

Subgroup Achievement and Gap Trends — Nevada

K-12 enrollment — 433,888

The raw data used to develop these state profiles, including data for additional grade levels and years before 2002, can be found on the CEP Web site at www.cep-dc.org. Click on the link on the left for State Testing Data. Below the name of the report, click on the link for View State Profiles and Worksheets. Scroll down the page, and click on the Worksheet links for any state.

Subgroup Achievement Trends and Gap Trends — Key Findings

Summary

This year the Center on Education Policy analyzed data on the achievement of different groups of students in two distinct ways. First, we looked at grade 4 test results to determine whether the performance of various groups improved at three achievement levels—basic and above, proficient and above, and advanced. Second, we looked at gaps between these groups at the proficient level across three grades (grade 4, grade 8 in most cases, and a high school grade). These two types of analyses show whether elementary school achievement has generally gone up for different groups of students and whether achievement gaps at different grade levels have narrowed, widened, or stayed the same.

A clear trend of gains at the proficient level in grade 4 reading and math was evident for most of the student groups analyzed. In most instances, achievement gaps between subgroups narrowed at the elementary, middle, and high school levels.

Subgroup trends by achievement level at grade 4

- **General:** Most subgroups made gains in reading and math at three achievement levels—basic-and-above, proficient-and-above, and advanced. In math, all 18 trend lines analyzed across the three achievement levels in math showed gains, most of them moderate-to-large. In reading, 13 of 18 trend lines showed gains, while 5 showed declines. All of the declines occurred at the advanced level, and most of them were slight.
- **Notable progress:** In reading, Latino and Native American students made notably large gains at the proficient-and-above level. In math, Latino and low-income students made notably large gains at this achievement level.

Gap trends at three grade levels

- **General:** In most instances, gaps in the percentages of students scoring at the proficient level in grades 4, 8, and 10 narrowed for four subgroups (African American, Latino, Native American, and low-income students).
- **Notable exception:** All the instances of gaps widening occurred for Native American students.

- Notable progress: Latino students showed notable gains in math at the proficient-and-above level.
- Asian students: Asian students progressed at a faster rate than white students in several instances. In reading at grade 4 and in math at grades 8 and 10, the percentages of Asian students at the proficient-and-above level started out below white students but ended up surpassing white students. In reading at grades 8 and 10, whites outperformed Asian students but Asian students narrowed the gap. (At grade 10 these trends in reading and math occurred partly because white performance declined.) In grade 4 math, Asian students outperformed white students and had greater gains over time.

Data notes

- Limited data: Trends are limited to 2006–2008 for grade 4, and 2004–2008 for grade 8. At grade 10, achievement gap trends are limited to 2004–2008, while trends by achievement level are limited to 2005–2008.
- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Native American, Asian American, and low-income students; however, the Native African American subgroup is too small in grade 10 reading to yield reliable trend data, so reading trends were not determined for that subgroup at that level. Trends for students with disabilities, English language learners, and male and female students have not been summarized because they will be discussed in separate reports.
- Grades analyzed: Analyses of subgroup trends by three achievement levels are limited to one elementary grade because of the massive amounts of data involved and because this is the pilot year of a process that CEP hopes to extend to the middle and high school levels in future years. Analyses of achievement gap trends cover grades 4, 8, and 10.

Data Limitations

Years of comparable percentage proficient data	2004 through 2008, grades 3, 5, 8, and high school 2006 through 2008, grades 4, 6, and 7
Years of data comparable mean scale score data	2004 through 2008, grades 3, 5, 8, and high school 2006 through 2008, grades 4, 6, and 7
Disaggregated data for all subgroups and comparison groups	2004 through 2008, grades 8 and high school 2006 through 2008, grade 4 Percentage proficient data disaggregated by achievement level not available until 2005 for grade 10 Percentage proficient data for students who are <i>not</i> low-income and <i>not</i> disabled not available for all grade levels in 2008, so the subgroups of low-income students and students with disabilities are compared with all tested students in the state

Test Characteristics

The characteristics highlighted below are for the state reading and mathematics tests used for accountability under the No Child Left Behind Act (NCLB).

Test(s) used for NCLB accountability	Nevada Criterion Referenced Test (CRT), grades 3–8 Nevada High School Proficiency Examination (HSPE), grades 10–12 Analytic Writing, grades 5 and 8
Grades tested for NCLB accountability	3–8, 10–12
State labels for achievement levels	NV uses four achievement levels: Emergent/Developing, Approaches Standard, Meets Standard, and Exceeds Standard. For our analyses we treated Approaches Standard as Basic, Meets Standard as Proficient, and Exceeds Standard as Advanced.
High school NCLB test also used as an exit exam?	Yes
First year test used	2001: HSPE 2002: CRT grades 3 and 5 (see Comments section below) 2004: CRT grade 8 2006: CRT grades 4, 6, and 7
Time of test administration	Spring
Major changes in testing system (2002–present)	2003–04: Writing assessments moved from fall to spring administration 2004: New test contractor chosen 2005–06: Assessment expanded to include grades 3–8, 10–12 2005–06: Writing assessment moved from grade 4 to 5
Comments	Nevada state education personnel indicated that although some assessments were in place prior to 2004, the baseline year for all grades in this analysis should be 2004, because changes were made in the assessment system, including changes in the item pool and item quality. Discrepancies existed in the totals for the percentages of grade 10 students scoring at the proficient level and above in reading and math in 2007. Specifically, the sums of the discrete percentages of students scoring at the proficient and advanced levels in grade 10 reading and math do not match the total percentages of students scoring proficient and above reported for NCLB

purposes. The state could not explain these discrepancies, which affected only 2007 data.

Achievement by Subgroup — Trends at the Elementary Level

Note: The tables in this profile of subgroup achievement and gap trends begin with table 7. Tables 1 through 6 can be found in the companion state profile of general achievement trends.

Table NV-7. Percentages of Grade 4 Students by Racial or Ethnic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year					Average Yearly Percentage Point Gain ¹		
	2002	2003	2004	2005	2006		2007	2008
All tested students								
Advanced					17%	16%	15%	-0.9
Proficient and Above					54%	58%	57%	1.8
Basic and Above					86%	87%	88%	1.0
White								
Advanced					25%	25%	23%	-1.3
Proficient and Above					67%	71%	69%	0.9
Basic and Above					92%	93%	93%	0.2
African American								
Advanced					10%	10%	9%	-0.4
Proficient and Above					40%	45%	44%	2.1
Basic and Above					79%	80%	82%	1.2
Latino								
Advanced					8%	8%	8%	-0.2
Proficient and Above					39%	44%	45%	3.3
Basic and Above					80%	81%	84%	2.2
Asian								
Advanced					23%	21%	24%	0.5
Proficient and Above					65%	70%	70%	2.8
Basic and Above					93%	93%	94%	0.3
Native American								
Advanced					12%	10%	10%	-0.9
Proficient and Above					46%	53%	53%	3.4
Basic and Above					85%	86%	87%	0.9

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test decreased from 25% in 2006 to 23% in 2008. During this period, the average yearly decline in the percentage advanced in reading for white 4th graders was 1.3 percentage points per year.

¹Averages are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table NV-8. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year						Average Yearly Percentage Point Gain ¹	
	2002	2003	2004	2005	2006	2007		2008
All tested students								
Advanced					17%	16%	15%	-0.9
Proficient and Above					54%	58%	57%	1.8
Basic and Above					86%	87%	88%	1.0
Low-income students								
Advanced					9%	8%	8%	-0.5
Proficient and Above					40%	44%	44%	2.5
Basic and Above					80%	81%	83%	1.5
Students with disabilities ³								
Advanced					5%	5%	7%	0.8
Proficient and Above					22%	25%	28%	3.4
Basic and Above					60%	59%	64%	2.1
English language learners ³								
Advanced					2%	1%	5%	1.8
Proficient and Above					16%	25%	38%	10.8
Basic and Above					66%	72%	81%	7.5
Female								
Advanced					20%	18%	17%	-1.1
Proficient and Above					58%	63%	62%	2.2
Basic and Above					89%	90%	91%	1.0
Male								
Advanced					15%	15%	14%	-0.7
Proficient and Above					50%	53%	53%	1.5
Basic and Above					84%	84%	86%	0.9

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test decreased from 9% in 2006 to 8% in 2008. During this period, the average yearly decline in the percentage advanced in reading for low-income 4th graders was 0.5 percentage points per year.

¹Averages are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

³Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Table NV-9. Percentages of Grade 4 Students by Racial or Ethnic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year							Average Yearly Percentage Point Gain ¹
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced					23%	29%	27%	2.1
Proficient and Above					56%	64%	66%	5.1
Basic and Above					88%	90%	91%	1.4
White								
Advanced					32%	38%	36%	1.7
Proficient and Above					68%	75%	75%	3.6
Basic and Above					93%	95%	94%	0.5
African American								
Advanced					12%	16%	15%	1.8
Proficient and Above					39%	48%	50%	5.7
Basic and Above					78%	81%	82%	2.3
Latino								
Advanced					14%	20%	20%	2.8
Proficient and Above					43%	55%	58%	7.5
Basic and Above					83%	87%	88%	2.3
Asian								
Advanced					34%	43%	43%	4.5
Proficient and Above					70%	78%	79%	4.5
Basic and Above					93%	95%	96%	1.3
Native American								
Advanced					13%	22%	18%	2.3
Proficient and Above					48%	57%	61%	6.5
Basic and Above					86%	89%	88%	0.9

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 32% in 2006 to 36% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 1.7 percentage points per year.

¹Averages are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table NV-10. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year							Average Yearly Percentage Point Gain ¹
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced					23%	29%	27%	2.1
Proficient and Above					56%	64%	66%	5.1
Basic and Above					88%	90%	91%	1.4
Low-income students								
Advanced					13%	19%	19%	2.7
Proficient and Above					43%	54%	56%	6.7
Basic and Above					82%	86%	87%	2.1
Students with disabilities ³								
Advanced					8%	12%	13%	2.7
Proficient and Above					27%	35%	55%	13.7
Basic and Above					67%	70%	74%	3.1
English language learners ³								
Advanced					6%	11%	17%	6.0
Proficient and Above					26%	42%	55%	14.2
Basic and Above					74%	81%	87%	6.6
Female								
Advanced					23%	28%	27%	2.0
Proficient and Above					56%	65%	67%	5.1
Basic and Above					89%	91%	92%	1.4
Male								
Advanced					23%	29%	28%	2.3
Proficient and Above					55%	64%	66%	5.3
Basic and Above					87%	89%	90%	1.5

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 13% in 2006 to 19% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 2.7 percentage points per year.

¹Averages are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

³Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table NV-11. Subgroup Achievement Trends in Reading by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

Subgroup	Grade 4					Grade 8					Grade 10				
	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group
All tested students	06-08	54%	57%	1.8		04-08	51%	54%	0.8		04-08	77%	74%	-0.8	
White	06-08	67%	69%	0.9		04-08	65%	69%	0.9		04-08	86%	84%	-0.6	
African American	06-08	40%	44%	2.1	L	04-08	31%	37%	1.6	L	04-08	62%	63%	0.2	L
Latino	06-08	39%	45%	3.3	L	04-08	31%	40%	2.1	L	04-08	62%	62%	0.1	L
Asian	06-08	65%	70%	2.8	L	04-08	59%	68%	2.3	L	04-08	81%	82%	0.2	L
Native American	06-08	46%	53%	3.4	L	04-08	49%	51%	0.4	S	04-08	72%	68%	-1.1 ²	S
All tested students	06-08	54%	57%	1.8		04-08	51%	54%	0.8		04-08	77%	74%	-0.8	
Low-income	06-08	40%	44%	2.5	L	04-08	33%	40%	1.6	L	04-08	60%	62%	0.4	L
All tested students	06-08	54%	57%	1.8		06-08	50%	54%	1.8		06-08	78%	74%	-2.3	
Students with disabilities ³	06-08	22%	28%	3.4	L	06-08	12%	13%	0.8	S	06-08	32%	37%	2.7	L
Not ELL	06-08	61%	64%	1.4		06-08	55%	60%	2.5		06-08	82%	78%	-2.3	
English language learners ³	06-08	16%	38%	10.8	L	06-08	14%	34%	10.2	L	06-08	33%	59%	12.8	L
Female	06-08	58%	62%	2.2		04-08	56%	60%	1.0		04-08	80%	78%	-0.5	
Male	06-08	50%	53%	1.5	S	04-08	46%	49%	0.7	S	04-08	74%	70%	-1.0	S

Table reads: In 2006, 67% of white 4th graders and 40% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 69% of white 4th graders and 44% of African American 4th graders scored at the proficient level in reading. Between 2006 and 2008, the percentage proficient improved at

an average rate of 0.9 percentage point per year for white students and 2.1 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

¹Numbers in these columns are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

³Trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table NV-12. Subgroup Achievement Trends in Mathematics by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

Subgroup	Grade 4					Grade 8					Grade 10				
	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group
All tested students	06-08	56%	66%	5.1		04-08	49%	52%	0.7		04-08	52%	46%	-1.6	
White	06-08	68%	75%	3.6		04-08	62%	66%	0.9		04-08	64%	59%	-1.3	
African American	06-08	39%	50%	5.7	L	04-08	28%	34%	1.6	L	04-08	31%	26%	-1.2	L
Latino	06-08	43%	58%	7.5	L	04-08	32%	39%	1.7	L	04-08	32%	31%	-0.4	L
Asian	06-08	70%	79%	4.5	L	04-08	61%	70%	2.2	L	04-08	62%	62%	-0.1	L
Native American	06-08	48%	61%	6.5	L	04-08	44%	45%	0.4	S	04-08	38%	32%	-1.6	S
All tested students	06-08	56%	66%	5.1		04-08	49%	52%	0.7		04-08	52%	46%	-1.6	
Low-income	06-08	43%	56%	6.7	L	04-08	33%	39%	1.6	L	04-08	34%	31%	-0.6	L
All tested students	06-08	56%	66%	5.1		06-08	50%	52%	1.1		06-08	47%	46%	-0.4	
Students with disabilities ³	06-08	27%	55%	13.7	L	06-08	11%	13%	1.2	L	06-08	9%	15%	3.4	L
Not ELL	06-08	62%	70%	3.6		06-08	54%	57%	1.7		06-08	49%	49%	0.1	
English language learners ³	06-08	26%	55%	14.2	L	06-08	18%	35%	8.8	L	06-08	15%	31%	7.9	L
Female	06-08	56%	67%	5.1		04-08	50%	53%	0.9		04-08	50%	45%	-1.3	
Male	06-08	55%	66%	5.3	L	04-08	48%	51%	0.8	S	04-08	54%	46%	-1.9	S

Table reads: In 2006, 68% of white 4th graders and 39% of African American 4th graders scored at the proficient level on the state math test. In 2008, 75% of white 4th graders and 50% of African American 4th graders scored at the proficient level in math. Between 2006 and 2008, the percentage proficient improved at an average rate of 3.6 percentage point per year for white students and 5.7 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

¹Numbers in these columns are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

³Trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table NV-13. Achievement Gap Trends in Reading by Mean Scale Scores

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	06-08	300.5	304.7	2.1		04-08	294.3	298.6	1.1		04-08	286.5	290.9	1.1	
	SD	06-08	85.6	83.1			04-08	73.3	71.9			04-08	58.2	59.3		
White	Mean SS	06-08	327.5	327.7	0.1		04-08	317.2	321.1	1.0		04-08	302.5	308.2	1.4	
	SD	06-08	79.9	77.4			04-08	68.5	65.1			04-08	54.3	53.7		
African American	Mean SS	06-08	272.7	277.6	2.4	L	04-08	261.9	271.3	2.4	L	04-08	260.4	269.5	2.3	L
	SD	06-08	84.8	86.8			04-08	70.3	73.3			04-08	57.2	60.9		
Latino	Mean SS	06-08	271.7	283.1	5.7	L	04-08	263.0	275.5	3.1	L	04-08	260.3	269.8	2.4	L
	SD	06-08	82.4	81.0			04-08	68.4	70.0			04-08	54.6	58.6		
Asian	Mean SS	06-08	324.6	330.0	2.7	L	04-08	308.0	321.2	3.3	L	04-08	292.0	303.6	2.9	L
	SD	06-08	76.9	76.0			04-08	66.0	67.3			04-08	54.2	54.2		
Native American	Mean SS	06-08	289.5	294.0	2.2	L	04-08	291.2	293.7	0.6	S	04-08	274.4	281.9	1.9 ²	L
	SD	06-08	80.1	80.8			04-08	66.6	65.6			04-08	53.0	57.0		
Not Low-income	Mean SS	06-08	323.6	327.5	2.0		04-08	309.2	313.8	1.2		04-08	288.7	298.1	2.3	
	SD	06-08	80.8	76.4			04-08	70.8	69.2			04-08	NA	57.3		
Low-income	Mean SS	06-08	272.9	280.1	3.6	L	04-08	265.4	276.0	2.7	L	04-08	260.9	269.9	2.3	S
	SD	06-08	83.1	82.9			04-08	69.5	69.9			04-08	56.7	59.9		
Not disabled	Mean SS	06-08	309.4	314.3	2.5		06-08	306.0	306.9	0.4		06-08	299.2	297.7	-0.8	
	SD	06-08	81.5	76.3			06-08	67.6	67.0			06-08	52.6	54.0		
Students with disabilities ³	Mean SS	06-08	230.4	239.8	4.7	L	06-08	224.7	238.6	7.0	L	06-08	227.7	232.6	2.4	L
	SD	06-08	85.3	96.5			06-08	68.0	77.5			06-08	54.4	69.5		
Not ELLs	Mean SS	06-08	314.9	316.9	1.0		06-08	305.7	308.5	1.4		06-08	297.8	297.5	-0.1	
	SD	06-08	80.8	80.2			06-08	68.9	69.3			06-08	54.2	57.2		
English language learners ³	Mean SS	06-08	229.1	269.8	20.4	L	06-08	236.8	267.6	15.4	L	06-08	233.2	264.0	15.4	L
	SD	06-08	72.3	81.0			06-08	65.9	71.0			06-08	50.3	60.0		
Female	Mean SS	06-08	310.0	314.6	2.3		04-08	305.0	309.1	1.0		04-08	291.2	296.8	1.4	
	SD	06-08	83.6	79.3			04-08	71.4	68.5			04-08	56.0	55.7		

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group
Male	Mean SS	06-08	291.6	295.1	1.8	S	04-08	284.6	288.7	1.0	E	04-08	281.9	285.2	0.8	S
	SD	06-08	86.6	85.4			04-08	73.7	73.6			04-08	59.9	62.0		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 327.5 for white students and 272.7 for African American students. In 2008, the mean scale score in 4th grade reading was 327.7 for white students and 277.6 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 0.1 points for white students and improved at an average yearly rate of 2.4 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The Nevada CRT and HSPE are scored on a scale of 100-500.

¹Numbers in these columns are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

³Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table NV-14. Subgroup Achievement Trends in Mathematics by Mean Scale Scores

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	06-08	309.0	324.9	8.0		04-08	291.7	298.6	1.7		04-08	288.6	296.0	1.9	
	SD	06-08	88.8	87.0			04-08	97.0	97.7			04-08	58.5	57.5		
White	Mean SS	06-08	334.6	345.3	5.4		04-08	319.7	328.7	2.3		04-08	303.4	311.9	2.1	
	SD	06-08	83.6	82.7			04-08	92.3	91.0			04-08	54.4	51.5		
African American	Mean SS	06-08	271.2	289.1	8.9	L	04-08	243.5	256.0	3.1	L	04-08	257.9	268.8	2.7	L
	SD	06-08	88.3	89.6			04-08	88.5	93.4			04-08	58.0	60.4		
Latino	Mean SS	06-08	284.0	307.3	11.6	L	04-08	254.3	267.4	3.3	L	04-08	264.7	277.9	3.3	L
	SD	06-08	84.7	84.3			04-08	88.4	92.2			04-08	54.5	56.3		
Asian	Mean SS	06-08	338.6	358.2	9.8	L	04-08	323.0	341.5	4.6	L	04-08	305.7	315.8	2.6	L
	SD	06-08	84.7	81.4			04-08	92.4	93.9			04-08	56.0	53.6		
Native American	Mean SS	06-08	290.7	307.7	8.5	L	04-08	276.3	283.1	1.7	S	04-08	267.2	283.0	4.0	L
	SD	06-08	79.7	81.3			04-08	92.7	84.8			04-08	55.8	54.9		
Not Low-income	Mean SS	06-08	331.6	345.5	7.0		04-08	310.2	319.7	2.4		04-08	290.9	302.0	2.8	
	SD	06-08	85.2	82.5			04-08	95.9	95.5			04-08	NA	56.4		
Low-income	Mean SS	06-08	282.0	302.8	10.4	L	04-08	255.8	267.4	2.9	L	04-08	262.4	278.4	4.0	L
	SD	06-08	85.5	86.3			04-08	88.7	92.2			04-08	57.3	57.1		
Not disabled	Mean SS	06-08	317.1	333.1	8.0		06-08	307.1	309.4	1.2		06-08	299.6	302.6	1.5	
	SD	06-08	85.4	82.2			06-08	93.5	92.7			06-08	53.2	52.2		
Students with disabilities ³	Mean SS	06-08	244.9	269.9	12.5	L	06-08	197.6	220.3	11.3	L	06-08	228.6	239.1	5.2	L
	SD	06-08	89.4	97.8			06-08	77.9	96.8			06-08	61.2	68.5		
Not ELLs	Mean SS	06-08	321.0	333.6	6.3		06-08	305.8	310.4	2.3		06-08	296.9	300.5	1.8	
	SD	06-08	85.9	86.0			06-08	95.0	95.7			06-08	56.1	56.5		
English language learners ³	Mean SS	06-08	249.5	300.3	25.4	L	06-08	220.9	261.6	20.4	L	06-08	249.7	277.8	14.1	L
	SD	06-08	78.5	85.0			06-08	85.1	94.4			06-08	58.3	58.1		
Female	Mean SS	06-08	311.1	326.1	7.5		04-08	294.6	300.6	1.5		04-08	287.1	296.0	2.2	

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) ¹	Gain Larger or Smaller than Comparison Group
	SD	06-08	86.8	84.4			04-08	91.4	94.7			04-08	55.9	54.5		
Male	Mean SS	06-08	307.2	323.9	8.4	L	04-08	289.4	296.6	1.8	L	04-08	290.2	295.9	1.4	S
	SD	06-08	90.6	89.4			04-08	101.8	100.3			04-08	60.9	60.3		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 334.6 for white students and 271.2 for African American students. In 2008, the mean scale score in 4th grade math was 345.3 for white students and 289.1 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 5.4 points for white students and 8.9 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The Nevada CRT and HSPE are scored on a scale of 100-500.

¹Numbers in these columns are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

³Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table NV-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					Grade 10				
		Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year	Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year	Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year
All tested students	Reading	06-08	32,177	33,527	4.2%	100.0%	04-08	30,197	33,405	10.6%	100.0%	04-08	24,767	30,137	21.7%	100.0%
	Math	06-08	32,165	33,525	4.2%	100.0%	04-08	30,196	33,396	10.6%	100.0%	04-08	25,217	30,838	22.3%	100.0%
White	Reading	06-08	14,143	13,720	-3.0%	40.9%	04-08	15,497	14,474	-6.6%	43.3%	04-08	13,814	14,077	1.9%	46.7%
	Math	06-08	14,136	13,723	-2.9%	40.9%	04-08	15,466	14,468	-6.5%	43.3%	04-08	13,996	14,266	1.9%	46.3%
African American	Reading	06-08	3,422	3,601	5.2%	10.7%	04-08	3,272	3,900	19.2%	11.7%	04-08	2,471	3,480	40.8%	11.5%
	Math	06-08	3,421	3,600	5.2%	10.7%	04-08	3,283	3,900	18.8%	11.7%	04-08	2,530	3,585	41.7%	11.6%
Latino	Reading	06-08	11,560	12,962	12.1%	38.7%	04-08	8,521	11,890	39.5%	35.6%	04-08	5,930	9,287	56.6%	30.8%
	Math	06-08	11,563	12,958	12.1%	38.7%	04-08	8,536	11,889	39.3%	35.6%	04-08	6,092	9,634	58.1%	31.2%
Asian	Reading	06-08	2,333	2,660	14.0%	7.9%	04-08	2,107	2,578	22.4%	7.7%	04-08	1,903	2,687	41.2%	8.9%
	Math	06-08	2,329	2,660	14.2%	7.9%	04-08	2,107	2,577	22.3%	7.7%	04-08	1,937	2,727	40.8%	8.8%
Native American	Reading	06-08	535	506	-5.4%	1.5%	04-08	491	506	3.1%	1.5%	04-08	464	498	7.3%	1.7%
	Math	06-08	534	506	-5.2%	1.5%	04-08	490	506	3.3%	1.5%	04-08	475	513	8.0%	1.7%
Low-income	Reading	06-08	14,646	16,155	10.3%	48.2%	04-08	10,239	13,492	31.8%	40.4%	04-08	1,702	7,660	350.1%	25.4%
	Math	06-08	14,644	16,148	10.3%	48.2%	04-08	10,244	13,487	31.7%	40.4%	04-08	1,730	7,887	355.9%	25.6%
Students w/ disabilities	Reading	06-08	3,601	4,338	20.5%	12.9%	06-08	3,353	4,074	21.5%	12.2%	06-08	2,589	3,139	21.2%	10.4%
	Math	06-08	3,610	4,340	20.2%	12.9%	06-08	3,332	4,071	22.2%	12.2%	06-08	2,611	3,226	23.6%	10.5%
English language learners	Reading	06-08	5,378	8,731	62.3%	26.0%	06-08	3,794	8,089	113.2%	24.2%	06-08	2,241	5,961	166.0%	19.8%
	Math	06-08	5,380	8,729	62.2%	26.0%	06-08	3,789	8,088	113.5%	24.2%	06-08	2,273	6,182	172.0%	20.0%
Female	Reading	06-08	15,681	16,420	4.7%	49.0%	04-08	14,572	16,136	10.7%	48.3%	04-08	12,276	14,791	20.5%	49.1%
	Math	06-08	15,672	16,413	4.7%	49.0%	04-08	14,577	16,133	10.7%	48.3%	04-08	12,504	15,129	21.0%	49.1%
Male	Reading	06-08	16,397	17,104	4.3%	51.0%	04-08	15,429	17,262	11.9%	51.7%	04-08	12,445	15,338	23.2%	50.9%
	Math	06-08	16,395	17,109	4.4%	51.0%	04-08	15,423	17,256	11.9%	51.7%	04-08	12,670	15,701	23.9%	50.9%

Table reads: In 2006, 14,143 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 13,720 students, a decrease of 3.0%. In 2008, the white subgroup made up 40.9% of the 33,527 4th graders taking the reading test that year.

Note: **Bold** type indicates that the number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data.

Key Terms

Percentage proficient (and above) — The percentage of students in a group who score at and above the cut score for “proficient” performance on the state test used to determine progress under NCLB. The Act requires states to report student test performance in terms of at least three achievement levels: basic, proficient, and advanced. Adequate yearly progress determinations are based on the percentage of students scoring at the proficient level and above.

Percentage basic (and above) — The percentage of students in a group who score at and above the cut score for “basic” performance on the state test used to determine progress under NCLB.

Percentage advanced — The percentage of students in a group who reach or exceed the cut score for “advanced” performance on the state test used to determine progress under NCLB.

Moderate-to-large gain — For the percentage basic, proficient, or advanced, an average gain of 1 or more percentage points per year. For effect size, an average gain of 0.02 or greater per year.

Slight gain — For the percentage basic, proficient, or advanced, an average gain of less than 1 percentage point per year. For effect size, an average gain of less than 0.02 per year.

Moderate-to-large decline — For the percentage basic, proficient, or advanced, an average decline of 1 or more percentage points per year. For effect size, an average decline of 0.02 or greater per year.

Slight decline — For the percentage basic, proficient, or advanced, an average decline of less than 1 percentage points per year. For effect size, an average decline of less than 0.02 per year.

Effect size — A statistical tool that conveys the amount of difference between test results using a common unit of measurement which does not depend on the scoring scale for a particular test.

Accumulated annual effect size — The cumulative gain in effect size over a range of years.

Mean scale score — The arithmetical average of a group of test scores, expressed on a common scale for a particular state’s test. The mean is calculated by adding the scores and dividing the sum by the number of scores.

Standard deviation — A measure of how much test scores tend to deviate from the mean—in other words, how spread out or bunched together test scores are. If students’ scores are bunched together, with many scores close to the mean, then the standard deviation will be small. If scores are spread out, with many students scoring at the high or low ends of the scale, then the standard deviation will be large.

Cautions and Explanations

Different labels for achievement levels — For consistency, all of the state profiles developed for this report use a common set of labels (basic, proficient, and advanced) for the main achievement levels required by NCLB. In practice, however, some states may use different labels, such as “meets standard” instead of proficient, and some states have established additional achievement levels beyond those required by NCLB.

Different names for subgroups — For the sake of consistency and ease of data tabulation, all of the state profiles developed for this report use a common set of names for the major student subgroups. In practice, however, states use various names for subgroups that may differ from those used here (such as using “Hispanic” instead of “Latino,” or “special education students” instead of “students with disabilities”). Moreover, a few states separately track the performance of subgroups not included in the analyses for this report.

Special caution for students with disabilities and English language learners — Trends for students with disabilities and English language learners should be interpreted with caution because changes in federal guidance and state accountability plans may have altered which students in these subgroups are tested for accountability purposes, how they are tested, and when their test scores are counted as proficient under NCLB. These factors could affect the year-to-year comparability of test results.

Inclusion of former English language learners — In many states, the subgroup of English language learners (also known as limited English proficient students) includes students who were formerly English language learners but who have achieved English language proficiency or fluency in the last two years. Federal NCLB regulations permit states to include these formerly ELL students (sometimes referred to as “redesignated fluent English proficient” students) in the ELL subgroup for up to two years for purposes of NCLB accountability.

Limitations of percentage proficient measure — The percentage proficient, the main gauge of student performance under NCLB, can be easily understood and gives a snapshot of how many students have met their state’s performance expectations. But it also has several limitations as a measure of student achievement. Users of percentage proficient data should keep in mind these limitations, particularly the following:

- * “Proficient” means different things across different states. States vary widely in curriculum, learning expectations, and tests, and state tests differ considerably in their difficulty and cut scores for proficient performance.
- * Although this study has taken steps to avoid comparing test data where there have been “breaks” in comparability resulting from new tests, changes in content standards, revised cut scores, or other major changes in testing programs, the year-to-year comparability of test results in the same state may still be affected by less obvious policy and demographic changes.
- * Changes in student performance may occur that are not reflected in percentage proficient data, such as an increase in the number of students reaching performance levels below and above proficient (such as the basic or advanced levels).
- * The size of the achievement gaps between various subgroups depends in part on where a state sets its cut score for proficiency. For example, if a proficiency cut score is set so high that almost nobody reaches it or so low that almost everyone reaches it, there will be little apparent achievement gap. By contrast, if the cut score is closer to the mean test score, the gaps between subgroups will be more apparent.

Difficulty of attributing causes — Although the tables above show trends in test scores since the enactment of NCLB, one cannot assume that these trends have occurred *because* of NCLB. It is always difficult to determine a cause-and-effect relationship between test score trends and any specific education policy or program due to the many federal, state, and local reforms undertaken in recent years and due to the lack of an appropriate “control” group of students not affected by NCLB.