

## Subgroup Achievement and Gap Trends — Mississippi

*K-12 enrollment — 493,302*

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](http://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.

Mississippi implemented new assessments at all grades in 2007-08. As a result, 2008 test data were not comparable to those from previous years. For that reason, CEP could not calculate updated trends through 2007-08 for this year's achievement study. The tables in this profile show trends through 2007.

#### Data Limitations

Years of comparable percentage proficient data	2002 through 2007, grades 3–8 2003 through 2007, high school
	MS implemented new assessments in 2008 at all grades.
Years of comparable mean scale score data	2002 through 2007, grades 3–8 2003 through 2007, high school
	MS implemented new assessments in 2008 at all grades
Disaggregated data for all subgroups and comparison groups	2002 through 2007, grades 3–8 2003 through 2007, high school MS implemented new assessments in 2008 at all grades

Data not available for the comparison group of students who are *not* English language learners, so the subgroup of ELL students is compared with all 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	Mississippi Curriculum Test (MCT), grades 3–8 MCT2 (first administered in 2007-08) Subject Area Testing Program (SATP) in English II & Algebra (high school end-of-course exams) SATP2 (first administered in 2007-08) Mississippi Alternate Assessment of the Extended Curriculum Frameworks (MAAECF)
Grades tested for NCLB accountability	3–8 Grades vary for high school tests, depending on when students complete the course content being tested
State labels for achievement levels	MS uses four achievement levels: Minimal, Basic, Proficient, and Advanced. For our analyses we treated Basic as Basic, Proficient as Proficient, and Advanced as Advanced.
High school NCLB test also used as an exit exam?	Yes
First year test used	2001–02 MCT 2002–03 SATP English II and Algebra I (SATP phased in over five years) 2008 (MCT2, SATP2) – baseline year for new assessments
Time of test administration	Spring (grades 3–8) Various times for end-of-course exams
Major changes in testing system (2002–present)	July 2001: SATP cut scores set for English II November 2002: SATP cut scores set for Algebra I November 2004: SATP cut scores set for Biology I and U.S. History 2005–06: Scores for some students displaced by Hurricane Katrina excluded from test results 2006–07: First year that MCT and SATP <i>only</i> were administered and previous tests were totally phased out (including Functional Literacy

Exam, grades 4 and 7, Writing Assessments, and TerraNova Norm-Referenced Tests)

2006–07: Grade 2 no longer assessed

2006: Language Arts frameworks revised

2007: Math frameworks revised

2007–08: MCT2 first administered to grades 3-8; SATP2 first administered in Algebra I and English II. New cut scores set.

## 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 MS-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 <sup>1</sup>
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced	22%	25%	22%	28%	28%	30%		NA
Proficient and Above	84%	87%	88%	89%	88%	90%		NA
Basic and Above	91%	94%	95%	95%	94%	95%		NA
White								
Advanced	35%	39%	35%	41%	41%	43%		NA
Proficient and Above	93%	95%	95%	95%	94%	95%		NA
Basic and Above	97%	98%	98%	98%	97%	97%		NA
African American								
Advanced	10%	12%	11%	15%	16%	18%		NA
Proficient and Above	75%	80%	82%	84%	82%	86%		NA
Basic and Above	86%	91%	91%	93%	92%	93%		NA
Latino								
Advanced	22%	24%	22%	26%	24%	25%		NA
Proficient and Above	84%	91%	85%	84%	84%	87%		NA
Basic and Above	93%	96%	92%	90%	92%	93%		NA
Asian <sup>2</sup>								
Advanced	31%	40%	33%	45%	44%	43%		NA
Proficient and Above	91%	96%	95%	97%	96%	96%		NA
Basic and Above	95%	99%	97%	99%	99%	98%		NA
Native American <sup>2</sup>								
Advanced	27%	15%	20%	35%	34%	29%		NA
Proficient and Above	78%	83%	88%	85%	90%	94%		NA
Basic and Above	88%	90%	92%	95%	92%	97%		NA

Table reads: The percentage of white 4<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 35% in 2002 to 43% in 2007. The average yearly gain in the percentage advanced in reading for white 4<sup>th</sup> graders is not available for the assessment in place in 2008.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

**Table MS-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 <sup>1</sup>
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced	22%	25%	22%	28%	28%	30%		NA
Proficient and Above	84%	87%	88%	89%	88%	90%		NA
Basic and Above	91%	94%	95%	95%	94%	95%		NA
Low-income students								
Advanced	13%	15%	13%	18%	19%	21%		NA
Proficient and Above	78%	82%	83%	85%	84%	87%		NA
Basic and Above	88%	92%	92%	94%	92%	93%		NA
Students with disabilities <sup>3</sup>								
Advanced	25%	27%	11%	11%	9%	11%		NA
Proficient and Above	81%	83%	70%	62%	54%	59%		NA
Basic and Above	88%	92%	83%	77%	68%	71%		NA
English language learners <sup>2,3</sup>								
Advanced	11%	10%	10%	15%	14%	16%		NA
Proficient and Above	79%	89%	70%	78%	79%	83%		NA
Basic and Above	91%	95%	79%	89%	90%	91%		NA
Female								
Advanced	25%	27%	26%	31%	32%	33%		NA
Proficient and Above	87%	90%	91%	92%	91%	93%		NA
Basic and Above	93%	96%	96%	97%	96%	97%		NA
Male								
Advanced	20%	22%	19%	25%	24%	28%		NA
Proficient and Above	81%	84%	86%	86%	85%	87%		NA
Basic and Above	89%	93%	93%	94%	92%	93%		NA

Table reads: The percentage of low-income 4<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 13% in 2002 to 21% in 2007. The average yearly gain in the percentage advanced in reading for white 4<sup>th</sup> graders is not available for the assessment in place in 2008.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap 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 MS-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 <sup>1</sup>
	2002	2003	2004	2005	2006	2007	
All tested students							
Advanced	31%	34%	35%	39%	43%	40%	NA
Proficient and Above	72%	74%	80%	79%	82%	81%	NA
Basic and Above	89%	90%	93%	93%	93%	94%	NA
White							
Advanced	47%	52%	52%	56%	58%	55%	NA
Proficient and Above	87%	88%	91%	89%	91%	90%	NA
Basic and Above	96%	97%	98%	97%	97%	97%	NA
African American							
Advanced	15%	17%	20%	23%	28%	25%	NA
Proficient and Above	57%	61%	69%	69%	73%	73%	NA
Basic and Above	82%	85%	89%	89%	89%	91%	NA
Latino							
Advanced	37%	37%	45%	40%	47%	44%	NA
Proficient and Above	81%	80%	87%	80%	85%	83%	NA
Basic and Above	93%	94%	95%	90%	94%	94%	NA
Asian <sup>2</sup>							
Advanced	65%	59%	68%	76%	75%	68%	NA
Proficient and Above	91%	91%	94%	95%	97%	97%	NA
Basic and Above	98%	98%	98%	99%	99%	99%	NA
Native American <sup>2</sup>							
Advanced	32%	19%	39%	49%	36%	47%	NA
Proficient and Above	68%	71%	79%	80%	85%	87%	NA
Basic and Above	88%	88%	88%	93%	96%	95%	NA

Table reads: The percentage of white 4<sup>th</sup> graders who scored at the advanced level on the state math test increased from 47% in 2002 to 55% in 2007. The average yearly gain in the percentage advanced in reading for white 4<sup>th</sup> graders is not available for the assessment in place in 2008.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

**Table MS-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 <sup>1</sup>
	2002	2003	2004	2005	2006	2007	
All tested students							
Advanced	31%	34%	35%	39%	43%	40%	NA
Proficient and Above	72%	74%	80%	79%	82%	81%	NA
Basic and Above	89%	90%	93%	93%	93%	94%	NA
Low-income students							
Advanced	20%	22%	23%	27%	33%	28%	NA
Proficient and Above	64%	65%	72%	72%	76%	75%	NA
Basic and Above	85%	87%	90%	90%	90%	91%	NA
Students with disabilities <sup>3</sup>							
Advanced	33%	36%	20%	19%	18%	18%	NA
Proficient and Above	70%	70%	61%	55%	53%	53%	NA
Basic and Above	88%	88%	83%	78%	72%	74%	NA
English language learners <sup>2,3</sup>							
Advanced	14%	26%	35%	35%	44%	40%	NA
Proficient and Above	56%	66%	79%	75%	83%	82%	NA
Basic and Above	82%	89%	88%	88%	93%	93%	NA
Female							
Advanced	31%	33%	35%	38%	43%	40%	NA
Proficient and Above	73%	74%	80%	80%	83%	83%	NA
Basic and Above	90%	91%	94%	94%	94%	95%	NA
Male							
Advanced	31%	35%	36%	39%	43%	39%	NA
Proficient and Above	71%	73%	79%	78%	81%	80%	NA
Basic and Above	88%	90%	92%	92%	92%	93%	NA

Table reads: The percentage of low-income 4<sup>th</sup> graders who scored at the advanced level on the state math test increased from 20% in 2002 to 28% in 2007. The average yearly gain in the percentage advanced in reading for white 4<sup>th</sup> graders is not available for the assessment in place in 2008.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap 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 MS-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 <sup>1</sup>	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain <sup>1</sup>	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain <sup>1</sup>	Gain Larger or Smaller Than Comparison Group
All tested students	02-07	84%	90%	NA		02-07	49%	52%	NA		03-07	35%	31%	NA	
White	02-07	93%	95%	NA		02-07	65%	68%	NA		03-07	50%	43%	NA	
African American	02-07	75%	86%	NA	NA	02-07	31%	37%	NA	NA	03-07	18%	19%	NA	NA
Latino	02-07	84%	87%	NA	NA	02-07	49%	45%	NA	NA	03-07	35%	29%	NA	NA
Asian	02-07	91%	96%	NA	NA	02-07	63%	76%	NA	NA	03-07	50%	52%	NA	NA
Native American	02-07	78%	94%	NA	NA	02-07	49%	48%	NA	NA	03-07	27%	27%	NA	NA
Not low-income	02-07	93%	96%	NA		02-07	62%	69%	NA		03-07	47%	42%	NA	
Low-income	02-07	78%	87%	NA	NA	02-07	34%	39%	NA	NA	03-07	18%	20%	NA	NA
Not disabled	06-07	92%	94%	NA		06-07	59%	56%	NA		06-07	38%	32%	NA	
Students with disabilities <sup>3</sup>	06-07	54%	59%	NA	NA	06-07	14%	12%	NA	NA	06-07	8%	7%	NA	NA
All tested students	06-07	88%	90%	NA		06-07	55%	52%	NA		06-07	37%	31%	NA	
English language learners <sup>3</sup>	06-07	79%	83%	NA	NA	06-07	40%	26%	NA	NA	06-07	23%	17%	NA	NA
Female	02-07	87%	93%	NA		02-07	52%	53%	NA		03-07	39%	35%	NA	
Male	02-07	81%	87%	NA	NA	02-07	45%	51%	NA	NA	03-07	31%	26%	NA	NA



Table reads: In 2002, 93% of white 4<sup>th</sup> graders and 75% of African American 4<sup>th</sup> graders scored at the proficient level on the state reading test. In 2007, 95% of white 4<sup>th</sup> graders and 86% of African American 4<sup>th</sup> graders scored at the proficient level in reading. Average annual percentage point gains were not calculated because the trend lines ended before 2008.

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap 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 MS-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 <sup>1</sup>	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain <sup>1</sup>	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain <sup>1</sup>	Gain Larger or Smaller Than Comparison Group
All tested students	02-07	72%	81%	NA		02-07	46%	54%	NA		03-07	45%	56%	NA	
White	02-07	87%	90%	NA		02-07	63%	69%	NA		03-07	60%	69%	NA	
African American	02-07	57%	73%	NA	NA	02-07	28%	40%	NA	NA	03-07	27%	42%	NA	NA
Latino	02-07	81%	83%	NA	NA	02-07	56%	55%	NA	NA	03-07	54%	63%	NA	NA
Asian	02-07	91%	97%	NA	NA	02-07	76%	86%	NA	NA	03-07	75%	82%	NA	NA
Native American	02-07	68%	87%	NA	NA	02-07	48%	60%	NA	NA	03-07	43%	46%	NA	NA
Not low-income	02-07	85%	91%	NA		02-07	59%	69%	NA		03-07	58%	67%	NA	
Low-income	02-07	64%	75%	NA	NA	02-07	30%	43%	NA	NA	03-07	26%	45%	NA	NA
Not disabled	06-07	86%	84%	NA		06-07	63%	58%	NA		06-07	55%	57%	NA	
Students with disabilities <sup>3</sup>	06-07	53%	53%	NA	NA	06-07	14%	12%	NA	NA	06-07	28%	31%	NA	NA
All tested students	06-07	82%	81%	NA		06-07	59%	54%	NA		06-07	54%	56%	NA	
English language learners <sup>3</sup>	06-07	83%	82%	NA	NA	06-07	50%	44%	NA	NA	06-07	61%	58%	NA	NA
Female	02-07	73%	83%	NA		02-07	46%	54%	NA		03-07	45%	56%	NA	
Male	02-07	71%	80%	NA	NA	02-07	46%	54%	NA	NA	03-07	44%	55%	NA	NA

Table reads: In 2002, 87% of white 4<sup>th</sup> graders and 57% of African American 4<sup>th</sup> graders scored at the proficient level on the state math test. In 2007, 90% of white 4<sup>th</sup> graders and 73% of African American 4<sup>th</sup> graders scored at the proficient level in math. Average annual percentage point gains were not calculated because the trend lines ended before 2008.

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap 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 MS-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					HS				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	02-07	503.5	517.2	NA		02-07	551.3	554.9	NA		03-07	330.0	326.5	NA	
	SD	02-07	48.0	50.7			02-07	48.0	50.5			03-07	39.8	39.9		
White	Mean SS	02-07	522.9	532.7	NA		02-07	568.8	572.6	NA		03-07	344.2	339.6	NA	
	SD	02-07	42.9	50.2			02-07	45.0	48.6			03-07	38.6	38.9		
African American	Mean SS	02-07	485.7	502.6	NA	NA	02-07	533.3	539.0	NA	NA	03-07	314.0	313.1	NA	NA
	SD	02-07	45.4	46.8			02-07	43.9	46.5			03-07	34.7	36.3		
Latino	Mean SS	02-07	503.1	508.8	NA	NA	02-07	555.6	543.9	NA	NA	03-07	332.3	327.4	NA	NA
	SD	02-07	46.8	50.4			02-07	46.2	56.5			03-07	35.4	36.8		
Asian	Mean SS	02-07	523.8	535.1	NA	NA	02-07	568.1	586.0	NA	NA	03-07	343.6	347.3	NA	NA
	SD	02-07	45.1	50.5			02-07	47.7	48.5			03-07	42.6	42.3		
Native American	Mean SS	02-07	475.8	519.1	NA	NA	02-07	520.6	551.6	NA	NA	03-07	326.5	320.0	NA	NA
	SD	02-07	51.4	36.7			02-07	51.8	52.3			03-07	29.2	38.3		
Not Low-income	Mean SS	02-07	508.2	536.0	NA		02-07	555.7	573.9	NA		03-07	337.4	338.0	NA	
	SD	02-07	47.8	48.4			02-07	47.7	47.6			03-07	39.7	39.3		
Low-income	Mean SS	02-07	490.1	505.0	NA	NA	02-07	535.6	541.2	NA	NA	03-07	316.3	314.8	NA	NA
	SD	02-07	45.5	48.1			02-07	44.6	47.7			03-07	36.1	37.0		
Not disabled	Mean SS	06-07	519.4	522.8	NA		06-07	566.1	561.5	NA		06-07	331.7	328.0	NA	
	SD	06-07	44.7	45.3			06-07	46.3	44.1			06-07	41.1	39.3		
Students with disabilities <sup>3</sup>	Mean SS	06-07	460.1	466.8	NA	NA	06-07	495.1	491.8	NA	NA	06-07	287.6	288.6	NA	NA
	SD	06-07	67.8	66.4			06-07	60.1	62.6			06-07	37.6	37.5		
All tested students	Mean SS	06-07	513.2	517.2	NA		06-07	560.1	554.9	NA		06-07	330.2	326.5	NA	
	SD	06-07	51.0	50.7			06-07	51.6	50.5			06-07	41.8	39.9		
English language learners <sup>3</sup>	Mean SS	06-07	492.4	498.9	NA	NA	06-07	536.4	517.3	NA	NA	06-07	310.5	312.6	NA	NA
	SD	06-07	51.1	50.1			06-07	56.3	60.5			06-07	39.3	38.7		
Female	Mean SS	02-07	508.8	522.6	NA		02-07	556.2	557.1	NA		03-07	334.4	331.2	NA	
	SD	02-07	46.0	47.8			02-07	46.3	45.7			03-07	39.4	39.7		

Subgroup	Statistic	Grade 4					Grade 8					HS				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group
Male	Mean SS	02-07	498.3	512.0	NA	NA	02-07	546.2	552.8	NA	NA	03-07	325.0	321.2	NA	NA
	SD	02-07	49.4	52.9			02-07	49.2	54.7			03-07	39.5	39.5		

Table reads: In 2002, the mean scale score on the state 4<sup>th</sup> grade reading test was 522.9 for white students and 485.7 for African American students. In 2007, the mean scale score in 4<sup>th</sup> grade reading was 532.7 for white students and 502.6 for African American students. Average annual percentage point gains were not calculated because the trend lines ended before 2008.

Note: The MCT scoring scale varies for different grade levels and subjects within a range of 140-775; the SATP is scored on a scale of 100-500.

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap 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 MS-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					HS				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	02-07	511.4	526.1	NA		02-07	577.4	587.8	NA		03-07	339.9	354.6	NA	
	SD	02-07	49.2	50.8			02-07	49.9	53.9			03-07	44.9	45.6		
White	Mean SS	02-07	532.3	542.8	NA		02-07	596.7	605.2	NA		03-07	355.1	368.7	NA	
	SD	02-07	44.8	48.8			02-07	43.4	51.2			03-07	44.5	46.5		
African American	Mean SS	02-07	491.6	509.9	NA	NA	02-07	557.3	571.7	NA	NA	03-07	322.0	339.1	NA	NA
	SD	02-07	44.5	47.3			02-07	47.4	50.9			03-07	37.9	38.8		
Latino	Mean SS	02-07	517.7	529.7	NA	NA	02-07	584.5	588.9	NA	NA	03-07	354.4	360.0	NA	NA
	SD	02-07	45.8	50.0			02-07	49.8	50.6			03-07	48.4	41.9		
Asian	Mean SS	02-07	556.8	559.5	NA	NA	02-07	612.2	637.1	NA	NA	03-07	377.4	396.1	NA	NA
	SD	02-07	49.3	48.7			02-07	45.5	56.5			03-07	49.7	55.3		
Native American	Mean SS	02-07	491.1	532.6	NA	NA	02-07	541.9	585.9	NA	NA	03-07	351.0	344.5	NA	NA
	SD	02-07	48.7	45.0			02-07	60.7	64.1			03-07	52.6	38.3		
Not Low-income	Mean SS	02-07	516.4	546.1	NA		02-07	582.1	606.7	NA		03-07	347.6	366.6	NA	
	SD	02-07	49.2	47.8			02-07	48.9	50.8			03-07	45.9	46.7		
Low-income	Mean SS	02-07	497.0	513.2	NA	NA	02-07	560.9	574.5	NA	NA	03-07	325.8	342.4	NA	NA
	SD	02-07	45.8	48.3			02-07	48.2	51.6			03-07	39.4	40.6		
Not disabled	Mean SS	06-07	533.7	530.6	NA		06-07	597.4	595.1	NA		06-07	353.1	355.6	NA	
	SD	06-07	48.9	47.0			06-07	43.9	46.8			06-07	43.2	45.5		
Students with disabilities <sup>3</sup>	Mean SS	06-07	488.1	485.9	NA	NA	06-07	519.6	518.4	NA	NA	06-07	325.1	327.0	NA	NA
	SD	06-07	57.7	63.9			06-07	69.4	66.7			06-07	38.9	39.1		
All tested students	Mean SS	06-07	528.8	526.1	NA		06-07	590.8	587.8	NA		06-07	352.2	354.6	NA	
	SD	06-07	51.9	50.8			06-07	51.3	53.9			06-07	43.4	45.6		
English language learners <sup>3</sup>	Mean SS	06-07	528.5	526.5	NA	NA	06-07	584.6	578.7	NA	NA	06-07	363.3	360.0	NA	NA
	SD	06-07	51.1	49.0			06-07	51.3	54.2			06-07	45.3	47.7		
Female	Mean SS	02-07	512.5	527.3	NA		02-07	577.8	587.6	NA		03-07	340.3	354.6	NA	

Subgroup	Statistic	Grade 4					Grade 8					HS				
		Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score) <sup>1</sup>	Gain Larger or Smaller than Comparison Group
	SD	02-07	47.5	47.9			02-07	47.3	49.4			03-07	44.6	44.2		
Male	Mean SS	02-07	510.4	525.0	NA	NA	02-07	577.1	588.0	NA	NA	03-07	339.5	354.6	NA	NA
	SD	02-07	50.8	53.4			02-07	52.4	57.9			03-07	45.3	47.1		

Table reads: In 2002, the mean scale score on the state 4<sup>th</sup> grade math test was 532.3 for white students and 491.6 for African American students. In 2007, the mean scale score in 4<sup>th</sup> grade reading was 542.8 for white students and 509.9 for African American students. Average annual percentage point gains were not calculated because the trend lines ended before 2008.

Note: The MCT scoring scale varies for different grade levels and subjects within a range of 140-775; the SATP is scored on a scale of 100-500.

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>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, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap 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 MS-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					HS				
		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	02-07	37,356	36,489	-2.3%	100.0%	02-07	33,390	37,728	13.0%	100.0%	03-07	28,404	30,593	7.7%	100.0%
	Math	02-07	37,426	36,465	-2.6%	100.0%	02-07	33,251	37,643	13.2%	100.0%	03-07	26,481	29,273	10.5%	100.0%
White	Reading	02-07	17,475	17,152	-1.8%	47.0%	02-07	16,475	17,363	5.4%	46.0%	03-07	14,674	14,935	1.8%	48.8%
	Math	02-07	17,532	17,120	-2.3%	46.9%	02-07	16,399	17,316	5.6%	46.0%	03-07	13,703	14,488	5.7%	49.5%
African American	Reading	02-07	18,873	18,331	-2.9%	50.2%	02-07	15,817	19,531	23.5%	51.8%	03-07	13,284	14,982	12.8%	49.0%
	Math	02-07	18,881	18,339	-2.9%	50.3%	02-07	15,748	19,495	23.8%	51.8%	03-07	12,313	14,111	14.6%	48.2%
Latino	Reading	02-07	285	609	113.7%	1.7%	02-07	255	<b>483</b>	89.4%	1.3%	03-07	175	<b>348</b>	98.9%	1.1%
	Math	02-07	290	609	110.0%	1.7%	02-07	257	<b>483</b>	87.9%	1.3%	03-07	174	<b>328</b>	88.5%	1.1%
Asian	Reading	02-07	230	<b>312</b>	35.7%	0.9%	02-07	214	<b>295</b>	37.9%	0.8%	03-07	229	<b>266</b>	16.2%	0.9%
	Math	02-07	231	<b>312</b>	35.1%	0.9%	02-07	216	<b>294</b>	36.1%	0.8%	03-07	252	<b>298</b>	18.3%	1.0%
Native American	Reading	02-07	220	<b>85</b>	-61.4%	0.2%	02-07	252	<b>56</b>	-77.8%	0.1%	03-07	41	<b>62</b>	51.2%	0.2%
	Math	02-07	220	<b>85</b>	-61.4%	0.2%	02-07	252	<b>55</b>	-78.2%	0.1%	03-07	37	<b>48</b>	29.7%	0.2%
Low-income	Reading	02-07	8,734	21,544	146.7%	59.0%	02-07	6,300	21,407	239.8%	56.7%	03-07	10,033	14,741	46.9%	48.2%
	Math	02-07	8,750	21,552	146.3%	59.1%	02-07	6,264	21,351	240.9%	56.7%	03-07	9,319	13,961	49.8%	47.7%
Students w/ disabilities	Reading	06-07	3,799	3,656	-3.8%	10.0%	06-07	3,175	3,568	12.4%	9.5%	06-07	1,072	1,164	8.6%	3.8%
	Math	06-07	3,879	3,679	-5.2%	10.1%	06-07	3,132	3,549	13.3%	9.4%	06-07	944	1,042	10.4%	3.6%
English language learners	Reading	06-07	305	<b>319</b>	4.6%	0.9%	06-07	151	<b>176</b>	16.6%	0.5%	06-07	94	<b>127</b>	35.1%	0.4%
	Math	06-07	306	<b>319</b>	4.2%	0.9%	06-07	152	<b>175</b>	15.1%	0.5%	06-07	93	<b>114</b>	22.6%	0.4%
Female	Reading	02-07	18,663	17,863	-4.3%	49.0%	02-07	17,177	18,686	8.8%	49.5%	03-07	14,932	16,232	8.7%	53.1%
	Math	02-07	18,657	17,850	-4.3%	49.0%	02-07	17,108	18,649	9.0%	49.5%	03-07	14,049	15,552	10.7%	53.1%
Male	Reading	02-07	18,583	18,626	0.2%	51.0%	02-07	16,061	19,042	18.6%	50.5%	03-07	13,471	14,361	6.6%	46.9%
	Math	02-07	18,657	18,615	-0.2%	51.0%	02-07	15,993	18,994	18.8%	50.5%	03-07	12,430	13,721	10.4%	46.9%

Table reads: In 2002, 17,475 students in the white subgroup took the state 4<sup>th</sup> grade reading test. By 2007, the number of white test-takers had fallen to 17,152 students, a decrease of 1.8%. In 2007, the white subgroup made up 47.0% of the 36,489 4<sup>th</sup> 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.