State Test Score Trends Through 2008-09, Part 2:

Slow and Uneven Progress in Narrowing Gaps

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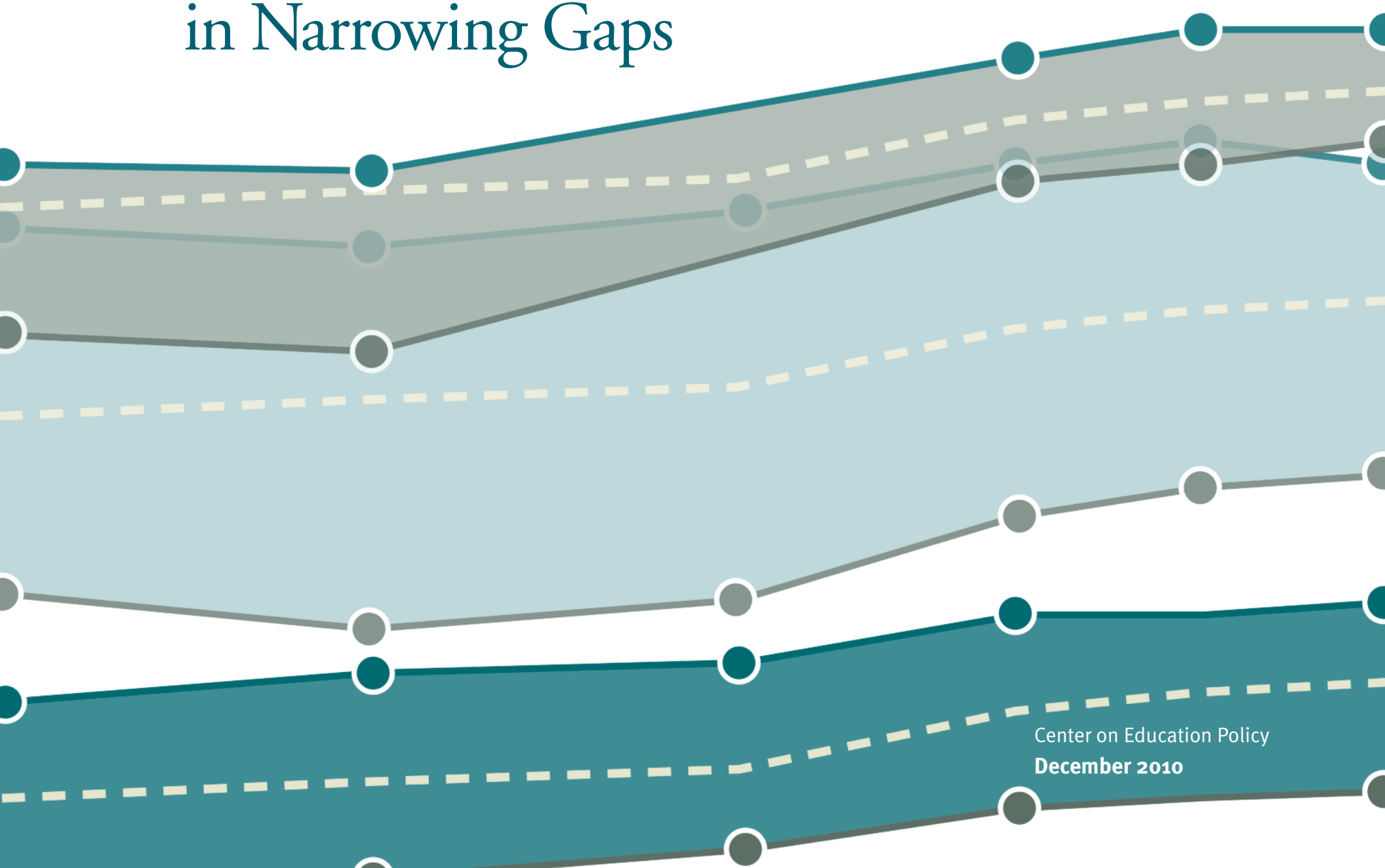

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Based in Washington, D.C., and founded in January 1995 by Jack Jennings, the Center on Education Policy is a national independent advocate for public education and for more effective public schools. The Center works to help Americans better understand the role of public education in a democracy and the need to improve the academic quality of public schools. We do not represent any special interests. Instead, we help citizens make sense of the conflicting opinions and perceptions about public education and create the conditions that will lead to better public schools.

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Executive Summary

After eight years of implementing the federal No Child Left Behind Act (NCLB) and other school reforms, how much progress have states, school districts, and schools made in raising achievement for students from all backgrounds and closing achievement gaps based on race, ethnicity, income, and gender?

To help answer this question, the Center on Education Policy (CEP) analyzed trends in reading and mathematics performance and achievement gaps for several groups of students: African American, Asian, Latino, Native American, and white students, as well as low-income, male, and female students. We looked at trends on state tests from 2002 (or a more recent year in some states) through 2009 at grades 4, 8, and the high school grade tested for NCLB. We also compared the direction of trends between 2005 and 2009 on state tests and the federally sponsored National Assessment of Educational Progress (NAEP).

All 50 states and the District of Columbia participated in this study, which marks the fourth year of CEP's research on student achievement. Not all states had the data needed for every analysis, however. States were considered to have sufficient data for an analysis if they had three or more years of comparable test data through 2009 and if the number of students in a particular subgroup was large enough to yield reliable trends.

Main conclusions

Four main conclusions emerged from this study.

- **Achievement gaps are large and persistent.**

In many states, the percentage of African American students scoring proficient on state tests was 20 to 30 points lower in 2009 than the percentage proficient for white students. Gaps in percentages proficient between Native American and white students were similarly wide. Gaps between Latino and white students often amounted to 15 to 20 percentage points.

Many states had gaps in percentages proficient of 25 points or more between students from low-income families and those who were not low-income. In reading, girls had higher percentages proficient than boys in every state and D.C.; this gender gap sometimes totaled 10 percentage points or more.

- **Every major student group has made gains since 2002 on state reading and math tests. But even when achievement has increased for all groups, gaps have not always narrowed.**

African American, Asian, Latino, Native American, and white students, as well as low-income students, boys, and girls, made gains in reading and math in two-thirds or more of the states with sufficient data. For each subgroup, states with gains on state tests outnumbered states with declines or flat trends in both reading and math and at grades 4, 8, and high school. This pattern was also evident on both indicators of achievement used for this study—the percentages of students scoring proficient on state tests and average (mean) test scores.

Within the same state, trends on NAEP corroborated the rising trends on state tests to a moderate degree. In math, a majority of the states with sufficient data that made gains for a particular student group on their state test also made gains on NAEP, except for Asian students in 4th grade math. In reading, a majority of the states with sufficient data showed gains on both state tests and NAEP for all subgroups except 4th grade boys. But NAEP and state results contradicted each other more often in reading than in math, and in some cases reading achievement declined on both assessments.

Rising achievement for all groups is no guarantee that achievement gaps will shrink. When gaps widened, it was often because both subgroups made gains, but the higher-achieving group improved more rapidly than the lower-achieving one. For gaps to narrow, the lower-achieving group must improve at a greater rate than the higher-achieving one.

- **For most student groups, gaps on state tests have often narrowed since 2002. Gap trends vary, however, based on the student group and indicator of achievement examined.**

Latino-white gaps and African American-white gaps in percentages proficient on state tests have narrowed more often than gaps for Native American students, low-income students and boys in reading. For all of these groups, however, gaps in some grades and subjects have widened or stayed the same in a notable number of states. Usually when gaps narrowed, both subgroups improved, but the lower-performing group improved at a greater rate than the higher-performing one.

Average test scores, which are generally considered a better indicator of changes in gaps than percentages proficient for reasons discussed in chapter 1, give a somewhat less positive picture of gaps narrowing. Across both reading and math and all three grade levels, the gap between low-income students and more advantaged students, for example, narrowed in 57% of the instances analyzed using average scores, compared with 72% of instances using percentages proficient. (An "instance" refers to a trend in a single state for one gap, grade level, and subject, such as the change in the gap between low-income and non-low-income students in Kentucky in grade 8 math.)

In addition, trends on state tests and NAEP within the same state show limited agreement about whether achievement gaps have narrowed since 2005 at grades 4 and 8. For some groups, gaps narrowed on both state tests and NAEP in a majority of the states with sufficient data. But there were also many instances of gaps narrowing on the state test and widening on NAEP. In a limited number of instances, a gap widened on NAEP but narrowed on the state test, or widened on both assessments.

- **Although gaps have narrowed more rapidly for some groups than for others, at the current rates of progress it would take many years to close most gaps.**

In general, Latino-white gaps in percentages proficient have narrowed at a greater rate than gaps for other groups. For some grades and subjects, African American-white gaps have also narrowed at a relatively faster rate than most other gaps. In high school math, for example, the gap in percentages proficient between Latino and white students narrowed at a median rate of 1.2 percentage point per year across *all* the states with sufficient data. (The median is the midpoint; by definition, half of the states with sufficient data will have annual rates of change in a gap above the median, and half will have rates below it.) If this gap continued to narrow at the same annual rate and if other critical factors remained the same, then theoretically a gap of 15 points would close in 12.5 years. For reasons discussed in chapter 1, however, it is unlikely that gaps would continue to narrow at a steady rate.

Other gaps, such as Native American-white gaps, are narrowing at median rates of less than 1 percentage point per year. These gaps would take much longer to close if the current pace continued.

Data from individual states also suggest it would take one or more decades to close most gaps at the current average rates of progress. In Florida, a state with a typical-size gap, the African American-white gap in percentages proficient has narrowed at an average rate of 0.9 percentage point per year since 2002. In 2009, this gap remained at 25 percentage points. If the gap continued to narrow at the same rate and if other key factors remained unchanged, then theoretically it would take 28 years to close this gap. In Pennsylvania, the gap between Latino and white students has narrowed at an average rate of 1.5 percentage point per year since 2002. In 2009, this gap stood at 25 percentage points, a typical-size gap for these subgroups. At the current rate of progress, it would take 17 years to close this gap. As illustrated by examples from other states in chapter 1, the pace of change also varies considerably even among states with gaps of similar size.

In conclusion, we looked at an array of evidence from state tests and NAEP, including average test scores on both assessments, the percentages of students scoring proficient on state tests, and the percentages scoring at the basic level on NAEP. Taken together, the evidence indicates that although some headway has been made in narrowing achievement gaps, progress is inconsistent, and much work remains.

Organization of this report

The full report of this study is available on CEP's Web site at www.cep-dc.org. The report includes the following chapters:

- Chapter 1—Findings Across Student Groups
- Chapter 2—African American Students
- Chapter 3—Asian Students
- Chapter 4—Latino Students
- Chapter 5—Native American Students
- Chapter 6—White Students
- Chapter 7—Low-Income Students
- Chapter 8—Male and Female Students
- Chapter 9—Comparison of Trends on State Tests and NAEP
- Chapter 10—Study Methods

State-by-state information is available on the Web in an appendix and individual state profiles.

Readers interested in particular states are encouraged to view and download two additional resources available at www.cep-dc.org:

- An appendix with state-by-state tables showing the 2009 percentages proficient, mean test scores, and achievement gaps in reading and math for all major subgroups in the states with sufficient data

- Individual state profiles, one for each of the 50 states and D.C., containing a wealth of state-specific data on the state's testing program, trends in subgroup performance as well as achievement gaps for all the years with comparable data, and numbers of test-takers.

Chapter 1: Findings Across Student Groups

Achievement gaps on state tests between lower- and higher-performing groups are often large.

This chapter presents cross-cutting findings about achievement on state reading and math tests for all the major student groups included in this study—African American, Asian, Latino, Native American, and white students, as well as low-income, male, and female students.[1] The tables in this chapter summarize key data across multiple subgroups, unlike the more detailed tables for each specific subgroup contained in chapters 2 through 8.

Our analysis of state test results looked at two indicators of achievement—the percentages of students scoring at or above the proficient level, which is the main gauge of progress under NCLB; and average, or mean, test scores. These two indicators offer different ways of looking at achievement trends. Viewed in tandem, they can provide a fuller picture of the performance of a group of students. Percentages proficient typically show the proportion of students in the aggregate that have met or exceeded a fixed benchmark—the cut score for proficient performance on the state test. Mean scores are independent of cut scores and therefore capture changes across the achievement spectrum, including performance well above or well below the proficiency cut score. To provide an additional perspective, the study also examined trends on NAEP, as discussed in chapter 9.

Among racial/ethnic groups, Asian and white students had the highest test performance. In reading, the Asian and white subgroups often performed at similar levels, but in math, Asian students outperformed white students in most of the states with sufficient data.

Other subgroups typically performed at lower levels. In many states, the gaps in percentages proficient between African American and white students and between Native American and white students amounted to 20 or 30 percentage points. The Latino-white gap in percentages proficient often totaled 15 to 20 percentage points.

Gaps also persisted between students from low-income families and those who were not low-income. In many states, gaps in percentages proficient between these two groups totaled 25 percentage points or more. In reading, a gender gap also exists. In 2009, girls outperformed boys in reading in every state and D.C., sometimes by more than 10 percentage points.

Large gaps between subgroups can also be found in mean test scores.

For all of the subgroups analyzed, the size of achievement gaps varied considerably from state to state. In grade 4 reading, for example, the largest Latino-white gap in any state was 38 percentage points in 2009, while the smallest gap in any state was 5 points. These variations may not be solely, or even mostly, due to differences in instructional quality but may also be attributable to state-by-state differences in where the cut score for proficiency is set, how difficult the test is, and other factors. The appendix to this report, available at www.cep-dc.org, shows the size of the gaps in 2009 for all major subgroups in each state.

One way to gauge the relative performance of various student groups on a broader scale than a single state is to look at a statistic called the median. The median is the midpoint; by definition, half of the states with sufficient data have percentages proficient above the median, and half have percentages proficient below it. For every subgroup, we calculated the 2009 median percentage proficient across *all* of the states with sufficient data for that group. The results are shown in **table 1** (reading) and **table 2** (math).

[1] CEP examined test score trends for English language learners (ELLs) and students with disabilities in two recent reports, which concluded that it is difficult to obtain a clear picture of achievement for these two groups because of fuzzy data, evolving state testing policies, fluctuating numbers of test-takers, and language barriers in the case of ELLs. See Center on Education Policy, *State Test Score Trends Through 2007-08, Part 4: Has Progress Been Made in Raising Achievement for Students with Disabilities?* (2009); and *State Test Score Trends Through 2007-08, Part 6: Has Progress Been Made in Raising Achievement for English Language Learners?* (2010).

As these tables reveal, performance differs markedly by subgroup. In grade 4 reading, for example, the median percentage proficient ranged from 58% for Native American students to 84% for Asian students. In grade 8 math, the medians ranged from 46% for African Americans to 84% for Asians.

Tables 1 and 2 also indicate how much the percentage proficient for a particular group varies by state. In high school math, for example, the percentage of African American students scoring proficient ranged from 7% in the lowest state to 89% in the highest state, while the Latino percentage proficient ranged from 9% to 93%. For white students, the range was somewhat narrower but still substantial—from 33% in the lowest state to 97% in the highest state.

Table 1. READING: Median, highest, and lowest percentages proficient for subgroups across all states with sufficient state test data, 2009

	African American	Asian	Latino	Native American	White	Low-Income	Female	Male
Grade 4								
Median PP across states	59%	84%	62%	58%	83%	64%	77%	71%
Highest PP in any state	88%	95%	92%	86%	96%	92%	96%	94%
Lowest PP in any state	28%	44%	28%	36%	52%	29%	51%	39%
# of states with data	*41*	*36*	*43*	*19*	*50*	*46*	*51*	*51*
Grade 8								
Median PP across states	54%	83%	60%	59%	79%	57%	77%	66%
Highest PP in any state	91%	98%	92%	94%	96%	92%	97%	94%
Lowest PP in any state	27%	55%	34%	39%	56%	33%	52%	38%
# of states with data	*41*	*35*	*42*	*21*	*50*	*46*	*51*	*51*
High school								
Median PP across states	53%	79%	62%	54%	81%	60%	79%	71%
Highest PP in any state	95%	99%	97%	96%	98%	96%	98%	97%
Lowest PP in any state	18%	54%	30%	37%	48%	23%	38%	34%
# of states with data	*37*	*32*	*38*	*19*	*47*	*43*	*48*	*48*

Table reads: Across all 41 states with sufficient data, the median percentage of African American students scoring proficient in grade 4 reading was 59%. The highest percentage proficient in any state for the African American subgroup was 88%, while the lowest in any state was 28%.

PP = Percentage proficient

Table 2. MATHEMATICS: Median, highest, and lowest percentages proficient for subgroups across all states with sufficient state test data, 2009

	African American	Asian	Latino	Native American	White	Low-Income	Female	Male
Grade 4								
Median PP across states	58%	88%	67%	62%	84%	64%	75%	74%
Highest PP in any state	90%	97%	94%	87%	97%	93%	96%	96%
Lowest PP in any state	21%	49%	25%	29%	51%	28%	43%	41%
# of states with data	*41*	*36*	*44*	*19*	*50*	*46*	*51*	*51*
Grade 8								
Median PP across states	46%	84%	58%	51%	76%	51%	67%	66%
Highest PP in any state	84%	96%	87%	79%	94%	86%	93%	91%
Lowest PP in any state	20%	38%	22%	28%	45%	25%	42%	36%
# of states with data	*41*	*35*	*42*	*21*	*50*	*46*	*51*	*51*
High school								
Median PP across states	43%	81%	54%	46%	69%	43%	63%	61%
Highest PP in any state	89%	98%	93%	92%	97%	84%	94%	93%
Lowest PP in any state	7%	33%	9%	18%	33%	12%	25%	30%
# of states with data	*37*	*32*	*39*	*19*	*47*	*42*	*48*	*48*

Table reads: Across all 41 states with sufficient data, the median percentage of African American students scoring proficient in grade 4 math was 58%. The highest percentage proficient in any state for the African American subgroup was 90%, while the lowest in any state was 21%.

PP = Percentage proficient

States with gains for subgroups on state tests far outnumber states with declines.

African American, Asian, Latino, Native American, and white students, as well as low-income students, boys, and girls, have made gains since 2002 in two-thirds or more of the states with sufficient data.[2] **Tables 3** (reading) and **4** (math) show the percentages of these states that posted gains, declines, or flat trends on state tests for each subgroup at grades 4, 8, and high school. As the tables illustrate, states with gains outnumbered states with declines or flat trends for every subgroup, in both subjects and at all three grade levels.

The pattern of states with gains outnumbering states with declines was evident in both percentages proficient and mean test scores.

Progress was especially noteworthy for Latino and African American students in grade 8 math; all or nearly all states made gains for these two groups in this grade and subject.

[2] The trend analyses in this report included only those states with three or more years of comparable test data through 2009. The starting year of the trends varies, however. In states with comparable data going back to 2002, the trends begin in 2002. In states that made changes in their testing program after 2002, the trends may start in any year from 2003 to 2007 but end in 2009 in all cases.

Table 3. READING: Percentage of states with sufficient data showing various trends for subgroups on state tests, 2002–2009*

	African American	Asian	Latino	Native American	White	Low-Income	Female	Male
Grade 4 PP								
% of states with gain	88%	84%	89%	81%	88%	90%	84%	84%
% of states w/ decline	12%	13%	11%	19%	2%	5%	12%	5%
No change	0%	3%	0%	0%	10%	5%	5%	9%
# of states with data	*34*	*31*	*37*	*16*	*42*	*42*	*43*	*43*
Grade 4 MS								
% of states with gain	79%	85%	84%	67%	92%	91%	89%	81%
% of states w/ decline	10%	12%	16%	20%	6%	6%	8%	14%
No change	10%	4%	0%	13%	3%	3%	3%	6%
# of states with data	*29*	*26*	*31*	*15*	*36*	*34*	*36*	*36*
Grade 8 PP								
% of states with gain	94%	83%	92%	89%	93%	93%	93%	93%
% of states w/ decline	6%	13%	8%	11%	7%	7%	7%	7%
No change	0%	3%	0%	0%	0%	0%	0%	0%
# of states with data	*34*	*30*	*36*	*18*	*42*	*42*	*43*	*43*
Grade 8 MS								
% of states with gain	90%	84%	87%	82%	92%	97%	89%	89%
% of states w/ decline	7%	16%	13%	12%	8%	0%	8%	6%
No change	3%	0%	0%	6%	0%	3%	3%	6%
# of states with data	*29*	*25*	*30*	*17*	*36*	*34*	*36*	*36*
High school PP								
% of states with gain	83%	82%	91%	82%	92%	92%	82%	84%
% of states w/ decline	10%	14%	6%	12%	8%	8%	18%	16%
No change	7%	4%	3%	6%	0%	0%	0%	0%
# of states with data	*30*	*28*	*33*	*17*	*37*	*38*	*38*	*38*
High school MS								
% of states with gain	88%	87%	85%	86%	77%	84%	77%	81%
% of states w/ decline	12%	13%	11%	14%	16%	13%	16%	10%
No change	0%	0%	4%	0%	6%	3%	6%	10%
# of states with data	*25*	*23*	*27*	*14*	*31*	*31*	*31*	*31*

Table reads: On state grade 4 reading tests, 88% of the 34 states with sufficient data showed gains since 2002 in the percentage of African American students scoring proficient, and 12% showed declines. Of the 29 states with sufficient mean score data in grade 4 reading, 79% showed gains in average scores for African American students, 10% showed declines, and 10% had no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

PP = Percentage proficient; MS = mean score

Table 4. MATHEMATICS: Percentage of states with sufficient data showing various trends for subgroups on state tests, 2002–2009*

	African American	Asian	Latino	Native American	White	Low-Income	Female	Male
Grade 4 PP								
% of states with gain	94%	87%	92%	82%	98%	91%	98%	93%
% of states w/ decline	6%	7%	3%	12%	2%	7%	0%	7%
No change	0%	7%	5%	6%	0%	2%	2%	0%
# of states with data	*33*	*30*	*37*	*17*	*42*	*43*	*43*	*43*
Grade 4 MS								
% of states with gain	86%	92%	90%	81%	97%	89%	92%	92%
% of states w/ decline	14%	8%	10%	19%	3%	9%	6%	6%
No change	0%	0%	0%	0%	0%	3%	3%	3%
# of states with data	*28*	*25*	*31*	*16*	*36*	*35*	*36*	*36*
Grade 8 PP								
% of states with gain	97%	93%	100%	95%	98%	98%	98%	98%
% of states w/ decline	3%	3%	0%	5%	2%	2%	2%	2%
No change	0%	3%	0%	0%	0%	0%	0%	0%
# of states with data	*33*	*29*	*35*	*19*	*42*	*43*	*43*	*43*
Grade 8 MS								
% of states with gain	100%	100%	100%	89%	94%	94%	97%	97%
% of states w/ decline	0%	0%	0%	11%	3%	3%	3%	3%
No change	0%	0%	0%	0%	3%	3%	0%	0%
# of states with data	*28*	*24*	*29*	*18*	*36*	*35*	*36*	*36*
High school PP								
% of states with gain	77%	83%	97%	83%	77%	92%	80%	80%
% of states w/ decline	23%	14%	3%	11%	18%	8%	20%	18%
No change	0%	3%	0%	6%	5%	0%	0%	3%
# of states with data	*31*	*29*	*34*	*18*	*39*	*39*	*40*	*40*
High school MS								
% of states with gain	88%	91%	93%	71%	75%	84%	73%	73%
% of states w/ decline	12%	9%	7%	29%	13%	13%	18%	15%
No change	0%	0%	0%	0%	13%	3%	9%	12%
# of states with data	*25*	*23*	*27*	*14*	*32*	*31*	*33*	*33*

Table reads: On state grade 4 math tests, 94% of the 33 states with sufficient data showed gains since 2002 in the percentage of African American students scoring proficient, and 6% showed declines. Of the 28 states with sufficient mean score data in grade 4 reading, 86% showed gains in average scores for African American students, and 14% showed declines.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

PP = Percentage proficient; MS = mean score

Student groups have made gains in both average test scores and percentages proficient.

States with gains in average (mean) scores for subgroups outnumbered states with declines. This pattern becomes especially apparent if one combines all of the trend lines analyzed across both subjects and all three grade levels. (As used in this study, a trend line is a record of change in a test result for one subgroup, subject, and grade level in a single state. For example, the change from 2002 to 2009 in the percentage proficient in math for Asian 8th graders in Colorado constitutes one trend line.)

As displayed in **table 5,** the proportions of trend lines with gains using mean scores were quite similar to the proportions with gains using percentages proficient. In both cases, at least 80% of the trend lines analyzed—and sometimes more than 90%— showed gains.

Table 5. Percentage of trend lines across two subjects and three grade levels that show gains on state tests for subgroups, 2002–2009*

	African American	Asian	Latino	Native American	White	Low-Income	Female	Male
% with gains in MS	88%	90%	90%	80%	88%	90%	86%	86%
% with gains in PP	89%	85%	93%	86%	91%	93%	89%	89%

Table reads: Across both reading and math and grades 4, 8, and high school, 88% of the trend lines analyzed showed gains in average test scores for African American students, and 89% showed gains in percentages proficient.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

PP = Percentage proficient; MS = mean score

For most student groups, achievement gaps on state tests have narrowed more often than they have widened. Trends for some groups are less positive.

Tables 6 (reading) and 7 (math) show the percentages of states with sufficient data in which achievement gaps have narrowed, widened, or stayed the same at grades 4, 8, and high school. For most subgroups, gaps have narrowed since 2002 in a majority of the states with sufficient data—particularly gaps in percentages proficient. But this is not the case for all subgroups and all grade levels, especially when gaps are measured in terms of mean scores.

As the tables indicate, gaps on state tests have narrowed more consistently for African American and Latino students than for Native American, low-income, and male students. Gaps between African American and white students, and between Latino and white students, narrowed in the majority of states with sufficient data in both reading and math; this was the case at all three grade levels according to both percentages proficient and mean scores. Even for these two groups, however, gaps in some grades and subjects widened or stayed the same in a sizeable minority of states. In grade 4 reading and math, for example, the black-white gap in mean scores widened in roughly 40% of the states with sufficient data. In grade 4 reading, the Latino-white gap increased in about one-third of the states with sufficient data.

Progress in narrowing gaps has been more erratic for Native American and low-income students and for boys in reading. In most grade/subject combinations, gaps for these three groups narrowed in a majority of the states with sufficient data. But in grade 4 reading, gaps in mean scores for Native Americans, low-income students, and boys widened or stayed the same in a majority of the states with sufficient data. The same was true for Native American and low-income students in grade 4 math. And in high school reading and math, the gap in mean scores between Native American and white students narrowed in half the states with adequate data but widened or stayed the same in the other half.

Usually when gaps narrowed, both subgroups improved but the lower-performing subgroup improved at a greater rate than the higher-performing one. Rising achievement for both groups, however, is no guarantee that gaps will shrink. When gaps widened, it was often because both subgroups made gains, but the higher-achieving group improved more rapidly than the lower-achieving one. In other cases, gaps increased because the higher-achieving group made gains while the lower-achieving group had declining or flat performance. Occasionally, both groups posted declines, but the lower-performing group declined at a greater rate, thus widening the gap.

Table 6. READING: Percentage of states with sufficient data showing various trends in achievement gaps on state tests, 2002–2009*

	African American/ White	Latino/ White	Native American/ White	Low-Income/ Not Low-Income	Male/ Female
Grade 4 PP					
% of states gaps narrowed	82%	78%	56%	74%	53%
% of states gaps widened	18%	19%	38%	24%	35%
No change	0%	3%	6%	3%	12%
# of states with data	*33*	*37*	*16*	*38*	*43*
Grade 4 MS					
% of states gaps narrowed	54%	58%	27%	44%	42%
% of states gaps widened	43%	32%	73%	38%	28%
No change	4%	10%	0%	19%	31%
# of states with data	*28*	*31*	*15*	*32*	*36*
Grade 8 PP					
% of states gaps narrowed	82%	89%	67%	66%	60%
% of states gaps widened	12%	8%	22%	26%	33%
No change	6%	3%	11%	8%	7%
# of states with data	*33*	*36*	*18*	*38*	*43*
Grade 8 MS					
% of states gaps narrowed	57%	67%	53%	72%	58%
% of states gaps widened	29%	27%	41%	19%	33%
No change	14%	7%	6%	9%	8%
# of states with data	*27*	*30*	*17*	*32*	*36*
High school PP					
% of states gaps narrowed	69%	85%	71%	65%	74%
% of states gaps widened	31%	15%	24%	18%	21%
No change	0%	0%	6%	18%	5%
# of states with data	*29*	*33*	*17*	*34*	*38*
High school MS					
% of states gaps narrowed	67%	85%	50%	66%	74%
% of states gaps widened	21%	15%	43%	17%	16%
No change	13%	0%	7%	17%	6%
# of states with data	*24*	*27*	*14*	*29*	*31*

Table reads: In grade 4 reading, the gap between African American and white students in percentages proficient on state tests narrowed in 82% of the 33 states with sufficient data and widened in 18% of these states. The African American-white gap in mean scores for grade 4 reading narrowed in 54% of the 28 states with sufficient data, widened in 43% of these states, and showed no net change in 4%.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

PP = Percentage proficient; MS = mean score

Table 7. MATHEMATICS: Percentage of states with sufficient data showing various trends in achievement gaps on state tests, 2002–2009*

	African American/ White	Latino/ White	Native American/ White	Low-Income/ Not Low-Income
Grade 4 PP				
% of states gaps narrowed	88%	83%	65%	79%
% of states gaps widened	13%	14%	29%	18%
No change	0%	3%	6%	3%
# of states with data	*32*	*36*	*17*	*38*
Grade 4 MS				
% of states gaps narrowed	56%	63%	31%	42%
% of states gaps widened	37%	33%	69%	39%
No change	7%	3%	0%	18%
# of states with data	*27*	*30*	*16*	*33*
Grade 8 PP				
% of states gaps narrowed	78%	86%	58%	74%
% of states gaps widened	19%	9%	37%	24%
No change	3%	6%	5%	3%
# of states with data	*32*	*35*	*19*	*38*
Grade 8 MS				
% of states gaps narrowed	74%	76%	61%	64%
% of states gaps widened	15%	17%	33%	27%
No change	11%	7%	6%	9%
# of states with data	*27*	*29*	*18*	*33*
High school PP				
% of states gaps narrowed	70%	91%	56%	76%
% of states gaps widened	23%	6%	28%	15%
No change	7%	3%	17%	9%
# of states with data	*30*	*34*	*18*	*34*
High school MS				
% of states gaps narrowed	63%	85%	50%	55%
% of states gaps widened	33%	15%	50%	34%
No change	4%	0%	0%	10%
# of states with data	*24*	*27*	*14*	*29*

Table reads: In grade 4 math, the gap between African American and white students in percentages proficient on state tests narrowed in 88% of the 32 states with sufficient data and widened in 13% of these states. The African American-white gap in mean scores in grade 4 math narrowed in 56% of the 27 states with sufficient data, widened in 37% of these states, and showed no net change in 7%.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

PP = Percentage proficient; MS = mean score

Average test scores give a somewhat less positive picture of gaps narrowing.

With percentages proficient, an achievement gap may appear smaller or larger depending on where a state has set its proficiency cut score. If the cut score is so low that nearly all students exceed it, or so high that few students reach it, achievement gaps will appear smaller than if the cut score is set closer to the middle of the scoring scale, where most students' scores cluster. The test data used in this study provide some evidence for this phenomenon. In the nine states in which the percentage proficient for white students in grade 4 reading exceeded 90%, the size of the African American-white gap averaged 14 percentage points. But in the 15 states where the percentage proficient for white students was less than 80%, the size of the African American-white gap averaged 25 percentage points. The states with very high percentages proficient for white students may have lower cut scores and/or easier tests than those with lower percentages proficient.

Mean scores, by contrast, are not tied to proficiency cut scores and show changes across the achievement spectrum, including changes above and below the proficiency cut score. For this reason, mean scores are generally seen as a better indicator of changes in gaps than percentages proficient. This study also analyzed gaps in percentages proficient, however, because that is the indicator for which schools are held accountable under NCLB.

Gaps in mean scores on state tests tended to narrow less often than gaps in percentages proficient. This pattern, which is already evident in tables 6 and 7, becomes especially clear if one looks at trend lines across both subjects and all three grade levels. As shown in **table 8**, the proportion of trend lines with narrowing gaps was smaller using mean scores than using percentages proficient for all subgroups. The gap between low-income and non-low-income students, for instance, narrowed in 57% of the trend lines using mean scores, compared with 72% of the trend lines using percentages proficient. The Native American-white gap narrowed in just 46% of the trend lines using mean scores but 62% of the trend lines using percentages proficient.

The less positive findings for mean scores are unrelated to the fact that fewer states (and a somewhat different group of states) provided mean score data than provided percentages proficient. Rather, this pattern seems to be a result of mean scores picking up different kinds of changes in achievement. In some cases, a lower-achieving subgroup made larger gains than a higher-achieving subgroup in percentages proficient but smaller gains in mean scores. In grade 4 math, for example, African American students made greater gains than white students in percentages proficient but smaller gains in mean scores. This could occur if large numbers of African American students improved their performance enough to move from just below the proficiency cut score to just above it or higher. If, during the same period, many students in the white subgroup were already scoring above the proficient level, then improvements in these students' scores would not affect the white percentage proficient. Thus the black-white gap in percentages proficient might narrow while the mean score gap may stay the same or widen.

Table 8. Percentage of trend lines across two subjects and three grades levels that show achievement gaps narrowing on state tests, 2002–2009*

	African American/ White	Latino/ Whte	Native American/ White	Low-Income/ Not Low-Income	Male/ Female†
% of MS trend lines narrowed	61%	72%	46%	57%	58%
% of PP trend lines narrowed	78%	85%	62%	72%	62%

Table reads: Across both reading and math and grades 4, 8, and high school, 61% of the trend lines analyzed using mean scores showed gaps narrowing between African American and white students, compared with 78% of trend lines using percentages proficient.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

†Percentages of male/female gaps narrowing are for reading only.

PP = percentage proficient; MS = mean score

Gaps have narrowed more rapidly for some groups than for others. Still, if progress were to continue at the current rates, it would take many years to close most gaps.

How quickly are achievement gaps on state tests narrowing? To answer this question, we calculated the average yearly change in the gaps between various subgroups in each of the states with sufficient data. If, for example, the percentage proficient gap between Native American and white students in a hypothetical state shrunk by 6 percentage points over the course of six years, then the average yearly change in the gap would be 1 percentage point per year. We then determined the median, or midpoint, of these average yearly rates of change across all of the states with sufficient data for each subgroup. (By definition, half of the states have rates of change above this median and half have rates below.)

Table 9 presents these medians. A bright spot among the data is the progress states have made since 2002 in narrowing percentage proficient gaps between Latino and white students. In most grade/subject combinations, Latino-white gaps narrowed more rapidly than gaps for other subgroups. In grade 8 reading, for example, the Latino-white gap in percentages proficient narrowed at a median rate of 1.4 percentage points per year across the states with sufficient data.

African American students tended to have the second highest median rates of progress in narrowing gaps, next to Latino students. In grade 4 math, the median change in the African American-white gap—1.3 percentage points per year—exceeded the median for the Latino-white gap. For some grade/subject combinations, however, the median change in the African American-white gap was less than l percentage point per year.

Other gaps have narrowed at a slower pace. The median rate at which the Native American-white gap has narrowed ranged from 0.3 percentage point per year in grade 4 reading to 0.7 percentage point per year in grade 8 math. The gap between low-income and non-low-income students has narrowed at a median rate that ranged from 0.5 to 0.7 percentage point per year, depending on the grade and subject. Progress in narrowing gaps between boys and girls in reading has been particularly slow, ranging from a median rate of no progress in grade 4 to 0.5 percentage point per year in high school.

Table 9. Progress in narrowing gaps in percentages proficient on state tests, in terms of median annual percentage point changes, 2002–2009*

	African American/ White	Latino/ White	Native American/ White	Low-Income/ Not Low-Income	Male/ Female
Grade 4 reading					
Median percentage pt. change	0.7	0.8	0.3	0.5	0.0
# of states with data	*33*	*37*	*16*	*38*	*43*
Grade 8 reading					
Median percentage pt. change	1.0	1.4	0.5	0.6	0.3
# of states with data	*33*	*36*	*18*	*38*	*43*
High school reading					
Median percentage pt. change	0.7	1.2	0.6	0.7	0.5
# of states with data	*29*	*33*	*17*	*34*	*38*
Grade 4 math					
Median percentage pt. change	1.3	1.2	0.4	0.7	NA
# of states with data	*32*	*36*	*17*	*39*	
Grade 8 math					
Median percentage pt. change	1.1	1.3	0.7	0.6	NA
# of states with data	*32*	*35*	*19*	*39*	
High school math					
Median percentage pt. change	0.7	1.2	0.5	0.6	NA
# of states with data	*30*	*34*	*18*	*35*	

Table reads: On state grade 4 reading tests, the median rate of progress in narrowing the African American-white gap in percentages proficient was 0.7 percentage point per year across all 33 states with sufficient data for both subgroups.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

We also looked at the median rates of progress in narrowing gaps in mean scores, but the number of states with sufficient data was quite limited—10 to 15 states, depending on the grade and subject. Fewer states provided the standard deviations needed to make these calculations than provided mean scores alone. In addition, these data did not always go back as far as the other data provided by states for this study. Because of these limitations, we could not reach firm conclusions about how quickly or slowly mean score gaps were closing.

One way of grasping what the current rates of progress signify is to consider hypothetically how long it would take to close typical-size gaps in specific states if that state's current rate of progress continued—which in reality is an unlikely scenario. Achievement trends for various groups rarely change at the same steady rate along a straight trajectory. In addition, the smaller a gap becomes, the more difficult it may be to close, as the very lowest-performing students struggle to master more challenging knowledge and skills. Changes in tests, such as the adoption of tests that more sensitively measure the effects of good instruction, may influence the rate at which gaps change. With these points in mind, it is nevertheless illuminating to consider examples from states with typical-size gaps for particular subgroups, as shown in **table 10**. These examples come from states that did not have unusually large or small gaps and that had data for all the years covered by this study, 2002 through 2009. States with longer trend lines offer a better opportunity to look at progress over time.

Table 10. Hypothetical progress in closing achievement gaps in selected states, 2002–2009

	2002 PP lower-achieving subgroup	2002 PP higher-achieving subgroup	2002 percentage point gap	2009 PP lower-achieving subgroup	2009 PP higher-achieving subgroup	2009 percentage point gap	Average annual rate of closure in percentage points	Hypothetical years to close gap
African American/white gap, grade 4 reading								
Florida	36%	67%	31	59%	84%	25	0.9	28
Louisiana	42%	73%	31	62%	82%	20	1.6	12.5
Washington State	49%	71%	22	57%	78%	21	0.2	105
Latino/white gap, grade 8 math								
Colorado	45%	80%	35	67%	88%	21	2.0	10.5
Pennsylvania	24%	60%	36	52%	77%	25	1.5	17
Native American/white gap, grade 4 reading								
Colorado	80%	92%	12	79%	93%	14	-0.4	Widening
Low income/non-low income gap, grade 8 reading								
Pennsylvania	31%	68%	37	66%	88%	22	2.0	11
Male/female gap, grade 8 reading								
Louisiana	42%	54%	12	57%	69%	12	0	Not closing
Florida	43%	49%	6	50%	58%	8	-0.3	Widening

Table reads: In Florida, the gap in percentages proficient between African American and white students narrowed from 31 percentage points in 2002 to 25 percentage points in 2009, an average rate of narrowing of 0.9 percentage point per year. If this current rate of change were to continue, it would take 28 years to close this gap.

PP = Percentage proficient

The examples in table 10 are offered for purposes of illustration, not prediction. They should not be used to compare one state with another, because states differ considerably in the difficulty of their tests, the rigor of their cut scores for proficiency, their student demographics, and many other factors. We used state examples because our data were not suitable for arriving at a "national" example of how long it would take to close gaps. Our data come from the subset of states with sufficient data for the analyses in this study, rather than from all states. The states included have different tests and cut scores, as noted above, and the data are not weighted for population size.

In Florida, for example, a state with a typical-size gap, the African American-white gap in percentages proficient has narrowed in grade 4 reading at an average rate of 0.9 percentage point per year since 2002. In 2009, this gap remained at 25 percentage points. If the gap continued to narrow at the same rate and if other key factors remained unchanged, then theoretically it would take 28 years to close this gap. In Washington State, the African American-white gap in grade 4 reading has narrowed at an average rate of 0.2 percentage point per year, and amounted to 21 percentage points in 2009. Theoretically, it would take 105 years to close this gap.

In Pennsylvania, it would hypothetically take 17 years to close the gap between Latino and white students in grade 8 math at the current average rate of 1.5 percentage points per year. In Colorado, where the Latino-white gap has narrowed at the average rate of 2.0 percentage points per year, it would hypothetically take 10.5 years to close this gap.

In other cases, gaps have widened or stayed the same, so the current rate of change would not lead to a closing of these gaps. In Florida, for example, the male-female gap in grade 8 reading is 8 points, but this gap has widened since 2002 at an average rate of 0.3 percentage point per year.

As these examples indicate, the average rate of change varies considerably among states with similar size gaps, but these rates may be affected by differences in testing programs, demographics, and other factors. It is encouraging that gaps in some states are much smaller in 2009 than they were in 2002. But it could still take many years to close most gaps if progress were to continue unchanged, and some gaps would not narrow, let alone close.

In sum, progress has been made in narrowing gaps, but much work remains to reduce disparities in educational quality and ensure that all groups of students—especially those with historically lower performance—acquire the knowledge and skills needed to succeed in higher education and the workplace.

Chapter 2: African American Students

Large achievement gaps remain between African American and white students on state tests.

In many states, gaps of 20 or 30 points existed in 2009 between African American and white students in the percentages scoring proficient on state reading and math tests. These gaps on state tests are consistent with the wide black-white gaps found on NAEP and other achievement measures, as highlighted in a 2010 study by the Council of the Great City Schools.[1]

The size of the black-white gap varies considerably, however, from state to state. In high school math, for example, the largest gap in any state in 2009 was 50 percentage points, while the smallest gap in any state was 8 points. These variations may not be solely, or even primarily, due to differences in educational quality but may also be attributable to differences among states in their cut scores for proficiency, test difficulty, and other factors. The appendix shows the size of the black-white gaps for individual states in 2009.

One way to gauge the relative performance of African American and white students on a broader scale than a single state is to look at the 2009 median percentage proficient for each group across all of the states with sufficient data for both groups. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.) **Table 11** shows these medians. In grade 8 math, for example, the median percentage proficient was 46% for African American students and 77% for white students, a difference of 31 points. Interestingly, African American students made the largest gains in grade 8 math, as discussed later.

As table 11 also reveals, the range among states in percentages proficient was much greater for African Americans than for white students. In grade 4 math, for example, the African American percentage proficient ranged from 21% in the lowest state to 90% in the highest state, compared with a low of 51% and a high of 97% for white students.

[3] S. Lewis et al. (2010). *A Call for Change: The Social and Educational Factors Contributing to the Outcomes of Black Males in Urban Schools*. Washington, DC: Council of the Great City Schools.

Table 11. Median, highest, and lowest percentages of AFRICAN AMERICAN and WHITE students scoring proficient across all states with sufficient state test data, 2009

	READING		MATHEMATICS	
	African American	White	African American	White
Grade 4				
Median PP across states	59%	84%	59%	84%
Highest PP in any state	88%	97%	90%	97%
Lowest PP in any state	28%	52%	21%	51%
# of states with data	*40*	*40*	*40*	*40*
Grade 8				
Median PP across states	56%	79%	46%	77%
Highest PP in any state	91%	96%	84%	94%
Lowest PP in any state	27%	56%	20%	53%
# of states with data	*40*	*40*	*40*	*40*
High school				
Median PP across states	54%	82%	45%	77%
Highest PP in any state	95%	98%	89%	97%
Lowest PP in any state	18%	47%	7%	33%
# of states with data	*36*	*36*	*36*	*36*

Table reads: Across all 40 states with sufficient 2009 data, the median percentage of African American students scoring proficient in grade 4 reading was 59%, compared with 84% for the white subgroup. The highest percentage proficient for grade 4 reading in any state for the African American subgroup was 88%, while the lowest in any state was 28%.

PP = Percentage proficient

NOTE: Forty states had sufficient 2009 data for both the African American and white subgroups at one or more grade levels: AL, AR, AZ, CA, CO, CT, DE, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, MS, NC, NE, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, WA, WI, and WV. Together these states enroll 98% of the African American student population in the U.S. States with fewer than 500 African American test-takers in a particular grade/subject were excluded from the analysis for that grade/subject.

Many more states showed gains for African American students on state tests than showed declines.

States with gains since 2002 for the African American subgroup far outnumbered states with declines in both the percentages of students scoring proficient and average (mean) test scores. The most positive results were in grade 8 math: the African American subgroup posted increases in mean scores in every state and increases in percentages proficient in all but one state.

According to percentages proficient, seven states showed declines for African Americans in high school math—the most declines of any grade/subject combination analyzed—but according to mean scores, just three states had declines for this subgroup.

The proportions of trend lines with increases were similar using either percentages proficient or mean scores. Across both subjects and all three grade levels, 89% of trend lines showed gains using percentages proficient, and 88% showed gains using mean scores.

Table 12. Number (and percentage) of states with various trends for AFRICAN AMERICAN students on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states with gain	30 (88%)	23 (79%)	31 (94%)	24 (86%)
# and % of states with decline	4 (12%)	3 (10%)	2 (6%)	4 (14%)
No change	0 (0%)	3 (10%)	0 (0%)	0 (0%)
# of states with data	*34*	*29*	*33*	*28*
Grade 8				
# and % of states with gain	32 (94%)	26 (90%)	32 (97%)	28 (100%)
# and % of states with decline	2 (6%)	2 (7%)	1 (3%)	0 (0%)
No change	0 (0%)	1 (3%)	0 (0%)	0 (0%)
# of states with data	*34*	*29*	*33*	*28*
High school				
# and % of states with gain	25 (83%)	22 (88%)	24 (77%)	22 (88%)
# and % of states with decline	3 (10%)	3 (12%)	7 (23%)	3 (12%)
No change	2 (7%)	0 (0%)	0 (0%)	0 (0%)
# of states with data	*30*	*25*	*31*	*25*

Table reads: On state grade 4 reading tests, 30 of the 34 states with sufficient data showed gains since 2002 in the percentage of African American students scoring proficient, and 4 showed declines. Of the 29 states with sufficient mean score data, 23 showed gains for African American students in average grade 4 reading scores, 3 showed declines, and 3 had no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Thirty-seven states had sufficient trend data for the African American subgroup at one or more grade levels: AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, IA, IL, KS, KY, LA, MA, MD, MI, MN, MO, NC, NE, NJ, NM, NV, NY, OH, OR, PA, RI, SC, TN, TX, UT, VA, WA, and WI. Together these states enroll 95% of African American test-takers nationwide. States with fewer than 500 African American test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Progress in closing black-white achievement gaps is mixed.

Gaps between African American and white students have narrowed since 2002 in the majority of states with sufficient data, according to both percentages proficient and mean scores. But mean scores, which capture changes across the achievement spectrum, tend to give a less positive picture of progress. Across both reading and math and all three grade levels, 78% of the black-white gaps analyzed narrowed according to percentages proficient, and 61% narrowed according to mean scores. In almost all cases where gaps narrowed, both subgroups improved, but African American students improved at a faster rate than white students.

In both reading and math, gaps in mean scores between African American and white students widened most often at grade 4. Gaps widened for various reasons. Often, both subgroups showed gains, but white students improved at a greater rate than African American students. In grade 4 reading, for example, gains by white students outstripped gains by black students in 6 of the 12 instances where mean score gaps widened. In 5 of these 12 instances, white students made gains while the African American subgroup showed a decline or a flat trend. In one instance, mean scores declined for both groups, but declined more for African American students.

Table 13. Number (and percentage) of states with various trends in the AFRICAN AMERICAN–WHITE achievement gap on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states narrowed	27 (82%)	15 (54%)	28 (88%)	15 (56%)
# and % of states widened	6 (18%)	12 (43%)	4 (13%)	10 (37%)
No change	0 (0%)	1 (4%)	0 (0%)	2 (7%)
# of states with data	*33*	*28*	*32*	*27*
Grade 8				
# and % of states narrowed	27 (82%)	16 (57%)	25 (78%)	20 (74%)
# and % of states widened	4 (12%)	8 (29%)	6 (19%)	4 (15%)
No change	2 (6%)	4 (14%)	1 (3%)	3 (11%)
# of states with data	*33*	*28*	*32*	*27*
High school				
# and % of states narrowed	20 (69%)	16 (67%)	21 (70%)	15 (63%)
# and % of states widened	9 (31%)	5 (21%)	7 (23%)	8 (33%)
No change	0 (0%)	3 (13%)	2 (7%)	1 (4%)
# of states with data	*29*	*24*	*30*	*24*

Table reads: The gap between African American and white students in percentages scoring proficient on state grade 4 reading tests narrowed in 27 of the 33 states with sufficient data and widened in 6 states. The African American-white gap in mean scores on grade 4 reading tests narrowed in 15 of the 28 states with sufficient data, widened in 12 states, and showed no net change in 1 state.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Thirty-six states had sufficient trend data for both the African American and white subgroups at one or more grade levels: AL, AR, AZ, CA, CO, CT, DE, FL, GA, IA, IL, KS, KY, LA, MA, MD, MI, MN, MO, NC, NE, NJ, NM, NV, NY, OH, OR, PA, RI, SC, TN, TX, UT, VA, WA, and WI. Together these states enroll 94% of African American test-takers nationwide. States with fewer than 500 African American test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Chapter 3: Asian American Students

Since 2002, the Asian subgroup has made gains on reading and math tests in many states.

Four-fifths or more of the states with sufficient data posted increases for Asian American students in both the percentages scoring proficient and average (mean) test scores. Across both reading and math and all three grade levels, 85% of the total trend lines analyzed showed gains using percentages proficient, and 90% showed gains using mean scores.

Gains for the Asian subgroup were most prevalent in grade 8 math: mean scores rose in all 24 states with sufficient data, and percentages proficient went up in 27 of 29 states.

More states saw decreases in performance for Asian students in reading than in math.

Table 14. Number (and percentage) of states with various trends for ASIAN AMERICAN students on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states with gain	26 (84%)	22 (85%)	26 (87%)	23 (92%)
# and % of states with decline	4 (13%)	3 (12%)	2 (7%)	2 (8%)
No change	1 (3%)	1 (4%)	2 (7%)	0 (0%)
# of states with data	*31*	*26*	*30*	*25*
Grade 8				
# and % of states with gain	25 (83%)	21 (84%)	27 (93%)	24 (100%)
# and % of states with decline	4 (13%)	4 (16%)	1 (3%)	0 (0%)
No change	1 (3%)	0 (0%)	1 (3%)	0 (0%)
# of states with data	*30*	*25*	*29*	*24*
High school				
# and % of states with gain	23 (82%)	20 (87%)	24 (83%)	21 (91%)
# and % of states with decline	4 (14%)	3 (13%)	4 (14%)	2 (9%)
No change	1 (4%)	0 (0%)	1 (3%)	0 (0%)
# of states with data	*28*	*23*	*29*	*23*

Table reads: On state grade 4 reading tests, 26 of the 31 states with sufficient data showed gains since 2002 in the percentage of Asian students scoring proficient, 4 showed declines, and 1 showed no net change. Of the 26 states with sufficient mean score data, 22 showed gains for Asian students in average grade 4 reading scores, 3 showed declines, and 1 state showed no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Thirty-five states had sufficient trend data for the Asian subgroup at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, FL, GA, HI, IA, IL, KS, KY, LA, MA, MD, MI, MN, MO, NC, NJ, NV, NY, OH, OK, OR, PA, SC, TN, TX, UT, VA, WA, and WI. Together these states enroll 98% of Asian test-takers nationwide. States with fewer than 500 Asian test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

In math, Asian American students often outperform white students and other racial/ethnic subgroups on state tests.

In at least three-quarters of the states with sufficient 2009 data for the Asian and white subgroups, Asian students had higher percentages proficient and mean scores in math than white students and other racial/ethnic groups. **Table 15** shows the specific numbers and percentages of states in which the Asian subgroup outperformed the white subgroup in math in 2009.

Table 15. Number and percentage of states in which ASIAN AMERICAN students outperformed WHITE students in mathematics, 2009

	PERCENTAGE PROFICIENT			MEAN SCORE		
	# of states Asian > white	% of states Asian > white	*# of states with data*	# of states Asian > white	% of states Asian > white	*# of states with data*
Grade 4	28	78%	*36*	22	*85%*	*26*
Grade 8	29	83%	*35*	21	*84%*	*25*
High school	24	75%	*32*	21	*88%*	*24*

Table reads: On state grade 4 math tests, a higher percentage of Asian students than of white students scored at or above the proficient level in 28 of the 36 states with sufficient data for both subgroups, or in 78% of these states.

NOTE: Thirty-six states had sufficient 2009 test data for both the Asian and white subgroups at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, FL, GA, HI, IA, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, NC, NJ, NV, NY, OH, OK, OR, PA, SC, TN, TX, UT, VA, WA, and WI. Together these states enroll about 98% of Asian test-takers nationwide. States with fewer than 500 Asian test-takers in a particular grade/subject were excluded from the analysis for that grade/subject.

In many states, the percentage of Asian students scoring proficient in math was at least 10 points higher than that of white students. At the high school level, this was the case in seven states (California, Illinois, Michigan, Missouri, Pennsylvania, South Carolina, and Texas). The appendix provides more details about Asian students' performance in individual states in 2009.

One way to gauge the relative performance of Asian American and white students on a broader scale than a single state is to look at the median percentage proficient for 2009 across all of the states with sufficient data for both groups. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.) As shown in **table 16**, the median percentages proficient in math were higher for the Asian subgroup than for the white subgroup at all three grade levels.

Table 16. Median, highest, and lowest percentages proficient in mathematics for ASIAN AMERICAN and WHITE students across all states with sufficient state test data, 2009

	GRADE 4		GRADE 8		HIGH SCHOOL	
	Asian	White	Asian	White	Asian	White
Median PP across states	88%	84%	84%	77%	81%	77%
Highest PP in any state	97%	96%	96%	93%	98%	97%
Lowest PP in any state	49%	51%	38%	45%	33%	43%
# of states with data	*36*	*36*	*35*	*35*	*32*	*32*

Table reads: Across all 36 states with sufficient 2009 test data, the median percentage of Asian American students scoring proficient in grade 4 math was 88%, compared with 84% for white students. The highest percentage proficient for grade 4 reading in any state for the Asian subgroup in grade 4 math was 97%, while the lowest in any state was 49%.

On state reading tests, the Asian and white subgroups often perform at similar levels, although differences exist by grade level and by indicator used (average scores or percentages proficient).

At grades 4 and 8, Asian students had higher mean scores in 2009 than white students in most of the states with sufficient data, as shown in **table 17**. But percentages proficient at these grades present a different picture: the number of states in which Asian students outperformed whites was similar to the number in which white students outperformed Asians. At the high school level, Asian students also had higher mean scores than whites in most of the states with sufficient data. In terms of percentages proficient, however, white students had the edge in more states.

Table 17. Number and percentage of states in which ASIAN AMERICAN students outperformed white students in reading, 2009

	PERCENTAGE PROFICIENT			MEAN SCORE		
	# of states Asian > white	% of states Asian > white	*# of states with data*	# of states Asian > white	% of states Asian > white	*# of states with data*
Grade 4	18	50%	*36*	18	69%	*26*
Grade 8	19	54%	*35*	19	76%	*25*
High school	11	34%	*32*	14	61%	*23*

Table reads: On state grade 4 reading tests, a higher percentage of Asian students than of white students scored at or above the proficient level in 18 of the 36 states with sufficient data for both subgroups, or in 50% of these states.

NOTE: Thirty-six states had sufficient 2009 test data for both the Asian and white subgroups at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, FL, GA, HI, IA, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, NC, NJ, NV, NY, OH, OK, OR, PA, SC, TN, TX, UT, VA, WA, and WI. Together these states enroll about 98% of Asian test-takers nationwide. States with fewer than 500 Asian test-takers in a particular grade/subject were excluded from the analysis for that grade/subject.

What accounts for these differences by indicator? In several states, the Asian subgroup had slightly lower percentages proficient than whites but slightly higher mean scores. In Connecticut, for instance, 90% of whites and 88% of Asians scored at or above the proficient level in high school reading/language arts; mean scores, however, were 257 for whites and 260 for Asians. Patterns like this indicate that among the top performers—students who scored above the proficient level—Asian students tended to earn higher scores than their white counterparts.

One way of gauging the relative performance of Asian American and white students across multiple states is to look at the median percentage proficient for 2009 across all of the states with sufficient data for both groups. **Table 18** shows the results. At grades 4 and 8, the median percentages proficient in reading across states were the same or quite similar for the Asian and white subgroups, but at the high school level, the median was slightly lower for Asians.

Table 18. Median, highest, and lowest percentages proficient in reading for ASIAN AMERICAN and WHITE students across all states with sufficient state test data, 2009

	GRADE 4		GRADE 8		HIGH SCHOOL	
	Asian	White	Asian	White	Asian	White
Median PP across states	84%	84%	83%	81%	79%	85%
Highest PP in any state	95%	94%	98%	96%	99%	98%
Lowest PP in any state	44%	52%	55%	56%	54%	48%
# of states with data	*36*	*36*	*35*	*35*	*32*	*32*

Table reads: Across all 36 states with sufficient data, the median percentage of Asian American students scoring proficient in grade 4 reading was 84%, the same as for white students. The highest percentage proficient in any state for the Asian subgroup in grade 4 reading was 95%, while the lowest in any state was 44%.

Chapter 4: Latino Students

States continue to confront large Latino-white achievement gaps on state reading and math tests.

In many states, gaps of 15 to 20 percentage points or more existed between Latino and white students in the percentages scoring proficient in 2009. The size of the Latino-white gap varied considerably, however, from state to state. In grade 4 reading, for example, the largest gap in any state in 2009 was 38 percentage points, while the smallest gap in any state was 5 points. These variations may not be solely, or even primarily, due to differences in educational quality but may also be attributable to differences among states in their cut scores for proficiency, test difficulty, and other factors. The appendix shows the size of the Latino-white gaps in specific states in 2009.

One way to gauge the relative performance of Latino and white students on a broader scale than a single state is to look at the median percentage proficient for 2009 across *all* of the states with sufficient data for both groups. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.) The results are shown in **table 19**. In high school reading/language arts, for example, the median percentage proficient was 62% for Latino students and 83% for white students, a difference of more than 20 percentage points. Similar differences can be found for other grade/subject combinations.

As table 19 also indicates, the range among states in percentages proficient was much greater for Latino students than for white students. In grade 8 math, for example, the Latino percentage proficient ranged from 22% in the lowest state to 87% in the highest state, compared with a low of 53% and a high of 94% for white students.

Table 19. Median, highest, and lowest percentages of LATINO and WHITE students scoring proficient across all states with sufficient state test data, 2009

	READING		MATHEMATICS	
	Latino	White	Latino	White
Grade 4				
Median PP across states	62%	84%	67%	84%
Highest PP in any state	92%	97%	94%	97%
Lowest PP in any state	28%	52%	25%	51%
# of states with data	*43*	*43*	*43*	*43*
Grade 8				
Median PP across states	60%	80%	58%	77%
Highest PP in any state	92%	96%	87%	94%
Lowest PP in any state	34%	56%	22%	53%
# of states with data	*42*	*42*	*42*	*42*
High school				
Median PP across states	62%	83%	54%	77%
Highest PP in any state	97%	98%	93%	97%
Lowest PP in any state	30%	48%	9%	33%
# of states with data	*38*	*38*	*39*	*39*

Table reads: Across all 43 states with sufficient 2009 data, the median percentage of Latino students scoring proficient in grade 4 reading was 62%, compared with 84% for the white subgroup. The highest percentage proficient for grade 4 reading in any state for the Latino subgroup was 92%, while the lowest in any state was 28%.

PP = Percentage proficient

NOTE: Forty-three states had sufficient 2009 data for both the Latino and white subgroups for one or more grade/subject combinations: AK, AL, AR, AZ, CA, CO, CT, DE, FL, GA, IA, ID, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, MS, NC, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, WA, WI, and WY. Together these states enroll almost 100% of the Latino student population in the U.S. States with fewer than 500 Latino test-takers in a particular grade/subject were excluded from the analysis for that grade/subject.

The number of states with test score gains for Latino students since 2002 far exceeds the number with declines.

Many more states have shown increases for Latino students on state reading and math tests since 2002 than have experienced decreases, according to both the percentages of students scoring proficient and average (mean) test scores. The most positive results were in grade 8 math; in every state with sufficient data, the Latino subgroup posted gains in both mean scores and percentages proficient.

Declines for Latino students were more evident in reading than in math, although a relatively small number of states showed declines in either subject.

Trends in percentages proficient and mean scores were generally similar for Latino students. Across two subjects and three grade levels, 93% of the trend lines analyzed showed gains using percentages proficient, and 90% showed gains using mean scores.

Table 20. Number (and percentage) of states with various trends for LATINO students on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states with gain	33 (89%)	26 (84%)	34 (92%)	28 (90%)
# and % of states with decline	4 (11%)	5 (16%)	1 (3%)	3 (10%)
No change	0 (0%)	0 (0%)	2 (5%)	0 (0%)
# of states with data	*37*	*31*	*37*	*31*
Grade 8				
# and % of states with gain	33 (92%)	26 (87%)	35 (100%)	29 (100%)
# and % of states with decline	3 (8%)	4 (13%)	0 (0%)	0 (0%)
No change	0 (0%)	0 (0%)	0 (0%)	0 (0%)
# of states with data	*36*	*30*	*35*	*29*
High school				
# and % of states with gain	30 (91%)	23 (85%)	33 (97%)	25 (93%)
# and % of states with decline	2 (6%)	3 (11%)	1 (3%)	2 (7%)
No change	1 (3%)	1 (4%)	0 (0%)	0 (0%)
# of states with data	*33*	*27*	*34*	*27*

Table reads: On state grade 4 reading tests, 33 of the 37 states with sufficient data showed gains since 2002 in the percentage of Latino students scoring proficient, and 4 showed declines. Of the 31 states with sufficient mean score data, 26 showed gains for Latino students in average grade 4 reading scores, and 5 showed declines.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-one states had sufficient trend data for the Latino subgroup for one or more grade/subject combinations: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, IA, ID, IL, KS, KY, LA, MA, MD, MI, MN, MO, NC, NE, NH, NJ, NM, NV, NY, OH, OR, PA, RI, SC, TN, TX, UT, VA, WA, WI, and WY. Together these states enroll 98% of Latino test-takers nationwide. States with fewer than 500 Latino test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Progress in narrowing Latino-white gaps is mixed.

State test score gaps between Latino and white students have narrowed since 2002 in the majority of states with sufficient data. In almost all cases where gaps have narrowed, both the Latino and white subgroups have improved, but Latinos have improved at a faster rate.

These positive results are tempered, however, by the notable number of instances in which Latino-white gaps have widened, especially gaps in mean scores. Across both subjects and all three grades levels, 72% of mean score gaps narrowed, compared with 85% of percentage proficient gaps.

Instances of widening Latino-white gaps were most common in grade 4; at this level, mean score gaps widened about one-third of the time. Latinos made the most progress in narrowing gaps at the high school level, where the Latino-white gap widened in just 15% of instances or fewer.

Gaps widened for various reasons. Often, both subgroups improved, but the white subgroup made greater gains than the Latino subgroup. In grade 4 math, for example, gains by white students outpaced gains by Latino students in 8 of the 10 instances of widening mean score gaps. In the remaining two instances, performance improved for the white subgroup but declined for the Latino subgroup.

Table 21. Number (and percentage) of states with various trends in the LATINO–WHITE achievement gap on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states narrowed	29 (78%)	18 (58%)	30 (83%)	19 (63%)
# and % of states widened	7 (19%)	10 (32%)	5 (14%)	10 (33%)
No change	1 (3%)	3 (10%)	1 (3%)	1 (3%)
# of states with data	*37*	*31*	*36*	*30*
Grade 8				
# and % of states narrowed	32 (89%)	20 (67%)	30 (86%)	22 (76%)
# and % of states widened	3 (8%)	8 (27%)	3 (9%)	5 (17%)
No change	1 (3%)	2 (7%)	2 (6%)	2 (7%)
# of states with data	*36*	*30*	*35*	*29*
High school				
# and % of states narrowed	28 (85%)	23 (85%)	31 (91%)	23 (85%)
# and % of states widened	5 (15%)	4 (15%)	2 (6%)	4 (15%)
No change	0 (0%)	0 (0%)	1 (3%)	0 (0%)
# of states with data	*33*	*27*	*34*	*27*

Table reads: The gap between Latino and white students in percentages scoring proficient on state grade 4 reading tests narrowed in 29 of the 37 states with sufficient data, widened in 7 states, and showed no net change in 1 state. The Latino-white gap in mean scores on grade 4 reading tests narrowed in 18 of the 31 states with sufficient data, widened in 10 states, and showed no net change in 3 states.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-one states had sufficient trend data for both the Latino and white subgroups for one or more grade/subject combinations: AK, AL, AR, AZ, CA, CO, CT, DE, FL, GA, IA, ID, IL, KS, KY, LA, MA, MD, MI, MN, MO, NC, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, WA, WI, and WY. Together these states enroll 98% of Latino test-takers nationwide. States with fewer than 500 Latino test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Chapter 5: Native American Students

Performance gaps on state tests between Native American and white students remain wide in many states.

In many of the 22 states with sufficiently large numbers of Native American test-takers, gaps in percentages proficient between Native American and white students amounted to 20 or even 30 percentage points on state 2009 reading and math tests. But in some states, these gaps totaled 10 percentage points or less. The size of the Native American-white gaps varied enormously from state to state. In high school math, for example, the largest gap in any state was 36 percentage points, while in another state there was no gap.

These variations may not be solely, or even primarily, the result of differences in educational quality but may also be attributable to differences among states in their cut scores for proficiency, test difficulty, and other factors. The appendix shows the size of the Native American-white gaps for individual states in 2009.

One way to gauge the relative performance of Native American and white students on a broader scale than a single state is to look at the median percentage proficient for 2009 across all of the states with sufficient data for both groups. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.) The results are shown in **table 22**. In grade 4 reading, for example, the median percentage proficient was 58% for Native American students and 84% for white students. The range from the lowest percentage proficient in any state to the highest in any state was also greater for Native Americans than for white students.

Table 22. Median, highest, and lowest percentages proficient for NATIVE AMERICAN and WHITE students across all states with sufficient state test data, 2009

	READING		MATHEMATICS	
	Native American	White	Native American	White
Grade 4				
Median PP across states	58%	84%	62%	83%
Highest PP in any state	86%	93%	87%	96%
Lowest PP in any state	36%	63%	29%	59%
# of states with data	*19*	*19*	*19*	*19*
Grade 8				
Median PP across states	59%	79%	51%	76%
Highest PP in any state	94%	96%	79%	89%
Lowest PP in any state	39%	66%	28%	56%
# of states with data	*21*	*21*	*21*	*21*
High school				
Median PP across states	54%	82%	46%	69%
Highest PP in any state	96%	97%	92%	94%
Lowest PP in any state	37%	48%	18%	47%
# of states with data	*19*	*19*	*19*	*19*

Table reads: Across all 19 states with sufficient data, the median percentage of Native American students scoring proficient in grade 4 reading was 58%, compared with 84% for the white subgroup. The highest percentage proficient for grade 4 reading in any state for the Native American subgroup was 86%, while the lowest in any state was 36%.

PP = Percentage proficient

NOTE: Twenty-two states had sufficient 2009 test data for both the Native American and white subgroups at one or more grade levels: AK, AL, AZ, CA, CO, FL, MI, MN, MT, NC, ND, NM, NV, NY, OK, OR, SD, TX, UT, VA, WA, and WI. Together these states enroll about 88% of the Native American student population in the U.S. States with fewer than 500 Native American test-takers in a particular grade/subject were excluded from the analysis for that grade/subject.

States with gains on state tests for Native Americans outnumber those with declines.

The reading and math performance of the Native American subgroup has improved since 2002 in two-thirds or more of the states with sufficient test data. A large majority of these states made gains for Native Americans on two indicators—average (mean) test scores and percentages scoring proficient. Across both subjects and all three grade levels, 86% of the trend lines we analyzed showed gains using percentages proficient, and 80% had gains using mean scores.

Our analysis of Native American gap trends was limited to the minority of states with large enough Native American subgroups to yield reliable trend information and sufficient years of comparable test data—from 14 to 19 states, depending on the grade level and subject.

Table 23. Number (and percentage) of states with various trends for NATIVE AMERICAN students on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states with gain	13 (81%)	10 (67%)	14 (82%)	13 (81%)
# and % of states with decline	3 (19%)	3 (20%)	2 (12%)	3 (19%)
No change	0 (0%)	2 (13%)	1 (6%)	0 (0%)
# of states with data	*16*	*15*	*17*	*16*
Grade 8				
# and % of states with gain	16 (89%)	14 (82%)	18 (95%)	16 (89%)
# and % of states with decline	2 (11%)	2 (12%)	1 (5%)	2 (11%)
No change	0 (0%)	1 (6%)	0 (0%)	0 (0%)
# of states with data	*18*	*17*	*19*	*18*
High school				
# and % of states with gain	14 (82%)	12 (86%)	15 (83%)	10 (71%)
# and % of states with decline	2 (12%)	2 (14%)	2 (11%)	4 (29%)
No change	1 (6%)	0 (0%)	1 (6%)	0 (0%)
# of states with data	*17*	*14*	*18*	*14*

Table reads: On state grade 4 reading tests, 13 of the 16 states with sufficient data showed gains since 2002 in the percentage of Native American students scoring proficient, and 3 showed declines. Of the 15 states with sufficient mean score data, 10 showed gains for Native American students in average grade 4 reading scores, 3 showed declines, and 2 had no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Twenty-two states had sufficient trend data for the Native American subgroup at one or more grade levels: AK, AL, AZ, CA, CO, FL, MI, MN, MT, NC, ND, NM, NV, NY, OK, OR, SD, TX, UT, VA, WA, and WI. These states enroll 88% of Native American test-takers nationwide. States with fewer than 500 Native American test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Less progress has been made in narrowing achievement gaps on state tests for Native Americans than for other racial/ethnic groups.

Although Native American-white gaps have narrowed in some states and grade levels, progress has been erratic, especially as gauged by mean scores. Across two subjects and three grade levels, 62% of the percentage proficient gaps between Native American and white students narrowed, and 46% of the mean score gaps narrowed. In most cases where gaps narrowed, both subgroups improved, but Native American students improved at a faster rate than white students.

For some grades and subjects, the Native American-white gap widened at least as often as it narrowed. In grade 4 reading and math, for example, mean score gaps widened in more than two-thirds of the states with sufficient data. In high school reading/language arts and math, the number of states with widening gaps in mean scores was the same as the number with narrowing or stable gaps. Gaps widened for various reasons. Often, both subgroups showed gains, but white students improved at a faster rate than Native Americans. In grade 4 math, for example, gains by white students outstripped gains by Native American students in 8 of the 11 instances where mean score gaps widened. In 2 of these 11 instances, the performance of white students improved while the Native American subgroup showed a decline. In one instance, mean scores declined for both groups but declined more for Native American students.

Table 24. Number (and percentage) of states with various trends in the NATIVE AMERICAN–WHITE achievement gap on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states narrowed	9 (56%)	4 (27%)	11 (65%)	5 (31%)
# and % of states widened	6 (38%)	11 (73%)	5 (29%)	11 (69%)
No change	1 (6%)	0 (0%)	1 (6%)	0 (0%)
# of states with data	*16*	*15*	*17*	*16*
Grade 8				
# and % of states narrowed	12 (67%)	9 (53%)	11 (58%)	11 (61%)
# and % of states widened	4 (22%)	7 (41%)	7 (37%)	6 (33%)
No change	2 (11%)	1 (6%)	1 (5%)	1 (6%)
# of states with data	*18*	*17*	*19*	*18*
High school				
# and % of states narrowed	12 (71%)	7 (50%)	10 (56%)	7 (50%)
# and % of states widened	4 (24%)	6 (43%)	5 (28%)	7 (50%)
No change	1 (6%)	1 (7%)	3 (17%)	0
# of states with data	*17*	*14*	*18*	*14*

Table reads: The gap between Native American and white students in percentages scoring proficient on state grade 4 reading tests narrowed in 9 of the 16 states with sufficient data, widened in 6 states, and showed no net change in 1 state. The Native American-white gap in mean scores on grade 4 reading tests narrowed in 4 of the 15 states with sufficient data and widened in 11 states.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Twenty-two states had sufficient trend data for both the Native American and white subgroups at one or more grade levels: AK, AL, AZ, CA, CO, FL, MI, MN, MT, NC, ND, NM, NV, NY, OK, OR, SD, TX, UT, VA, WA, and WI. These states enroll 88% of Native American test-takers nationwide. States with fewer than 500 Native American test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Chapter 6: White Students

States with gains for white students on state reading and math tests greatly outnumbered states with declines.

The vast majority of states with sufficient years of trend data showed gains since 2002 for the white subgroup in both percentages proficient and average (mean) test scores. Trends on these two indicators were generally similar. Across both subjects and three grade levels, 91% of the trend lines analyzed showed gains for white students using percentages proficient, and 88% showed gains using mean scores.

The most positive results for white students were in math at grades 4 and 8: in almost all of the states with sufficient data, this subgroup showed gains in percentages proficient and mean scores. Declines in performance for white students occurred most often at the high school level in both reading and math.

In reading, white students and Asian students often showed similar test results, outperforming other racial/ethnic groups. In math, white students outperformed other groups except for Asians.

More states had sufficient test data for white students than for other racial/ethnic subgroups. One way to gauge the performance of white students is to look at the median percentages proficient for this subgroup across *all* of the states with such data. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.) The 2009 median percentages proficient for white students were 84% in grade 4 reading, 84% in grade 4 math, 79% in grade 8 reading/language arts, 77% in grade 8 math, 81% in high school reading/language arts, and 75% in high school math. The appendix provides more details about the performance of white students in individual states in 2009.

Table 25. Number (and percentage) of states with various trends for WHITE students on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states with gain	37 (88%)	33 (92%)	41 (98%)	35 (97%)
# and % of states with decline	1 (2%)	2 (6%)	1 (2%)	1 (3%)
No change	4 (10%)	1 (3%)	0 (0%)	0 (0%)
# of states with data	*42*	*36*	*42*	*36*
Grade 8				
# and % of states with gain	39 (93%)	33 (92%)	41 (98%)	34 (94%)
# and % of states with decline	3 (7%)	3 (8%)	1 (2%)	1 (3%)
No change	0 (0%)	0 (0%)	0 (0%)	1 (3%)
# of states with data	*42*	*36*	*42*	*36*
High school				
# and % of states with gain	34 (92%)	24 (77%)	30 (77%)	24 (75%)
# and % of states with decline	3 (8%)	5 (16%)	7 (18%)	4 (13%)
No change	0 (0%)	2 (6%)	2 (5%)	4 (13%)
# of states with data	*37*	*31*	*39*	*32*

Table reads: On state grade 4 reading tests, 37 of the 42 states with sufficient data showed gains since 2002 in the percentage of white students scoring proficient, 1 showed a decline, and 4 showed no net change. Of the 36 states with sufficient mean score data, 33 showed gains for white students in average grade 4 reading scores, 2 showed declines, and 1 had no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-seven states had sufficient trend data for the white subgroup at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, DE, FL, GA, HI, IA, ID, IL, KS, KY, LA, MA, MD, ME, MI, MN, MO, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, and WY. Together these states enroll 91% of the white student population in the U.S. States with fewer than three years of comparable test data in a particular grade/subject were excluded from the analysis for that grade/subject.

Chapter 7: Low-Income Students

Sizeable achievement gaps exist between students from low-income families and more advantaged students.

Within individual states, the gaps in percentages proficient between students who come from low-income families and those who do not often amounted to 25 percentage points in 2009. The size of these gaps varied considerably, however, from state to state. In high school math, for example, the largest gap between low-income and non-low-income students in any state was 37 percentage points, while the smallest gap in any state was 6 points. These variations may not be solely, or even primarily, due to differences in educational quality, but may also be attributable to differences among states in their cut scores for proficiency, test difficulty, and other factors. The appendix shows the size of the gaps between low-income and non-low-income students in specific states in 2009.

One way to gauge the relative performance of low-income and non-low-income students on a broader scale than a single state is to look at the median percentage proficient for 2009 across all of the states with sufficient data for both groups. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.) The results are shown in **table 26**. In grade 8 reading/language arts, for example, the median percentage proficient was 57% for low-income students and 81% for students who were not low-income, a difference of 24 percentage points.

As table 26 also reveals, the range among states in percentages proficient was much greater for low-income students than for students who were not low-income. In high school reading/language arts, for example, the percentage proficient for low-income students ranged from 96% in the highest state to 23% in the lowest state, compared with a high of 99% and a low of 46% for students who were not low-income.

Table 26. Median, highest, and lowest percentages of LOW-INCOME and NON-LOW-INCOME students scoring proficient across all states with sufficient state test data, 2009

	READING		MATHEMATICS	
	Low-Income	Not Low-Income	Low-Income	Not Low-Income
Grade 4				
Median PP across states	64%	85%	64%	85%
Highest PP in any state	92%	98%	93%	98%
Lowest PP in any state	29%	60%	28%	58%
# of states with data	*46*	*46*	*46*	*46*
Grade 8				
Median PP across states	57%	81%	51%	76%
Highest PP in any state	92%	97%	86%	95%
Lowest PP in any state	33%	56%	25%	46%
# of states with data	*46*	*46*	*46*	*46*
High school				
Median PP across states	60%	82%	43%	67%
Highest PP in any state	96%	99%	84%	94%
Lowest PP in any state	23%	46%	12%	34%
# of states with data	*43*	*43*	*42*	*42*

Table reads: Across all 46 states with sufficient data, the median percentage of low-income students scoring proficient in grade 4 reading was 64%, compared with 85% for students who were not from low-income families. The highest percentage proficient for grade 4 reading in any state for the low-income subgroup was 92%, while the lowest in any state was 29%.

PP = Percentage proficient

NOTE: Forty-six states had sufficient 2009 data for both the low-income and non-low-income subgroups for one or more grade/subject combinations: AK, AL, AR, CA, CO, CT, DC, DE, FL, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, VT, WA, WI, and WY. States with fewer than 500 low-income test-takers in a particular grade/subject were excluded from the analysis for that grade/subject. States were also excluded if they did not provide data for the comparison group of students who were not low-income.

The vast majority of states with sufficient data made gains on state tests for low-income students.

Many more states showed gains since 2002 for low-income students than showed declines, according to both the percentages scoring proficient and average (mean) test scores. The most positive results were in grade 8; in both reading and math, 93% or more of the states with sufficient data posted increases at this grade for the low-income subgroup, whether percentages proficient or mean scores were used.

Trends in percentages proficient and mean scores were generally similar for low-income students. Across all subjects and grades, 93% of the trend lines analyzed showed gains using percentages proficient, and 90% showed gains using mean scores. In high school reading/language arts and math, however, a somewhat smaller share of states showed gains in mean scores than showed gains in percentages proficient.

Table 27. Number (and percentage) of states with various trends for LOW-INCOME students on state tests, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states with gain	38 (90%)	31 (91%)	39 (91%)	31 (89%)
# and % of states with decline	2 (5%)	2 (6%)	3 (7%)	3 (9%)
No change	2 (5%)	1 (3%)	1 (2%)	1 (3%)
# of states with data	*42*	*34*	*43*	*35*
Grade 8				
# and % of states with gain	39 (93%)	33 (97%)	42 (98%)	33 (94%)
# and % of states with decline	3 (7%)	0	1 (2%)	1 (3%)
No change	0 (0%)	1 (3%)	0 (0%)	1 (3%)
# of states with data	*42*	*34*	*43*	*35*
High school				
# and % of states with gain	35 (92%)	26 (84%)	36 (92%)	26 (84%)
# and % of states with decline	3 (8%)	4 (13%)	3 (8%)	4 (13%)
No change	0 (0%)	1 (3%)	0 (0%)	1 (3%)
# of states with data	*38*	*31*	*39*	*31*

Table reads: On state grade 4 reading tests, 38 of the 42 states with sufficient data showed gains since 2002 in the percentage of low-income students scoring proficient, 2 showed declines, and 2 showed no net change. Of the 34 states with sufficient mean score data, 31 showed gains for low-income students in average grade 4 reading scores, 2 showed declines, and 1 showed no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-seven states had sufficient trend data for the low-income subgroup at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, HI, IA, ID, IL, KS, KY, LA, MA, MD, ME, MI, MN, MO, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, and WY. States with fewer than 500 low-income test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject. States were also excluded if they did not provide data for the comparison group of students who were not low-income.

States have made mixed progress in narrowing gaps between low-income and more advantaged students.

Since 2002, gaps between low-income and non-low-income students have narrowed in many states. But mean scores give a less positive picture of progress in narrowing these gaps than percentages proficient do. Across reading and math and three grade levels, just 57% of the low-income gaps in mean scores narrowed, compared with 72% of gaps in percentages proficient. In most cases where gaps narrowed, both low-income and non-low-income students made gains, but low-income students improved at a faster rate than their more advantaged peers.

At grade 4, a sizeable share of states made no progress in narrowing gaps in mean scores for low-income students. In both reading and math at this grade level, gaps widened or stayed the same more often than they narrowed. Gaps widened for various reasons. In grade 4 math, for example, gains by students who were not low-income outpaced gains by low-income students in 10 of the 13 instances of widening mean score gaps. In 2 of the 13 instances, mean scores improved for non-low-income students but declined for low-income students. In one case, mean scores went up for non-low-income students but stayed the same for low-income students.

Table 28. Number (and percentage) of states with various trends on state tests in the gap between LOW-INCOME and NON-LOW-INCOME students, 2002–2009*

	READING		MATHEMATICS	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Grade 4				
# and % of states narrowed	28 (74%)	14 (44%)	30 (79%)	14 (42%)
# and % of states widened	9 (24%)	12 (38%)	7 (18%)	13 (39%)
No change	1 (3%)	6 (19%)	1 (3%)	6 (18%)
# of states with data	*38*	*32*	*38*	*33*
Grade 8				
# and % of states narrowed	25 (66%)	23 (72%)	28 (74%)	21 (64%)
# and % of states widened	10 (26%)	6 (19%)	9 (24%)	9 (27%)
No change	3 (8%)	3 (9%)	1 (3%)	3 (9%)
# of states with data	*38*	*32*	*38*	*33*
High school				
# and % of states narrowed	22 (65%)	19 (66%)	26 (76%)	16 (55%)
# and % of states widened	6 (18%)	5 (17%)	5 (15%)	10 (34%)
No change	6 (18%)	5 (17%)	3 (9%)	3 (10%)
# of states with data	*34*	*29*	*34*	*29*

Table reads: The gap between low-income and non-low income students in percentages scoring proficient on state grade 4 reading tests narrowed in 28 of the 38 states with sufficient data, widened in 9 states, and showed no net change in 1 state. The gap between these two groups in mean scores on grade 4 reading tests narrowed in 14 of the 32 states with sufficient data, widened in 12 states, and showed no net change in 6 states.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-one states had sufficient trend data for both the low-income and non-low-income subgroups at one or more grade levels: AK, AL, AR, CA, CO, CT, DC, DE, FL, HI, IA, IL, KS, KY, LA, MA, MD, ME, MN, MO, MT, NC, ND, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, WA, WI, and WY. States with fewer than 500 low-income test-takers in a particular grade/subject or with fewer than three years of comparable test data were excluded from the analysis for that grade/subject. States were also excluded if they did not provide data for the comparison group of students who were not low-income.

Chapter 8: Male and Female Students

On state reading tests, girls consistently outperform boys in every state. On math tests, girls and boys tend to perform at similar levels.

In every state and D.C., higher percentages of girls than boys scored at or above the proficient level in reading in 2009.[4] In fact, this reading gap between boys and girls exceeded 10 percentage points (in favor of girls) in 6 states at grade 4, 14 states at grade 8, and 8 states at the high school level.

In math, the 2009 percentages proficient were fairly similar for boys and girls in most states. At grades 4 and 8, girls slightly outperformed boys in math in a majority of states; however, these differences rarely exceeded 6 percentage points. At the high school level, the math performance of the two genders was roughly equal. The appendix shows the percentages proficient for boys and girls in reading and math in individual states in 2009.

One way to gauge the relative performance of boys and girls on a broader scale than a single state is to look at the median percentage proficient for 2009 across *all* of the states with sufficient data for both groups. (The median is the midpoint; by definition, half of the states with such data have percentages proficient above the median, and half have percentages proficient below it.)

As shown in **table 29**, the median percentages proficient in reading were higher for girls than for boys at all three grade levels. At grade 8, for example, these medians were 77% for girls and 66% for boys. In math, the medians for the two genders were quite similar—a difference of just 1 or 2 percentage points in favor of girls—at all three grade levels.

Table 29. Median, highest, and lowest percentages proficient for MALE and FEMALE students across all states with sufficient state test data, 2009

	READING		MATHEMATICS	
	Male	Female	Male	Female
Grade 4				
Median PP across states	71%	77%	74%	75%
Highest PP in any state	94%	96%	96%	96%
Lowest PP in any state	39%	51%	41%	43%
# of states with data	*51*	*51*	*51*	*51*
Grade 8				
Median PP across states	66%	77%	66%	67%
Highest PP in any state	94%	97%	91%	93%
Lowest PP in any state	38%	52%	36%	42%
# of states with data	*51*	*51*	*51*	*51*
High school				
Median PP across states	71%	79%	61%	63%
Highest PP in any state	97%	98%	93%	94%
Lowest PP in any state	34%	38%	30%	25%
# of states with data	*48*	*48*	*48*	*48*

Table reads: Across all 50 states and D.C., the median percentage of students scoring at or above the proficient level in grade 4 reading was 71% for boys and 77% for girls. The highest percentage proficient for grade 4 reading in any state for boys was 94%, while the lowest in any state was 39%.

PP = Percentage proficient

NOTE: All 50 states and the District of Columbia had sufficient 2009 data for both boys and girls for one or more grade/subject combinations. Three states (IN, NC, and NY) did not have 2009 data for boys and girls at the high school level.

[4] An exception to this pattern occurred at one grade level in Maine, where boys outperformed girls in reading/language arts at the high school level.

Since 2002, scores on state reading and math tests have gone up for both boys and girls in the vast majority of states.

Between 2002 and 2009, both males and females made gains reading and math in most states—from 73% to 98% of the states, depending on the grade level and subject. The numbers of states with gains were quite similar for boys and girls. And achievement gains outnumbered declines for boys and girls according to both percentages scoring proficient and average test scores.

For both genders and both subjects, declines in achievement were more prevalent at the high school level than at the other two grades.

Table 30. Number (and percentage) of states with various trends for MALE and FEMALE students on state reading and mathematics tests, 2002–2009*

	MALE		FEMALE	
	Percentage proficient	Mean score	Percentage proficient	Mean score
Reading, grade 4				
# and % of states with gain	36 (84%)	29 (81%)	36 (84%)	32 (89%)
# and % of states with decline	2 (5%)	5 (14%)	5 (12%)	3 (8%)
No change	4 (9%)	2 (6%)	2 (5%)	1 (3%)
# of states with data	*43*	*36*	*43*	*36*
Reading, grade 8				
# and % of states with gain	40 (93%)	32 (89%)	40 (93%)	32 (89%)
# and % of states with decline	3 (7%)	2 (6%)	3 (7%)	3 (8%)
No change	0 (0%)	2 (6%)	0 (0%)	1 (3%)
# of states with data	*43*	*36*	*43*	*36*
Reading, high school				
# and % of states with gain	32 (84%)	25 (81%)	31 (82%)	23 (74%)
# and % of states with decline	6 (16%)	3 (10%)	7 (18%)	5 (16%)
No change	0 (0%)	3 (10%)	0 (0%)	3 (10%)
# of states with data	*38*	*31*	*38*	*31*
Math, grade 4				
# and % of states with gain	40 (93%)	33 (92%)	42 (98%)	33 (92%)
# and % of states with decline	3 (7%)	2 (6%)	0 (0%)	2 (6%)
No change	0 (0%)	1 (3%)	1 (2%)	1 (3%)
# of states with data	*43*	*36*	*43*	*36*
Math, grade 8				
# and % of states with gain	42 (98%)	35 (97%)	42 (98%)	35 (97%)
# and % of states with decline	1 (2%)	1 (3%)	1 (2%)	1 (3%)
No change	0 (0%)	0 (0%)	0 (0%)	0 (0%)
# of states with data	*43*	*36*	*43*	*36*
Math, high school				
# and % of states with gain	32 (80%)	24 (73%)	32 (80%)	24 (73%)
# and % of states with decline	7 (18%)	5 (15%)	8 (20%)	6 (18%)
No change	1 (3%)	4 (12%)	0 (0%)	3 (9%)
# of states with data	*40*	*33*	*40*	*33*

Table reads: On state grade 4 reading tests, 36 of the 43 states with sufficient data showed gains since 2002 in the percentage of male students scoring proficient, 2 showed declines, and 4 showed no net change. Of the 36 states with sufficient mean score data, 29 showed gains for male students in average grade 4 reading scores, 5 showed declines, and 2 had no net change.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-eight states had sufficient trend data for both female and male students at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, HI, IA, ID, IL, KS, KY, LA, MA, MD, ME, MI, MN, MO, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, and WY. States with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Progress in narrowing the boy-girl gap in reading has been uneven.

Across all three grade levels, the male-female gap in reading has narrowed since 2002 according to 62% of the trend lines analyzed using percentages proficient and 58% of the trend lines analyzed using average (mean) scores. Progress varied by grade level and by whether percentages proficient or mean scores were used. And, as discussed in more detail in chapter 1, the boy-girl gap in reading has narrowed at a slower rate than gaps for other subgroups.

In reading at grades 4 and 8, gaps in percentages proficient between boys and girls have shrunk since 2002 in more than half the states with sufficient data, but have widened or stayed the same in a notable share of states. This uneven progress is especially evident using mean scores. At grade 4, the boy-girl gap in mean scores widened or stayed the same in over half the states with sufficient data.

At the high school level, the male-female gap in reading narrowed in about three-fourths of the states with adequate data according to both percentages proficient and mean scores.

In most cases where gaps narrowed, both groups improved, but boys improved more rapidly than girls. When gaps widened, both groups often improved, but girls made greater gains than boys. In grade 8 reading, for example, gains by girls outpaced gains by boys in 10 of 12 instances of widening mean score gaps. In one instance, scores went up for girls but stayed the same for boys; in the other instance, scores decreased for both groups, but decreased more for boys.

Table 31. Number (and percentage) of states with various trends in the MALE-FEMALE achievement gap on state reading tests, 2002–2009*

	READING	
	Percentage proficient	Mean score
Grade 4		
# and % of states narrowed	23 (53%)	15 (42%)
# and % of states widened	15 (35%)	10 (28%)
No change	5 (12%)	11 (31%)
# of states with data	*43*	*36*
Grade 8		
# and % of states narrowed	26 (60%)	21 (58%)
# and % of states widened	14 (33%)	12 (33%)
No change	3 (7%)	3 (8%)
# of states with data	*43*	*36*
High school		
# and % of states narrowed	28 (74%)	23 (74%)
# and % of states widened	2 (5%)	5 (16%)
No change	8 (21%)	2 (6%)
# of states with data	*38*	*30*

Table reads: The gap between male and female students in percentages scoring proficient on state grade 4 reading tests narrowed in 23 of the 43 states with sufficient data, widened in 15 states, and showed no net change in 5 states. The male-female gap in mean scores on grade 4 reading tests narrowed in 15 of the 36 states with sufficient data, widened in 10 states, and showed no net change in 11 states.

*The years covered by these trends vary among states. Trends in some states begin later than 2002, although every state included in the table has at least three years of comparable test data ending in 2009.

NOTE: Forty-eight states had sufficient trend data for both female and male students at one or more grade levels: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, HI, IA, ID, IL, KS, KY, LA, MA, MD, ME, MI, MN, MO, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, and WY. States with fewer than three years of comparable test data were excluded from the analysis for that grade/subject.

Chapter 9: Comparison of Trends on State Tests and NAEP

Background on state tests and NAEP

As another indicator of whether achievement has improved and gaps have narrowed for subgroups, we looked at whether state-level trends for student groups on the main National Assessment of Educational Progress have moved in the same direction as trends on state tests. The goal was to see whether NAEP trends confirm or contradict the patterns found on state tests. When trends on both types of assessments agree within the same state, this provides more evidence that achievement is improving or declining.

The methods used to compare trends on state tests and NAEP are discussed more fully in chapter 10. In general, we analyzed trends from 2005 through 2009 at grades 4 and 8 in the states with sufficient data on both state tests and NAEP.[5] On both types of assessments, we looked at the direction of changes using two performance indicators. First, we examined trends in mean, or average, test scores, which are a useful indicator of changes in achievement gaps because they are not tied to a specific cut score for proficient or basic performance. Second, we analyzed trends in the percentages of students reaching the proficient level of achievement on state tests and the basic level on NAEP. (Chapter 10 explains why the basic level on NAEP is closest to the proficient level on most state tests.) For reasons described in chapter 10, we included gains or declines of any size on either NAEP or state tests.

A total of 25 states had sufficient data for at least some of the NAEP and state test analyses, but this number varied by grade level and subgroup.[6] In grade 8 math, for example, 21 states had sufficient percentage proficient/basic data for the white subgroup, while 9 states had sufficient data for the Asian subgroup.

It is important to understand how NAEP differs from state tests and why these differences may sometimes lead to different results on the two assessments:

- NAEP is administered every two years to representative samples of students in a sample of schools in each state, rather than annually to virtually all students in a state, as state tests are. Each NAEP participant takes only a portion of the larger assessment instead of the entire test, so NAEP cannot produce scores for individual students or schools.

- NAEP differs, to varying degrees, from state tests in the content assessed, test question formats, rigor of the achievement levels, testing environment and administration, and other features. For example, state tests are designed to measure how well students have learned the knowledge and skills embodied in that particular state's academic content standards, while NAEP content is deliberately not aligned to any state's standards.

- The NAEP definition of "proficient" performance is more ambitious than many state definitions. For NAEP, "proficient" represents an aspirational goal for what students should know and be able to do, while on most state tests, "proficient" describes a level of performance that is good enough to be regarded as acceptable for a particular grade level. This is one reason why this study compares state proficient results with NAEP basic results.

- NAEP is considered a "low-stakes" test. Unlike the results of "high-stakes" state tests, NAEP scores are not tied to specific consequences for individual students, teachers, schools, or districts.

The tables in this chapter compare trends on state tests and NAEP *within the same state*. Trends moved upward so often on both assessments that there was a fair amount of agreement between state tests and NAEP simply by virtue of chance. Because we were also interested in the extent to which both state tests and NAEP have picked up on the same student achievement trends, whether upward or downward, we also calculated whether the levels of agreement between the two types of assessments exceeded what would be expected by chance. These instances are marked with asterisks in the tables in this chapter.[7]

[5] High school trends were not included because NAEP only recently began reporting state-level data for grade 12 in a limted pilot so trends cannot be determined. In addition, NAEP is administered in grade 12, while most state high school tests are administered in grades 10 or 11.

[6] These states include AL, AK, AZ, AR, CA, CO, DE, FL, IA, LA, MA, MD, MT, ND, NE, NM, NV, OH, OR, PA, TN, TX, UT, WA, and WI.

[7] Our thanks to Dr. Andrew Ho, Harvard Graduate School of Education, for noting the "chance" issue.

In reading, gains for subgroups on NAEP confirmed gains on state tests to a moderate extent. However, trends on NAEP and state tests contradicted each other or declined more often in reading than in math.

For nearly all of the subgroups analyzed, a majority of the states with sufficient data showed gains in reading between 2005 and 2009 on both state tests and NAEP. This pattern was evident in both mean scores (**table 32**) and percentages proficient/basic (**table 33**) for all subgroups except boys. Several states, however, had declines for some subgroups on one or both assessments.

Reading trends varied by grade level and subgroup. At grade 4, African American, Asian, low-income, and female students generally made progress on both NAEP and state tests, but trends for Latino students, white students, and boys sometimes moved in contradictory directions on the two assessments. At grade 8, NAEP and state tests showed contradictory trends in a notable number of states for several subgroups.

Trends in reading for boys and girls differed markedly at grade 4. Girls made gains on both state tests and NAEP in a majority of the states with sufficient data, while boys more often had declines or contradictory trends on the two assessments.

Table 32. READING, MEAN SCORES: Number of states in which subgroup trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American	Asian	Latino	White	Low-Income	Male	Female
Grade 4 reading							
# of states with data	*11*	*8*	*11*	*14*	*11*	*13*	*13*
Same direction	10	8	7	9	9	6	12
Both up	8	6	6	8	8	5	10
Both down	2	2	1	1	1	1	2
Different direction	1	0	4	4	1	5	1
State test up, NAEP down	0	0	3	3	1	4	0
NAEP up, state test down	1	0	1	1	0	1	1
One flat	0	0	0	1	1	2	0
% of states same direction	91%*	100%*	64%*	64%*	82%*	46%*	92%*
% of states both up	73%*	75%*	55%*	57%*	73%*	38%*	77%*
Grade 8 reading							
# of states with data	*12*	*8*	*13*	*17*	*16*	*16*	*16*
Same direction	8	5	11	12	11	11	11
Both up	8	5	11	12	11	11	10
Both down	0	0	0	0	0	0	1
Different direction	4	1	2	5	4	4	5
State test up, NAEP down	3	1	2	4	4	3	3
NAEP up, state test down	1	0	0	1	0	1	2
One flat	0	2	0	0	1	1	0
% of states same direction	67%	63%	85%	71%	69%	69%*	69%*
% of states both up	67%	63%	85%	71%	69%	69%*	63%*

Table reads: In 10 of the 11 states with sufficient data, trends in mean test scores for African American students in grade 4 reading moved in the same direction—upward in 8 cases—on both state tests and NAEP. Two states had a decline for African American 4th graders on both types of reading assessments. In one state, mean scores for this subgroup increased on one assessment but decreased on the other.

*This level of agreement is greater than what would have been expected by chance.

Table 33. READING, PERCENTAGES PROFICIENT/BASIC: Number of states in which subgroup trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American	Asian	Latino	White	Low-Income	Male	Female
Grade 4 reading							
# of states with data	*17*	*12*	*17*	*21*	*20*	*21*	*21*
Same direction	14	10	10	17	18	14	18
Both up	13	9	9	16	16	13	17
Both down	1	1	1	1	2	1	1
Different direction	1	2	5	3	1	2	2
State test up, NAEP down	0	1	3	2	1	2	1
NAEP up, state test down	1	1	2	1	0	0	1
One flat	2	0	2	1	1	5	1
% of states same direction	82%*	83%*	59%*	81%*	90%*	67%*	86%*
% of states both up	76%*	75%*	53%*	76%*	80%*	62%*	81%*
Grade 8 reading							
# of states with data	*16*	*10*	*16*	*21*	*21*	*21*	*21*
Same direction	12	7	13	16	18	19	15
Both up	12	7	13	16	18	19	15
Both down	0	0	0	0	0	0	0
Different direction	4	1	3	4	3	1	5
State test up, NAEP down	3	1	2	2	2	0	4
NAEP up, state test down	1	0	1	2	1	1	1
One flat	0	2	0	1	0	1	1
% of states same direction	75%	70%*	81%	76%	86%	91%	71%*
% of states both up	75%	70%*	81%	76%	86%	91%	71%*

Table reads: In 14 of the 17 states with sufficient data, trends in the percentage of African American students scoring proficient on state grade 4 reading tests moved in the same direction as trends in the percentage scoring basic on NAEP. In 13 of these 14 states, trends on both assessments moved upward. One state showed a decline for African Americans 4th graders on both types of assessments. And in one state, the percentage of African American students scoring proficient on the state grade 4 reading test went down while the percentage scoring basic on NAEP went up.

*This level of agreement is greater than what would have been expected by chance.

In math, NAEP results confirmed state test results more often than in reading. In most of the states studied, all subgroups except Asian students made gains in math on both state tests and NAEP, especially at grade 8.

In a majority of the states with sufficient data, nearly all subgroups made gains in math on both state tests and NAEP between 2005 and 2009. This pattern was apparent in mean scores (**table 34**), as well as in percentages proficient/basic (**table 35**), for low-income students, girls and boys, and all major racial/ethnic groups except Asian students.

Within the same state, gains on NAEP often confirmed gains for subgroups on state tests. In grade 8 math, trends were especially positive on both assessments in a high percentage of the states analyzed. African American students in particular appear to have made solid progress in grade 8 math—both NAEP and state tests showed gains in grade 8 math in all 14 states with mean score data and all 18 states with percentage proficient/basic data.

In a limited number of instances, NAEP results in math contradicted state test results. This was particularly true for Latino and male students at grade 4. In most of these cases, the NAEP trend showed a gain while the state test trend showed a decline. In one state, math scores declined on both assessments for African Americans at grade 4.

Fewer states made progress in raising the percentages scoring proficient/basic in math for Asian students than for other subgroups. This may be because the Asian subgroup is the highest performing, and a large percentage of these students—more than 90% in grade 4 math—have already surpassed the proficient/basic level.

Table 34. MATH, MEAN SCORES: Number of states in which subgroup trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American	Asian	Latino	White	Low-Income	Male	Female
Grade 4 math							
# of states with data	*11*	*7*	*10*	*13*	*11*	*12*	*12*
Same direction	9	5	6	9	8	8	9
Both up	8	5	6	9	8	8	9
Both down	1	0	0	0	0	0	0
Different direction	2	2	3	2	2	3	2
State test up, NAEP down	2	1	2	1	2	3	1
NAEP up, state test down	0	1	1	1	0	0	1
One flat	0	0	1	2	1	1	1
% of states same direction	82%*	71%	60%	69%	73%	67%*	75%
% of states both up	73%*	71%	60%	69%	73%	67%*	75%
Grade 8 math							
# of states with data	*14*	*9*	*12*	*16*	*15*	*15*	*15*
Same direction	14	7	11	15	13	14	13
Both up	14	7	11	15	13	14	13
Both down	0	0	0	0	0	0	0
Different direction	0	1	1	1	2	1	2
State test up, NAEP down	0	1	1	0	1	0	1
NAEP up, state test down	0	0	0	1	1	1	1
One flat	0	1	0	0	0	0	0
% of states same direction	100%	78%	92%	94%	87%	93%	87%
% of states both up	100%	78%	92%	94%	87%	93%	87%

Table reads: In 9 of the 11 states with sufficient data, trends in mean test scores for African American students in grade 4 math moved in the same direction on both state tests and NAEP. In 8 of these 9 states, trends for African Americans moved upward on both assessments; in the remaining state, trends declined on both. In two states, mean scores for African American students moved upward on the state test but downward on NAEP.

*This level of agreement is greater than what would have been expected by chance.

Table 35. MATH, PERCENTAGES PROFICIENT/BASIC: Number of states in which subgroup trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American	Asian	Latino	White	Low-Income	Male	Female
Grade 4 math							
# of states with data	*16*	*11*	*15*	*19*	*13*	*19*	*19*
Same direction	14	3	11	13	11	11	15
Both up	13	3	11	13	11	10	15
Both down	1	0	0	0	0	1	0
Different direction	2	5	3	2	2	3	2
State test up, NAEP down	2	3	2	2	2	3	1
NAEP up, state test down	0	2	1	0	0	0	1
One flat	0	3	1	4	0	5	2
% of states same direction	88%*	27%	73%	68%*	85%	58%*	79%
% of states both up	81%*	27%	73%	68%*	85%	53%	79%
Grade 8 math							
# of states with data	*18*	*9*	*16*	*21*	*7*	*21*	*21*
Same direction	18	5	14	19	7	20	18
Both up	18	5	14	19	7	20	18
Both down	0	0	0	0	0	0	0
Different direction	0	2	1	1	0	1	1
State test up, NAEP down	0	2	1	0	0	0	0
NAEP up, state test down	0	0	0	1	0	1	1
One flat	0	2	1	1	0	0	2
% of states same direction	100%	56%	88%	91%	100%	95%*	86%
% of states both up	100%	56%	88%	91%	100%	95%*	86%

Table reads: In 14 of the 16 states with sufficient data, trends in the percentage of African American students scoring proficient on state grade 4 math tests moved in the same direction as trends in the percentage scoring basic on NAEP. In 13 of these 14 states, trends for African Americans moved upward on both assessments; in the remaining state, trends declined on both. In two states, the percentage of African American students scoring proficient on state grade 4 math tests went up while the percentage scoring basic on NAEP went down.

*This level of agreement is greater than what would have been expected by chance.

State tests and NAEP show little agreement about whether achievement gaps have narrowed in reading since 2005.

Progress has been mixed in narrowing achievement gaps in reading from 2005 to 2009, according to evidence from states with sufficient data on both state tests and NAEP. Within the same state, NAEP results often contradicted state test results. In several instances, a gap narrowed on the state test but widened on NAEP, or vice versa. And in some instances, gaps widened on both assessments.

For most subgroups, progress in narrowing gaps appeared somewhat less positive using mean scores (**table 36**) than percentages proficient/basic (**table 37**).

States made lackluster progress in narrowing the gap in reading between boys and girls. According to mean scores, this gap narrowed on both state tests and NAEP in just 2 of the 13 states with sufficient data at grade 4, and in just 2 of 16 states at grade 8. The results were particularly disappointing according to percentages proficient/basic at grade 4.

The gaps in reading between African American and white students, and between Latino and white students, widened on NAEP, on the state test, or on both in a notable number of states.

Table 36. READING, MEAN SCORES: Number of states in which gap trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American/ White	Latino/ White	Low-Income/ Not Low-Income	Male/ Female
Grade 4				
# of states with data	*11*	*11*	*11*	*13*
Same direction	4	5	5	6
Narrowed on both	3	4	4	2
Widened on both	1	1	1	4
Different direction	4	4	3	7
Narrowed on state test, widened on NAEP	0	3	0	5
Narrowed on NAEP, widened on state test	4	1	3	2
One flat	3	2	3	0
% of states same direction	36%*	46%*	46%*	46%
% of states both narrowed	27%*	36%*	36%*	15%
Grade 8				
# of states with data	*12*	*13*	*16*	*16*
Same direction	7	8	9	5
Narrowed on both	4	5	5	2
Widened on both	3	3	4	3
Different direction	5	3	7	9
Narrowed on state test, widened on NAEP	3	3	6	7
Narrowed on NAEP, widened on state test	2	0	1	2
One flat	0	2	0	2
% of states same direction	58%*	62%*	56%*	31%
% of states both narrowed	33%*	38%*	31%*	13%

Table reads: In 3 of the 11 states with sufficient data, the gap in mean scores between African American and white students in grade 4 reading narrowed on both state tests and NAEP. In one state this gap widened on both assessments. In 4 states, the African American-white gap in grade 4 reading widened on one assessment and narrowed on the other.

*This level of agreement is greater than what would have been expected by chance.

Table 37. READING, PERCENTAGES PROFICIENT/BASIC: Number of states in which gap trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American/ White	Latino/ White	Low-Income/ Not Low-Income	Male/ Female
Grade 4				
# of states with data	*17*	*17*	*16*	*21*
Same direction	13	10	11	4
Narrowed on both	11	8	8	1
Widened on both	2	2	3	3
Different direction	2	7	3	10
Narrowed on state test, widened on NAEP	1	5	3	9
Narrowed on NAEP, widened on state test	1	2	0	1
One flat	2	0	2	7
% of states same direction	77%*	59%*	69%*	19%
% of states both narrowed	65%*	47%*	50%*	5%
Grade 8				
# of states with data	*16*	*16*	*21*	*21*
Same direction	11	8	11	9
Narrowed on both	9	7	10	8
Widened on both	2	1	1	1
Different direction	3	5	8	7
Narrowed on state test, widened on NAEP	3	5	6	2
Narrowed on NAEP, widened on state test	0	0	2	5
One flat	2	3	2	5
% of states same direction	69%*	50%*	52%	43%
% of states both narrowed	56%*	50%*	48%	38%

Table reads: In 13 of the 17 states with sufficient data in grade 4 reading, the gap between African American and white students in the percentage reaching the proficient level on the state test moved in the same direction as the gap in the percentage reaching the basic level on NAEP. In 11 of these 13 states, the African American-white gap narrowed on both assessments, while in 2 states it widened on both. In two states, the African American-white gap in grade 4 reading widened on one assessment and narrowed on the other.

*This level of agreement is greater than what would have been expected by chance.

State tests and NAEP show little agreement about whether achievement gaps have narrowed in math since 2005.

Within the same state, gaps between subgroups in math often narrowed on state assessments and widened on NAEP, or vice versa. For the Latino-white gap, trends on state tests and NAEP moved in contradictory directions more often than they agreed.

Instances of gaps narrowing on both indicators were less positive using mean scores (**table 38**) than they were using percentages proficient/basic (**table 39**). According to mean scores, gaps in grade 4 math narrowed on both assessments in about one-fourth or less of the states with sufficient data.

Although African American students showed improvement in grade 8 math on both state tests and NAEP in every state with sufficient data, this has not translated into progress in narrowing gaps in every state. According to mean scores, the African American-white gap in grade 8 math narrowed on both NAEP and state tests in 9 of 14 states but showed mixed results on the two assessments in the other 5 states.

Table 38. MATHEMATICS, MEAN SCORES: Number of states in which gap trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American/ White	Latino/ White	Low-Income/ Not Low-Income
Grade 4			
# of states with data	*11*	*10*	*11*
Same direction	6	2	6
Narrowed on both	3	2	2
Widened on both	3	0	4
Different direction	4	6	5
Narrowed on state test, widened on NAEP	2	3	3
Narrowed on NAEP, widened on state test	2	3	2
One flat	1	2	0
% of states same direction	55%*	20%	55%*
% of states both narrowed	27%*	20%	18%*
Grade 8			
# of states with data	*14*	*12*	*15*
Same direction	9	7	11
Narrowed on both	9	6	7
Widened on both	0	1	4
Different direction	4	4	3
Narrowed on state test, widened on NAEP	3	4	3
Narrowed on NAEP, widened on state test	1	0	0
One flat	1	1	1
% of states same direction	64%	58%*	73%*
% of states both narrowed	64%	50%*	47%*

Table reads: In 6 of the 11 states with sufficient data, the gap in mean test scores between African American and white students in grade 4 math showed similar trends on both state tests and NAEP. In three states, this gap narrowed on both assessments, and in three states it widened on both. In four states, the African American-white gap in grade 4 math narrowed on one assessment and widened on the other.

*This level of agreement is greater than what would have been expected by chance.

Table 39. MATHEMATICS, PERCENTAGES PROFICIENT/BASIC: Number of states in which gap trends moved in the same or a different direction on state tests and NAEP, 2005–2009

	African American/ White	Latino/ White	Low-Income/ Not Low-Income
Grade 4			
# of states with data	*16*	*15*	*13*
Same direction	12	10	9
Narrowed on both	11	10	8
Widened on both	1	0	1
Different direction	2	4	1
Narrowed on state test, widened on NAEP	2	4	0
Narrowed on NAEP, widened on state test	0	0	1
One flat	2	1	3
% of states same direction	75%*	67%	69%*
% of states both narrowed	69%*	67%	62%*
Grade 8			
# of states with data	*18*	*16*	*7*
Same direction	15	10	3
Narrowed on both	15	9	2
Widened on both	0	1	1
Different direction	3	4	3
Narrowed on state test, widened on NAEP	0	3	0
Narrowed on NAEP, widened on state test	3	1	3
One flat	0	2	1
% of states same direction	83%	63%*	43%*
% of states both narrowed	83%	56%*	29%

Table reads: In 12 of the 16 states with sufficient data in grade 4 math, the gap between African American and white students in the percentage reaching the proficient level on the state test moved in the same direction as the gap in the percentage reaching the basic level on NAEP. In 11 of these 12 states, this gap narrowed on both assessments, while in 1 state it widened on both. In two states, the African American-white gap in grade 4 math narrowed on one assessment and widened on the other.

*This level of agreement is greater than what would have been expected by chance.

Chapter 10: Study Methods

CEP'S ACHIEVEMENT RESEARCH

The Center on Education Policy has been studying student achievement since 2007 with advice from a panel of five nationally known experts in educational testing or education policy.[8] To carry out this research, we have collected an extensive set of state test data from all 50 states (and this year from the District of Columbia) with considerable technical support from our contractor, the Human Resources Research Organization (HumRRO). State officials have verified the accuracy of the data.

UPDATES IN THIS YEAR'S REPORT

This report, the second part of our 2010 series on test score trends, adds another year of data from state tests administered in 2008-09 and from the 2009 administration of NAEP. This creates longer trend lines in some states. The District of Columbia also participated in our data collection for the first time. In addition, the report looks more deeply than our previous reports did at trends in average (mean) scores on state tests and NAEP.

SUBGROUPS INCLUDED

Our analyses include trends for African American, Asian, Latino, Native American, and white students, as well as students from low-income families (compared with those who are not low-income), males, and females. Native Americans were not included in the state-NAEP comparisons because in many states the NAEP samples of Native American test-takers were too small, or because fewer than 500 Native American students took the state test at grade 4 or 8.

Trends for students with disabilities and English language learners, two other subgroups tracked for NCLB accountability, are not included in this report. CEP released special reports on these subgroups in 2009 and 2010 and concluded that it is difficult to obtain a clear picture of achievement for students with disabilities and English language learners because of fuzzy data, evolving state testing policies, fluctuating numbers of test-takers, and language barriers in the case of ELLs.

YEARS COVERED

The analyses of subgroup trends on state tests alone extend from 2002 (or a more recent year in some states) through 2009 and represent the most recent cycle of test results reported for NCLB by the time our data collection ended in June 2010. We used 2002 as the starting point because many states did not break out their test results by student subgroup and achievement level until they were required to do so by NCLB, and because trends in the limited number of states with comparable pre-2002 data were discussed in our 2007 report.[9] This year, as in past years, only trend lines that encompassed at least three years of comparable test data for a particular subgroup, subject, grade, and achievement level were included in our analyses. States with at least three years of comparable data but fewer than the full eight years were included in the analysis of a particular grade and subject as long as their data extended through 2008–09. Test data were not considered comparable if, during the period of analysis, a state had introduced new tests, changed its cut scores for proficient performance, or made other major changes in its testing program; these types of "breaks" in test data make year-to-year comparisons invalid.

The comparisons of trends on NAEP and state tests covered the same span for both assessments, 2005 through 2009. We focused on 2005 through 2009 because a shorter trend lines (2007–2009) would have been more subject to short-term fluctuations and therefore less reliable, and a longer trend line (2003–2009) would have excluded many more states. A maximum of 25 states, listed in chapter 9, had comparable state test data for 2005 and 2009 and could be included in at least some of the analyses. All states had NAEP data for these

[8] Members of the expert panel include Laura Hamilton, senior behavioral scientist, RAND Corporation; Eric Hanushek, senior fellow, Hoover Institution; Frederick Hess, director of education policy studies, American Enterprise Institute; Robert L. Linn, professor emeritus, University of Colorado; and W. James Popham, professor emeritus, University of California, Los Angeles.

[9] Center on Education Policy. (2007). *Answering the question that matters most: Has student achievement increased since No Child Left Behind?* Washington, DC: Author.

years, but for most subgroups, the number of states with sufficient state and NAEP data was much smaller.

STATES EXCLUDED

States were excluded from the analysis of a particular grade, subject, and subgroup if they had fewer than three years of comparable data, or if data were unavailable or missing for other reasons. Fewer states provided mean test scores than provided percentages proficient. In addition, states were omitted from a grade/subject analysis if the number of test-takers in a particular subgroup was fewer than 500, as this was too small to allow for a reliable determination of trends. States were also excluded if they did not provide data for students who are not low-income, because a comparison could not be made with low-income students in order to analyze achievement gaps. For the NAEP analyses, states were excluded if the number of students in the NAEP sample for a particular subgroup did not meet the minimum size requirements for NAEP reporting.

SUBJECTS AND GRADE LEVELS

For the analyses that focused on state test results alone, we looked at trends in reading and mathematics, the subjects tested for NCLB accountability, at grades 4, 8, and the high school grade tested for NCLB, usually grade 10 or 11. (Utah uses an end-of-course test of pre-algebra as its grade 8 test, which students take after they have completed the appropriate course.)

For the NAEP-state comparisons, we examined reading and math trends at grades 4 and 8. NAEP data at the high school level were not reported by state in 2005 and 2009; moreover, NAEP is given in grade 12, whereas most state tests are administered in grade 10 or 11.

USE OF TREND LINES

State tests vary greatly in difficulty, content, scoring scales, cut scores for proficiency, and other aspects. Within two different states, for example, the same percentage proficient may signify different degrees of achievement and learning. Because of the diversity in state tests, we based our analyses on trend lines. A trend line is a record of change in the percentage proficient or mean score for a specific subgroup or a specific gap in one state, subject, and grade level between 2002 (or a more recent starting year in some states) and 2009. For example, the change from 2002 to 2009 in the percentage proficient in math for Asian 8th graders in Colorado constitutes one trend line. We calculated the number and percentage of trend lines that showed a gain, decline, or no net change in performance for a particular subgroup, as well as the number and percentage of trend lines that showed a narrowing, widening, or no net change in a particular achievement gap.

We determined movement in trend lines by using average annual changes in test results. These were calculated by taking the overall increase or decrease in the percentage proficient/basic or mean score and dividing it by the number of years of testing minus one (because we are looking at the difference between two years). To determine whether achievement gaps narrowed or widened, we compared the average annual gain in the mean score or the percentage proficient made by a lower-performing subgroup, such as African American students, with the average annual gain of higher-performing group, such as white students, in the same state, subject, and grade level. If the average gain for the lower-performing subgroup was larger that of the higher-performing group, we counted this as one instance of an achievement gap narrowing; if the average gain for the lower-performing group was smaller, we counted it as an instance of an achievement gap widening.

MEAN SCORES

As one indicator of achievement, this study analyzed mean scores. A mean score is the average of a group of test scores expressed on a common scoring scale for a particular state's test. It is calculated by adding up all of the scores of the members of a group (such as all low-income students in Iowa who took the state's 8th grade reading test) and dividing the sum by the number of scores. States use different numerical scoring scales, such as 1–100 in one state and 1–500 in another.

In some respects, mean scores are a better measure of trends in achievement gaps than percentages proficient because they do not depend on where cut scores for proficiency are set. Mean scores also pick up changes along the entire scoring scale, not just at the proficient level. Therefore, mean scores avoid the problem, described in chapter 1, of gaps appearing smaller or larger depending on where the cut score for proficiency is set.

MEDIANS

For some of the analyses in this report, we examined the medians of the 2009 percentages proficient across all of the states with sufficient data for each subgroup. The median is a midpoint; by definition, half the states with sufficient data will have percentages proficient above the median, and half will have percentages proficient below it. The median enables one to see the relative performance of different subgroups across multiple states in situations where state test results cannot be averaged because they come from diverse assessments with different scoring scales and proficiency definitions.

Although mean scores were used for several analyses in this study, we did not compute the extent to which gaps in mean scores narrowed or widened or the rate of change in mean score gaps. This was because only a maximum of 15 states provided both the mean score and standard deviation data needed to calculate these changes. Any analysis based on this limited pool of states would have been insufficient to support or refute the findings from the percentage proficient analyses that included several more states.

NAEP AND STATE TEST COMPARISONS

Part of our study used state-by-state data from the main National Assessment of Educational Progress as an additional source of evidence to confirm or raise questions about the trends found on state tests for the same time period, 2005–2009. (The long-term trend NAEP program does not report state-level results, so it is not suitable for our state-level study.)

Because NAEP and state tests use different definitions of proficient performance, we determined that it was most appropriate to compare the percentages of students scoring at or above the *proficient* level on state tests with the percentages scoring at or above the *basic* level on NAEP. In most states, the median percentage proficient on state tests is much closer to the percentage scoring basic on NAEP than it is to the percentage scoring proficient on NAEP.[10] A 2009 study by the National Center for Education Statistics, which "mapped" states' proficiency standards onto the NAEP scoring scale, found that on most state tests, cut scores for the proficient level were less ambitious than the NAEP proficient level and were often closer to—or sometimes below—the NAEP basic level.[11] In short, NAEP basic is closest to state proficient in most states. This matters for our study because we wanted to measure gains at points on the achievement spectrum that were most comparable to each other.

Our study counted an increase or decrease of any size as a gain or decline on both state tests and NAEP. Based on advice from our expert panel, we decided not to consider the statistical significance of NAEP results in our analysis. This approach treated trends on both assessments in the same way, enabling us to compare state and NAEP results. We took this approach for several reasons, outlined in the box below.

[10] For a fuller discussion of the rationale for comparing state proficient and NAEP basic results, see Center on Education Policy. (2010). *State Test Score Trends Through 2008-09, Part 1: Rising Scores on State Tests and NAEP*. Washington, DC: Author.

[11] Bandeira de Mello, V., Blankenship, C. & McLaughlin, D. H. (2009). *Mapping state proficiency standards onto NAEP scales: 2005-2007* (NCES 2010-456). Washington, DC: National Center for Education Statistics, U.S. Department of Education.

Statistical Significance on State Tests and NAEP

NAEP reports its results using tests of statistical significance because NAEP average scores and percentages are estimates, based on representative samples of students in a sample of schools in each state rather than on the entire student population in a state or the nation. Moreover, the collection of test questions used for each subject and grade level is just a sample of the vast number of questions that could have been asked. As such, NAEP results are subject to a measure of uncertainty.

Because of the sampling technique used, the NAEP program must compute statistical estimates of student performance in order to generalize results from this sample to the state's entire student population. NAEP reports its estimated results with a standard error, which is used to calculate whether a change in results is reliable—for instance, whether a state's average score in grade 4 math in 2009 is significantly different from the average score in a previous year.

The NAEP program is understandably careful to report the degree of confidence that data users should have in these sample-based estimates, and highlights shifts in performance only when they are statistically significant. In reporting whether results are significant, NAEP uses a strict standard, common in the research community, called a 95% confidence interval. The confidence interval says how likely it is that one would get the same results if the test were administered to different samples of students. A statistically significant gain with a 95% confidence interval means that if the test were administered 100 times to different samples of students, one would see a gain in at least 95 of the 100 samples.

If NAEP gains do not meet this 95% confidence standard, this does not mean gains are necessarily nonexistent. Over a longer time period than the four-year span of our state-NAEP analysis, incremental gains that are not statistically significant could accumulate to become significant.

State tests results, by contrast, are not reported using tests of statistical significance. Checks for statistical significance are not routinely done because state tests are administered to virtually all students in a particular grade; therefore, the results do not need to be extrapolated from a sample and are not subject to uncertainty about whether the tested sample accurately represents the state's student population. There is still some possibility of measurement error in state tests due, for example, to the sample of test questions chosen, as mentioned above. However, states do not routinely report their test results in terms of statistical significance, and it would be very difficult to get estimates of appropriate standard errors for state tests.

Our study involved comparisons of state test and NAEP results. Since we treated small increases and decreases on state tests as changes, it would have biased the comparison to treat NAEP results differently and count only those changes on NAEP that met NAEP's strict standard of significance. This would have meant applying different rules to state tests and NAEP. However, because we are counting even small changes as increases or decreases, it is possible that some of these changes on either state tests or NAEP merely reflect random fluctuations in some states.

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Appendix Table 1. African American-White achievement gaps in mean scores and percentages proficient on state READING tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

AA = African American
MS = Mean score
NA = Data not available from state
W = White
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

State	Grade 4						Grade 8						High School					
	W MS	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**
AK	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
AL	654.0	627.5	26.5	92%	78%	14	682.1	661.0	21.1	83%	62%	21	NA	NA	NA	88%	71%	18
AR	677.1	554.9	122.2	78%	52%	26	797.6	684.4	113.2	79%	51%	28	206.8	187.8	19.0	66%	29%	37
AZ	496.0	464.2	31.8	84%	63%	21	546.2	513.2	33.0	81%	62%	19	725.0	691.2	33.8	87%	66%	21
CA	391.9	349.4	42.5	78%	50%	28	373.6	328.4	45.2	66%	34%	32	396.0	367.0	29.0	71%	37%	34
CO	604.9	556.9	48.0	93%	77%	16	661.8	622.0	39.8	93%	80%	13	697.9	660.3	37.6	94%	82%	11
CT	266.5	229.3	37.2	85%	53%	33	262.0	225.7	36.3	90%	60%	30	257.1	213.2	43.9	90%	60%	30
DC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DE	478.6	453.5	25.1	89%	69%	20	534.2	508.9	25.3	89%	69%	20	528.4	501.2	27.2	81%	53%	28
FL	338.0	303.0	35.0	84%	59%	25	325.0	290.0	35.0	66%	34%	32	321.0	277.0	44.0	48%	18%	30
GA	839.0	821.0	18.0	93%	80%	13	841.0	825.0	16.0	96%	89%	7	246.0	225.0	21.0	94%	85%	9
HI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IA	215.1	196.3	18.8	84%	60%	24	262.4	235.4	27.0	77%	50%	28	290.9	262.1	28.8	79%	52%	27
ID	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IL	226.4	204.0	22.4	85%	56%	29	254.3	237.8	16.5	90%	71%	19	161.1	147.1	14.0	68%	28%	40
IN	477.7	435.6	42.1	78%	52%	26	543.0	494.0	49.0	70%	41%	29	NA	NA	NA	NA	NA	NA
KS	83.7	73.3	10.4	92%	70%	22	81.9	69.0	12.9	90%	67%	23	80.3	69.5	10.8	89%	66%	23
KY	454.0	443.0	11.0	77%	56%	21	848.0	840.0	8.0	70%	52%	18	1045.0	1038.0	7.0	64%	44%	20
LA	337.0	309.0	28.0	82%	62%	20	334.0	308.0	26.0	77%	48%	29	318.0	296.0	22.0	72%	48%	24
MA	NA	NA	NA	61%	29%	32	NA	NA	NA	85%	63%	22	NA	NA	NA	86%	63%	23
MD	NA	NA	NA	93%	79%	15	NA	NA	NA	89%	70%	19	NA	NA	NA	90%	73%	17
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	433.2	410.7	22.5	88%	66%	22	824.4	805.3	19.1	81%	57%	24	1110.1	1086.6	23.5	66%	33%	33
MN	460.6	447.2	13.4	82%	49%	33	856.4	844.4	12.0	74%	38%	36	1059.1	1045.6	13.5	81%	42%	39
MO	660.9	641.1	19.8	52%	28%	24	697.1	674.2	22.9	56%	27%	29	211.1	208.7	2.4	77%	51%	26

State	Grade 4						Grade 8						High School					
	W MS	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**
MS	152.6	145.7	6.9	66%	39%	27	151.6	144.2	7.4	63%	34%	29	653.0	645.9	7.1	67%	31%	36
MT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NC	348.7	340.9	7.8	74%	42%	32	361.7	354.8	6.9	71%	37%	34	NA	NA	NA	NA	NA	NA
ND	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NE	NA	NA	NA	96%	88%	9	NA	NA	NA	96%	91%	6	NA	NA	NA	94%	83%	11
NH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NJ	213.8	190.8	23.0	74%	40%	35	226.9	205.2	21.7	91%	62%	29	230.2	203.3	26.9	91%	63%	28
NM	653.7	632.6	21.1	69%	45%	23	707.3	689.1	18.2	79%	59%	20	n	n	n	n	n	n
NV	334.0	287.6	46.4	75%	49%	26	327.5	287.5	40.0	73%	47%	26	312.4	272.0	40.4	88%	68%	20
NY	678.0	658.0	20.0	85%	65%	20	668.0	650.0	18.0	79%	52%	28	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	87%	61%	26	NA	NA	NA	78%	49%	29	NA	NA	NA	88%	69%	20
OK	731.0	689.3	41.7	71%	46%	25	741.9	692.3	49.6	75%	50%	25	NA	NA	NA	83%	54%	29
OR	222.1	216.3	5.8	88%	74%	14	235.6	230.7	4.9	75%	54%	21	240.1	233.1	7.0	73%	42%	31
PA	1410.0	1250.0	160.0	79%	50%	29	1540.0	1360.0	180.0	86%	63%	22	1410.0	1190.0	220.0	72%	39%	33
RI	447.0	440.0	7.0	76%	54%	22	848.0	838.0	10.0	74%	45%	29	1147.0	1139.0	8.0	75%	50%	25
SC	648.2	612.2	35.4	85%	63%	23	633.0	599.9	33.1	78%	53%	25	229.4	212.9	16.5	64%	31%	33
SD	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TN	506.4	483.7	22.7	94%	81%	12	553.1	528.9	24.2	95%	86%	9	545.0	520.3	24.7	98%	95%	3
TX	2322.0	2204.0	118.0	92%	76%	16	2425.0	2328.0	97.0	96%	90%	6	2286.0	2210.0	76.0	93%	83%	10
UT	168.2	162.0	6.2	83%	61%	22	170.2	163.0	7.2	87%	66%	21	170.5	163.0	7.5	89%	68%	21
VA	NA	NA	NA	92%	81%	11	NA	NA	NA	91%	78%	13	NA	NA	NA	97%	91%	6
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	414.9	402.5	12.4	78%	57%	21	408.9	398.2	10.7	71%	54%	16	422.1	406.0	16.1	84%	68%	16
WI	484.9	444.2	40.7	87%	59%	28	535.9	488.1	47.8	90%	62%	28	549.9	485.2	64.7	82%	41%	40
WV	437.0	428.0	9.0	64%	56%	8	467.0	455.0	12.0	61%	51%	10	468.0	446.0	22.0	47%	34%	13
WY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 2. African American-White achievement gaps in mean scores and percentages proficient on state MATH tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

AA = African American
MS = Mean score
NA = Data not available from state
W = White
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**
AK	n	n	n	n	n	n	n	n	N	n	n	n	n	n	n	n	n	n
AL	644.7	622.6	22.1	85%	69%	17	700.0	676.7	23.3	82%	60%	22	NA	NA	NA	90%	77%	14
AR	648.8	579.4	69.4	84%	60%	24	745.7	662.4	83.3	71%	36%	35	231.6	194.1	37.5	79%	47%	31
AZ	506.2	468.2	38.0	85%	64%	21	579.3	539.1	40.2	76%	50%	26	722.1	691.2	30.9	81%	57%	24
CA	404.9	354.4	50.5	78%	51%	27	366.5	313.7	52.8	56%	26%	30	397.0	364.0	33.0	69%	33%	37
CO	512.3	450.6	61.7	95%	79%	16	587.2	539.6	47.6	88%	65%	23	605.4	544.4	61.0	76%	43%	33
CT	275.1	230.7	44.4	92%	65%	27	272.5	228.0	44.5	93%	64%	29	265.9	211.3	54.6	89%	46%	43
DC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DE	474.2	442.3	31.9	87%	61%	25	519.5	487.2	32.3	78%	46%	32	545.4	515.8	29.6	69%	34%	35
FL	343.0	305.0	38.0	83%	60%	23	335.0	300.0	35.0	78%	45%	33	338.0	307.0	31.0	80%	49%	31
GA	838.0	811.0	27.0	84%	61%	23	830.0	807.0	23.0	79%	58%	21	543.0	523.0	20.0	97%	89%	8
HI	n	n	n	n	n	n	n	n	n	n	n	n	N	n	n	n	n	n
IA	212.9	196.0	16.9	84%	58%	26	265.3	238.3	27.0	80%	47%	33	293.5	259.7	33.8	80%	50%	31
ID	n	n	n	n	n	n	n	n	n	n	n	n	N	n	n	n	n	n
IL	237.2	212.4	24.8	93%	71%	22	279.1	255.9	23.2	89%	64%	26	160.9	144.1	16.8	63%	19%	45
IN	487.2	436.7	50.5	75%	46%	29	575.3	517.3	58.0	72%	40%	32	NA	NA	NA	NA	NA	NA
KS	81.7	70.2	11.5	91%	70%	21	74.1	60.7	13.4	83%	57%	25	66.2	49.1	17.1	83%	50%	33
KY	453.0	441.0	12.0	74%	53%	21	844.0	830.0	14.0	58%	32%	27	1136.0	1124.0	12.0	44%	21%	23
LA	348.0	311.0	37.0	80%	50%	30	350.0	314.0	36.0	75%	42%	33	343.0	312.0	31.0	84%	60%	24
MA	NA	NA	NA	54%	25%	29	NA	NA	NA	56%	24%	32	NA	NA	NA	81%	51%	30
MD	NA	NA	NA	95%	82%	13	NA	NA	NA	80%	46%	34	NA	NA	NA	94%	72%	22
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	432.6	414.9	17.7	92%	74%	18	823.7	802.5	21.2	81%	52%	29	1099.7	1069.3	30.4	56%	16%	40
MN	459.1	446.8	12.3	80%	44%	36	854.0	838.9	15.1	65%	24%	41	1147.5	1124.2	23.3	47%	10%	36
MO	649.4	622.6	26.8	51%	21%	30	709.7	677.6	32.1	53%	20%	33	203.7	197.8	5.9	59%	24%	34

State	Grade 4						Grade 8						High School					
	W MS	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**	*W MS*	*AA MS*	*Gap MS*	*W PP*	*AA PP*	*Gap PP**
MS	154.2	147.7	6.5	70%	45%	25	153.2	146.0	7.2	67%	41%	26	656.9	649.8	7.1	75%	50%	25
MT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NC	353.9	346.3	7.6	84%	56%	28	364.4	357.6	6.8	82%	55%	27	NA	NA	NA	NA	NA	NA
ND	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NE	NA	NA	NA	97%	90%	7	NA	NA	NA	94%	84%	10	NA	NA	NA	91%	83%	8
NH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NJ	231.9	200.4	31.5	82%	51%	32	231.6	192.3	39.3	82%	45%	37	228.5	195.5	33.0	83%	43%	40
NM	642.9	621.5	21.4	59%	33%	26	714.3	694.2	20.1	61%	37%	24	n	n	n	n	n	n
NV	350.4	295.9	54.5	73%	49%	24	335.8	268.0	67.8	67%	36%	31	313.0	274.1	38.9	62%	28%	34
NY	695.0	675.0	20.0	92%	78%	14	683.0	658.0	25.0	89%	63%	26	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	84%	53%	32	NA	NA	NA	77%	41%	36	NA	NA	NA	86%	59%	27
OK	743.7	691.5	52.2	74%	51%	23	728.9	683.2	45.7	68%	47%	21	NA	NA	NA	77%	48%	29
OR	219.7	213.6	6.1	82%	62%	21	236.8	230.0	6.8	75%	50%	26	237.1	229.7	7.4	58%	28%	31
PA	1490.0	1320.0	170.0	87%	62%	25	1450.0	1300.0	150.0	77%	49%	28	1380.0	1180.0	200.0	62%	28%	33
RI	446.0	437.0	9.0	71%	43%	28	842.0	834.0	8.0	63%	27%	36	1136.0	1127.0	9.0	33%	7%	26
SC	650.9	614.3	36.6	86%	63%	23	636.2	600.5	35.7	75%	45%	29	232.8	210.5	22.3	65%	31%	34
SD	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TN	503.8	485.5	18.3	92%	83%	9	558.6	528.9	29.7	93%	83%	10	552.1	518.2	33.9	94%	76%	18
TX	2365.0	2232.0	133.0	92%	77%	15	2297.0	2163.0	134.0	88%	66%	22	2239.0	2103.0	136.0	77%	49%	28
UT	166.5	158.3	8.2	78%	51%	27	164.3	156.1	8.2	74%	42%	32	163.2	155.4	7.8	58%	37%	21
VA	NA	NA	NA	91%	78%	13	NA	NA	NA	90%	77%	13	NA	NA	NA	94%	83%	10
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	407.7	378.9	28.8	59%	30%	30	405.1	376.4	28.7	57%	27%	30	393.9	366.7	27.2	51%	21%	31
WI	479.3	438.2	41.1	87%	55%	32	554.7	503.8	50.9	85%	46%	39	568.2	512.9	55.3	77%	26%	50
WV	581.0	569.0	12.0	65%	53%	12	623.0	603.0	20.0	54%	37%	17	659.0	643.0	16.0	59%	44%	15
WY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 3. Asian American-White achievement gaps in mean scores and percentages proficient on state READING tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

A = Asian American
W = White
MS = Mean score
PP = Percentage of students scoring at or above the proficient level
NA = Data not available from state
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	***W MS***	***A MS***	***Gap MS†***	***W PP***	***A PP***	***Gap PP*†***	***W MS***	***A MS***	***Gap MS†***	***W PP***	***A PP***	***Gap PP*†***	***W MS***	***A MS***	***Gap MS†***	***W PP***	***A PP***	***Gap PP*†***
AK	390.0	345.0	45.0 *w*	88%	71%	17 *w*	389.0	351.0	38.0 *w*	90%	76%	14 *w*	392.0	346.0	46.0 *w*	92%	75%	17 *w*
AL	654.0	663.0	9.0 *a*	92%	93%	1 *a*	682.1	688.7	6.6 *a*	83%	87%	4 *a*	NA	NA	NA	88%	88%	0
AR	677.1	650.3	26.8 *w*	78%	73%	5 *w*	797.6	795.2	2.4 *w*	79%	75%	4 *w*	206.8	203.3	3.5 *w*	66%	63%	3 *w*
AZ	496.0	498.3	2.3 *w*	84%	85%	1 *a*	546.2	554.6	8.4 *a*	81%	83%	2 *a*	725.0	730.0	5.0 *a*	87%	84%	3 *w*
CA	391.9	403.1	11.2 *a*	78%	82%	4 *a*	373.6	385.5	11.9 *a*	66%	72%	6 *a*	396.0	398.0	2.0 *a*	71%	70%	0
CO	604.9	598.6	6.3 *w*	93%	90%	3 *w*	661.8	661.2	0.6 *w*	93%	91%	2 *w*	697.9	692.5	5.4 *w*	94%	91%	2 *w*
CT	266.5	271.0	4.5 *a*	85%	85%	0	262.0	267.6	5.6 *a*	90%	89%	1 *w*	257.1	260.4	3.3 *a*	90%	88%	2 *w*
DC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DE	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
FL	338.0	346.0	8.0 *a*	84%	86%	2 *a*	325.0	333.0	8.0 *a*	66%	71%	5 *a*	321.0	329.0	8.0 *a*	48%	54%	6 *a*
GA	839.0	843.0	4.0 *a*	93%	94%	1 *a*	841.0	845.0	4.0 *a*	96%	96%	0	246.0	250.0	4.0 *a*	94%	94%	0
HI	321.0	303.9	17.1 *w*	76%	59%	17 *w*	322.0	312.8	9.2 *w*	78%	67%	11 *w*	327.1	315.4	11.7 *w*	82%	72%	9 *w*
IA	215.1	214.8	0.3 *w*	84%	84%	0	262.4	265.4	3.0 *a*	77%	78%	1 *a*	290.9	293.6	2.7 *a*	79%	77%	2 *w*
ID	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IL	226.4	232.9	6.5 *a*	85%	89%	5 *a*	254.3	260.8	6.5 *a*	90%	94%	4 *a*	161.1	162.0	0.9 *a*	68%	69%	0
IN	477.7	488.4	10.7 *a*	78%	73%	5 *w*	543.0	562.0	19.0 *a*	70%	72%	2 *a*	NA	NA	NA	NA	NA	NA
KS	83.7	82.4	1.3 *w*	92%	86%	5 *w*	81.9	80.6	1.3 *w*	90%	85%	5 *w*	80.3	77.5	2.8 *w*	89%	80%	9 *w*
KY	454.0	458.0	4.0 *a*	77%	82%	5 *a*	n	n	n	n	n	n	n	n	n	n	n	n
LA	337.0	341.0	4.0 *a*	82%	81%	1 *w*	334.0	337.0	3.0 *a*	77%	76%	1 *w*	318.0	319.0	1.0 *a*	72%	71%	1 *w*
MA	NA	NA	NA	61%	62%	1 *a*	NA	NA	NA	85%	85%	0	NA	NA	NA	86%	82%	4 *w*
MD	NA	NA	NA	93%	95%	1 *a*	NA	NA	NA	89%	92%	4 *a*	NA	NA	NA	90%	91%	0
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	433.2	439.5	6.3 *a*	88%	92%	4 *a*	824.4	833.3	8.9 *a*	81%	86%	5 *a*	1110.1	1114.7	4.6 *a*	66%	67%	1 *a*
MN	460.6	453.8	6.8 *w*	82%	63%	19 *w*	856.4	851.2	5.2 *w*	74%	55%	19 *w*	1059.1	1051.9	7.2 *w*	81%	59%	23 *w*
MO	660.9	666.1	5.2 *a*	52%	44%	8 *w*	697.1	701.4	4.3 *a*	56%	59%	3 *a*	211.1	213.3	1.2 *a*	77%	78%	1 *a*

State	Grade 4						Grade 8						High School					
	W MS	*A MS*	*Gap MS*[†]	*W PP*	*A PP*	*Gap PP**[†]	*W MS*	*A MS*	*Gap MS*[†]	*W PP*	*A PP*	*Gap PP**[†]	*W MS*	*A MS*	*Gap MS*[†]	*W PP*	*A PP*	*Gap PP**[†]
MS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NC	348.7	349.2	0.5 *a*	74%	72%	1 *w*	361.7	361.5	0.2 *w*	71%	67%	4 *w*	NA	NA	NA	NA	NA	NA
ND	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NE	n	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
NH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NJ	213.8	220.9	7.1 *a*	74%	81%	7 *a*	226.9	233.6	6.7 *a*	91%	93%	2 *a*	230.2	233.5	3.3 *a*	91%	91%	0
NM	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NV	334.0	334.9	0.9 *a*	75%	72%	3 *w*	327.5	333.0	5.5 *a*	73%	74%	1 *a*	312.4	305.1	7.3 *w*	88%	85%	3 *w*
NY	678.0	682.0	4.0 *a*	85%	87%	2 *a*	668.0	671.0	3.0 *a*	79%	80%	0	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	87%	89%	2 *a*	NA	NA	NA	78%	83%	6 *a*	NA	NA	NA	88%	89%	1 *a*
OK	731.0	738.5	7.5 *a*	71%	72%	1 *a*	741.9	746.3	4.4 *a*	75%	75%	0	NA	NA	NA	83%	78%	5 *w*
OR	222.1	222.7	0.6 *a*	88%	88%	1 *w*	235.6	235.7	0.1 *a*	75%	74%	1 *w*	240.1	239.2	0.9 *w*	73%	68%	5 *w*
PA	1410.0	1460.0	50.0 *a*	79%	84%	5 *a*	1540.0	1620.0	80.0 *a*	86%	90%	4 *a*	1410.0	1470.0	60.0 *a*	72%	75%	3 *a*
RI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
SC	648.2	652.6	4.4 *a*	85%	86%	1 *a*	633.0	646.4	13.4 *a*	78%	84%	6 *a*	229.4	232.6	3.2 *a*	64%	67%	3 *a*
SD	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TN	506.4	516.6	10.2 *a*	94%	94%	1 *a*	553.1	561.6	8.5 *a*	95%	94%	1 *w*	545.0	556.1	11.1 *a*	98%	99%	1 *a*
TX	2322.0	2366.0	44.0 *a*	92%	95%	3 *a*	2425.0	2474.0	49.0 *a*	96%	98%	2 *a*	2286.0	2329.0	43.0 *a*	93%	95%	2 *a*
UT	168.0	168.0	0.0	83%	78%	5 *w*	170.0	171.0	1.0 *a*	87%	84%	3 *w*	170.5	169.4	1.1 *w*	89%	85%	4 *w*
VA	NA	NA	NA	92%	94%	2 *a*	NA	NA	NA	91%	94%	3 *a*	NA	NA	NA	97%	97%	0
VT	n	n	n	n	n	n	n	n	n	n	n	n	NA	NA	NA	n	n	n
WA	414.9	416.1	1.2 *a*	78%	78%	1 *a*	408.9	412.9	4.0 *a*	71%	76%	5 *a*	422.1	423.6	1.5 *a*	84%	85%	1 *a*
WI	484.9	470.7	14.2 *w*	87%	75%	12 *w*	535.9	520.0	15.9 *w*	90%	80%	10 *w*	549.9	524.1	25.8 *w*	82%	63%	19 *w*
WV	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

*Calculations of percentage proficient gaps are subject to rounding error.

[†]A "w" symbol in this column means that the white subgroup outperformed the Asian subgroup. An "a" symbol means that the Asian subgroup outperformed the white subgroup.

Appendix Table 4. Asian American-White achievement gaps in mean scores and percentages proficient on state MATH tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

A = Asian American
W = White
MS = Mean score
PP = Percentage of students scoring at or above the proficient level
NA = Data not available from state
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	***W MS***	***A MS***	***Gap MS†***	***W PP***	***A PP***	***Gap PP*†***	***W MS***	***A MS***	***Gap MS†***	***W PP***	***A PP***	***Gap PP*†***	***W MS***	***A MS***	***Gap MS†***	***W PP***	***A PP***	***Gap PP*†***
AK	371.0	340.0	31.0 *w*	83%	71%	12 *w*	351.0	325.0	26.0 *w*	76%	62%	14 *w*	350.0	322.0	28.0 *w*	77%	63%	15 *w*
AL	644.7	665.7	21.0 *a*	85%	92%	7 *a*	700.0	726.2	26.2 *a*	82%	92%	10 *a*	NA	NA	NA	90%	96%	6 *a*
AR	648.8	636.8	12.0 *w*	84%	80%	4 *w*	745.7	752.4	6.7 *a*	71%	70%	1 *w*	231.6	231.8	0.2 *a*	79%	76%	2 *w*
AZ	506.2	520.0	13.8 *a*	85%	87%	2 *a*	579.3	601.2	21.9 *a*	76%	83%	7 *a*	722.1	738.3	16.2 *a*	81%	86%	5 *a*
CA	404.9	439.2	34.3 *a*	78%	88%	10 *a*	366.5	410.3	43.8 *a*	56%	74%	18 *a*	397.0	414.0	17.0 *a*	69%	83%	14 *a*
CO	512.3	522.7	10.4 *a*	95%	94%	1 *w*	587.2	600.3	13.1 *a*	88%	91%	3 *a*	605.4	616.0	10.6 *a*	76%	78%	2 *a*
CT	275.1	289.3	14.2 *a*	92%	95%	2 *a*	272.5	284.3	11.8 *a*	93%	94%	1 *a*	265.9	270.7	4.8 *a*	89%	89%	0
DC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DE	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
FL	343.0	365.0	22.0 *a*	83%	90%	7 *a*	335.0	350.0	15.0 *a*	78%	85%	7 *a*	338.0	351.0	13.0 *a*	80%	87%	7 *a*
GA	838.0	857.0	19.0 *a*	84%	92%	8 *a*	830.0	856.0	26.0 *a*	79%	92%	13 *a*	543.0	552.0	9.0 *a*	97%	98%	1 *a*
HI	310.7	298.9	11.8	62%	49%	13 *w*	295.7	288.9	6.8 *w*	45%	38%	7 *w*	293.2	285.2	8.0 *w*	43%	33%	10 *w*
IA	212.9	213.4	0.5 *a*	84%	82%	2 *w*	265.3	272.6	7.3 *a*	80%	83%	3 *a*	293.5	297.3	3.8 *a*	80%	80%	0
ID	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IL	237.2	248.2	11.0 *a*	93%	96%	3 *a*	279.1	294.7	15.6 *a*	89%	94%	5 *a*	160.9	167.4	6.5 *a*	63%	76%	12 *a*
IN	487.2	512.6	25.4 *a*	75%	79%	4 *a*	575.3	611.0	35.7 *a*	72%	80%	8 *a*	NA	NA	NA	NA	NA	NA
KS	81.7	82.7	1.0 *a*	91%	91%	0	74.1	77.1	3.0 *a*	83%	84%	2 *a*	66.2	68.2	2.0 *a*	83%	85%	2 *a*
KY	453.0	461.0	8.0 *a*	74%	84%	10 *a*	n	n	n	n	n	n	n	n	n	n	n	n
LA	348.0	361.0	13.0 *a*	80%	83%	3 *a*	350.0	377.0	27.0 *a*	75%	83%	8 *a*	343.0	363.0	20.0 *a*	84%	87%	3 *a*
MA	NA	NA	NA	54%	65%	11 *a*	NA	NA	NA	56%	68%	12 *a*	NA	NA	NA	81%	86%	5 *a*
MD	NA	NA	NA	95%	97%	2 *a*	NA	NA	NA	80%	90%	10 *a*	NA	NA	NA	94%	96%	3 *a*
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	432.6	447.2	14.6 *a*	92%	95%	3 *a*	823.7	846.3	22.6 *a*	81%	89%	9 *a*	1099.7	1114.5	14.8 *a*	56%	72%	16 *a*
MN	459.1	455.0	4.1 *w*	80%	66%	14 *w*	854.0	851.3	2.7 *w*	65%	55%	10	1147.5	1142.3	5.2 *w*	47%	35%	11 *w*
MO	649.4	659.7	10.3 *a*	51%	62%	11 *a*	709.7	722.6	12.9 *a*	53%	66%	13 *a*	203.7	211.7	8.0 *a*	59%	69%	10 *a*

State	Grade 4						Grade 8						High School					
	W MS	*A MS*	*Gap MS*[†]	*W PP*	*A PP*	*Gap PP**[†]	*W MS*	*A MS*	*Gap MS*[†]	*W PP*	*A PP*	*Gap PP**[†]	*W MS*	*A MS*	*Gap MS*[†]	*W PP*	*A PP*	*Gap PP**[†]
MS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NC	353.9	356.7	2.8 *a*	84%	87%	3 *a*	364.4	368.3	3.9 *a*	82%	88%	6 *a*	NA	NA	NA	NA	NA	NA
ND	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NE	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
NH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NJ	231.9	248.1	16.2 *a*	82%	89%	7 *a*	231.6	251.8	20.2 *a*	82%	90%	8 *a*	228.5	241.9	13.4 *a*	83%	90%	7 *a*
NM	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NV	350.4	366.0	15.6 *a*	73%	80%	6 *a*	335.8	353.7	17.9 *a*	67%	72%	5 *a*	313.0	317.6	4.6 *a*	62%	64%	2 *a*
NY	695.0	714.0	19.0 *a*	92%	96%	4 *a*	683.0	696.0	13.0 *a*	89%	92%	3 *a*	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	84%	89%	4 *a*	NA	NA	NA	77%	85%	8 *a*	NA	NA	NA	86%	93%	6 *a*
OK	743.7	773.3	29.6 *a*	74%	84%	10 *a*	728.9	767.8	38.9 *a*	68%	83%	15 *a*	NA	NA	NA	77%	86%	9 *a*
OR	219.7	222.5	2.8 *a*	82%	84%	2 *a*	236.8	242.0	5.2 *a*	75%	82%	7 *a*	237.1	240.2	3.1 *a*	58%	67%	8 *a*
PA	1490.0	1590.0	100.0 *a*	87%	93%	6 *a*	1450.0	1590.0	140.0 *a*	77%	89%	12 *a*	1380.0	1530.0	150.0 *a*	62%	80%	18 *a*
RI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
SC	650.9	669.1	18.2 *a*	86%	91%	5 *a*	636.2	662.8	26.6 *a*	75%	86%	11 *a*	232.8	247.7	14.9 *a*	65%	79%	14 *a*
SD	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TN	503.8	522.1	18.3 *a*	92%	96%	4 *a*	558.6	582.2	23.6 *a*	93%	96%	3 *a*	552.1	561.7	9.6 *a*	94%	94%	0
TX	2365.0	2462.0	97.0 *a*	92%	97%	5 *a*	2297.0	2416.0	119.0 *a*	88%	94%	6 *a*	2239.0	2355.0	116.0 *a*	77%	89%	12 *a*
UT	166.5	166.7	0.2 *a*	78%	79%	1 *a*	164.3	164.1	0.2	74%	72%	2 *w*	163.2	165.1	1.9 *a*	58%	67%	9 *a*
VA	NA	NA	NA	91%	94%	3 *a*	NA	NA	NA	90%	95%	5 *a*	NA	NA	NA	94%	96%	2 *a*
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	407.7	413.5	5.8 *a*	59%	63%	4 *a*	405.1	413.0	7.9 *a*	57%	63%	7 *a*	393.9	397.6	3.7 *a*	51%	57%	6 *a*
WI	479.3	472.7	6.6 *w*	87%	80%	7 *w*	554.7	549.6	5.1 *w*	85%	79%	6 *w*	568.2	557.8	10.4 *w*	77%	65%	12 *w*
WV	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

*Calculations of percentage proficient gaps are subject to rounding error.

[†]A "w" symbol in this column means that the white subgroup outperformed the Asian subgroup. An "a" symbol means that the Asian subgroup outperformed the white subgroup.

Appendix Table 5. Latino-White achievement gaps in mean scores and percentages proficient on state READING tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

L = Latino
MS = Mean score
NA = Data not available from state
W = White
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**
AK	390.0	359.0	31.0	88%	77%	12	389.0	353.0	36.0	90%	76%	14	392.0	353.0	39.0	92%	81%	11
AL	654.0	629.0	25.0	92%	79%	13	682.1	655.9	26.2	83%	67%	16	NA	NA	NA	88%	72%	16
AR	677.1	582.2	94.9	78%	59%	19	797.6	739.2	58.4	79%	65%	14	206.8	192.9	13.9	66%	41%	25
AZ	496.0	462.2	33.8	84%	62%	22	546.2	509.5	36.7	81%	58%	23	725.0	688.9	36.1	87%	63%	24
CA	391.9	347.7	44.2	78%	49%	29	373.6	328.4	45.2	66%	34%	32	396.0	368.0	28.0	71%	37%	34
CO	604.9	554.1	50.8	93%	76%	17	661.8	616.9	44.9	93%	78%	16	697.9	657.4	40.5	94%	83%	11
CT	266.5	225.7	40.8	85%	47%	38	262.0	222.7	39.3	90%	55%	35	257.1	214.7	42.4	90%	61%	29
DC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DE	478.6	464.1	14.5	89%	79%	11	534.2	518.5	15.7	89%	79%	10	528.4	509.1	19.3	81%	62%	19
FL	338.0	314.0	24.0	84%	68%	16	325.0	303.0	22.0	66%	47%	19	321.0	295.0	26.0	48%	30%	18
GA	839.0	823.0	16.0	93%	84%	9	841.0	827.0	14.0	96%	89%	7	246.0	229.0	17.0	94%	86%	8
HI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IA	215.1	199.3	15.8	84%	67%	17	262.4	237.8	24.6	77%	52%	26	290.9	264.5	26.4	79%	57%	22
ID	211.0	204.0	7.0	89%	72%	18	231.0	223.0	8.0	93%	81%	12	230.0	223.0	7.0	92%	74%	17
IL	226.4	206.5	19.9	85%	60%	24	254.3	242.3	12.0	90%	77%	12	161.1	149.6	11.5	68%	37%	32
IN	477.7	445.2	32.5	78%	59%	19	543.0	504.9	38.1	70%	49%	21	NA	NA	NA	NA	NA	NA
KS	83.7	75.0	8.7	92%	75%	17	81.9	69.9	12.0	90%	67%	23	80.3	70.3	10.0	89%	67%	22
KY	454.0	448.0	6.0	77%	67%	9	848.0	844.0	4.0	70%	61%	9	1045.0	1041.0	4.0	64%	53%	12
LA	337.0	314.0	23.0	82%	67%	15	334.0	313.0	21.0	77%	60%	17	318.0	296.0	22.0	72%	53%	19
MA	NA	NA	NA	61%	28%	33	NA	NA	NA	85%	56%	29	NA	NA	NA	86%	57%	29
MD	NA	NA	NA	93%	81%	13	NA	NA	NA	89%	72%	17	NA	NA	NA	90%	78%	12
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	433.2	415.6	17.6	88%	73%	15	824.4	810.4	14.0	81%	65%	16	1110.1	1093.5	16.6	66%	45%	22
MN	460.6	447.8	12.8	82%	49%	33	856.4	845.6	10.8	74%	41%	32	1059.1	1047.9	11.2	81%	47%	34
MO	660.9	646.7	14.2	52%	34%	18	697.1	682.7	14.4	56%	38%	18	211.1	204.1	7.0	77%	64%	13

State	Grade 4						Grade 8						High School					
	W MS	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**
MS	152.6	148.3	4.3	66%	52%	14	151.6	145.9	5.7	63%	44%	19	n	n	n	n	n	n
MT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NC	348.7	341.3	7.4	74%	44%	30	361.7	355.4	6.3	71%	41%	29	NA	NA	NA	NA	NA	NA
ND	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NE	NA	NA	NA	96%	92%	5	NA	NA	NA	96%	92%	4	NA	NA	NA	94%	84%	9
NH	447.0	441.0	6.0	76%	57%	19	n	n	n	n	n	n	n	n	n	n	n	n
NJ	213.8	194.4	19.4	74%	45%	29	226.9	209.1	17.8	91%	69%	22	230.2	210.2	20.0	91%	72%	19
NM	653.7	634.0	19.7	69%	46%	23	707.3	686.7	20.6	79%	55%	24	632.7	614.1	18.6	67%	43%	25
NV	334.0	289.9	44.1	75%	50%	25	327.5	291.1	36.4	73%	48%	25	312.4	275.6	36.8	88%	71%	18
NY	678.0	653.0	25.0	85%	65%	20	668.0	649.0	19.0	79%	53%	27	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	87%	69%	18	NA	NA	NA	78%	59%	19	NA	NA	NA	88%	73%	15
OK	731.0	689.4	41.6	71%	49%	22	741.9	687.6	54.3	75%	48%	27	NA	NA	NA	83%	66%	17
OR	222.1	214.4	7.7	88%	69%	19	235.6	229.5	6.1	75%	48%	27	240.1	233.1	7.0	73%	41%	32
PA	1410.0	1260.0	150.0	79%	53%	26	1540.0	1350.0	190.0	86%	62%	24	1410.0	1210.0	200.0	72%	40%	32
RI	447.0	438.0	9.0	76%	48%	28	848.0	837.0	11.0	74%	40%	34	1147.0	1139.0	8.0	75%	50%	25
SC	648.2	613.2	34.4	85%	61%	25	633.0	607.6	25.4	78%	60%	18	229.4	214.9	14.5	64%	38%	26
SD	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TN	506.4	490.2	16.2	94%	85%	8	553.1	534.1	19.0	95%	87%	8	545.0	531.6	13.4	98%	97%	2
TX	2322.0	2227.0	95.0	92%	80%	12	2425.0	2327.0	98.0	96%	90%	6	2286.0	2215.0	71.0	93%	84%	9
UT	168.0	161.0	7.0	83%	58%	25	170.0	162.0	8.0	87%	62%	25	170.5	162.1	8.4	89%	66%	24
VA	NA	NA	NA	92%	86%	6	NA	NA	NA	91%	81%	10	NA	NA	NA	97%	93%	4
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	414.9	400.9	14.0	78%	54%	24	408.9	396.7	12.2	71%	52%	18	422.1	408.7	13.4	84%	70%	14
WI	484.9	453.4	31.5	87%	65%	22	535.9	501.8	34.1	90%	70%	20	549.9	506.8	43.1	82%	53%	28
WV	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WY	663.9	638.1	25.8	74%	57%	17	696.7	673.0	23.7	68%	47%	20	164.2	155.8	8.4	68%	46%	22

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 6. Latino-White achievement gaps in mean scores and percentages proficient on state MATH tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

L = Latino
MS = Mean score
NA = Data not available from state
W = White
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**
AK	371.0	343.0	28.0	83%	73%	10	351.0	316.0	35.0	76%	58%	18	350.0	315.0	35.0	77%	62%	15
AL	644.7	626.9	17.8	85%	72%	13	700.0	682.6	17.4	82%	67%	15	NA	NA	NA	90%	83%	7
AR	648.8	608.6	40.2	84%	74%	10	745.7	701.1	44.6	71%	54%	17	231.6	208.8	22.8	79%	62%	17
AZ	506.2	472.8	33.4	85%	67%	18	579.3	542.7	36.6	76%	52%	24	722.1	693.0	29.1	81%	59%	22
CA	404.9	363.2	41.7	78%	56%	22	366.5	325.2	41.3	56%	33%	23	397.0	372.0	25.0	69%	40%	29
CO	512.3	457.0	55.3	95%	84%	11	587.2	543.1	44.1	88%	67%	21	605.4	548.7	56.7	76%	43%	32
CT	275.1	234.2	40.9	92%	67%	25	272.5	228.8	43.7	93%	63%	30	265.9	218.5	47.4	89%	54%	35
DC	n	n	n	n	61%	n	n	n	n	n	n	n	n	n	n	n	n	n
DE	474.2	454.7	19.5	87%	73%	14	519.5	499.5	20.0	78%	63%	15	545.4	527.4	18.0	69%	48%	20
FL	343.0	323.0	20.0	83%	72%	11	335.0	316.0	19.0	78%	61%	17	338.0	321.0	17.0	80%	64%	16
GA	838.0	819.0	19.0	84%	71%	13	830.0	813.0	17.0	79%	65%	14	543.0	530.0	13.0	97%	93%	4
HI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IA	212.9	199.4	13.5	84%	65%	19	265.3	244.2	21.1	80%	58%	22	293.5	265.8	27.7	80%	56%	24
ID	214.0	208.0	6.0	88%	75%	14	240.0	232.0	8.0	82%	59%	23	245.0	238.0	7.0	82%	61%	21
IL	237.2	218.3	18.9	93%	80%	13	279.1	263.5	15.6	89%	76%	13	160.9	149.2	11.7	63%	32%	32
IN	487.2	459.6	27.6	75%	60%	15	575.3	539.4	35.9	72%	54%	18	NA	NA	NA	NA	NA	NA
KS	81.7	73.8	7.9	91%	77%	13	74.1	62.4	11.7	83%	60%	22	66.2	54.1	12.1	83%	62%	21
KY	453.0	448.0	5.0	74%	65%	9	844.0	837.0	7.0	58%	46%	12	1136.0	1131.0	5.0	44%	34%	9
LA	348.0	327.0	21.0	80%	64%	16	350.0	332.0	18.0	75%	62%	13	343.0	322.0	21.0	84%	66%	18
MA	NA	NA	NA	54%	25%	29	NA	NA	NA	56%	22%	34	NA	NA	NA	81%	48%	33
MD	NA	NA	NA	95%	85%	10	NA	NA	NA	80%	56%	24	NA	NA	NA	94%	83%	11
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	432.6	419.6	13.0	92%	81%	11	823.7	809.4	14.3	81%	65%	16	1099.7	1083.4	16.3	56%	32%	24
MN	459.1	448.0	11.1	80%	47%	32	854.0	842.1	11.9	65%	30%	36	1147.5	1130.0	17.5	47%	16%	31
MO	649.4	637.0	12.4	51%	33%	18	709.7	693.4	16.3	53%	35%	18	203.7	195.4	8.3	59%	42%	17

State	Grade 4						Grade 8						High School					
	W MS	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**	*W MS*	*L MS*	*Gap MS*	*W PP*	*L PP*	*Gap PP**
MS	154.2	152.2	2.0	70%	62%	8	153.2	150.3	2.9	67%	58%	9	656.9	656.8	0.1	75%	77%	‡
MT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NC	353.9	348.8	5.1	84%	68%	16	364.4	359.7	4.7	82%	65%	17	NA	NA	NA	NA	NA	NA
ND	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NE	NA	NA	NA	97%	94%	3	NA	NA	NA	94%	87%	7	NA	NA	NA	91%	85%	6%
NH	446.0	440.0	6.0	75%	51%	24	n	n	n	n	n	n	n	n	n	n	n	n
NJ	231.9	209.9	22.0	82%	61%	21	231.6	203.7	27.9	82%	56%	25	228.5	205.0	23.5	83%	56%	27
NM	642.9	624.7	18.2	59%	36%	24	714.3	695.3	19.0	61%	35%	25	598.6	576.7	21.9	52%	25%	26
NV	350.4	312.9	37.5	73%	56%	17	335.8	281.3	54.5	67%	42%	26	313.0	283.0	30.0	62%	34%	28
NY	695.0	680.0	15.0	92%	82%	10	683.0	663.0	20.0	89%	69%	20	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	84%	65%	20	NA	NA	NA	77%	55%	23	NA	NA	NA	86%	70%	17
OK	743.7	702.0	41.7	74%	57%	17	728.9	689.5	39.4	68%	49%	19	NA	NA	NA	77%	61%	16
OR	219.7	213.5	6.2	82%	61%	21	236.8	230.4	6.4	75%	54%	22	237.1	231.0	6.1	58%	33%	25
PA	1490.0	1350.0	140.0	87%	67%	20	1450.0	1310.0	140.0	77%	52%	25	1380.0	1200.0	180.0	62%	31%	31
RI	446.0	436.0	10.0	71%	42%	29	842.0	834.0	8.0	63%	26%	37	1136.0	1128.0	8.0	33%	9%	24
SC	650.9	626.4	24.5	86%	72%	14	636.2	613.7	22.5	75%	59%	16	232.8	219.0	13.8	65%	45%	20
SD	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TN	503.8	493.4	10.4	92%	89%	4	558.6	538.9	19.7	93%	86%	7	552.1	537.1	15.0	94%	87%	8
TX	2365.0	2282.0	83.0	92%	84%	8	2297.0	2206.0	91.0	88%	74%	14	2239.0	2141.0	98.0	77%	58%	19
UT	166.5	158.7	7.8	78%	50%	28	164.3	156.4	7.9	74%	41%	33	163.2	154.5	8.7	58%	30%	27
VA	NA	NA	NA	91%	79%	12	NA	NA	NA	90%	78%	12	NA	NA	NA	94%	87%	7
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	407.7	379.0	28.7	59%	29%	30	405.1	378.7	26.4	57%	29%	28	393.9	370.3	23.6	51%	23%	28
WI	479.3	452.8	26.5	87%	67%	20	554.7	520.4	34.3	85%	60%	25	568.2	533.4	34.8	77%	45%	32
WV	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WY	659.8	636.2	23.6	78%	64%	14	730.1	707.7	22.4	65%	46%	20	154.0	146.5	7.5	65%	46%	19

*Calculations of percentage proficient gaps are subject to rounding error.

‡Latino students outperformed white students.

Appendix Table 7. Native American-White achievement gaps in mean scores and percentages proficient on state READING tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

NAm = Native American
MS = Mean score
NA = Data not available from state
W = White
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**
AK	390.0	321.0	69.0	88%	57%	31	389.0	328.0	61.0	90%	65%	25	392.0	324.0	68.0	92%	63%	29
AL	n	n	n	n	n	n	682.1	678.2	3.9	83%	79%	4	NA	NA	NA	88%	83%	6
AR	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
AZ	496.0	452.9	43.1	84%	54%	30	546.2	500.6	45.6	81%	50%	31	725.0	677.2	47.8	87%	53%	34
CA	391.9	354.3	37.6	78%	54%	24	373.6	339.1	34.5	66%	42%	24	396.0	377.0	19.0	71%	48%	23
CO	604.9	560.6	44.3	93%	79%	14	661.8	631.9	29.9	93%	83%	10	697.9	668.4	29.5	94%	86%	8
CT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DC	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
DE	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
FL	338.0	328.0	10.0	84%	79%	5	325.0	315.0	10.0	66%	59%	7	321.0	311.0	10.0	48%	39%	9
GA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
HI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
ID	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IL	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IN	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
KS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
KY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
LA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MA	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
MD	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	433.2	422.8	10.4	88%	82%	6	824.4	815.1	9.3	81%	73%	8	1110.1	1097.5	12.6	66%	52%	14
MN	460.6	449.5	11.1	82%	54%	28	856.4	846.6	9.8	74%	43%	31	1059.1	1048.7	10.4	81%	50%	32
MO	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

State	Grade 4						Grade 8						High School					
	W MS	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**
MS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MT	277.3	255.7	21.6	85%	56%	29	278.8	256.6	22.2	84%	57%	27	275.1	241.9	33.2	80%	53%	27
NC	348.7	341.8	6.9	74%	46%	28	361.7	354.9	6.8	71%	39%	32	NA	NA	NA	NA	NA	NA
ND	653.1	634.3	18.8	83%	62%	21	690.7	670.0	20.7	79%	53%	26	711.0	689.8	21.2	71%	44%	27
NE	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
NH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NJ	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NM	653.7	624.4	29.3	69%	36%	33	707.3	682.9	24.4	79%	49%	30	632.7	610.9	21.8	67%	37%	31
NV	n	n	n	n	n	n	327.5	303.9	23.6	73%	60%	13	n	n	n	n	n	n
NY	678.0	661.0	17.0	85%	69%	16	668.0	652.0	16.0	79%	56%	24	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
OK	731.0	711.5	19.5	71%	60%	11	741.9	721.5	20.4	75%	65%	10	NA	NA	NA	83%	79%	4
OR	222.1	217.1	5.0	88%	78%	10	235.6	231.8	3.8	75%	60%	15	240.1	236.4	3.7	73%	54%	19
PA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
RI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
SC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
SD	627.7	598.9	28.8	63%	52%	11	625.1	597.1	28.0	79%	48%	31	622.9	602.0	20.9	73%	49%	24
TN	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TX	2322.0	2275.0	47.0	92%	86%	6	2425.0	2376.0	49.0	96%	94%	2	2286.0	2258.0	28.0	93%	91%	2
UT	168.0	160.0	8.0	83%	55%	28	170.0	162.0	8.0	87%	63%	24	170.5	162.7	7.8	89%	68%	21
VA	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	97%	96%	1
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	414.9	402.4	12.5	78%	58%	20	408.9	395.1	13.8	71%	49%	22	422.1	407.3	14.8	84%	65%	18
WI	484.9	462.8	22.1	87%	74%	13	535.9	508.5	27.4	90%	76%	14	549.9	513.1	36.8	82%	58%	23
WV	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 8. Native American-White achievement gaps in mean scores and percentages proficient on state MATH tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

NAm = Native American
MS = Mean score
NA = Data not available from state
W = White
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**
AK	371.0	314.0	57.0	83%	56%	28	351.0	302.0	49.0	76%	49%	27	350.0	295.0	55.0	77%	47%	30
AL	n	n	n	n	n	n	700.0	694.6	5.4	82%	77%	5	NA	NA	NA	90%	89%	1
AR	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
AZ	506.2	458.9	47.3	85%	55%	30	579.3	532.9	46.4	76%	42%	34	722.1	682.7	39.4	81%	49%	32
CA	404.9	364.9	40.0	78%	58%	20	366.5	328.5	38.0	56%	34%	22	397.0	376.0	21.0	69%	46%	23
CO	512.3	460.3	52.0	95%	84%	12	587.2	553.3	33.9	88%	70%	18	605.4	562.6	42.8	76%	52%	24
CT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
DC	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
DE	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
FL	343.0	336.0	7.0	83%	79%	4	335.0	326.0	9.0	78%	70%	8	338.0	332.0	6.0	80%	75%	5
GA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
HI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
ID	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IL	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
IN	n	n	n	n	n	n	n	n	n	n	n	n	NA	NA	NA	NA	NA	NA
KS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
KY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
LA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MA	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
MD	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
ME	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MI	432.6	423.8	8.8	92%	87%	5	823.7	812.7	11.0	81%	72%	9	1099.7	1086.5	13.2	56%	36%	20
MN	459.1	449.7	9.4	80%	53%	26	854.0	841.8	12.2	65%	31%	35	1147.5	1131.6	15.9	47%	18%	29
MO	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

State	Grade 4						Grade 8						High School					
	W MS	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**	*W MS*	*NAm MS*	*Gap MS*	*W PP*	*NAm PP*	*Gap PP**
MS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MT	266.3	242.6	23.7	71%	41%	30	261.6	238.0	23.6	64%	31%	33	256.7	238.2	18.5	58%	24%	34
NC	353.9	348.1	5.8	84%	65%	19	364.4	358.2	6.2	82%	57%	25	NA	NA	NA	NA	NA	NA
ND	636.5	617.5	19.0	84%	62%	22	707.0	681.4	25.6	74%	48%	26	747.4	708.3	39.1	60%	26%	35
NE	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
NH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NJ	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
NM	642.9	618.1	24.8	59%	28%	31	714.3	689.3	25.0	61%	28%	32	598.6	570.9	27.7	52%	19%	33
NV	n	n	n	n	n	n	335.8	297.3	38.5	67%	51%	16	n	n	n	n	n	n
NY	695.0	679.0	16.0	92%	83%	9	683.0	666.0	17.0	89%	74%	15	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n
OK	743.7	721.7	22.0	74%	65%	9	728.9	705.3	23.6	68%	56%	12	NA	NA	NA	77%	77%	0
OR	219.7	215.2	4.5	82%	68%	14	236.8	231.8	5.0	75%	59%	17	237.1	232.9	4.2	58%	36%	23
PA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
RI	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
SC	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
SD	655.2	617.7	37.5	84%	46%	38	719.9	683.9	36.0	80%	40%	40	735.1	700.8	34.3	69%	33%	36
TN	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
TX	2365.0	2310.0	55.0	92%	86%	6	2297.0	2240.0	57.0	88%	79%	9	2239.0	2198.0	41.0	77%	70%	7
UT	166.5	158.2	8.3	78%	48%	30	164.3	156.0	8.3	74%	38%	36	n	n	n	58%	32%	26
VA	NA	NA	NA	n	n	n	NA	NA	NA	n	n	n	NA	NA	NA	94%	92%	2
VT	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WA	407.7	381.6	26.1	59%	33%	26	405.1	379.6	25.5	57%	31%	26	393.9	370.8	23.1	51%	25%	26
WI	479.3	456.8	22.5	87%	72%	15	554.7	526.1	28.6	85%	64%	20	568.2	540.9	27.3	77%	51%	25
WV	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
WY	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 9. Mean scores and percentages proficient for white students on state READING and MATH tests, 2009

Note: *This table includes 2009 mean scores and percentages proficient for* all *of the states with sufficient data for the white subgroup, including states omitted from appendix tables 1-8 because the racial/ethnic group being compared with white students was too small to yield reliable results.*

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features. The mean scores below are calculated on scoring scales that differ by state, grade, and subject.*

W = White
MS = Mean score
NA = Data not available from state
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4				Grade 8				High School			
	Reading		*Math*		*Reading*		*Math*		*Reading*		*Math*	
State	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*
AK	390.0	88%	371.0	83%	389.0	90%	351.0	76%	392.0	92%	350.0	77%
AL	654.0	92%	644.7	85%	682.1	83%	700.0	82%	NA	88%	NA	90%
AR	677.1	78%	648.8	84%	797.6	79%	745.7	71%	206.8	66%	231.6	79%
AZ	496.0	84%	506.2	85%	546.2	81%	579.3	76%	725.0	87%	722.1	81%
CA	391.9	78%	404.9	78%	373.6	66%	366.5	56%	396.0	71%	397.0	69%
CO	604.9	93%	512.3	95%	661.8	93%	587.2	88%	697.9	94%	605.4	76%
CT	266.5	85%	275.1	92%	262.0	90%	272.5	93%	257.1	90%	265.9	89%
DC	n	n	n	n	n	n	n	n	n	n	n	n
DE	478.6	89%	474.2	87%	534.2	89%	519.5	78%	528.4	81%	545.4	69%
FL	338.0	84%	343.0	83%	325.0	66%	335.0	78%	321.0	48%	338.0	80%
GA	839.0	93%	838.0	84%	841.0	96%	830.0	79%	246.0	94%	543.0	97%
HI	321.0	76%	310.7	62%	322.0	78%	295.7	45%	327.1	82%	293.2	43%
IA	215.1	84%	212.9	84%	262.4	77%	265.3	80%	290.9	79%	293.5	80%
ID	211.0	89%	214.0	88%	231.0	93%	240.0	82%	230.0	92%	245.0	82%
IL	226.4	85%	237.2	93%	254.3	90%	279.1	89%	161.1	68%	160.9	63%
IN	477.7	78%	487.2	75%	543.0	70%	575.3	72%	NA	NA	NA	NA
KS	83.7	92%	81.7	91%	81.9	90%	74.1	83%	80.3	89%	66.2	83%
KY	454.0	77%	453.0	74%	848.0	70%	844.0	58%	1045.0	64%	1136.0	44%
LA	337.0	82%	348.0	80%	334.0	77%	350.0	75%	318.0	72%	343.0	84%
MA	NA	61%	NA	54%	NA	85%	NA	56%	NA	86%	NA	81%
MD	NA	93%	NA	95%	NA	89%	NA	80%	NA	90%	NA	94%
ME	446.0	70%	447.0	66%	850.0	71%	843.0	52%	1141.0	50%	1141.0	43%
MI	433.2	88%	432.6	92%	824.4	81%	823.7	81%	1110.1	66%	1099.7	56%
MN	460.6	82%	459.1	80%	856.4	74%	854.0	65%	1059.1	81%	1147.5	47%
MO	660.9	52%	649.4	51%	697.1	56%	709.7	53%	211.1	77%	203.7	59%

	Grade 4				Grade 8				High School			
	Reading		*Math*		*Reading*		*Math*		*Reading*		*Math*	
State	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*	*W MS*	*W PP*
MS	152.6	66%	154.2	70%	151.6	63%	153.2	67%	653.0	67%	656.9	75%
MT	277.3	85%	266.3	71%	278.8	84%	261.6	64%	275.1	80%	256.7	58%
NC	348.7	74%	353.9	84%	361.7	71%	364.4	82%	NA	NA	NA	NA
ND	653.1	83%	635.5	84%	690.7	79%	707.0	74%	711.0	71%	747.4	60%
NE	NA	96%	NA	97%	NA	96%	NA	94%	NA	94%	NA	91%
NH	447.0	76%	446.0	75%	846.0	71%	843.0	65%	1145.0	74%	1135.0	33%
NJ	213.8	74%	231.9	82%	226.9	91%	231.6	82%	230.2	91%	228.5	83%
NM	653.7	69%	642.9	59%	707.3	79%	714.3	61%	632.7	67%	589.6	52%
NV	334.0	75%	350.4	73%	327.5	73%	335.8	67%	312.4	88%	313.0	62%
NY	678.0	85%	695.0	92%	668.0	79%	683.0	89%	NA	NA	NA	NA
OH	NA	87%	NA	84%	NA	78%	NA	77%	NA	88%	NA	86%
OK	731.0	71%	743.7	74%	741.9	75%	728.9	68%	NA	83%	NA	77%
OR	222.1	88%	219.7	82%	235.6	75%	236.8	75%	240.1	73%	237.1	58%
PA	1410.0	79%	1490.0	87%	1540.0	86%	1450.0	77%	1410.0	72%	1380.0	62%
RI	447.0	76%	446.0	71%	848.0	74%	842.0	63%	1147.0	75%	1136.0	33%
SC	648.2	85%	650.9	86%	633.0	78%	636.2	75%	229.4	64%	232.8	65%
SD	627.7	63%	655.2	84%	625.1	79%	719.9	80%	622.9	73%	735.1	69%
TN	506.4	94%	503.8	92%	553.1	95%	558.6	93%	545.0	98%	552.1	94%
TX	2322.0	92%	2365.0	92%	2425.0	96%	2297.0	88%	2286.0	93%	2239.0	77%
UT	168.2	83%	166.5	78%	170.2	87%	164.3	74%	170.5	89%	163.2	58%
VA	NA	92%	NA	91%	NA	91%	NA	90%	NA	97%	NA	94%
VT	445.0	70%	445.0	69%	846.0	70%	842.0	63%	1146.0	72%	1135.0	36%
WA	414.9	78%	407.7	59%	408.9	71%	405.1	57%	422.1	84%	393.9	51%
WI	484.9	87%	479.3	87%	535.9	90%	554.7	85%	549.9	82%	568.2	77%
WV	437.0	64%	581.0	65%	467.0	61%	623.0	54%	468.0	47%	659.0	59%
WY	663.9	74%	659.8	78%	696.7	68%	730.1	65%	164.2	68%	154.0	65%

Appendix Table 10. Achievement gaps between low-income and non-low-income students in mean scores and percentages proficient on state READING tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

LI = Low-income
NLI = Not low-income
MS = Mean score
PP = Percentage of students scoring at or above the proficient level
NA = Data not available from state
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**
AK	NA	NA	NA	88%	66%	22	NA	NA	NA	89%	71%	19	NA	NA	NA	90%	69%	22
AL	NA	NA	NA	95%	80%	14	NA	NA	NA	87%	65%	22	NA	NA	NA	89%	71%	18
AR	717.4	593.6	123.8	83%	62%	21	826.0	721.8	104.2	83%	61%	22	209.0	193.1	15.9	69%	41%	28
AZ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CA	394.8	346.8	48.0	80%	48%	32	373.0	327.8	45.2	65%	33%	32	395.0	367.0	28.0	69%	36%	33
CO	607.5	555.7	51.8	94%	77%	17	663.6	616.9	46.7	94%	78%	16	696.1	657.0	39.1	93%	83%	10
CT	267.6	227.4	40.2	86%	50%	36	262.2	224.3	37.9	90%	58%	32	256.0	213.3	42.7	89%	60%	30
DC	457.7	449.5	8.2	61%	39%	22	857.2	851.5	5.7	56%	40%	15	956.3	951.8	4.5	46%	35%	11
DE	479.2	456.3	22.9	89%	72%	18	533.5	511.3	22.2	88%	72%	16	525.6	503.5	22.1	78%	56%	22
FL	344.0	309.0	35.0	87%	65%	22	328.0	296.0	32.0	69%	40%	29	319.0	285.0	34.0	47%	23%	24
GA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HI	316.9	294.3	22.6	72%	49%	23	321.5	304.5	17.0	77%	57%	20	323.4	306.7	16.7	80%	63%	17
IA	219.0	202.2	16.8	88%	70%	18	267.2	243.0	24.2	82%	58%	24	294.6	270.1	24.5	82%	61%	21
ID	210.0	207.0	3.0	92%	80%	12	230.0	226.0	4.0	95%	87%	8	229.0	226.0	3.0	93%	81%	12
IL	228.6	206.0	22.6	87%	59%	27	255.5	240.0	15.5	91%	74%	18	161.0	148.5	12.5	68%	33%	35
IN	489.8	446.8	43.0	84%	61%	23	554.6	504.1	50.5	77%	48%	29	NA	NA	NA	NA	NA	NA
KS	85.0	77.1	7.9	94%	80%	14	83.4	72.4	11.0	92%	73%	19	81.0	72.3	8.7	90%	72%	17
KY	458.0	448.0	10.0	84%	66%	18	852.0	843.0	9.0	79%	58%	21	1048.0	1040.0	8.0	71%	51%	19
LA	346.0	313.0	33.0	87%	66%	21	337.0	311.0	26.0	79%	52%	27	319.0	299.0	20.0	72%	52%	20
MA	NA	NA	NA	66%	29%	37	NA	NA	NA	87%	61%	26	NA	NA	NA	87%	62%	25
MD	NA	NA	NA	92%	78%	15	NA	NA	NA	88%	66%	21	NA	NA	NA	87%	71%	16
ME	448.0	443.0	5.0	78%	58%	20	853.0	844.0	9.0	79%	55%	25	1143.0	1136.0	7.0	55%	33%	22
MI	427.9	416.5	11.4	NA	NA	NA	820.2	809.5	10.7	NA	NA	NA	1105.6	1092.5	13.1	NA	NA	NA
MN	461.8	450.1	11.7	84%	56%	28	857.6	846.8	10.8	77%	45%	31	1059.8	1049.1	10.7	83%	52%	31
MO	666.5	646.2	20.3	60%	34%	26	701.5	680.6	20.9	62%	35%	27	212.4	201.7	10.7	80%	60%	20

State	Grade 4						Grade 8						High School					
	NLI MS	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**
MS	153.4	146.2	7.2	68%	41%	27	151.9	144.5	7.4	65%	36%	29	652.5	646.1	6.4	64%	32%	32
MT	280.5	265.6	14.9	88%	70%	18	282.1	265.2	16.9	87%	69%	18	277.2	260.7	16.5	83%	63%	20
NC	349.3	341.7	7.6	76%	46%	30	361.8	355.5	6.3	71%	41%	31	NA	NA	NA	NA	NA	NA
ND	654.8	642.5	12.3	85%	72%	12	692.7	677.8	14.9	81%	65%	16	712.4	697.6	14.8	73%	56%	17
NE	NA	NA	NA	98%	92%	6	NA	NA	NA	97%	92%	5	NA	NA	NA	95%	86%	8
NH	448.0	441.0	7.0	79%	58%	21	848.0	840.0	8.0	75%	50%	25	NA	NA	NA	75%	54%	21
NJ	213.7	191.7	22.0	74%	41%	33	226.1	206.4	19.7	89%	64%	25	227.4	206.2	21.2	88%	67%	21
NM	654.8	642.5	12.3	70%	44%	26	692.7	677.8	14.9	79%	52%	26	712.4	697.6	14.8	61%	40%	21
NV	330.9	290.1	40.8	73%	50%	23	322.8	290.4	32.4	69%	48%	21	302.4	275.6	26.8	84%	70%	14
NY	681.0	659.0	22.0	88%	67%	22	670.0	651.0	19.0	81%	55%	26	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	91%	71%	20	NA	NA	NA	83%	56%	26	NA	NA	NA	91%	73%	18
OK	NA	NA	NA	76%	53%	23	NA	NA	NA	79%	56%	23	NA	NA	NA	83%	66%	17
OR	224.2	216.9	7.3	92%	77%	15	236.9	231.3	5.6	81%	56%	25	241.0	235.2	5.8	76%	51%	26
PA	1440.0	1280.0	160.0	84%	56%	27	1570.0	1380.0	190.0	88%	66%	22	1420.0	1230.0	190.0	73%	44%	29
RI	449.0	439.0	10.0	80%	52%	28	849.0	839.0	10.0	77%	46%	31	1147.0	1140.0	7.0	76%	53%	23
SC	653.9	616.8	31.7	88%	66%	23	637.3	602.3	35.0	81%	55%	26	230.3	213.2	17.1	65%	32%	33
SD	628.0	611.8	16.2	NA	NA	NA	625.4	609.5	15.9	NA	NA	NA	622.8	610.9	11.9	NA	NA	NA
TN	514.3	489.0	25.3	97%	85%	11	559.8	533.4	26.4	97%	88%	9	549.8	523.7	26.1	99%	96%	3
TX	2329.0	2212.0	117.0	92%	78%	14	2427.0	2314.0	113.0	97%	89%	8	2281.0	2205.0	76.0	92%	82%	10
UT	169.0	163.1	5.9	85%	67%	19	170.8	164.7	6.1	88%	71%	18	170.8	164.5	6.3	90%	73%	16
VA	NA	NA	NA	93%	81%	12	NA	NA	NA	92%	78%	14	NA	NA	NA	97%	90%	7
VT	448.0	440.0	8.0	78%	53%	25	849.0	840.0	9.0	76%	51%	25	NA	NA	NA	76%	55%	21
WA	411.5	403.3	8.2	82%	59%	23	406.4	397.5	8.9	76%	53%	22	419.0	408.5	10.5	86%	69%	16
WI	489.4	455.8	33.6	90%	68%	21	539.8	502.5	37.3	91%	71%	20	552.9	506.8	46.1	83%	55%	28
WV	450.0	426.0	24.0	NA	NA	NA	480.0	452.0	28.0	NA	NA	NA	481.0	445.0	36.0	NA	NA	NA
WY	669.1	643.8	25.3	77%	61%	16	700.8	676.6	24.2	71%	51%	19	164.4	157.9	6.5	69%	51%	18

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 11. Achievement gaps between low-income and non-low-income students in mean scores and percentages proficient on state MATH tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

LI = Low-income
NLI = Not low-income
MS = Mean score
PP = Percentage of students scoring at or above the proficient level
NA = Data not available from state
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

	Grade 4						Grade 8						High School					
State	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**
AK	NA	NA	NA	83%	63%	21	NA	NA	NA	76%	51%	25	NA	NA	NA	77%	51%	26
AL	NA	NA	NA	89%	72%	17	NA	NA	NA	86%	63%	23	NA	NA	NA	91%	78%	14
AR	670.0	604.5	65.5	88%	71%	17	763.4	692.4	71.0	75%	50%	25	235.5	208.6	26.9	80%	61%	20
AZ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CA	411.2	362.3	48.9	80%	56%	24	369.6	326.5	43.1	54%	33%	21	397.0	372.0	25.0	68%	41%	28
CO	516.7	456.5	60.2	96%	84%	12	589.5	542.3	47.2	89%	66%	22	602.9	548.6	54.3	74%	44%	30
CT	276.5	233.7	42.8	93%	67%	26	272.7	229.4	43.3	93%	65%	28	263.8	216.7	47.1	87%	52%	36
DC	462.0	454.3	7.7	64%	44%	20	849.7	844.4	5.3	51%	39%	12	950.0	944.2	5.8	46%	35%	11
DE	474.7	447.0	27.7	86%	66%	20	518.9	491.4	27.5	76%	52%	25	542.6	519.9	22.7	65%	39%	26
FL	351.0	314.0	37.0	86%	66%	20	337.0	308.0	29.0	79%	54%	25	336.0	314.0	22.0	78%	57%	21
GA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HI	310.5	288.6	21.9	61%	38%	24	298.0	278.4	19.6	46%	28%	18	292.7	275.1	17.6	40%	23%	18
IA	215.8	202.4	13.4	88%	70%	18	270.0	247.3	22.7	85%	61%	24	297.3	271.4	25.9	83%	62%	22
ID	213.0	210.0	3.0	91%	80%	11	239.0	235.0	4.0	85%	69%	17	244.0	240.0	4.0	84%	68%	16
IL	239.3	216.7	22.6	94%	77%	17	280.8	260.1	20.7	90%	71%	20	161.0	147.0	14.0	63%	26%	37
IN	499.0	455.4	43.6	81%	58%	23	586.8	534.6	52.2	78%	51%	27	NA	NA	NA	NA	NA	NA
KS	83.2	74.9	8.3	93%	80%	13	76.0	64.1	11.9	86%	64%	21	67.2	55.2	12.0	85%	64%	20
KY	458.0	446.0	12.0	82%	63%	19	849.0	836.0	13.0	68%	43%	25	1140.0	1128.0	12.0	51%	28%	23
LA	356.0	318.0	38.0	84%	56%	28	354.0	320.0	34.0	77%	49%	28	343.0	317.0	26.0	82%	64%	18
MA	NA	NA	NA	58%	28%	30	NA	NA	NA	60%	25%	35	NA	NA	NA	82%	54%	28
MD	NA	NA	NA	94%	82%	11	NA	NA	NA	76%	46%	30	NA	NA	NA	88%	74%	15
ME	450.0	442.0	8.0	74%	53%	22	847.0	835.0	12.0	61%	35%	27	1142.0	1136.0	6.0	48%	25%	23
MI	428.7	419.5	9.2	NA	NA	NA	819.4	807.9	11.5	NA	NA	NA	1094.5	1079.6	14.9	NA	NA	NA
MN	460.3	450.0	10.3	83%	54%	29	855.1	843.6	11.5	69%	36%	33	1148.4	1132.2	16.2	49%	20%	29
MO	654.8	632.7	22.1	58%	31%	27	714.5	689.1	25.4	59%	32%	28	204.9	192.9	12.0	61%	38%	23

State	Grade 4						Grade 8						High School					
	NLI MS	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**	*NLI MS*	*LI MS*	*Gap MS*	*NLI PP*	*LI PP*	*Gap PP**
MS	155.0	148.4	6.6	72%	47%	25	153.6	146.4	7.2	68%	43%	25	656.6	650.3	6.3	74%	51%	23
MT	270.1	253.0	17.1	76%	54%	22	265.2	247.0	18.2	69%	44%	25	258.4	245.1	13.3	61%	37%	24
NC	354.5	347.8	6.7	86%	63%	23	364.7	358.5	6.2	83%	59%	23	NA	NA	NA	NA	NA	NA
ND	638.5	625.0	13.5	86%	73%	13	709.2	691.2	18.0	76%	59%	17	749.5	725.1	24.4	63%	41%	22
NE	NA	NA	NA	98%	93%	5	NA	NA	NA	95%	86%	9	NA	NA	NA	92%	84%	9
NH	448.0	441.0	7.0	78%	57%	21	844.0	837.0	7.0	70%	44%	26	NA	NA	NA	35%	15%	20
NJ	231.9	205.7	26.2	81%	56%	25	230.6	198.4	32.2	80%	51%	29	225.8	201.1	24.7	79%	51%	28
NM	638.5	625.0	13.5	60%	35%	25	709.2	691.2	18.0	60%	32%	27	749.5	725.1	24.4	45%	23%	22
NV	349.9	309.2	40.7	73%	55%	19	327.7	281.5	46.2	63%	42%	21	304.5	284.0	20.5	54%	36%	18
NY	699.0	681.0	18.0	93%	82%	12	684.0	665.0	19.0	89%	70%	19	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	89%	66%	23	NA	NA	NA	82%	53%	29	NA	NA	NA	89%	67%	21
OK	NA	NA	NA	79%	59%	20	NA	NA	NA	72%	51%	21	NA	NA	NA	73%	67%	6
OR	221.8	215.2	6.6	87%	68%	19	238.9	231.7	7.2	81%	58%	23	238.4	232.3	6.1	64%	38%	26
PA	1520.0	1360.0	160.0	90%	70%	20	1470.0	1320.0	150.0	80%	55%	26	1390.0	1220.0	170.0	63%	35%	28
RI	447.0	437.0	10.0	76%	46%	30	843.0	835.0	8.0	66%	33%	33	1136.0	1129.0	7.0	34%	12%	22
SC	657.2	619.8	37.4	89%	67%	22	639.9	604.7	35.2	77%	50%	28	233.2	212.5	20.7	65%	35%	30
SD	654.7	636.3	18.4	NA	NA	NA	720.1	700.2	19.9	NA	NA	NA	734.3	720.4	13.9	NA	NA	NA
TN	511.8	489.0	22.8	96%	85%	10	567.6	534.5	33.1	95%	85%	10	553.4	529.5	23.9	94%	83%	12
TX	2376.0	2262.0	114.0	93%	81%	12	2297.0	2189.0	108.0	87%	71%	16	2227.0	2127.0	100.0	74%	55%	19
UT	167.2	161.3	5.9	80%	60%	20	164.8	159.0	5.8	75%	52%	23	163.2	157.6	5.6	57%	42%	16
VA	NA	NA	NA	92%	78%	14	NA	NA	NA	90%	77%	13	NA	NA	NA	NA	NA	NA
VT	448.0	439.0	9.0	77%	52%	25	845.0	837.0	8.0	71%	42%	29	NA	NA	NA	39%	17%	22
WA	400.9	384.9	16.0	65%	36%	30	399.5	382.2	17.3	62%	33%	29	388.6	372.8	15.8	54%	27%	27
WI	483.3	452.9	30.4	89%	68%	21	558.6	521.3	37.3	87%	61%	26	570.5	534.1	36.4	78%	46%	32
WV	593.0	570.0	23.0	NA	NA	NA	636.0	607.0	29.0	NA	NA	NA	666.0	646.0	20.0	NA	NA	NA
WY	664.3	641.8	22.5	81%	66%	15	734.4	709.0	25.4	68%	49%	19	154.3	147.7	6.6	66%	47%	19

*Calculations of percentage proficient gaps are subject to rounding error.

Appendix Table 12. Male-female achievement gaps in mean scores and percentages proficient on state READING tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

M = Male
MS = Mean score
NA = Data not available from state
F = Female
PP = Percentage of students scoring at or above the proficient level
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

State	Grade 4						Grade 8						High School					
	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†
AK	NA	NA	NA	81%	75%	6 *f*	NA	NA	NA	86%	78%	8 *f*	NA	NA	NA	86%	80%	6 *f*
AL	648.8	639.2	9.6 *f*	90%	83%	7 *f*	678.6	669.9	8.7 *f*	80%	70%	10 *f*	NA	NA	NA	85%	79%	6 *f*
AR	674.0	608.8	65.2 *f*	76%	64%	12 *f*	803.9	733.4	70.5 *f*	79%	64%	15 *f*	205.8	197.6	8.2 *f*	64%	49%	15 *f*
AZ	NA	NA	NA	76%	68%	8 *f*	NA	NA	NA	74%	65%	9 *f*	NA	NA	NA	77%	72%	5 *f*
CA	372.1	361.5	10.6 *f*	65%	57%	8 *f*	355.8	341.3	14.5 *f*	52%	44%	8 *f*	385.0	375.0	10.0 *f*	57%	47%	10 *f*
CO	593.4	579.2	14.2 *f*	89%	85%	4 *f*	655.6	639.1	16.5 *f*	91%	86%	5 *f*	694.5	675.7	18.8 *f*	93%	87%	6 *f*
CT	257.5	252.2	5.3 *f*	76%	73%	3 *f*	254.3	248.4	5.9 *f*	83%	78%	5 *f*	253.0	237.4	15.6 *f*	86%	77%	9 *f*
DC	454.2	449.4	4.8 *f*	51%	39%	12 *f*	855.8	850.5	5.3 *f*	52%	38%	14 *f*	954.9	951.5	3.4 *f*	44%	34%	10 *f*
DE	472.6	465.9	6.7 *f*	84%	79%	5 *f*	528.6	520.1	8.5 *f*	84%	78%	6 *f*	521.4	516.0	5.4 *f*	72%	70%	2 *f*
FL	329.0	319.0	10.0 *f*	77%	71%	6 *f*	317.0	307.0	10.0 *f*	58%	50%	8 *f*	309.0	301.0	8.0 *f*	38%	35%	3 *f*
GA	834.0	827.0	7.0 *f*	90%	84%	6 *f*	836.0	831.0	5.0 *f*	95%	91%	4 *f*	240.0	235.0	5 *f*	92%	88%	4 *f*
HI	313.2	300.0	13.2 *f*	68%	55%	13 *f*	320.7	307.8	12.9 *f*	76%	61%	15 *f*	323.1	311.5	11.6 *f*	80%	68%	12 *f*
IA	214.5	211.2	3.3 *f*	83%	79%	4 *f*	262.0	257.1	4.9 *f*	77%	72%	5 *f*	292.9	284.1	8.8 *f*	80%	73%	7 *f*
ID	211.0	209.0	2.0 *f*	88%	84%	4 *f*	231.0	229.0	2.0 *f*	93%	90%	3 *f*	230.0	228.0	2.0 *f*	90%	88%	2 *f*
IL	220.7	215.3	5.4 *f*	77%	70%	7 *f*	250.9	246.8	4.1 *f*	87%	80%	7 *f*	158.0	156.1	1.9 *f*	59%	55%	4 *f*
IN	475.2	464.1	11.1 *f*	76%	69%	7 *f*	546.4	522.8	23.6 *f*	71%	59%	12 *f*	NA	NA	NA	NA	NA	NA
KS	81.9	81.1	0.8 *f*	88%	86%	2 *f*	79.9	78.4	1.5 *f*	86%	83%	3 *f*	78.8	77.9	0.9 *f*	85%	83%	2 *f*
KY	455.0	450.0	5.0 *f*	78%	70%	8 *f*	851.0	844.0	7.0 *f*	76%	61%	15 *f*	1048.0	1041.0	7.0 *f*	70%	54%	16 *f*
LA	330.0	316.0	14.0 *f*	77%	68%	9 *f*	327.0	314.0	13.0 *f*	69%	57%	12 *f*	314.0	302.0	12.0 *f*	68%	55%	13 *f*
MA	NA	NA	NA	60%	48%	12 *f*	NA	NA	NA	83%	75%	8 *f*	NA	NA	NA	85%	77%	8 *f*
MD	NA	NA	NA	89%	84%	5 *f*	NA	NA	NA	85%	76%	9 *f*	NA	NA	NA	88%	79%	9 *f*
ME	448.0	445.0	3.0 *f*	74%	66%	8 *f*	852.0	847.0	5.0 *f*	76%	65%	11 *f*	1140.0	1142.0	2.0 *m*	53%	46%	7 *f*
MI	429.3	426.5	2.8 *f*	85%	81%	4 *f*	822.4	818.1	4.3 *f*	79%	73%	6 *f*	1109.1	1102.1	7.0 *f*	64%	56%	8 *f*
MN	459.1	456.4	2.7 *f*	77%	72%	5 *f*	856.5	852.1	4.4 *f*	72%	62%	10 *f*	1057.6	1055.9	1.7 *f*	76%	73%	3 *f*
MO	662.3	651.5	10.8 *f*	53%	41%	12 *f*	697.9	687.5	10.4 *f*	56%	45%	11 *f*	211.0	206.5	4.5 *f*	77%	68%	9 *f*

State	Grade 4						Grade 8						High School					
	F MS	M MS	Gap MS[†]	F PP	M PP	Gap PP*[†]	F MS	M MS	Gap MS[†]	F PP	M PP	Gap PP*[†]	F MS	M MS	Gap MS[†]	F PP	M PP	Gap PP*[†]
MS	150.4	147.9	2.5 *f*	57%	47%	10 *f*	149.1	146.3	2.8 *f*	53%	43%	10 *f*	650.1	648.2	1.9 *f*	52%	43%	9 *f*
MT	276.6	272.8	3.8 *f*	84%	78%	6 *f*	279.9	272.2	7.7 *f*	85%	77%	8 *f*	277.3	267.6	9.7 *f*	82%	72%	10 *f*
NC	346.2	345.0	1.2 *f*	64%	58%	6 *f*	359.6	358.4	1.2 *f*	60%	55%	5 *f*	NA	NA	NA	NA	NA	NA
ND	653.2	648.0	5.2 *f*	82%	78%	4 *f*	692.1	684.9	7.2 *f*	81%	72%	9 *f*	712.1	705.6	6.5 *f*	72%	65%	7 *f*
NE	NA	NA	NA	96%	94%	2 *f*	NA	NA	NA	97%	94%	3 *f*	NA	NA	NA	94%	90%	4 *f*
NH	449.0	445.0	4.0 *f*	80%	71%	9 *f*	849.0	844.0	5.0 *f*	76%	65%	11 *f*	NA	NA	NA	80%	66%	14 *f*
NJ	209.2	204.0	5.2 *f*	66%	60%	6 *f*	224.5	216.5	8.0 *f*	86%	78%	8 *f*	226.7	219.3	7.4 *f*	87%	81%	6 *f*
NM	459.1	456.4	2.7 *f*	57%	47%	10 *f*	856.5	852.1	4.4 *f*	67%	58%	9 *f*	1057.6	1055.9	1.7 *f*	54%	47%	7 *f*
NV	319.7	303.5	16.2 *f*	66%	58%	8 *f*	321.0	299.5	21.5 *f*	67%	55%	12 *f*	298.2	290.8	7.4 *f*	83%	77%	6 *f*
NY	674.0	666.0	8.0 *f*	80%	74%	6 *f*	665.0	657.0	8.0 *f*	74%	64%	10 *f*	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	84%	80%	4 *f*	NA	NA	NA	78%	67%	11 *f*	NA	NA	NA	87%	82%	5 *f*
OK	NA	NA	NA	67%	61%	6 *f*	NA	NA	NA	70%	66%	4 *f*	NA	NA	NA	79%	75%	4 *f*
OR	220.9	220.0	0.9 *f*	86%	82%	4 *f*	235.2	233.5	1.7 *f*	74%	66%	8 *f*	239.5	238.0	1.5 *f*	70%	63%	7 *f*
PA	1400.0	1350.0	50.0 *f*	77%	69%	8 *f*	1540.0	1460.0	80.0 *f*	85%	76%	9 *f*	1400.0	1340.0	60.0 *f*	70%	61%	9 *f*
RI	447.0	443.0	4.0 *f*	73%	64%	9 *f*	847.0	843.0	4.0 *f*	70%	60%	10 *f*	NA	NA	NA	74%	65%	9 *f*
SC	636.6	630.1	6.5 *f*	79%	73%	6 *f*	624.6	614.0	10.6 *f*	73%	63%	10 *f*	225.1	219.5	5.6 *f*	55%	46%	9 *f*
SD	624.7	621.1	3.6 *f*	80%	75%	5 *f*	624.3	617.6	6.7 *f*	77%	71%	6 *f*	622.8	618.6	4.2 *f*	73%	68%	5 *f*
TN	504.1	496.6	7.5 *f*	93%	88%	5 *f*	551.5	541.6	9.9 *f*	96%	90%	6 *f*	543.1	534.0	9.1 *f*	98%	97%	1 *f*
TX	2280.0	2247.0	33.0 *f*	87%	82%	5 *f*	2391.0	2346.0	45.0 *f*	94%	91%	3 *f*	2265.0	2228.0	37.0 *f*	91%	84%	7 *f*
UT	167.8	165.8	2.0 *f*	81%	75%	6 *f*	170.4	167.4	3.0 *f*	87%	78%	9 *f*	170.4	167.8	2.6 *f*	88%	82%	6 *f*
VA	NA	NA	NA	90%	87%	3 *f*	NA	NA	NA	89%	86%	3 *f*	NA	NA	NA	96%	95%	1 *f*
VT	447.0	443.0	4.0 *f*	75%	65%	10 *f*	849.0	844.0	5.0 *f*	74%	64%	10 *f*	NA	NA	NA	79%	65%	14 *f*
WA	414.4	408.8	5.6 *f*	76%	68%	8 *f*	411.0	402.0	9.0 *f*	73%	61%	12 *f*	423.7	414.8	8.9 *f*	84%	76%	8 *f*
WI	480.5	473.5	7.0 *f*	84%	79%	5 *f*	533.4	522.0	11.4 *f*	88%	82%	6 *f*	545.5	534.7	10.8 *f*	78%	72%	6 *f*
WV	445.0	428.0	17.0 *f*	71%	56%	15 *f*	477.0	455.0	22.0 *f*	70%	51%	19 *f*	438.0	451.0	32.0 *f*	57%	38%	19 *f*
WY	665.7	654.2	11.5 *f*	75%	68%	7 *f*	699.4	687.7	11.7 *f*	70%	60%	10 *f*	165.1	161.3	3.8 *f*	70%	60%	10 *f*

*Calculations of percentage proficient gaps are subject to rounding error.

[†]The symbol "f" in this column means that the female subgroup outperformed the male subgroup; "m" means that the male subgroup outperformed the female subgroup.

Appendix Table 13. Male-female achievement gaps in mean scores and percentages proficient on state MATH tests, 2009

Caution: *Comparisons between states, grades, or subjects are not appropriate or meaningful because state tests vary in difficulty, content, scoring scales, cut scores for proficient performance, and other key features.*

M = Male
F = Female
MS = Mean score
PP = Percentage of students scoring at or above the proficient level
NA = Data not available from state
n = Number of test-takers in one of the subgroups being compared was fewer than 500 at this grade level in 2009

State	Grade 4						Grade 8						High School					
	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†
AK	NA	NA	NA	75%	73%	2 *f*	NA	NA	NA	67%	66%	1 *f*	NA	NA	NA	68%	68%	0
AL	637.9	635.1	2.8 *f*	81%	77%	4 *f*	693.0	689.9	3.1 *f*	77%	71%	6 *f*	NA	NA	NA	87%	84%	3 *f*
AR	632.3	626.7	5.6 *f*	79%	76%	3 *f*	726.9	720.8	6.1 *f*	63%	60%	3 *f*	223.5	219.4	4.1 *f*	73%	68%	5 *f*
AZ	NA	NA	NA	75%	73%	2 *f*	NA	NA	NA	64%	63%	1 *f*	NA	NA	NA	71%	68%	3 *f*
CA	382.4	382.7	0.3 *m*	66%	66%	0	349.5	345.0	4.5 *f*	45%	43%	2 *f*	383.0	385.0	2.0 *m*	52%	55%	3 *m*
CO	492.1	491.5	0.6 *f*	92%	90%	2 *f*	572.8	572.7	0.1 *f*	82%	80%	2 *f*	586.2	588.3	2.1 *m*	65%	65%	0
CT	261.0	264.5	3.5 *m*	85%	84%	1 *f*	260.5	260.0	0.5 *f*	85%	84%	1 *f*	249.2	254.5	5.3 *m*	77%	80%	3 *m*
DC	457.8	455.1	2.7 *f*	52%	47%	5 *f*	847.3	844.7	2.6 *f*	45%	40%	5 *f*	947.2	945.1	2.1 *f*	42%	37%	5 *f*
DE	461.7	462.1	0.4 *m*	78%	76%	2 *f*	506.2	508.2	2.0 *m*	65%	66%	1 *m*	533.6	537.0	3.4 *m*	55%	58%	3 *m*
FL	329.0	330.0	1.0 *m*	75%	75%	0	322.0	322.0	0.0	66%	67%	1 *m*	327.0	327.0	0.0	68%	70%	2 *m*
GA	826.0	826.0	0.0	75%	73%	2 *f*	822.0	818.0	4.0 *f*	73%	67%	6 *f*	534.0	536.0	2.0 *m*	94%	93%	1 *f*
HI	303.7	297.0	6.7 *f*	54%	47%	7 *f*	292.6	286.6	6.0 *f*	42%	36%	6 *f*	288.1	284.0	4.1 *f*	35%	33%	2 *f*
IA	210.2	211.5	1.3 *m*	81%	82%	1 *m*	261.0	264.4	3.4 *m*	77%	78%	1 *m*	286.9	294.6	7.7 *m*	77%	79%	2 *m*
ID	213.0	213.0	0.0	86%	85%	1 *f*	238.0	239.0	1.0 *m*	78%	78%	0	244.0	245.0	1.0 *m*	78%	79%	1 *m*
IL	228.5	228.8	0.3 *m*	87%	85%	2 *f*	272.1	271.7	0.4 *f*	83%	81%	2 *f*	155.5	157.7	2.2 *m*	49%	54%	5 *m*
IN	478.0	487.7	0.7 *m*	70%	70%	0	566.1	565.3	0.8 *f*	67%	66%	1 *f*	NA	NA	NA	NA	NA	NA
KS	79.2	79.8	0.6 *m*	86%	87%	1 *m*	71.6	71.1	0.5 *f*	78%	76%	2 *f*	62.9	64.3	1.4 *m*	78%	78%	0
KY	452.0	451.0	1.0 *f*	72%	71%	1 *f*	844.0	841.0	3.0 *f*	57%	53%	4 *f*	1135.0	1134.0	1.0 *f*	42%	41%	1 *f*
LA	329.0	329.0	0.0	64%	65%	1 *m*	331.0	334.0	3.0 *m*	58%	60%	2 *m*	327.0	333.0	6.0 *m*	71%	75%	4 *m*
MA	NA	NA	NA	49%	48%	1 *f*	NA	NA	NA	50%	48%	2 *f*	NA	NA	NA	74%	74%	0
MD	NA	NA	NA	90%	88%	2 *f*	NA	NA	NA	68%	64%	4 *f*	NA	NA	NA	86%	85%	1 *f*
ME	446.0	447.0	1.0 *m*	65%	66%	1 *m*	843.0	842.0	1.0 *f*	54%	50%	4 *f*	1141.0	1140.0	1.0 *f*	41%	43%	2 *m*
MI	427.7	429.7	2.0 *m*	88%	88%	0	818.0	820.7	2.7 *m*	74%	75%	1 *m*	1093.5	1095.5	2.0 *m*	47%	52%	5 *m*
MN	457.0	456.3	0.7 *f*	73%	72%	1 *f*	851.6	851.4	0.2 *f*	59%	58%	1 *f*	1143.4	1144.9	1.5 *m*	39%	43%	4 *m*
MO	643.9	644.4	0.5 *m*	44%	46%	2 *m*	704.3	703.0	1.3 *f*	47%	47%	0	200.1	201.2	1.1 *m*	52%	54%	2 *m*

State	Grade 4						Grade 8						High School					
	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†	F MS	M MS	Gap MS†	F PP	M PP	Gap PP*†
MS	151.6	150.4	1.2 *f*	59%	56%	3 *f*	150.5	148.5	2.0 *f*	57%	51%	6 *f*	653.8	652.7	1.1 *f*	65%	59%	6 *f*
MT	262.4	263.4	1.0 *m*	66%	67%	1 *m*	258.3	258.8	0.5 *m*	60%	60%	0	254.3	254.7	0.4 *m*	54%	54%	0
NC	351.1	351.3	0.2 *m*	75%	74%	1 *f*	362.3	361.6	0.7 *f*	74%	70%	4 *f*	NA	NA	NA	NA	NA	NA
ND	633.1	634.7	1.6 *m*	81%	82%	1 *m*	703.4	704.5	1.1 *m*	71%	71%	0	741.9	745.2	3.3 *m*	56%	58%	2 *m*
NE	NA	NA	NA	96%	96%	0	NA	NA	NA	93%	91%	2 *f*	NA	NA	NA	91%	89%	2 *f*
NH	446.0	446.0	0.0	73%	74%	1 *m*	843.0	842.0	1.0 *f*	65%	64%	1 *f*	NA	NA	NA	30%	34%	4 *m*
NJ	222.5	224.2	1.7 *m*	73%	73%	0	220.4	222.1	1.7 *m*	72%	71%	1 *f*	219.7	221.4	1.7 *m*	73%	73%	0
NM	457.0	456.3	0.7 *f*	43%	41%	2 *f*	851.6	851.4	0.2 *f*	43%	41%	2 *f*	1143.4	1144.9	1.5 *m*	32%	35%	3 *m*
NV	331.1	329.9	1.2 *f*	65%	64%	1 *f*	309.8	309.5	0.3 *f*	55%	55%	0	297.8	299.0	1.2 *m*	47%	50%	3 *m*
NY	690.0	689.0	1.0 *f*	88%	87%	1 *f*	677.0	673.0	4.0 *f*	82%	79%	3 *f*	NA	NA	NA	NA	NA	NA
OH	NA	NA	NA	79%	78%	1 *f*	NA	NA	NA	72%	70%	2 *f*	NA	NA	NA	82%	81%	1 *f*
OK	NA	NA	NA	65%	69%	4 *m*	NA	NA	NA	63%	62%	1 *f*	NA	NA	NA	75%	66%	9 *f*
OR	217.9	219.0	1.1 *m*	77%	78%	1 *m*	235.1	236.1	1.0 *m*	71%	71%	0	235.7	236.3	0.6 *m*	53%	54%	1 *m*
PA	1450.0	1470.0	20.0 *m*	82%	82%	0	1420.0	1420.0	0.0	72%	70%	2 *f*	1340.0	1350.0	10.0 *m*	55%	56%	1 *m*
RI	443.0	443.0	0.0	62%	64%	2 *m*	840.0	840.0	0.0	53%	53%	0	1133.0	1134.0	1.0 *m*	25%	30%	5 *m*
SC	635.7	636.7	1.0 *m*	77%	76%	1 *f*	622.0	621.2	0.8 *f*	65%	61%	4 *f*	223.8	223.4	0.4 *f*	51%	50%	1 *f*
SD	648.0	649.5	1.5 *m*	78%	77%	1 *f*	714.3	714.7	0.4 *m*	76%	73%	3 *f*	730.5	733.0	2.5 *m*	67%	66%	1 *f*
TN	500.0	498.3	1.7 *f*	91%	89%	2 *f*	552.5	549.4	3.1 *f*	92%	88%	4 *f*	544.1	540.4	3.7 *f*	90%	87%	3 *f*
TX	2311.0	2312.0	1.0 *m*	86%	86%	0	2239.0	2243.0	4.0 *m*	79%	79%	0	2181.0	2183.0	2.0 *m*	66%	65%	1 *f*
UT	164.7	165.2	0.5 *m*	72%	73%	1 *m*	162.7	162.7	0.0	68%	67%	1 *f*	161.5	162.0	0.5 *m*	51%	54%	3 *m*
VA	NA	NA	NA	86%	87%	1 *m*	NA	NA	NA	88%	83%	5 *f*	NA	NA	NA	91%	90%	1 *f*
VT	445.0	445.0	0.0	69%	68%	1 *f*	843.0	842.0	1.0 *f*	64%	61%	3 *f*	NA	NA	NA	34%	35%	1 *m*
WA	401.6	400.2	1.4 *f*	53%	51%	2 *f*	400.1	398.9	1.2 *f*	51%	50%	1 *f*	388.6	388.7	0.1 *m*	45%	46%	1 *m*
WI	471.4	472.4	1.0 *m*	80%	82%	2 *m*	545.8	546.8	1.0 *m*	78%	78%	0	558.2	562.2	4.0 *m*	69%	70%	1 *m*
WV	581.0	581.0	0.0	65%	64%	1 *f*	621.0	622.0	1 *m*	53%	53%	0	660.0	657.0	3.0 *f*	54%	54%	0
WY	655.4	656.3	0.9 *m*	75%	76%	1 *m*	725.4	727.9	2.5 *m*	63%	61%	2 *f*	152.4	153.5	1.1 *m*	61%	63%	2 *m*

*Calculations of percentage proficient gaps are subject to rounding error.

†The symbol "f" in this column means that the female subgroup outperformed the male subgroup; "m" means that the male subgroup outperformed the female subgroup.