

Subgroup Achievement and Gap Trends — Alabama

K-12 enrollment — 735,605

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.

Overall, Alabama showed upward trends on achievement and progress in closing achievement gaps on state tests.

Subgroup trends by achievement level at grade 4

- **Main trend:** Almost all subgroups showed improvements in the percentage of students reading at three achievement levels—basic-and-above, proficient-and-above, and advanced. The same was true for math.

Gap trends at three grade levels

- **Main trend:** In most instances, gaps in the percentages of students scoring at the proficient level in reading became narrower between the African American and Latino subgroups and the white subgroup, and between low-income and non-low-income students, at grades 4 and 8 and at the high school grade tested. In math, gaps narrowed across the board.

Data notes

- **Limited data:** Trends are limited to 2005–2008. Data are not available to calculate mean scale scores.
- **Subgroups analyzed:** Trends were analyzed for white, African American, Latino, Asian American, and low-income students. The Native American subgroup is too small in Alabama to yield reliable trend data. 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 three grade levels: grade 4, grade 8, and the high school grade tested for NCLB.

Data Limitations

Years of comparable percentage proficient data	2005 through 2008
Years of comparable mean scale score data	2007 through 2008 No grade 11 mean scale score data available
Disaggregated data for all subgroups and comparison groups	Subgroup mean scale score data not available until 2007 Mean scale score data not available for grade 11 students, low-income students, and students who are <i>not</i> low-income Mean scale score data not available for comparison groups of students who are <i>not</i> disabled or are <i>not</i> English language learners (ELLs), so these subgroups are compared with all tested students in the state in mean scale score analyses
Numbers of test-takers by subgroup	Not available until 2007 for all subgroups. Not available for grade 11 or for low-income students

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	Alabama Reading and Mathematics Test (ARMT), grades 3–8 Alabama High School Graduation Exam (AHSGE), grade 11 Alabama Alternate Assessment, grades 3–8 and 11
Grades tested for NCLB accountability	3–8, 11
State labels for achievement levels	AL uses four achievement levels: I, II, III, and IV. For our analyses we treated II as Basic, III as Proficient, and IV as Advanced.
High school NCLB test also used as an exit exam?	Yes (AHSGE)
First year test used	2004: First year of use for NCLB for ARMT reading grades 4, 6, and 8; ARMT mathematics grades 4 and 6; AHSGE reading grade 11;

	and AHSGE mathematics grade 11 2005: First year of use for NCLB for ARMT reading grades 3, 5, and 7; and ARMT mathematics grades 3, 5, 7, and 8
Time of test administration	Spring
Major changes in testing system (2002–present)	2003–04: ARMT assessments implemented, replacing the Stanford-10 in grades 4, 6, and 8 for reading and in grades 4 and 6 for mathematics. (Stanford 10 scores were not used for NCLB accountability.) 2004–05: ARMT assessments implemented, replacing the Stanford-10 in grades 3, 5, and 7 in reading and in grades 3, 5, 7, and 8 in mathematics 2005–06: Displaced Hurricane Katrina students disaggregated for this administration only
Comments	The scale scores associated with some of the achievement levels for some of the grades were changed in 2005. Therefore, the percentages proficient for 2005 and later years cannot be compared with the percentage proficient for 2004. However, since the scale did not change, comparison of scale scores for 2005 and later years can be compared with scale scores for 2004.

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 AL-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				50%	52%	53%	53%	0.8
Proficient and Above				83%	84%	85%	86%	0.9
Basic and Above				100%	100%	100%	100%	0.0
White								
Advanced				62%	64%	64%	64%	0.6
Proficient and Above				89%	90%	91%	91%	0.8
Basic and Above				100%	100%	100%	100%	0.0
African American								
Advanced				32%	34%	35%	35%	1.0
Proficient and Above				75%	76%	76%	78%	1.1
Basic and Above				100%	99%	99%	100%	0.0
Latino								
Advanced				33%	33%	36%	36%	1.1
Proficient and Above				73%	73%	74%	79%	1.8
Basic and Above				100%	100%	99%	99%	0.0
Asian								
Advanced				66%	71%	71%	71%	1.8
Proficient and Above				93%	93%	94%	95%	0.6
Basic and Above				100%	99%	100%	100%	-0.1
Native American²								
Advanced				56%	64%	65%	66%	3.3
Proficient and Above				88%	87%	92%	90%	0.7
Basic and Above				100%	100%	99%	100%	0.1

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test increased from 62% in 2005 to 64% in 2008. During this period, the average yearly gain in the percentage advanced in reading for white 4th graders was 0.6 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 AL-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				50%	52%	53%	53%	0.8
Proficient and Above				83%	84%	85%	86%	0.9
Basic and Above				100%	100%	100%	100%	0.0
Low-income students								
Advanced				36%	38%	39%	39%	0.9
Proficient and Above				76%	77%	78%	80%	1.2
Basic and Above				100%	99%	99%	100%	0.0
Students with disabilities³								
Advanced				14%	15%	16%	16%	0.6
Proficient and Above				41%	42%	45%	47%	2.7
Basic and Above				98%	97%	96%	98%	0.6
English language learners³								
Advanced				23%	26%	28%	23%	-1.5
Proficient and Above				68%	67%	69%	70%	1.4
Basic and Above				100%	99%	99%	99%	0.0
Female								
Advanced				55%	58%	59%	57%	0.6
Proficient and Above				88%	89%	89%	90%	0.6
Basic and Above				100%	100%	100%	100%	0.0
Male								
Advanced				45%	47%	47%	48%	1.0
Proficient and Above				79%	80%	81%	83%	1.2
Basic and Above				100%	99%	99%	100%	0.0

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test increased from 36% in 2005 to 39% in 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 0.9 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 AL-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				44%	50%	48%	50%	2.1
Proficient and Above				74%	78%	78%	79%	1.6
Basic and Above				97%	98%	98%	98%	0.2
White								
Advanced				53%	59%	58%	58%	1.9
Proficient and Above				81%	84%	85%	85%	1.1
Basic and Above				98%	99%	99%	99%	0.1
African American								
Advanced				29%	36%	32%	36%	2.4
Proficient and Above				62%	67%	67%	69%	2.4
Basic and Above				96%	97%	97%	97%	0.3
Latino								
Advanced				29%	36%	35%	38%	3.2
Proficient and Above				62%	68%	69%	72%	3.4
Basic and Above				96%	98%	97%	97%	0.4
Asian								
Advanced				74%	77%	72%	77%	1.3
Proficient and Above				91%	94%	92%	93%	0.5
Basic and Above				99%	100%	99%	100%	0.0
Native American²								
Advanced				49%	57%	61%	57%	2.7
Proficient and Above				81%	84%	86%	85%	1.3
Basic and Above				98%	99%	99%	99%	0.1

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 53% in 2005 to 58% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 1.9 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 AL-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				44%	50%	48%	50%	2.1
Proficient and Above				74%	78%	78%	79%	1.6
Basic and Above				97%	98%	98%	98%	0.2
Low-income students								
Advanced				32%	38%	36%	38%	2.3
Proficient and Above				65%	70%	70%	72%	2.3
Basic and Above				96%	98%	97%	97%	0.3
Students with disabilities³								
Advanced				13%	17%	17%	18%	0.4
Proficient and Above				34%	38%	41%	41%	1.5
Basic and Above				85%	90%	88%	88%	-1.0
English language learners³								
Advanced				27%	33%	31%	32%	-0.4
Proficient and Above				58%	65%	66%	64%	-0.4
Basic and Above				96%	97%	97%	97%	-0.3
Female								
Advanced				45%	51%	49%	51%	2.0
Proficient and Above				77%	80%	80%	81%	1.3
Basic and Above				98%	99%	99%	99%	0.1
Male								
Advanced				42%	49%	48%	49%	2.2
Proficient and Above				72%	76%	76%	77%	1.9
Basic and Above				97%	98%	98%	98%	0.3

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 32% in 2005 to 38% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 2.3 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.

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 AL-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 11				
	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	05-08	83%	86%	0.9		05-08	70%	74%	1.5		05-08	86%	81%	-1.5	
White	05-08	89%	91%	0.8		05-08	79%	82%	1.1		05-08	91%	87%	-1.4	
African American	05-08	75%	78%	1.1	L	05-08	55%	61%	2.2	L	05-08	76%	71%	-1.7	S
Latino	05-08	73%	79%	1.8	L	05-08	56%	65%	2.8	L	05-08	72%	70%	-0.7	L
Asian	05-08	93%	95%	0.6	S	05-08	81%	85%	1.1	E	05-08	89%	85%	-1.3	L
Native American	05-08	88%	90%	0.7 ²	S	05-08	77%	80%	1.2	L	05-08	90%	87%	-1.1	L
Not low-income	05-08	92%	94%	0.6		05-08	83%	86%	1.0		05-08	92%	88%	-1.1	
Low-income	05-08	76%	80%	1.2	L	05-08	57%	63%	2.0	L	05-08	76%	71%	-1.6	S
Not disabled	06-08	90%	91%	0.5		06-08	78%	80%	1.0		06-08	91%	86%	-2.1	
Students with disabilities ³	06-08	42%	47%	2.7	L	06-08	23%	24%	0.7	S	06-08	33%	26%	-3.6	S
Not ELL	06-08	85%	87%	0.9		06-08	72%	74%	1.2		06-08	86%	82%	-2.2	
English language learners ³	06-08	67%	70%	1.4	L	06-08	41%	41%	-0.2	S	06-08	43%	44%	0.6	L
Female	05-08	88%	90%	0.6		05-08	76%	80%	1.2		05-08	88%	84%	-1.3	
Male	05-08	79%	83%	1.2	L	05-08	63%	68%	1.7	L	05-08	83%	78%	-1.8	S

Table reads: In 2005, 89% of white 4th graders and 75% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 91% of white 4th graders and 78% of African American 4th graders scored at the proficient level in reading. Between 2005 and 2008, the percentage proficient improved at an average rate of 0.8 percentage point per year for white students and 1.1 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.

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 AL-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 11				
	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	05-08	74%	79%	1.6		05-08	63%	68%	1.7		05-08	78%	84%	1.9	
White	05-08	81%	85%	1.1		05-08	74%	77%	1.0		05-08	85%	90%	1.5	
African American	05-08	62%	69%	2.4	L	05-08	45%	53%	3.0	L	05-08	66%	74%	2.7	L
Latino	05-08	62%	72%	3.4	L	05-08	57%	63%	1.9	L	05-08	72%	83%	3.5	L
Asian	05-08	91%	93%	0.5	S	05-08	86%	91%	1.7	L	05-08	94%	94%	0.0	S
Native American	05-08	81%	85%	1.3 ²	L	05-08	74%	75%	0.6	S	05-08	84%	90%	1.8	L
Not low-income	05-08	86%	88%	0.9		05-08	78%	81%	1.2		05-08	85%	90%	1.5	
Low-income	05-08	65%	72%	2.3	L	05-08	49%	56%	2.3	L	05-08	66%	75%	3.0	L
Not disabled	06-08	83%	83%	0.4		06-08	73%	74%	0.2		06-08	89%	89%	0.2	
Students with disabilities ³	06-08	38%	41%	1.5	L	06-08	23%	24%	0.4	L	06-08	31%	31%	0.1	S
Not ELL	06-08	78%	79%	0.5		06-08	68%	68%	0.3		06-08	84%	84%	0.2	
English language learners ³	06-08	65%	64%	-0.4	S	06-08	48%	49%	0.7	L	06-08	74%	75%	0.5	L
Female	05-08	77%	81%	1.3		05-08	67%	71%	1.5		05-08	81%	86%	1.9	
Male	05-08	72%	77%	1.9	L	05-08	60%	65%	1.9	L	05-08	76%	82%	1.9	E

Table reads: In 2005, 81% of white 4th graders and 62% of African American 4th graders scored at the proficient level on the state math test. In 2008, 85% of white 4th graders and 69% of African American 4th graders scored at the proficient level in math. Between 2005 and 2008, the percentage proficient improved at an average rate of 1.1 percentage point per year for white students and 2.4 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.

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.

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table AL-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 11				
		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	07-08	641.3	641.9	NA		07-08	671.9	672.9	NA		NA-NA	NA	NA	NA	
	SD	07-08	38.3	38.2			07-08	33.0	33.1			NA-NA	NA	NA		
White	Mean SS	07-08	650.8	651.4	NA		07-08	680.2	680.9	NA		NA-NA	NA	NA	NA	
	SD	07-08	36.5	36.6			07-08	32.5	32.6			NA-NA	NA	NA		
African American	Mean SS	07-08	625.9	626.8	NA	NA	07-08	659.0	660.0	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	35.5	35.6			07-08	29.2	29.3			NA-NA	NA	NA		
Latino	Mean SS	07-08	625.6	627.6	NA	NA	07-08	660.6	664.7	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	38.2	35.9			07-08	33.5	33.9			NA-NA	NA	NA		
Asian	Mean SS	07-08	660.0	660.7	NA	NA	07-08	688.8	689.4	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	38.2	36.3			07-08	35.2	36.0			NA-NA	NA	NA		
Native American	Mean SS	07-08	652.3	651.7	NA	NA	07-08	678.3	677.3	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	36.8	37.5			07-08	30.9	30.9			NA-NA	NA	NA		
Not Low-income	Mean SS	07-08	NA	NA	NA		07-08	NA	NA	NA		NA-NA	NA	NA	NA	
	SD	07-08	NA	NA			07-08	NA	NA			NA-NA	NA	NA		
Low-income	Mean SS	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	NA	NA			07-08	NA	NA			NA-NA	NA	NA		
All tested students	Mean SS	07-08	641.3	641.9	NA		07-08	671.9	672.9	NA		NA-NA	NA	NA	NA	
	SD	07-08	38.3	38.2			07-08	33.0	33.1			NA-NA	NA	NA		
Students with disabilities ³	Mean SS	07-08	599.1	603.5	NA	NA	07-08	633.2	634.1	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	36.7	37.5			07-08	26.6	27.5			NA-NA	NA	NA		
All tested students	Mean SS	07-08	641.3	641.9	NA		07-08	671.9	672.9	NA		NA-NA	NA	NA	NA	
	SD	07-08	38.3	38.2			07-08	33.0	33.1			NA-NA	NA	NA		
English language learners ³	Mean SS	07-08	617.2	618.7	NA	NA	07-08	644.4	648.6	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	35.9	34.5			07-08	28.3	30.0			NA-NA	NA	NA		
Female	Mean SS	07-08	647.5	646.9	NA		07-08	677.3	678.1	NA		NA-NA	NA	NA	NA	
	SD	07-08	36.9	37.2			07-08	31.4	31.7			NA-NA	NA	NA		

Subgroup	Statistic	Grade 4					Grade 8					Grade 11				
		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	07-08	635.5	637.3	NA	NA	07-08	666.8	667.9	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	38.6	38.5			07-08	33.7	33.7			NA-NA	NA	NA		

Table reads: In 2007, the mean scale score on the state 4th grade reading test was 650.8 for white students and 625.9 for African American students. In 2008, the mean scale score in 4th grade reading was 651.4 for white students and 626.8 for African American students. The average annual gains were not calculated because there were fewer than three years of comparable data, too few years to constitute a trend.

Note: The Alabama Reading and Mathematics Test (ARMT) for grades 3-8 is scored on a scale of 300-900.

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 AL-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 11				
		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	07-08	633.4	635.6	NA		07-08	684.3	687.0	NA		NA-NA	NA	NA		NA
	SD	07-08	37.5	38.7			07-08	34.6	36.8			NA-NA	NA	NA		
White	Mean SS	07-08	641.5	643.2	NA		07-08	692.2	695.6	NA		NA-NA	NA	NA		NA
	SD	07-08	36.3	38.0			07-08	35.7	38.1			NA-NA	NA	NA		
African American	Mean SS	07-08	619.8	622.8	NA	NA	07-08	671.2	672.6	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	34.9	36.3			07-08	27.5	28.6			NA-NA	NA	NA		
Latino	Mean SS	07-08	621.3	625.7	NA	NA	07-08	676.3	680.1	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	36.1	36.2			07-08	29.2	31.6			NA-NA	NA	NA		
Asian	Mean SS	07-08	658.4	662.2	NA	NA	07-08	721.6	724.7	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	40.4	39.1			07-08	48.7	50.1			NA-NA	NA	NA		
Native American	Mean SS	07-08	643.3	642.5	NA	NA	07-08	688.0	691.2	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	37.1	38.6			07-08	32.9	34.6			NA-NA	NA	NA		
Not Low-income	Mean SS	07-08	NA	NA	NA		07-08	NA	NA	NA		NA-NA	NA	NA		NA
	SD	07-08	NA	NA			07-08	NA	NA			NA-NA	NA	NA		
Low-income	Mean SS	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	NA	NA			07-08	NA	NA			NA-NA	NA	NA		
All tested students	Mean SS	07-08	633.4	635.6	NA		07-08	684.3	687.0	NA		NA-NA	NA	NA		NA
	SD	07-08	37.5	38.7			07-08	34.6	36.8			NA-NA	NA	NA		
Students with disabilities ³	Mean SS	07-08	597.0	600.3	NA	NA	07-08	654.3	655.8	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	37.1	38.4			07-08	20.9	22.4			NA-NA	NA	NA		
All tested students	Mean SS	07-08	633.4	635.6	NA		07-08	684.3	687.0	NA		NA-NA	NA	NA		NA
	SD	07-08	37.5	38.7			07-08	34.6	36.8			NA-NA	NA	NA		
English language learners ³	Mean SS	07-08	617.0	621.5	NA	NA	07-08	669.5	673.6	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	35.9	37.7			07-08	28.6	31.5			NA-NA	NA	NA		
Female	Mean SS	07-08	634.4	637.1	NA		07-08	685.5	688.4	NA		NA-NA	NA	NA		NA

Subgroup	Statistic	Grade 4					Grade 8					Grade 11				
		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	07-08	35.7	37.9			07-08	32.9	35.5			NA-NA	NA	NA		
Male	Mean SS	07-08	632.3	634.1	NA	NA	07-08	683.2	685.8	NA	NA	NA-NA	NA	NA	NA	NA
	SD	07-08	39.1	39.4			07-08	36.0	37.9			NA-NA	NA	NA		

Table reads: In 2007, the mean scale score on the state 4th grade math test was 641.5 for white students and 619.8 for African American students. In 2008, the mean scale score in 4th grade math was 643.2 for white students and 622.8 for African American students. The average annual gains were not calculated because there were fewer than three years of comparable data, too few years to constitute a trend.

Note: The Alabama Reading and Mathematics Test (ARMT) for grades 3-8 is scored on a scale of 300-900.

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 AL-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					Grade 11				
		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	07-08	56,083	57,164	1.9%	100.0%	07-08	57,666	57,174	-0.9%	100.0%	NA	NA	NA	NA	NA
	Math	07-08	56,035	57,196	2.1%	100.0%	07-08	57,654	57,158	-0.9%	100.0%	NA	NA	NA	NA	NA
White	Reading	07-08	33,223	33,588	1.1%	58.8%	07-08	33,785	33,520	-0.8%	58.6%	NA	NA	NA	NA	NA
	Math	07-08	33,171	33,579	1.2%	58.7%	07-08	33,762	33,488	-0.8%	58.6%	NA	NA	NA	NA	NA
African American	Reading	07-08	19,653	19,993	1.7%	35.0%	07-08	21,093	20,707	-1.8%	36.2%	NA	NA	NA	NA	NA
	Math	07-08	19,608	19,984	1.9%	34.9%	07-08	21,040	20,688	-1.7%	36.2%	NA	NA	NA	NA	NA
Latino	Reading	07-08	1,902	2,185	14.9%	3.8%	07-08	1,514	1,651	9.0%	2.9%	NA	NA	NA	NA	NA
	Math	07-08	1,935	2,214	14.4%	3.9%	07-08	1,563	1,679	7.4%	2.9%	NA	NA	NA	NA	NA
Asian	Reading	07-08	636	660	3.8%	1.2%	07-08	524	635	21.2%	1.1%	NA	NA	NA	NA	NA
	Math	07-08	649	680	4.8%	1.2%	07-08	536	639	19.2%	1.1%	NA	NA	NA	NA	NA
Native American	Reading	07-08	441	473	7.3%	0.8%	07-08	543	519	-4.4%	0.9%	NA	NA	NA	NA	NA
	Math	07-08	441	473	7.3%	0.8%	07-08	546	520	-4.8%	0.9%	NA	NA	NA	NA	NA
Low-income	Reading	07-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Math	07-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Students w/ disabilities	Reading	07-08	5,584	6,244	11.8%	10.9%	07-08	6,371	6,345	-0.4%	11.1%	NA	NA	NA	NA	NA
	Math	07-08	5,577	6,245	12.0%	10.9%	07-08	6,341	6,329	-0.2%	11.1%	NA	NA	NA	NA	NA
English language learners	Reading	07-08	1,486	1,537	3.4%	2.7%	07-08	834	985	18.1%	1.7%	NA	NA	NA	NA	NA
	Math	07-08	1,538	1,594	3.6%	2.8%	07-08	903	1,027	13.7%	1.8%	NA	NA	NA	NA	NA
Female	Reading	07-08	27,279	27,790	1.9%	48.6%	07-08	28,130	27,985	-0.5%	48.9%	NA	NA	NA	NA	NA
	Math	07-08	27,253	27,807	2.0%	48.6%	07-08	28,124	28,002	-0.4%	49.0%	NA	NA	NA	NA	NA
Male	Reading	07-08	28,768	29,331	2.0%	51.3%	07-08	29,462	29,161	-1.0%	51.0%	NA	NA	NA	NA	NA
	Math	07-08	28,746	29,345	2.1%	51.3%	07-08	29,455	29,127	-1.1%	51.0%	NA	NA	NA	NA	NA

Table reads: In 2007, 33,223 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had risen to 33,588 students, an increase of 1.1%. In 2008, the white subgroup made up 58.8% of the 57,164 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.