Subgroup Achievement and Gap Trends — Oklahoma

K-12 enrollment — 641,671

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 No Child Left Behind. In the Document Library, look for the most recent report on student achievement since 2002. 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.

Nearly all major student groups in Oklahoma showed a clear trend of gains in grade 4 math at all achievement levels. Gains were made in math, except at the advanced level. A clear trend of narrowing gaps was also evident for all major groups in reading at three grade levels and in math at grades 4 and 8. (Too few years of data were available to determine trends in high school math.)

Subgroup trends by achievement level at grade 4

- Gains for most subgroups: All major subgroups in the state made gains in grade 4 math at all three achievement levels—basic-and-above, proficient-and-above, and advanced. In reading, all groups made gains in grade 4 at the basic and proficient levels but declines at the advanced level.

Gap trends at three grade levels

- Narrowing gaps: Gaps in percentages proficient narrowed across the board for all subgroups at the elementary, middle, and high school levels in reading and at the elementary and middle school levels in math.

Data notes

- Limited data: Trends for subgroups are limited to 2005–2008. Average (mean) test score data for subgroups is limited to 2006–2008. Trends could not be determined at the high school level because a new test was implemented in 2007.

- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Asian, Native American, and low-income students. 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 grades in reading (4, 8, and the high school grade tested for NCLB), and two grades in math (4 and 8).

Data Limitations

Years of comparable percentage proficient data	2002–2008, grades 5, 8 2005–2008, grades 3, 4 2006–2008, grades 6, 7 2003–2008, English II exam, high school 2007–2008, Algebra I exam, high school
Years of comparable mean scale score data	Statewide (all students tested) data available for: 2005–2008, grade 4 2002–2008, grade 8 2003–2008, English II exam, high school 2007–2008, Algebra I exam, high school
Disaggregated data for all subgroups and comparison groups	Percentages proficient not available for some subgroups for certain years Percentage proficient data not available until 2008 for students who are *not* low-income or English language learners (ELLs), so the low-income and ELL subgroups are compared with all tested students in the state Data broken down by achievement level for subgroups are available only for 2005 and 2008, and not for 2006 or 2007. Disaggregated scale score data for grades 3-8 not available until 2006; only subgroup data available for high school students is for males and females Mean scale score data for students with disabilities and English language learners not available in 2006

Numbers of test-takers by subgroup	Not available until 2006 for most student subgroups, not available until 2007 for students with disabilities and English language learners
Other data limitations	Disaggregated achievement level data (i.e., Unsatisfactory, Limited, Satisfactory, Advanced) not available for 2002.

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	Oklahoma Core Curriculum Tests (OCCT) End-of-Instruction Tests (EOI) in English II and Algebra I (high school) Oklahoma Alternate Assessment Portfolio
Grades tested for NCLB accountability	3–8 and high school
State labels for achievement levels	OK uses four achievement levels: Unsatisfactory, Limited Knowledge, Satisfactory, and Advanced. For our analyses we treated Limited Knowledge as Basic, Satisfactory as Proficient, and Advanced as Advanced.
High school NCLB test also used as an exit exam?	Not currently, but EOI exams are being phased in as a graduation requirement for the class of 2012
First year test used	2002: English II EOI exam 2001: Grades 5, 8 (new standard setting) 2005: Grades 3, 4 2006: Grades 6, 7 2007: Algebra I EOI exam (previously was 2003)
Time of test administration	Spring (OCCT) Winter and spring (EOI)
Major changes in testing system (2002–present)	2004-05: Norm-referenced SAT-9 tests phased out 2004-05 and 2005-06: OCCT criterion-reference tests field-tested and implemented 2006-07: Algebra I EOI test recalibrated and realigned to new standards

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 OK-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				8%	5%	4%	4%	-1.3
Proficient and Above				83%	86%	90%	92%	3.0
Basic and Above				95%	95%	97%	98%	1.0
White								
Advanced				11%	NA	NA	2%	-3.0
Proficient and Above				88%	90%	93%	91%	1.0
Basic and Above				97%	NA	NA	95%	-0.7
African American								
Advanced				3%	NA	NA	2%	-0.3
Proficient and Above				69%	76%	82%	86%	5.7
Basic and Above				91%	NA	NA	97%	2.0
Latino								
Advanced				3%	NA	NA	2%	-0.3
Proficient and Above				72%	76%	80%	88%	5.3
Basic and Above				91%	NA	NA	98%	2.3
Asian								
Advanced				12%	NA	NA	8%	-1.3
Proficient and Above				88%	94%	92%	95%	2.3
Basic and Above				96%	NA	NA	98%	0.7
Native American								
Advanced				6%	NA	NA	3%	-1.0
Proficient and Above				83%	85%	90%	92%	3.0
Basic and Above				96%	NA	NA	99%	1.0

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test decreased from 11% in 2005 to 2% in 2008. During this period, the average yearly loss in the percentage advanced in reading for white 4th graders was 3.0 percentage points per year.

[1]Averages are subject to rounding error.

[2]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 OK-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				8%	5%	4%	4%	-1.3
Proficient and Above				83%	86%	90%	92%	3.0
Basic and Above				95%	95%	97%	98%	1.0
Low-income students								
Advanced				4%	NA	NA	2%	-0.7
Proficient and Above				77%	80%	86%	89%	4.0
Basic and Above				93%	NA	NA	98%	1.7
Students with disabilities[3]								
Advanced				2%	1%	NA	2%	0.5
Proficient and Above				46%	49%	65%	77%	14.0
Basic and Above				79%	75%	NA	94%	9.5
English language learners[3]								
Advanced				2%	1%	NA	1%	0.0
Proficient and Above				62%	68%	76%	81%	6.5
Basic and Above				88%	87%	NA	96%	4.5
Female								
Advanced				9%	NA	NA	4%	-1.7
Proficient and Above				86%	89%	92%	93%	2.3
Basic and Above				96%	NA	NA	98%	0.7
Male								
Advanced				8%	NA	NA	4%	-1.3
Proficient and Above				81%	84%	88%	91%	3.3
Basic and Above				94%	NA	NA	98%	1.3

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test decreased from 4% in 2005 to 2% in 2008. During this period, the average yearly loss in the percentage advanced in reading for low-income 4th graders was 0.7 percentage points per year.

[1]Averages are subject to rounding error.

[2]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.

[3]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 OK-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				16%	18%	19%	19%	1.0
Proficient and Above				75%	79%	82%	83%	2.7
Basic and Above				96%	95%	98%	98%	0.7
White								
Advanced				20%	NA	NA	23%	1.0
Proficient and Above				81%	85%	86%	87%	2.0
Basic and Above				98%	NA	NA	98%	0.0
African American								
Advanced				6%	NA	NA	9%	1.0
Proficient and Above				54%	62%	67%	67%	4.3
Basic and Above				90%	NA	NA	94%	1.3
Latino								
Advanced				9%	NA	NA	13%	1.3
Proficient and Above				66%	70%	74%	75%	3.0
Basic and Above				95%	NA	NA	97%	0.7
Asian								
Advanced				27%	NA	NA	40%	4.3
Proficient and Above				84%	90%	91%	91%	2.3
Basic and Above				98%	NA	NA	100%	0.7
Native American								
Advanced				12%	NA	NA	16%	1.3
Proficient and Above				73%	77%	80%	82%	3.0
Basic and Above				96%	NA	NA	98%	0.7

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 20% in 2005 to 23% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 1.0 percentage points per year.

[1]Averages are subject to rounding error.

[2]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 OK-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				16%	18%	19%	19%	1.0
Proficient and Above				75%	79%	82%	83%	2.7
Basic and Above				96%	95%	98%	98%	0.7
Low-income students								
Advanced				9%	NA	NA	12%	1.0
Proficient and Above				66%	72%	76%	77%	3.7
Basic and Above				94%	NA	NA	97%	1.0
Students with disabilities[3]								
Advanced				5%	5%	NA	10%	2.5
Proficient and Above				40%	46%	58%	65%	9.5
Basic and Above				82%	79%	NA	93%	7.0
English language learners[3]								
Advanced				6%	7%	NA	10%	1.5
Proficient and Above				57%	64%	71%	68%	2.0
Basic and Above				91%	91%	NA	95%	2.0
Female								
Advanced				14%	NA	NA	17%	1.0
Proficient and Above				75%	79%	81%	82%	2.3
Basic and Above				96%	NA	NA	98%	0.7
Male								
Advanced				17%	NA	NA	21%	1.3
Proficient and Above				74%	79%	82%	84%	3.3
Basic and Above				95%	NA	NA	98%	1.0

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 9% in 2005 to 12% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 1.0 percentage points per year.

[1]Averages are subject to rounding error.

[2]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.

[3]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 OK-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.

	Grade 4					Grade 8					English II EOI				
Subgroup	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%	92%	3.0		03-08	71%	83%	2.4		03-08	62%	75%	2.6	
White	05-08	88%	91%	1.0		05-08	79%	87%	2.7		05-08	68%	81%	4.3	
African American	05-08	69%	86%	5.7	L	05-08	52%	68%	5.3	L	05-08	40%	57%	5.7	L
Latino	05-08	72%	88%	5.3	L	05-08	57%	67%	3.3	L	05-08	44%	61%	5.7	L
Asian	05-08	88%	95%	2.3	L	05-08	80%	87%	2.3	S	05-08	67%	83%	5.3	L
Native American	05-08	83%	92%	3.0	L	05-08	69%	82%	4.3	L	05-08	57%	72%	5.0	L
All tested students	05-08	83%	92%	3.0		05-08	73%	83%	3.3		05-08	61%	75%	4.7	
Low-income	05-08	77%	89%	4.0	L	05-08	61%	75%	4.7	L	05-08	47%	65%	6.0	L
Not disabled	06-08	93%	95%	1.0		06-08	84%	87%	1.5		06-08	72%	79%	3.5	
Students with disabilities[3]	06-08	49%	77%	14.0	L	06-08	27%	52%	12.5	L	06-08	17%	35%	9.0	L
All tested students	06-08	86%	92%	3.0		06-08	75%	83%	4.0		06-08	64%	75%	5.5	
English language learners[3]	06-08	68%	81%	6.5	L	06-08	41%	47%	3.0	S	06-08	30%	40%	5.0	S
Female	05-08	86%	93%	2.3		05-08	77%	83%	2.0		05-08	66%	80%	4.7	
Male	05-08	81%	91%	3.3	L	05-08	68%	82%	4.7	L	05-08	57%	70%	4.3	S

Table reads: In 2005, 88% of white 4th graders and 69% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 91% of white 4th graders and 86% of African American 4th graders scored at the proficient level in reading. Between 2005 and 2008, the percentage proficient increased at

an average rate of 1.0 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.

[1]Numbers in these columns are subject to rounding error.

[2]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.

[3]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 OK-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.

	Grade 4					Grade 8					Algebra I EOI				
Subgroup	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	75%	83%	2.7		03-08	65%	82%	3.4		07-08	72%	77%	NA	
White	05-08	81%	87%	2.0		05-08	76%	86%	3.3		07-08	78%	81%	NA	
African American	05-08	54%	67%	4.3	L	05-08	47%	69%	7.3	L	07-08	50%	58%	NA	NA
Latino	05-08	66%	75%	3.0	L	05-08	58%	74%	5.3	L	07-08	58%	67%	NA	NA
Asian	05-08	84%	91%	2.3	L	05-08	83%	92%	3.0	S	07-08	88%	91%	NA	NA
Native American	05-08	73%	82%	3.0	L	05-08	65%	78%	4.3	L	07-08	68%	71%	NA	NA
All tested students	05-08	75%	83%	2.7		05-08	69%	82%	4.3		07-08	72%	77%	NA	
Low-income	05-08	66%	77%	3.7	L	05-08	59%	75%	5.3	L	07-08	61%	67%	NA	NA
Not disabled	06-08	86%	86%	0.0		06-08	80%	85%	2.5		07-08	76%	79%	NA	
Students with disabilities[3]	06-08	46%	65%	9.5	L	06-08	29%	54%	12.5	L	07-08	31%	44%	NA	NA
All tested students	06-08	79%	83%	2.0		06-08	72%	82%	5.0		07-08	72%	77%	NA	
English language learners[3]	06-08	64%	68%	2.0	E	06-08	52%	62%	5.0	E	07-08	49%	53%	NA	NA
Female	05-08	75%	82%	2.3		05-08	69%	82%	4.3		07-08	NA	78%	NA	
Male	05-08	74%	84%	3.3	L	05-08	69%	82%	4.3	E	07-08	NA	75%	NA	NA

Table reads: In 2005, 81% of white 4th graders and 54% of African American 4th graders scored at the proficient level on the state math test. In 2008, 87% of white 4th graders and 67% 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 2.0 percentage points per year for white students and 4.3 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.

[1]Numbers in these columns are subject to rounding error.

[2]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.

[3]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 OK-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.

		Grade 4					Grade 8					English II EOI				
Subgroup	Statistic	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	770.1	781.5	5.7		06-08	743.4	753.8	5.2		03-08	703.7	736.0	6.5	
	SD	06-08	79.6	63.9			06-08	80.7	64.3			03-08	71.7	71.3		
White	Mean SS	06-08	782.5	791.2	4.4		06-08	757.1	764.8	3.9		03-08	NA	NA	NA	
	SD	06-08	76.4	63.0			06-08	77.5	61.2			03-08	NA	NA		
African American	Mean SS	06-08	736.9	757.4	10.3	L	06-08	703.6	724.4	10.4	L	03-08	NA	NA	NA	NA
	SD	06-08	81.7	63.4			06-08	81.6	65.3			03-08	NA	NA		
Latino	Mean SS	06-08	741.3	758.8	8.8	L	06-08	712.0	722.7	5.4	L	03-08	NA	NA	NA	NA
	SD	06-08	82.5	62.2			06-08	82.9	68.4			03-08	NA	NA		
Asian	Mean SS	06-08	798.1	798.6	0.3	S	06-08	773.2	767.3	-3.0	S	03-08	NA	NA	NA	NA
	SD	06-08	71.7	64.4			06-08	84.5	66.7			03-08	NA	NA		
Native American	Mean SS	06-08	764.1	777.5	6.7	L	06-08	734.0	749.4	7.7	L	03-08	NA	NA	NA	NA
	SD	06-08	77.2	60.4			06-08	76.1	60.6			03-08	NA	NA		
Not Low-income	Mean SS	06-08	794.7	799.9	2.6		06-08	765.5	770.1	2.3		03-08	NA	NA	NA	
	SD	06-08	70.6	61.8			06-08	75.0	60.3			03-08	NA	NA		
Low-income	Mean SS	06-08	750.3	766.8	8.3	L	06-08	719.9	736.0	8.1	L	03-08	NA	NA	NA	NA
	SD	06-08	80.9	61.7			06-08	79.9	63.7			03-08	NA	NA		
Not disabled	Mean SS	07-08	785.1	785.6	NA		07-08	760.0	759.1	NA		07-08	NA	NA	NA	
	SD	07-08	62.5	61.3			07-08	71.3	60.9			07-08	NA	NA		
Students with disabilities[3]	Mean SS	07-08	715.1	740.6	NA	NA	07-08	667.4	697.5	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	91.8	74.7			07-08	90.4	71.7			07-08	NA	NA		
Not ELLs	Mean SS	07-08	780.4	783.9	NA		07-08	753.3	756.5	NA		07-08	NA	NA	NA	
	SD	07-08	68.6	63.2			07-08	76.9	62.8			07-08	NA	NA		
English language learners[3]	Mean SS	07-08	733.5	740.8	NA	NA	07-08	681.4	691.6	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	74.7	62.9			07-08	90.4	68.1			07-08	NA	NA		
Female	Mean SS	06-08	778.3	785.1	3.4		06-08	752.0	756.4	2.2		03-08	715.3	746.8	6.3	
	SD	06-08	73.9	62.0			06-08	75.8	62.9			03-08	66.2	67.7		

		Grade 4					Grade 8					English II EOI				
Subgroup	Statistic	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	762.4	778.0	7.8	L	06-08	735.3	751.4	8.1	L	03-08	692.7	725.2	6.5	L
	SD	06-08	83.9	65.6			06-08	84.4	65.5			03-08	74.6	73.1		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 782.5 for white students and 736.9 for African American students. In 2008, the mean scale score in 4th grade reading was 791.2 for white students and 757.4 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 4.4 points for white students and 10.3 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The OCCT (grades 3-8) is scored on a scale of 400-900. The EOI English II test (high school) is scored on a scale of 440-999.

[1]Numbers in these columns are subject to rounding error.

[2]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.

[3]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 OK-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.

		Grade 4					Grade 8					Algebra 1 EOI				
Subgroup	Statistic	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	751.9	763.1	5.6		06-08	733.5	753.9	10.2		07-08	718.2	716.3	-1.9	
	SD	06-08	84.9	76.3			06-08	88.2	77.0			07-08	71.3	65.2		
White	Mean SS	06-08	765.9	774.2	4.2		06-08	746.6	764.9	9.2		07-08	NA	NA	NA	
	SD	06-08	82.0	73.7			06-08	84.3	72.6			07-08	NA	NA		
African American	Mean SS	06-08	709.7	727.7	9.0	L	06-08	689.7	719.9	15.1	L	07-08	NA	NA	NA	NA
	SD	06-08	84.0	79.1			06-08	94.0	84.8			07-08	NA	NA		
Latino	Mean SS	06-08	726.0	743.0	8.5	L	06-08	712.9	734.2	10.7	L	07-08	NA	NA	NA	NA
	SD	06-08	85.5	77.4			06-08	88.4	79.9			07-08	NA	NA		
Asian	Mean SS	06-08	793.2	799.8	3.3	S	06-08	787.3	807.0	9.9	L	07-08	NA	NA	NA	NA
	SD	06-08	84.9	82.2			06-08	86.7	80.2			07-08	NA	NA		
Native American	Mean SS	06-08	743.9	758.4	7.3	L	06-08	722.2	743.2	10.5	L	07-08	NA	NA	NA	NA
	SD	06-08	81.2	71.9			06-08	84.2	73.3			07-08	NA	NA		
Not Low-income	Mean SS	06-08	778.6	785.3	3.4		06-08	755.9	771.3	7.7		07-08	NA	NA	NA	
	SD	06-08	78.7	72.4			06-08	81.9	73.1			07-08	NA	NA		
Low-income	Mean SS	06-08	730.5	745.5	7.5	L	06-08	709.8	734.8	12.5	L	07-08	NA	NA	NA	NA
	SD	06-08	83.6	74.7			06-08	88.5	76.5			07-08	NA	NA		
Not disabled	Mean SS	07-08	765.6	767.5	NA		07-08	753.7	759.5	NA		07-08	NA	NA	NA	
	SD	07-08	72.0	74.1			07-08	75.0	72.8			07-08	NA	NA		
Students with disabilities[3]	Mean SS	07-08	704.1	723.3	NA	NA	07-08	669.9	691.1	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	90.1	84.6			07-08	97.4	93.3			07-08	NA	NA		
Not ELLs	Mean SS	07-08	760.6	765.1	NA		07-08	747.3	755.7	NA		07-08	NA	NA	NA	
	SD	07-08	76.3	75.6			07-08	80.5	76.1			07-08	NA	NA		
English language learners[3]	Mean SS	07-08	728.7	731.0	NA	NA	07-08	700.9	713.1	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	78.4	80.0			07-08	90.0	86.2			07-08	NA	NA		
Female	Mean SS	06-08	749.3	759.0	4.9		06-08	733.4	752.3	9.5		07-08	718.8	717.8	NA	

		Grade 4					Grade 8					Algebra 1 EOI				
Subgroup	Statistic	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	80.9	74.9			06-08	83.7	73.7			07-08	68.4	61.1		
Male	Mean SS	06-08	754.4	767.2	6.4	L	06-08	733.6	755.7	11.1	L	07-08	717.6	714.8	NA	NA
	SD	06-08	88.4	77.4			06-08	92.3	80.0			07-08	73.9	69.0		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 765.9 for white students and 709.7 for African American students. In 2008, the mean scale score in 4th grade math was 774.2 for white students and 727.7 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 4.2 points for white students and 9.0 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The OCCT (grades 3-8) is scored on a scale of 400-900. The EOI Algebra I test (high school) is scored on a scale of 450-999.

[1]Numbers in these columns are subject to rounding error.

[2]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.

[3]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 OK-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					English II EOI/Algebra I EOI				
		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	43,442	42,786	-1.5%	100.0%	06-08	46,327	41,334	-10.8%	100.0%	03-08	34,996	33,236	-5.0%	100.0%
	Math	06-08	43,613	43,253	-0.8%	100.0%	06-08	46,408	41,188	-11.2%	100.0%	07-08	41,831	36,027	-13.9%	100.0%
White	Reading	06-08	24,714	24,334	-1.5%	56.9%	06-08	27,240	24,083	-11.6%	58.3%	NA	NA	NA	NA	NA
	Math	06-08	24,748	24,533	-0.9%	56.7%	06-08	27,243	23,934	-12.1%	58.1%	NA	NA	NA	NA	NA
African American	Reading	06-08	4,740	4,540	-4.2%	10.6%	06-08	4,876	4,182	-14.2%	10.1%	NA	NA	NA	NA	NA
	Math	06-08	4,736	4,593	-3.0%	10.6%	06-08	4,874	4,192	-14.0%	10.2%	NA	NA	NA	NA	NA
Latino	Reading	06-08	4,090	4,397	7.5%	10.3%	06-08	3,645	3,653	0.2%	8.8%	NA	NA	NA	NA	NA
	Math	06-08	4,186	4,501	7.5%	10.4%	06-08	3,708	3,683	-0.7%	8.9%	NA	NA	NA	NA	NA
Asian	Reading	06-08	744	763	2.6%	1.8%	06-08	748	766	2.4%	1.9%	NA	NA	NA	NA	NA
	Math	06-08	760	791	4.1%	1.8%	06-08	764	782	2.4%	1.9%	NA	NA	NA	NA	NA
Native American	Reading	06-08	8,312	7,951	-4.3%	18.6%	06-08	8,703	7,481	-14.0%	18.1%	NA	NA	NA	NA	NA
	Math	06-08	8,319	8,025	-3.5%	18.6%	06-08	8,696	7,441	-14.4%	18.1%	NA	NA	NA	NA	NA
Low-income	Reading	06-08	24,129	23,751	-1.6%	55.5%	06-08	22,495	19,744	-12.2%	47.8%	NA	NA	NA	NA	NA
	Math	06-08	24,232	24,107	-0.5%	55.7%	06-08	22,550	19,663	-12.8%	47.7%	NA	NA	NA	NA	NA
Students w/ disabilities	Reading	07-08	4,800	3,878	-19.2%	9.1%	07-08	4,361	3,535	-18.9%	8.6%	NA	NA	NA	NA	NA
	Math	07-08	4,978	4,262	-14.4%	9.9%	07-08	4,176	3,378	-19.1%	8.2%	NA	NA	NA	NA	NA
English language learners	Reading	07-08	2,848	2,387	-16.2%	5.6%	07-08	1,632	1,690	3.6%	4.1%	NA	NA	NA	NA	NA
	Math	07-08	2,954	2,512	-15.0%	5.8%	07-08	1,685	1,736	3.0%	4.2%	NA	NA	NA	NA	NA
Female	Reading	06-08	21,023	21,249	1.1%	49.7%	06-08	22,606	20,437	-9.6%	49.4%	03-08	17,253	16,709	-3.2%	50.3%
	Math	06-08	21,088	21,382	1.4%	49.4%	06-08	22,658	20,329	-10.3%	49.4%	07-08	20,906	17,973	-14.0%	49.9%
Male	Reading	06-08	22,382	21,505	-3.9%	50.3%	06-08	23,642	20,703	-12.4%	50.1%	03-08	17,619	16,479	-6.5%	49.6%
	Math	06-08	22,488	21,840	-2.9%	50.5%	06-08	23,671	20,667	-12.7%	50.2%	07-08	20,909	18,028	-13.8%	50.0%

Table reads: In 2006, 24,714 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 24,334 students, a decrease of 1.5%. In 2008, the white subgroup made up 56.9% of the 42,786 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.