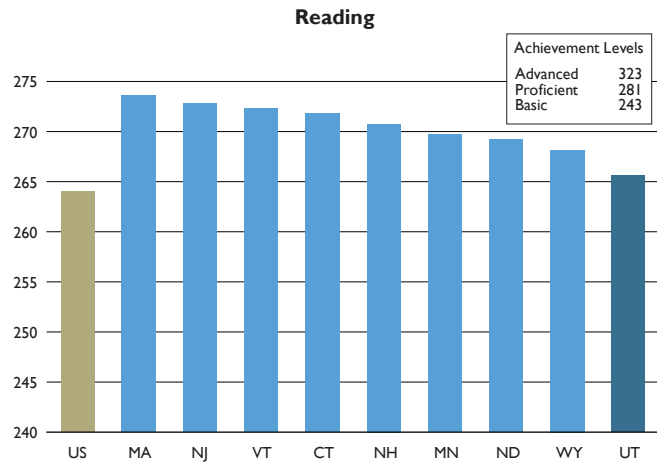
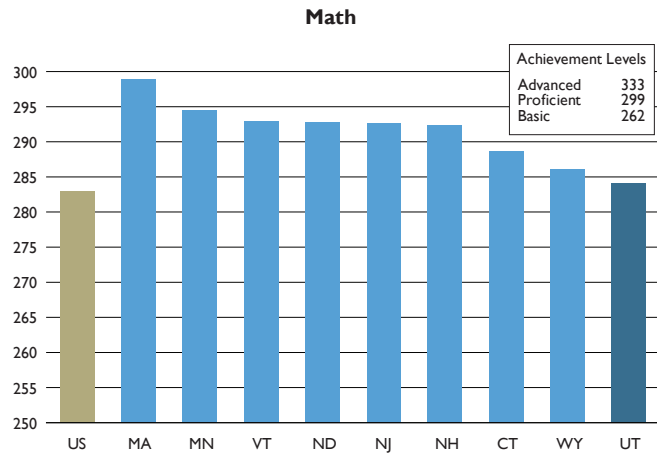
**Figure I-J: States with Student Poverty Levels Similar to Utah, 2009**

Ranked by Percent Eligible for Free and Reduced-Price Lunch

Jurisdiction	Eligible	Not Eligible	Unknown	National Rank
<b>US Average</b>	<b>39%</b>	<b>54%</b>	<b>7%</b>	
New Hampshire	20%	77%	3%	37
Connecticut	26%	74%	0%	36
<b>Utah</b>	<b>27%</b>	<b>64%</b>	<b>9%</b>	<b>35</b>
New Jersey	27%	71%	2%	34
Minnesota	27%	73%	0%	33
Massachusetts	29%	71%	0%	32
North Dakota	29%	71%	0%	32
Vermont	29%	71%	0%	32
Wyoming	29%	71%	0%	32

Source: NCES, NAEP.

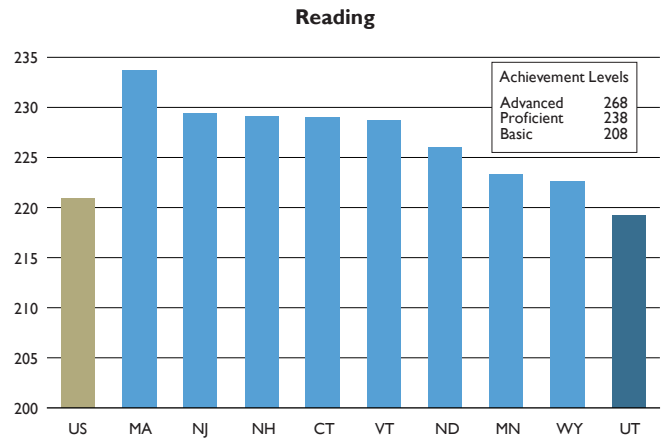
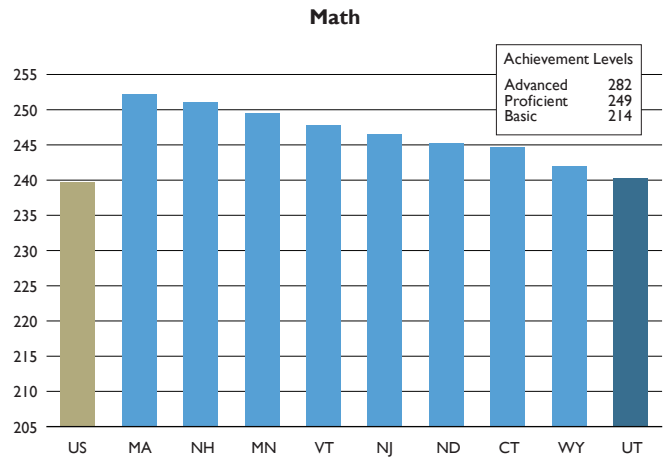
**Figure I-K: States with Similar Student Poverty Levels and Their Performance on 8th Grade NAEP Math and Reading Tests, 2009**



Note: Science scores are unavailable for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

**Figure I-L: States with Similar Student Poverty Levels and Their Performance on 4th Grade NAEP Math and Reading Tests, 2009**



Note: Science scores are unavailable for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.



# APPENDIX II: STATES WITH PARENTAL EDUCATION LEVELS SIMILAR TO UTAH

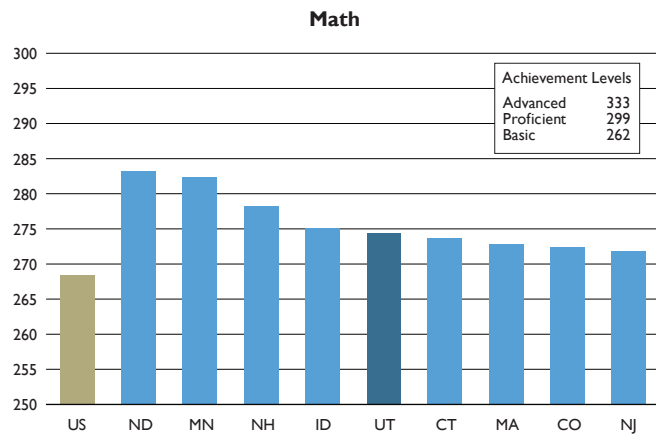
**Figure 2-A: States with Parental Education Levels Similar to Utah, 1992**

Ranked by Percent of Students With at Least One College-Graduate Parent

Jurisdiction	Did Not Finish H.S.	Graduated High School	Some Ed. After H.S.	Graduated College	Unknown	National Rank
<b>US Average</b>	<b>8%</b>	<b>24%</b>	<b>18%</b>	<b>42%</b>	<b>9%</b>	
New Jersey	7%	23%	18%	45%	8%	8
Colorado	6%	21%	19%	46%	7%	7
New Hampshire	6%	24%	17%	46%	7%	6
Connecticut	6%	22%	16%	47%	9%	5
Minnesota	3%	22%	21%	48%	7%	4
Idaho	7%	19%	20%	48%	6%	3
Massachusetts	7%	21%	17%	48%	7%	3
<b>Utah</b>	<b>3%</b>	<b>15%</b>	<b>22%</b>	<b>53%</b>	<b>7%</b>	<b>2</b>
North Dakota	3%	19%	18%	54%	5%	1

Source: NCES, NAEP.

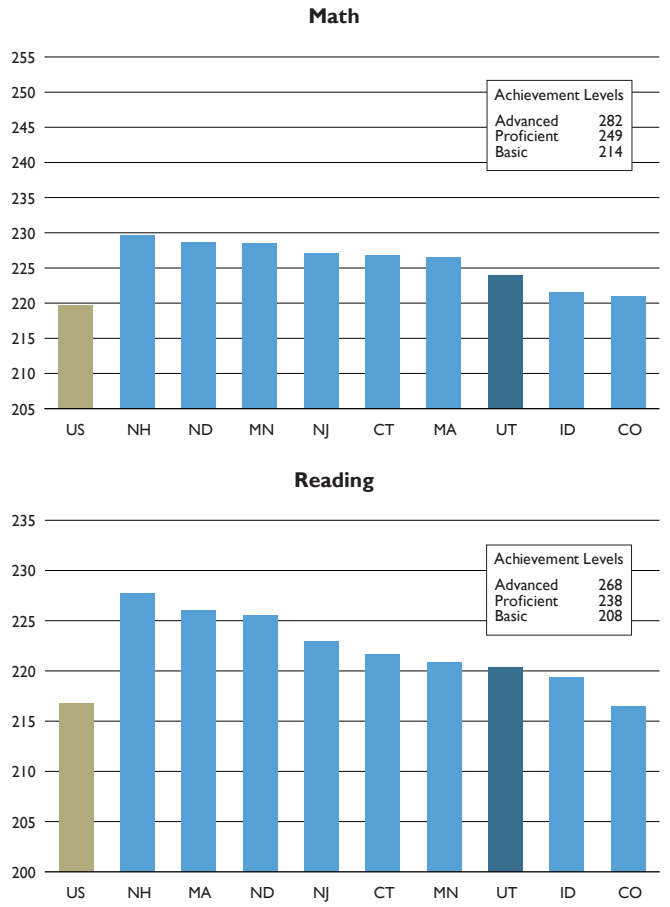
**Figure 2-B: States with Similar Parental Education Levels and Their Performance on 8th Grade NAEP Math Test, 1992**



Note: 8th grade reading and science scores are unavailable for 1992. The scale for the math assessment is 0 to 500.

Source: NCES, NAEP.

**Figure 2-C: States with Similar Parental Education Levels and Their Performance on 4th Grade NAEP Math and Reading Tests, 1992**



Note: 4th grade science scores are unavailable for 1992. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

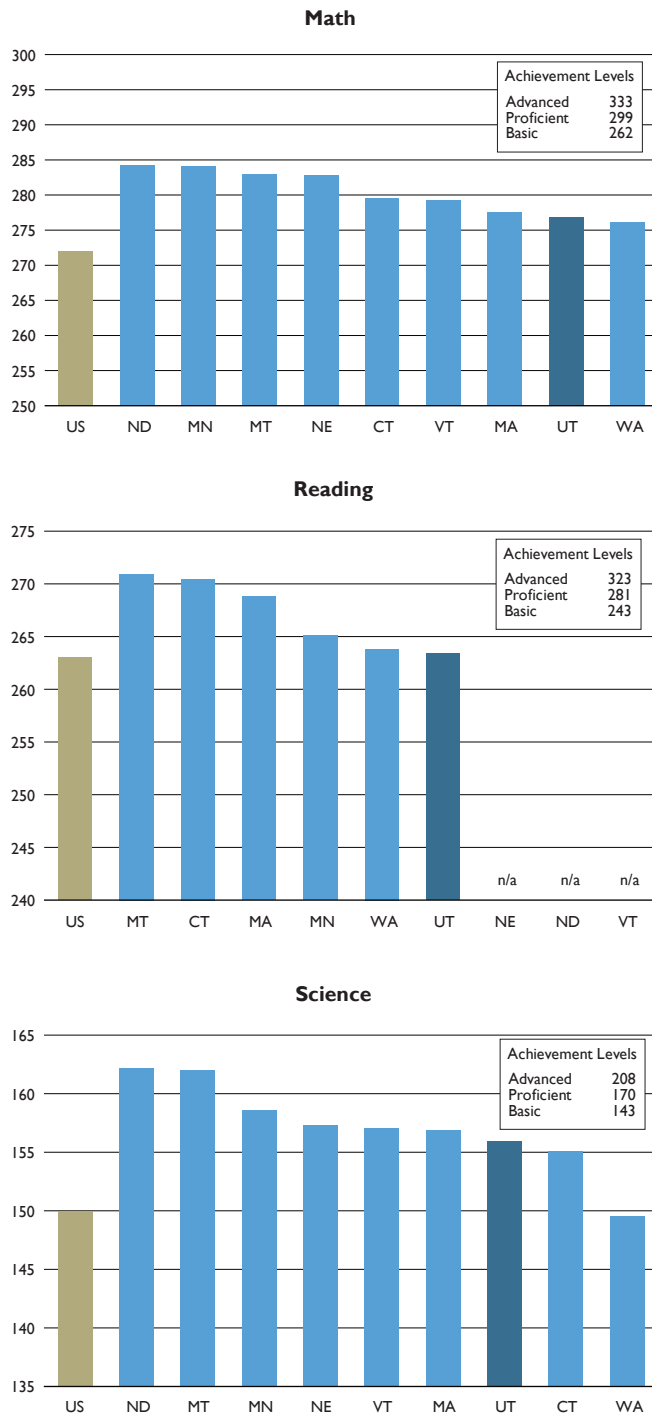
**Figure 2-D: States with Parental Education Levels Similar to Utah, 1996**

Ranked by Percent of Students With at Least One College-Graduate Parent

Jurisdiction	Did Not Finish H.S.	Graduated High School	Some Ed. After H.S.	Graduated College	Unknown	National Rank
<b>US Average</b>	<b>7%</b>	<b>22%</b>	<b>19%</b>	<b>42%</b>	<b>11%</b>	
Washington	6%	16%	21%	46%	12%	9
Nebraska	4%	22%	20%	47%	7%	8
Montana	6%	21%	20%	48%	6%	7
Vermont	5%	25%	16%	49%	6%	6
Minnesota	3%	21%	19%	50%	8%	5
Connecticut	5%	19%	17%	51%	9%	4
Massachusetts	6%	18%	15%	51%	10%	3
<b>Utah</b>	<b>3%</b>	<b>17%</b>	<b>18%</b>	<b>53%</b>	<b>9%</b>	<b>2</b>
North Dakota	3%	19%	16%	55%	7%	1

Source: NCES, NAEP.

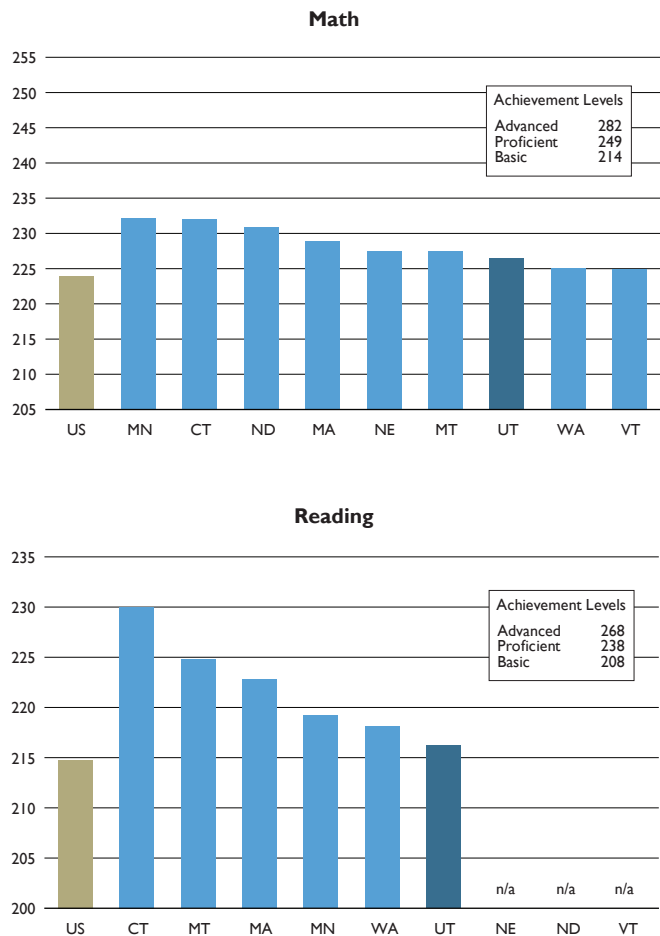
**Figure 2-E: States with Similar Parental Education Levels and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 1996**



Note: Reading scores are from the 1998 assessment because 1996 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure 2-F: States with Similar Parental Education Levels and Their Performance on 4th Grade NAEP Math and Reading Tests, 1996**



Note: Reading scores are from the 1998 assessment because 1996 data were unavailable. Science scores are not available for 1996 and 1998. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

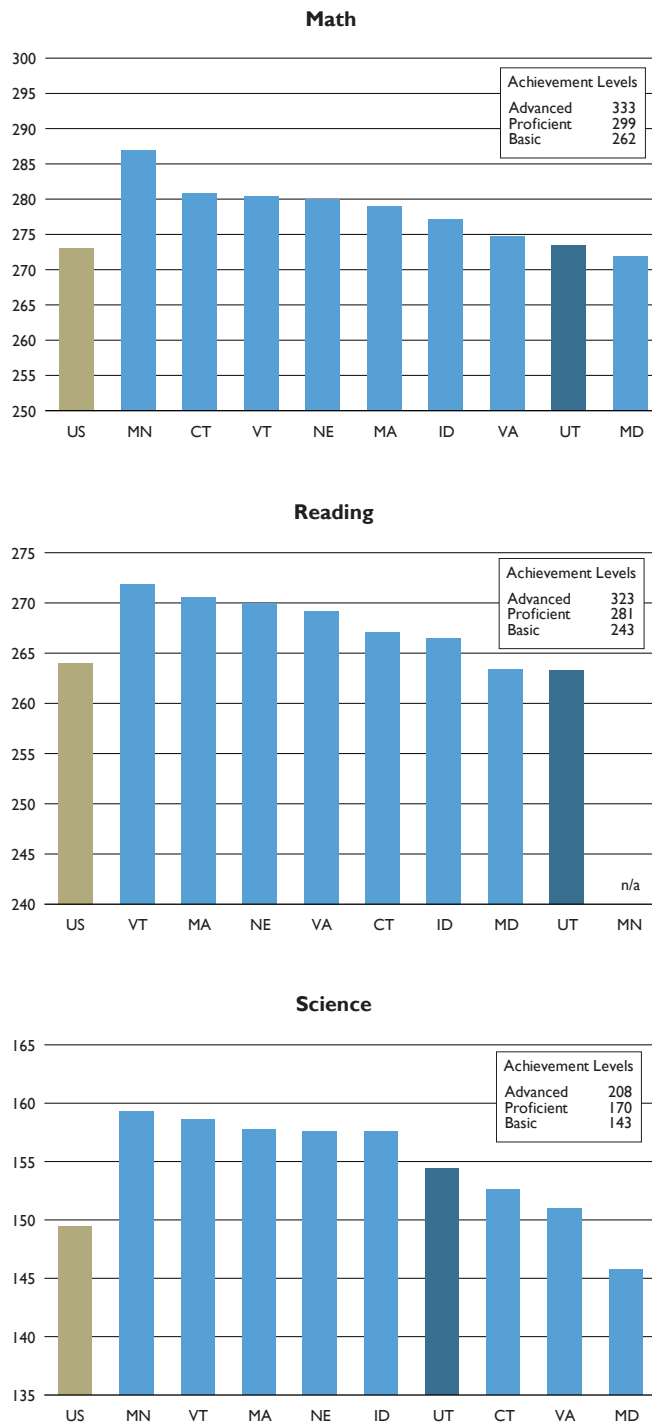
**Figure 2-G: States with Parental Education Levels Similar to Utah, 2000**

Ranked by Percent of Students With at Least One College-Graduate Parent

Jurisdiction	Did Not Finish H.S.	Graduated High School	Some Ed. After H.S.	Graduated College	Unknown	National Rank
<b>US Average</b>	7%	20%	18%	43%	12%	
Idaho	7%	16%	20%	47%	11%	10
Minnesota	4%	21%	19%	48%	7%	9
Virginia	6%	21%	16%	48%	10%	8
Maryland	5%	21%	16%	49%	9%	7
<b>Utah</b>	4%	17%	18%	50%	12%	6
Massachusetts	4%	20%	14%	50%	11%	5
Nebraska	4%	20%	16%	50%	9%	4
Connecticut	4%	18%	16%	52%	10%	3
Vermont	3%	23%	13%	53%	8%	2

Source: NCES, NAEP.

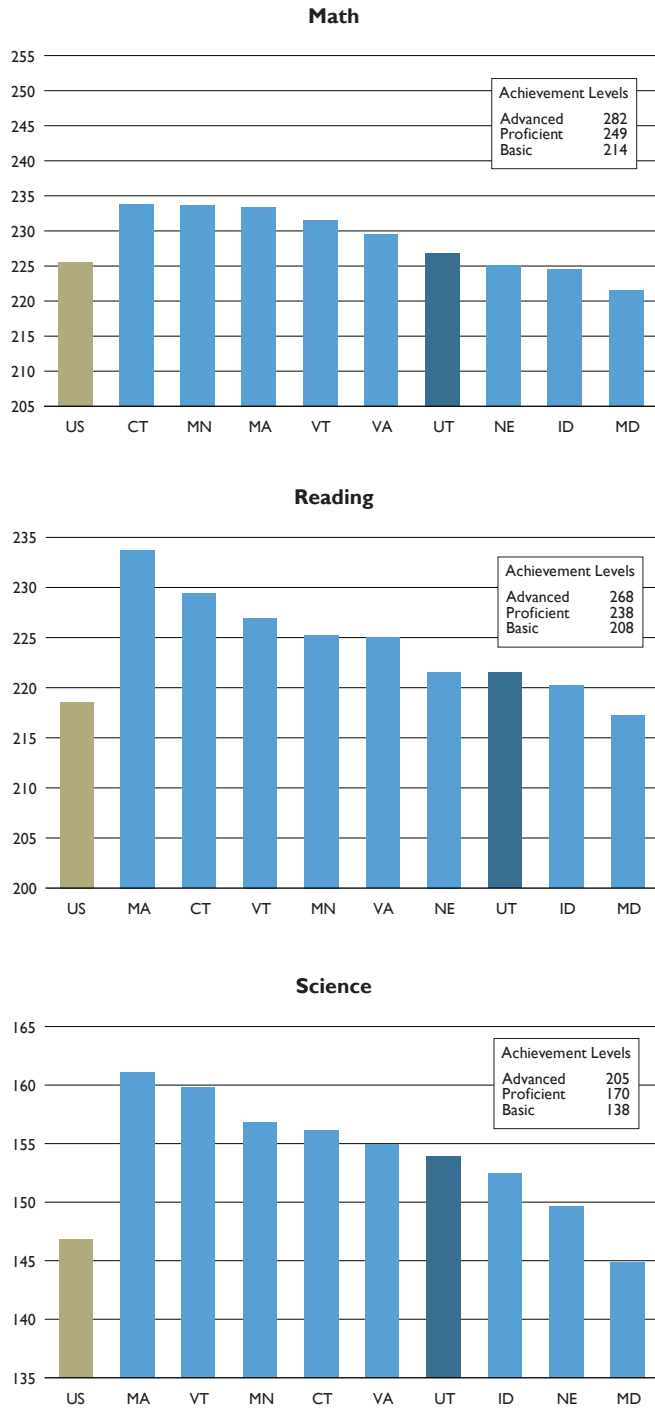
**Figure 2-H: States with Similar Parental Education Levels and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 2000**



Note: Reading scores are from the 2002 assessment because 2000 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure 2-I: States with Similar Parental Education Levels and Their Performance on 4th Grade NAEP Math, Reading, and Science Tests, 2000**



Note: Reading scores are from the 2002 assessment because 2000 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

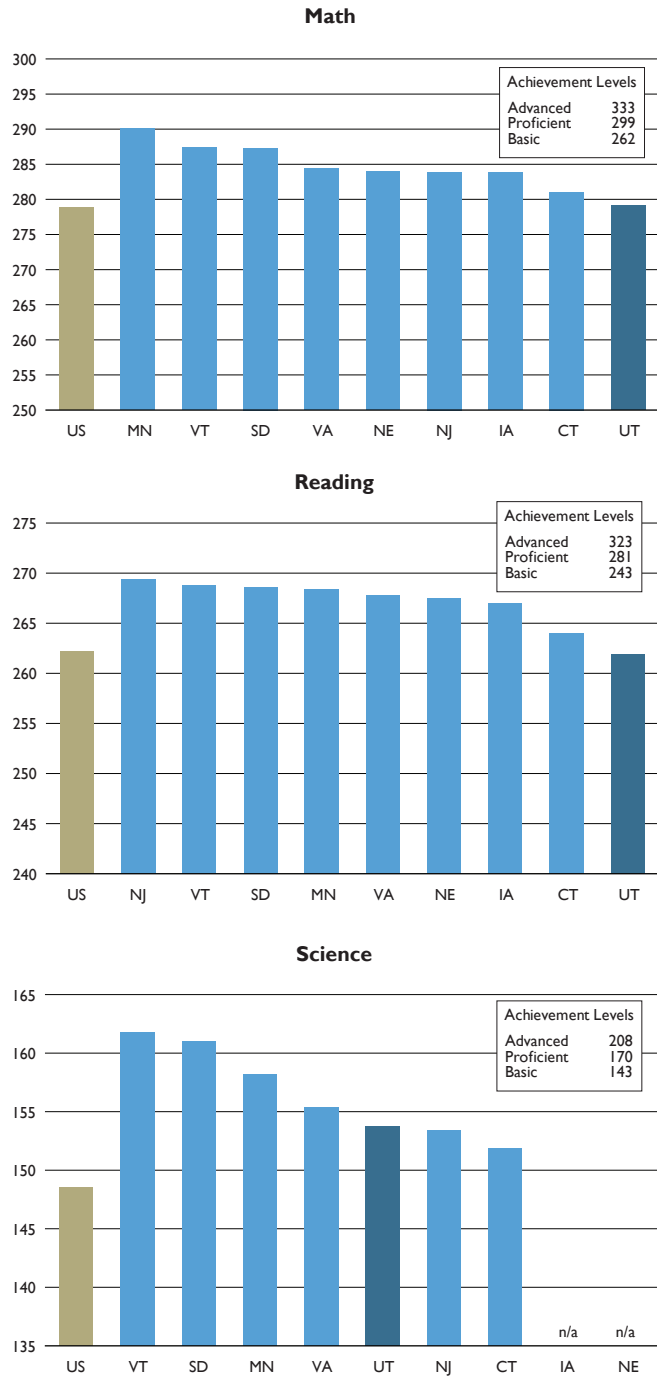
**Figure 2-J: States with Parental Education Levels Similar to Utah, 2005**

Ranked by Percent of Students With at Least One College-Graduate Parent

Jurisdiction	Did Not Finish H.S.	Graduated High School	Some Ed. After H.S.	Graduated College	Unknown	National Rank
<b>US Average</b>	7%	18%	17%	47%	11%	
Virginia	6%	18%	15%	52%	9%	8
New Jersey	4%	16%	15%	53%	11%	7
Nebraska	5%	16%	18%	53%	9%	7
Iowa	5%	17%	17%	53%	8%	7
<b>Utah</b>	4%	14%	17%	54%	10%	6
Vermont	4%	20%	15%	54%	7%	5
South Dakota	5%	15%	19%	54%	8%	4
Connecticut	5%	16%	16%	54%	10%	4
Minnesota	4%	14%	17%	55%	11%	3

Source: NCES, NAEP.

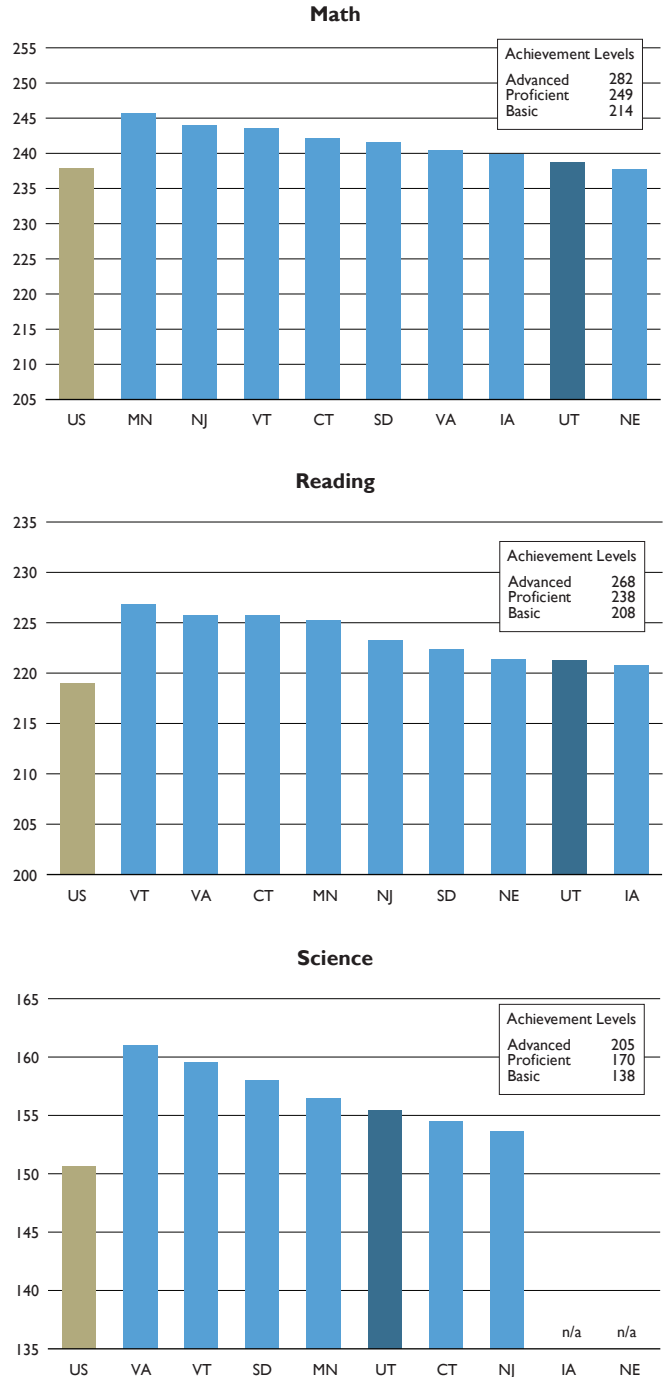
**Figure 2-K: States with Similar Parental Education Levels and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 2005**



Note: The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure 2-L: States with Similar Parental Education Levels and Their Performance on 4th Grade NAEP Math, Reading, and Science Tests, 2005**



Note: The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

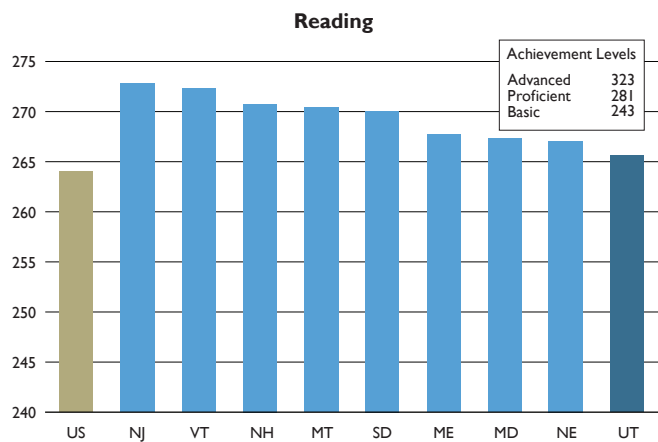
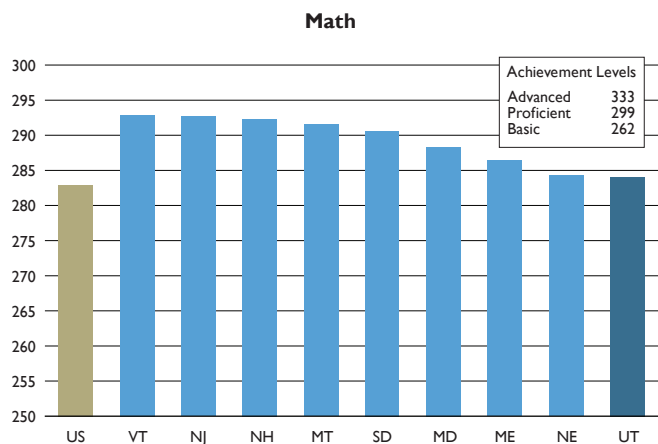
**Figure 2-M: States with Parental Education Levels Similar to Utah, 2009**

Ranked by Percent of Students With at Least One College-Graduate Parent

Jurisdiction	Did Not Finish H.S.	Graduated High School	Some Ed. After H.S.	Graduated College	Unknown	National Rank
<b>US Average</b>	<b>8%</b>	<b>16%</b>	<b>16%</b>	<b>49%</b>	<b>11%</b>	
Montana	5%	16%	18%	53%	8%	8
Maine	4%	17%	18%	54%	7%	9
South Dakota	4%	15%	15%	55%	10%	10
Vermont	4%	19%	15%	55%	8%	10
<b>Utah</b>	<b>5%</b>	<b>13%</b>	<b>17%</b>	<b>55%</b>	<b>9%</b>	<b>11</b>
Maryland	5%	14%	16%	55%	9%	11
Nebraska	5%	14%	16%	55%	9%	11
New Hampshire	3%	16%	14%	57%	8%	12
New Jersey	4%	14%	15%	57%	9%	12

Source: NCES, NAEP.

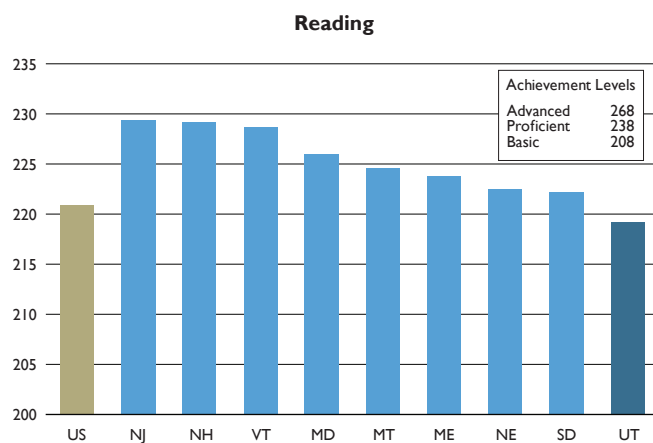
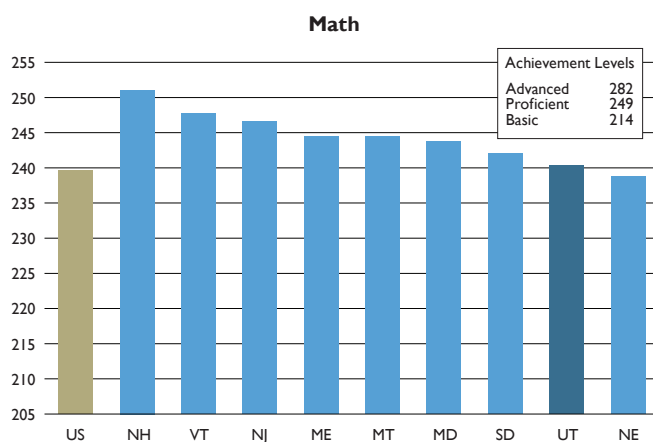
**Figure 2-N: States with Similar Parental Education Levels and Their Performance on 8th Grade NAEP Math and Reading Tests, 2009**



Note: Science scores are not available for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

**Figure 2-O: States with Similar Parental Education Levels and Their Performance on 4th Grade NAEP Math and Reading Tests, 2009**



Note: Science scores are not available for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

# APPENDIX III: STATES WITH ETHNIC PROFILES

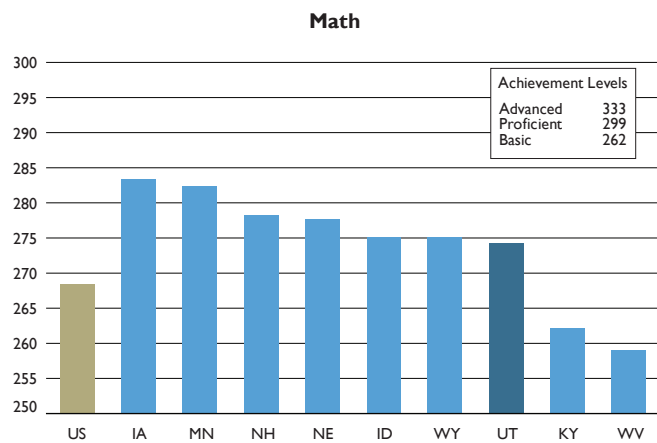
## SIMILAR TO UTAH

**Figure 3-A: States with Ethnic Profiles Similar to Utah, 1992**

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Island	American Indian	Unclassified
<b>US Average</b>	<b>73%</b>	<b>16%</b>	<b>8%</b>	<b>2%</b>	<b>1%</b>	<b>1%</b>
Nebraska	90%	5%	3%	1%	1%	0%
Kentucky	90%	9%	0%	1%	0%	0%
Wyoming	91%	1%	5%	0%	3%	0%
Idaho	92%	0%	5%	1%	1%	0%
<b>Utah</b>	<b>93%</b>	<b>1%</b>	<b>4%</b>	<b>2%</b>	<b>1%</b>	<b>0%</b>
Minnesota	94%	2%	1%	2%	1%	0%
Iowa	95%	2%	1%	1%	0%	0%
West Virginia	95%	5%	0%	0%	0%	0%
New Hampshire	96%	1%	1%	1%	0%	2%

Source: NCES, NAEP.

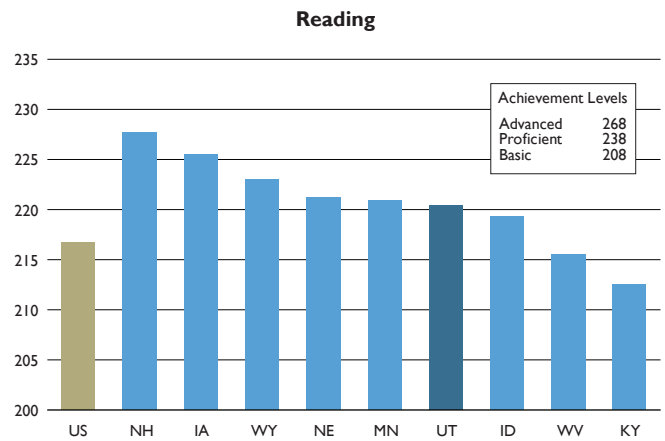
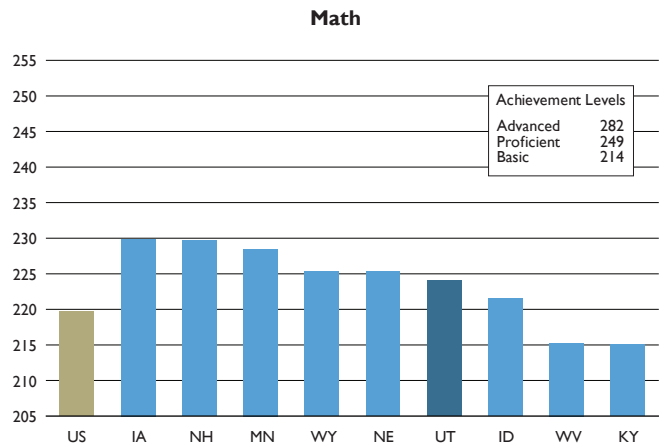
**Figure 3-B: States with Similar Ethnic Profiles and Their Performance on 8th Grade NAEP Math Test, 1992**



Note: 8th grade reading and science scores are unavailable for 1992. The scale for the math assessment is 0 to 500.

Source: NCES, NAEP.

**Figure 3-C: States with Similar Ethnic Profiles and Their Performance on 4th Grade NAEP Math and Reading Tests, 1992**



Note: 4th grade science scores are unavailable for 1992. The scale for the math and reading assessments is 0 to 500.

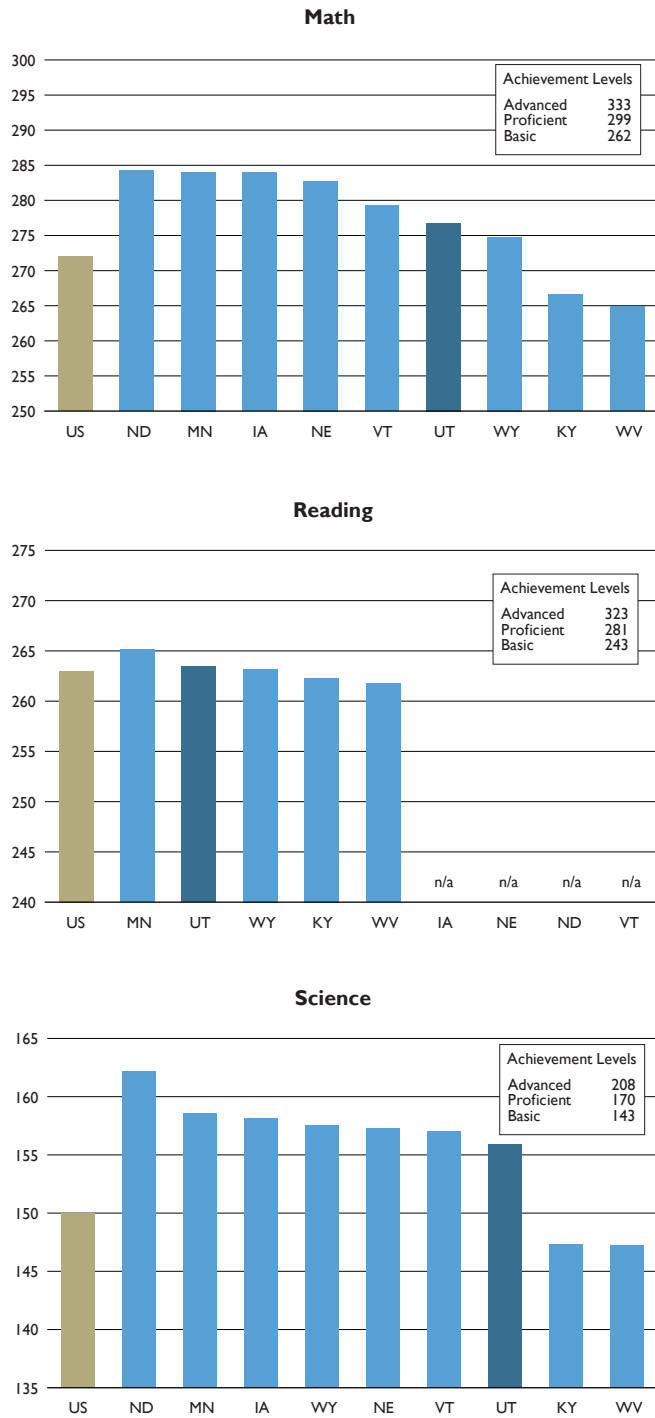
Source: NCES, NAEP.

**Figure 3-D: States with Ethnic Profiles Similar to Utah, 1996**

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Island	American Indian	Unclassified
<b>US Average</b>	<b>71%</b>	<b>15%</b>	<b>9%</b>	<b>8%</b>	<b>1%</b>	<b>0%</b>
Minnesota	88%	4%	1%	5%	2%	0%
Kentucky	89%	9%	1%	1%	0%	0%
Wyoming	90%	1%	5%	1%	3%	0%
Nebraska	90%	5%	4%	1%	1%	0%
<b>Utah</b>	<b>92%</b>	<b>1%</b>	<b>4%</b>	<b>2%</b>	<b>1%</b>	<b>0%</b>
North Dakota	94%	1%	1%	1%	3%	0%
Iowa	95%	2%	1%	1%	0%	0%
Vermont	96%	1%	1%	1%	1%	0%
West Virginia	96%	3%	0%	0%	0%	0%

Source: NCES, NAEP.

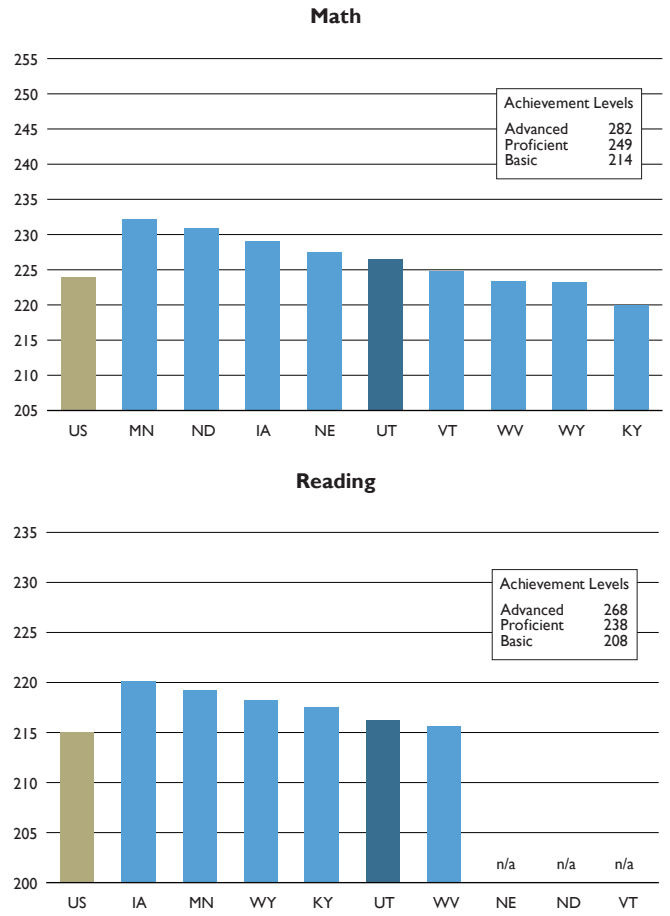
**Figure 3-E: States with Similar Ethnic Profiles and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 1996**



Note: Reading scores are from the 1998 assessment because 1996 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure 3-F: States with Similar Ethnic Profiles and Their Performance on 4th Grade NAEP Math and Reading Tests, 1996**



Note: Reading scores are from the 1998 assessment because 1996 data were unavailable. Science scores are not available for 1996 and 1998. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

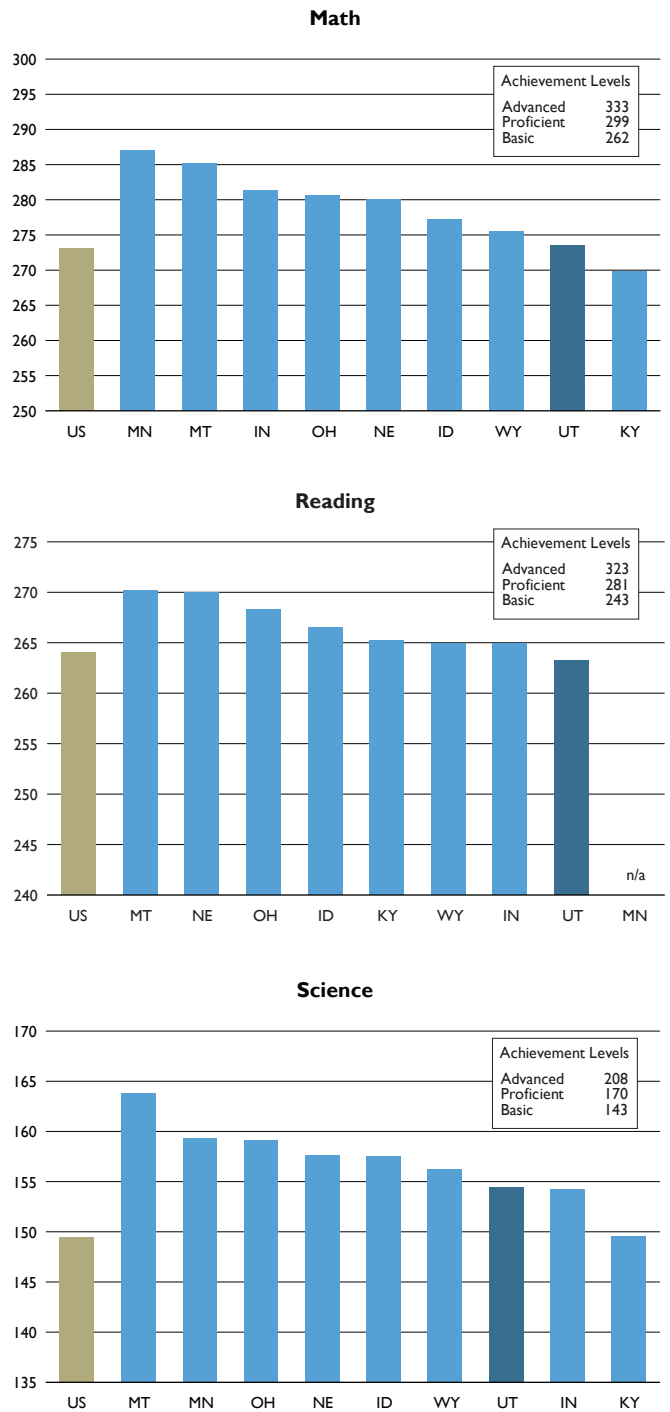


**Figure 3-G: States with Similar Ethnic Profiles to Utah, 2000**

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Island	American Indian	Unclassified
<b>US Average</b>	<b>65%</b>	<b>16%</b>	<b>13%</b>	<b>4%</b>	<b>2%</b>	<b>1%</b>
Indiana	85%	10%	3%	1%	0%	1%
Ohio	85%	13%	1%	1%	0%	1%
Nebraska	87%	4%	6%	1%	2%	0%
Kentucky	87%	11%	1%	1%	0%	0%
<b>Utah</b>	<b>88%</b>	<b>1%</b>	<b>6%</b>	<b>3%</b>	<b>2%</b>	<b>0%</b>
Idaho	88%	1%	8%	1%	1%	1%
Minnesota	88%	4%	4%	4%	0%	0%
Wyoming	90%	1%	5%	1%	3%	0%
Montana	90%	0%	1%	1%	8%	0%

Source: NCES, NAEP.

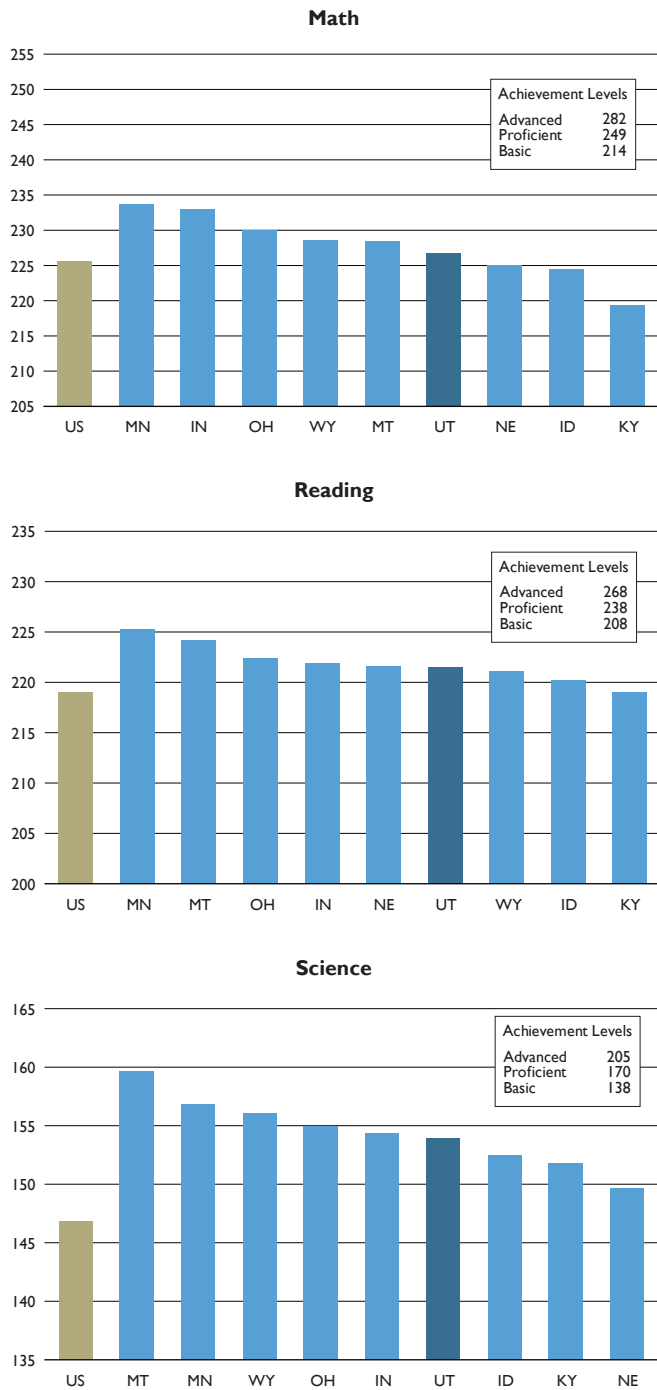
**Figure 3-H: States with Similar Ethnic Profiles and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 2000**



Note: Reading scores are from the 2002 assessment because 2000 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure 3-I: States with Similar Ethnic Profiles and Their Performance on 4th Grade NAEP Math, Reading, and Science Tests, 2000**



Note: Reading scores are from the 2002 assessment because 2000 data were unavailable. The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

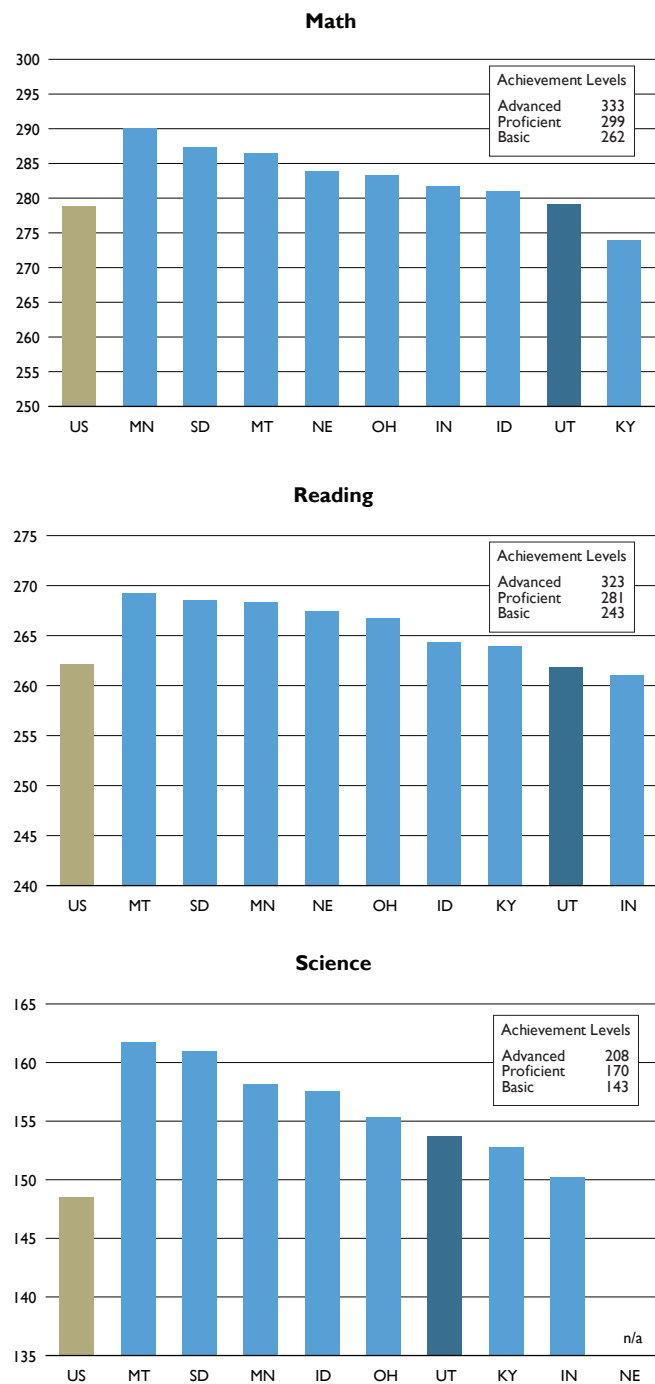
Source: NCES, NAEP.

**Figure 3-J: States with Ethnic Profiles Similar to Utah, 2005**

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Island	American Indian	Unclassified
<b>US Average</b>	<b>61%</b>	<b>16%</b>	<b>16%</b>	<b>5%</b>	<b>1%</b>	<b>1%</b>
Ohio	80%	15%	1%	2%	0%	2%
Minnesota	81%	8%	4%	5%	2%	0%
Indiana	81%	12%	4%	1%	0%	2%
Nebraska	83%	5%	9%	1%	1%	0%
<b>Utah</b>	<b>84%</b>	<b>1%</b>	<b>10%</b>	<b>3%</b>	<b>2%</b>	<b>0%</b>
Idaho	85%	1%	12%	1%	1%	0%
South Dakota	86%	1%	2%	1%	10%	0%
Kentucky	86%	10%	1%	1%	0%	1%
Montana	86%	0%	2%	1%	10%	0%

Source: NCES, NAEP.

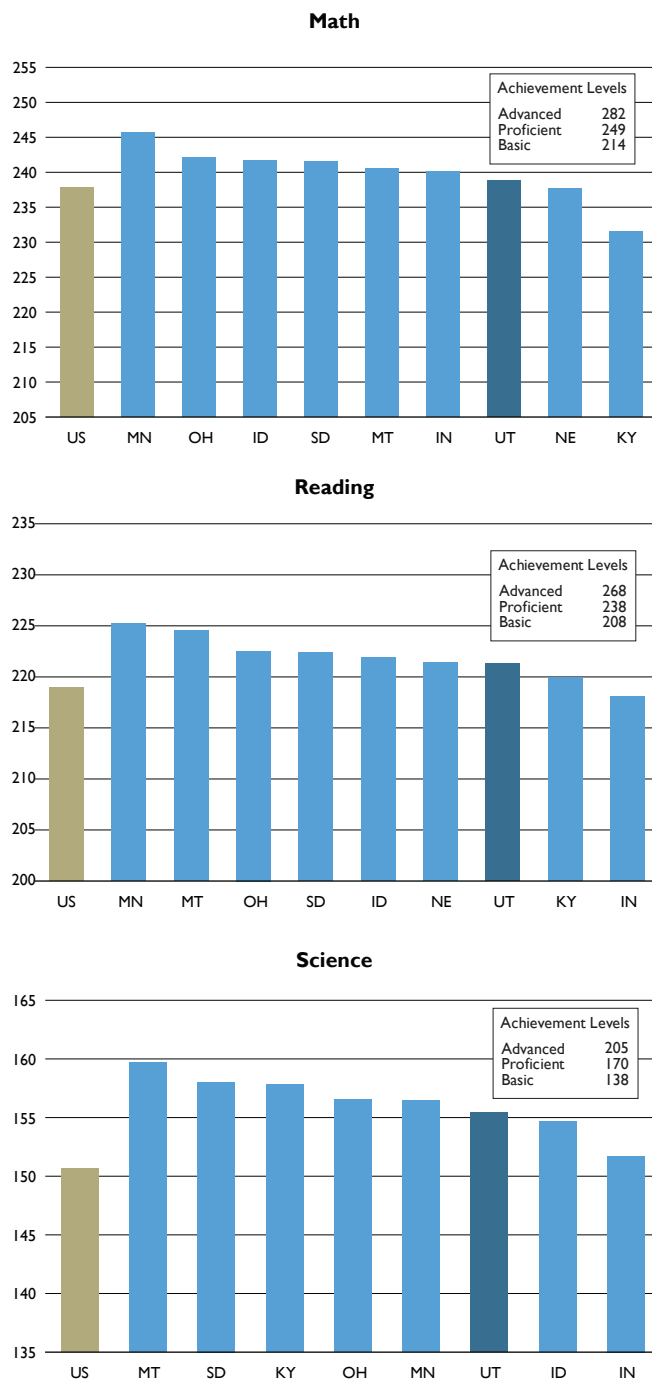
**Figure 3-K: States with Similar Ethnic Profiles and Their Performance on 8th Grade NAEP Math, Reading, and Science Tests, 2005**



Note: The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

Source: NCES, NAEP.

**Figure 3-L: States with Similar Ethnic Profiles and Their Performance on 4th Grade NAEP Math, Reading, and Science Tests, 2005**



Note: The scale for the math and reading assessments is 0 to 500; the scale for the science assessment is 0 to 300.

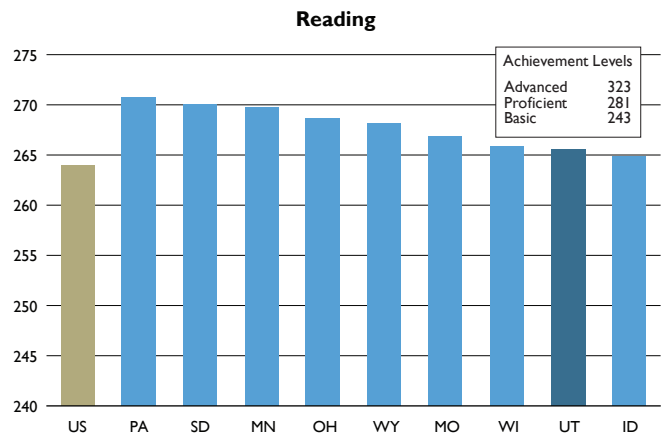
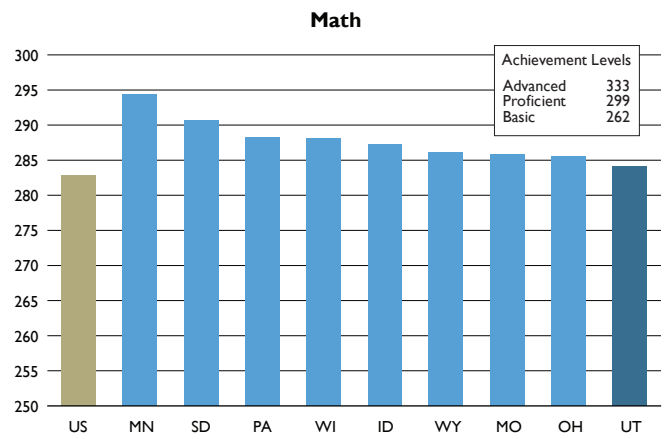
Source: NCES, NAEP.

**Figure 3-M: States with Ethnic Profiles Similar to Utah, 2009**

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Island	American Indian	Unclassified
<b>US Average</b>	<b>61%</b>	<b>16%</b>	<b>16%</b>	<b>5%</b>	<b>1%</b>	<b>1%</b>
Pennsylvania	77%	13%	6%	3%	0%	0%
Ohio	78%	15%	2%	1%	0%	3%
Minnesota	79%	7%	5%	6%	2%	0%
Wisconsin	79%	10%	7%	3%	1%	0%
<b>Utah</b>	<b>80%</b>	<b>1%</b>	<b>14%</b>	<b>3%</b>	<b>1%</b>	<b>0%</b>
Missouri	80%	14%	3%	2%	1%	0%
Idaho	81%	1%	14%	2%	2%	0%
Wyoming	84%	1%	10%	1%	3%	0%
South Dakota	84%	2%	2%	1%	11%	0%

Source: NCES, NAEP.

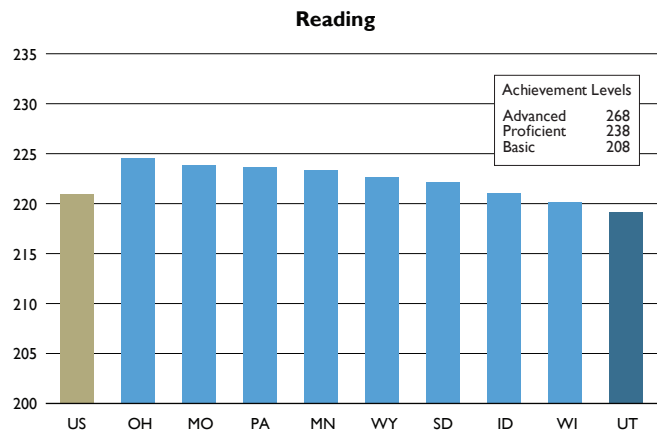
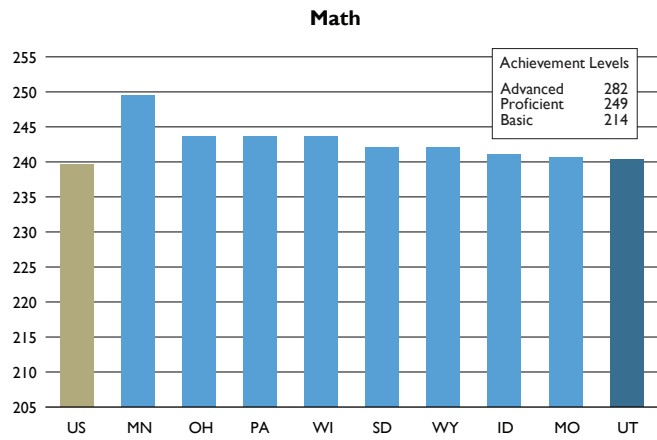
**Figure 3-N: States with Similar Ethnic Profiles and Their Performance on 8th Grade NAEP Math and Reading Tests, 2009**



Note: Science scores are not available for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.

**Figure 3-O: States with Similar Ethnic Profiles and Their Performance on 4th Grade NAEP Math and Reading Tests, 2009**



Note: Science scores are not available for 2009. The scale for the math and reading assessments is 0 to 500.

Source: NCES, NAEP.