

## Subgroup Achievement and Gap Trends — Oklahoma

*K-12 enrollment — 644,754*

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 labeled State Testing Data. In the list of results that appears, look for the most recent report on student achievement since 2002. Below the name of the report, click on the link for State Profiles and Worksheets. Scroll down the page until you reach the list of states. Click on the Worksheet link for proficiency data or scale score data for a particular state.

### Subgroup Achievement Trends and Gap Trends — Key Findings

**Summary.** Oklahoma made progress in narrowing achievement gaps for most major subgroups on the End-of-Instruction (EOI) test in Algebra I. Trends in achievement gaps could not be determined for other grades in math, or for any grades in reading, because the state changed its performance standards in 2009, making it inappropriate to compare current and previous years' test results. For the same reason, subgroup trends by achievement level at grade 8 could not be determined.

- **Achievement gap trends for subgroups.** Gaps narrowed on the EOI test in Algebra I for *Latino*, *Native American*, and *low-income* students. For the *African American* subgroup, however, the gap in Algebra I widened.
- **Notable progress.** Oklahoma made notable progress in narrowing the achievement gap in Algebra I between Native American and white students.

## 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 2007–2009, Algebra I exam, high school
Years of comparable mean scale score data	2006 through 2008 for grades 4 and 8 (new trend in 2009) 2003 through 2008 for English II EOI (new trend in 2009) 2007 through 2009 for Algebra I EOI
Disaggregated data for all subgroups and comparison groups	Percentages proficient not available for some subgroups for certain years Percentage proficient data not available in 2007 for students who are <i>not</i> low-income or English language learners (ELLs), so the low-income and ELL subgroups are compared with all tested students in the state for math analyses Achievement level data for ELLs not available for 2007 Disaggregated achievement level data (i.e., Unsatisfactory, Limited, Satisfactory, Advanced) not available for 2002. Disaggregated scale score data for grades 3-8 not available until 2006; the 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

## 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) – high school Oklahoma Alternate Assessment Portfolio Oklahoma Modified Alternate Assessment Program (OMAAP)
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?	Students beginning 9 <sup>th</sup> grade in the 2008-09 SY and thereafter, must pass 4 of 7 EOI tests in order to graduate; Algebra I and English II must be among the 4 passed.
First year test used	2001: Grades 5, 8 (new trend in 2009) 2002: English II EOI exam (new trend in 2009) 2005: Grades 3, 4 (new trend in 2009) 2006: Grades 6, 7 (new trend in 2009) 2007: Algebra I EOI exam (previously was 2003)
Time of test administration	OCCT: Spring EOI: Winter, Spring and Summer OMAAP EOI subjects – Winter, Spring and Summer
Major changes in testing system (2002–present)	2009: Performance Standards raised to align closer with NAEP for Grades 3-8 in Math and Reading 2008-09: English II End of Course test recalibrated/realigned 2006-07: Algebra I End of Course test recalibrated/realigned 2004-05: Norm-Referenced SAT-9 tests phased out; OCCT CRTs field-tested and implemented in 2004-05 and 2005-06 Proficiency percentages prior to 2003 included regular education students only (all students except Special Education students and English Language Learners)

## Achievement by Subgroup — Trends at the Middle School 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 8 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	2009	
<b>All tested students</b>									
Advanced	NA	6%	5%	8%	9%	9%	9%		NA
Proficient-and-above	77%	71%	74%	73%	75%	79%	83%		NA
Basic-and-above	NA	90%	92%	91%	91%	93%	97%		NA
<b>White</b>									
Advanced	NA	NA	NA	10%	12%	12%	11%		NA
Proficient-and-above	82%	85%	86%	79%	81%	84%	87%		NA
Basic-and-above	NA	NA	NA	94%	94%	96%	97%		NA
<b>African American</b>									
Advanced	NA	NA	NA	2%	4%	4%	3%		NA
Proficient-and-above	56%	57%	64%	52%	57%	62%	68%		NA
Basic-and-above	NA	NA	NA	79%	82%	86%	92%		NA
<b>Latino</b>									
Advanced	NA	NA	NA	3%	4%	4%	4%		NA
Proficient-and-above	61%	63%	73%	57%	60%	64%	67%		NA
Basic-and-above	NA	NA	NA	80%	83%	85%	90%		NA
<b>Asian</b>									
Advanced	NA	NA	NA	14%	18%	20%	15%		NA
Proficient-and-above	80%	87%	91%	80%	84%	87%	87%		NA
Basic-and-above	NA	NA	NA	93%	95%	96%	97%		NA
<b>Native American</b>									
Advanced	NA	NA	NA	5%	6%	6%	7%		NA
Proficient-and-above	72%	75%	79%	69%	72%	77%	82%		NA
Basic-and-above	NA	NA	NA	90%	90%	93%	98%		NA

Table reads: The percentage of white 8<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 10% in 2005 to 11% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

**Table OK-8. Percentage of grade 8 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	2009	
<b>All tested students</b>									
Advanced	NA	6%	5%	8%	9%	9%	9%		NA
Proficient-and-above	77%	71%	74%	73%	75%	79%	83%		NA
Basic-and-above	NA	90%	92%	91%	91%	93%	97%		NA
<b>Low-income students</b>									
Advanced	NA	NA	NA	3%	5%	4%	5%		NA
Proficient-and-above	66%	68%	74%	61%	65%	69%	75%		NA
Basic-and-above	NA	NA	NA	85%	87%	89%	95%		NA
<b>Students with disabilities<sup>3</sup></b>									
Advanced	NA	0%	0%	1%	1%	1%	2%		NA
Proficient-and-above	NA	21%	28%	26%	27%	39%	51%		NA
Basic-and-above	NA	53%	64%	58%	60%	71%	83%		NA
<b>English language learners<sup>3</sup></b>									
Advanced	NA	3%	1%	1%	1%	NA	1%		NA
Proficient-and-above	NA	42%	42%	40%	41%	45%	47%		NA
Basic-and-above	NA	69%	71%	69%	71%	NA	81%		NA
<b>Female</b>									
Advanced	NA	NA	NA	9%	10%	11%	10%		NA
Proficient-and-above	NA	NA	NA	77%	78%	81%	83%		NA
Basic-and-above	NA	NA	NA	93%	93%	95%	97%		NA
<b>Male</b>									
Advanced	NA	NA	NA	6%	8%	7%	8%		NA
Proficient-and-above	NA	NA	NA	68%	71%	76%	82%		NA
Basic-and-above	NA	NA	NA	87%	88%	91%	96%		NA

Table reads: The percentage of low-income 8<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 3% in 2005 to 5% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<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 2009 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 2006-2009 results.

**Table OK-9. Percentages of grade 8 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	2008	2009	
<b>All tested students</b>									
Advanced	NA	14%	17%	18%	21%	23%	25%		NA
Proficient-and-above	70%	65%	69%	69%	72%	77%	82%		NA
Basic-and-above	NA	91%	92%	90%	90%	91%	96%		NA
<b>White</b>									
Advanced	NA	NA	NA	22%	25%	28%	29%		NA
Proficient-and-above	76%	78%	82%	76%	77%	83%	86%		NA
Basic-and-above	NA	NA	NA	94%	92%	95%	97%		NA
<b>African American</b>									
Advanced	NA	NA	NA	6%	8%	9%	13%		NA
Proficient-and-above	43%	48%	NA	47%	53%	59%	69%		NA
Basic-and-above	NA	NA	NA	77%	80%	83%	91%		NA
<b>Latino</b>									
Advanced	NA	NA	NA	10%	14%	16%	18%		NA
Proficient-and-above	54%	59%	67%	58%	62%	68%	74%		NA
Basic-and-above	NA	NA	NA	84%	86%	88%	94%		NA
<b>Asian</b>									
Advanced	NA	NA	NA	41%	46%	51%	53%		NA
Proficient-and-above	80%	86%	91%	83%	87%	90%	92%		NA
Basic-and-above	NA	NA	NA	94%	95%	96%	98%		NA
<b>Native American</b>									
Advanced	NA	NA	NA	13%	15%	17%	18%		NA
Proficient-and-above	62%	65%	72%	65%	67%	75%	78%		NA
Basic-and-above	NA	NA	NA	88%	90%	91%	95%		NA

Table reads: The percentage of white 8<sup>th</sup> graders who scored at the advanced level on the state math test increased from 22% in 2005 to 29% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

**Table OK-10. Percentage of grade 8 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	2008	2009	
<b>All tested students</b>									
Advanced	NA	14%	17%	18%	21%	23%	25%		NA
Proficient-and-above	70%	65%	69%	69%	72%	77%	82%		NA
Basic-and-above	NA	91%	92%	90%	90%	91%	96%		NA
<b>Low-income students</b>									
Advanced	NA	NA	NA	10%	12%	14%	16%		NA
Proficient-and-above	57%	61%	67%	59%	62%	69%	75%		NA
Basic-and-above	NA	NA	NA	85%	86%	88%	94%		NA
<b>Students with disabilities<sup>3</sup></b>									
Advanced	NA	1%	2%	2%	3%	5%	7%		NA
Proficient-and-above	NA	18%	26%	28%	29%	43%	54%		NA
Basic-and-above	NA	64%	68%	63%	63%	70%	84%		NA
<b>English language learners<sup>3</sup></b>									
Advanced	NA	7%	7%	8%	10%	NA	11%		NA
Proficient-and-above	NA	43%	46%	48%	52%	57%	62%		NA
Basic-and-above	NA	81%	83%	78%	79%	NA	90%		NA
<b>Female</b>									
Advanced	NA	NA	NA	16%	19%	21%	23%		NA
Proficient-and-above	NA	NA	NA	69%	73%	77%	82%		NA
Basic-and-above	NA	NA	NA	90%	91%	92%	96%		NA
<b>Male</b>									
Advanced	NA	NA	NA	19%	22%	25%	26%		NA
Proficient-and-above	NA	NA	NA	69%	71%	78%	82%		NA
Basic-and-above	NA	NA	NA	89%	89%	92%	96%		NA

Table reads: The percentage of low-income 8<sup>th</sup> graders who scored at the advanced level on the state math test increased from 10% in 2005 to 16% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<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 2009 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 2006-2009 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.

Subgroup	Grade 4					Grade 8					EOI English II				
	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	05-08	83%	92%	NA		02-08	77%	83%	NA		03-08	62%	75%	NA	
White	05-08	88%	91%	NA		02-08	82%	87%	NA		03-08	69%	81%	NA	
African American	05-08	69%	86%	NA	NA	02-08	56%	68%	NA	NA	03-08	37%	57%	NA	NA
Latino	05-08	72%	88%	NA	NA	02-08	61%	67%	NA	NA	03-08	44%	61%	NA	NA
Asian	05-08	88%	95%	NA	NA	02-08	80%	87%	NA	NA	03-08	69%	83%	NA	NA
Native American	05-08	83%	92%	NA	NA	02-08	72%	82%	NA	NA	03-08	55%	72%	NA	NA
Not low-income	05-08	91%	97%	NA		05-08	82%	89%	NA		05-08	70%	81%	NA	
Low-income	05-08	77%	89%	NA	NA	05-08	61%	75%	NA	NA	05-08	47%	65%	NA	NA
Not disabled	06-08	93%	95%	NA		06-08	84%	87%	NA		06-08	72%	79%	NA	
Students with disabilities <sup>3</sup>	06-08	49%	76%	NA	NA	06-08	27%	51%	NA	NA	06-08	17%	36%	NA	NA
Not ELLs	06-08	86%	93%	NA		06-08	76%	84%	NA		06-08	64%	75%	NA	
English language learners <sup>3</sup>	06-08	68%	81%	NA	NA	06-08	41%	47%	NA	NA	06-08	30%	40%	NA	NA
Female	05-08	86%	93%	NA		05-08	77%	83%	NA		05-08	66%	80%	NA	
Male	05-08	81%	91%	NA	NA	05-08	68%	82%	NA	NA	05-08	57%	70%	NA	NA

Table reads: In 2005, 88% of white 4<sup>th</sup> graders and 69% of African American 4<sup>th</sup> graders scored at the proficient level on the state reading test. In 2008, 91% 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 2009.

<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 2009 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 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.

Subgroup	Grade 4					Grade 8					EOI Algebra I				
	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	05-08	75%	83%	NA		02-08	70%	82%	NA		07-09	72%	71%	-0.5	
White	05-08	81%	87%	NA		02-08	76%	86%	NA		07-09	78%	77%	-0.5	
African American	05-08	54%	67%	NA	NA	02-08	43%	69%	NA	NA	07-09	50%	48%	-1.0	S
Latino	05-08	66%	75%	NA	NA	02-08	54%	74%	NA	NA	07-09	58%	61%	1.5	L
Asian	05-08	84%	91%	NA	NA	02-08	80%	92%	NA	NA	07-09	88%	86%	-1.0	S
Native American	05-08	73%	82%	NA	NA	02-08	62%	78%	NA	NA	07-09	68%	77%	4.5	L
All tested students	05-08	75%	83%	NA		02-08	70%	82%	NA		07-09	72%	71%	-0.5	
Low-income	05-08	66%	77%	NA	NA	02-08	57%	75%	NA	NA	07-09	61%	67%	3.0	L
Not disabled	06-08	86%	86%	NA		06-08	80%	85%	NA		07-09	76%	73%	-1.5	
Students with disabilities <sup>3</sup>	06-08	46%	65%	NA	NA	06-08	29%	54%	NA	NA	07-09	32%	42%	5.0	L
All tested students	06-08	79%	83%	NA		06-08	72%	82%	NA		07-09	72%	71%	-0.5	
English language learners <sup>3</sup>	06-08	64%	68%	NA	NA	06-08	52%	62%	NA	NA	07-09	49%	65%	8.0	L
Female	05-08	75%	82%	NA		05-08	69%	82%	NA		07-09	73%	75%	1.0	
Male	05-08	74%	84%	NA	NA	05-08	69%	82%	NA	NA	07-09	71%	66%	-2.5	S

Table reads: In 2005, 81% of white 4<sup>th</sup> graders and 54% of African American 4<sup>th</sup> graders scored at the proficient level on the state math test. In 2008, 87% of white 4<sup>th</sup> graders and 67% 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 2009.

<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 2009 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 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. MSS = mean scale score. SD = standard deviation. 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					EOI English II				
		Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group
All tested students	MSS	06-08	770.1	781.5	NA		06-08	743.4	753.8	NA		03-08	703.7	736.0	NA	
	SD	06-08	79.6	63.9			06-08	80.7	64.3			03-08	71.7	71.3		
White	MSS	06-08	782.5	791.2	NA		06-08	757.1	764.8	NA		03-08	NA	NA	NA	
	SD	06-08	76.4	63.0			06-08	77.5	61.2			03-08	NA	NA		
African American	MSS	06-08	736.9	757.4	NA	NA	06-08	703.6	724.4	NA	NA	03-08	NA	NA	NA	NA
	SD	06-08	81.7	63.4			06-08	81.6	65.3			03-08	NA	NA		
Latino	MSS	06-08	741.3	758.8	NA	NA	06-08	712.0	722.7	NA	NA	03-08	NA	NA	NA	NA
	SD	06-08	82.5	62.2			06-08	82.9	68.4			03-08	NA	NA		
Asian	MSS	06-08	798.1	798.6	NA	NA	06-08	773.2	767.3	NA	NA	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	MSS	06-08	764.1	777.5	NA	NA	06-08	734.0	749.4	NA	NA	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	MSS	06-08	794.7	799.9	NA		06-08	765.5	770.1	NA		03-08	NA	NA	NA	
	SD	06-08	70.6	61.8			06-08	75.0	60.3			03-08	NA	NA		
Low-income	MSS	06-08	750.3	766.8	NA	NA	06-08	719.9	736.0	NA	NA	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	MSS	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 <sup>3</sup>	MSS	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	MSS	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 <sup>3</sup>	MSS	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	MSS	06-08	778.3	785.1	NA		06-08	752.0	756.4	NA		03-08	715.3	746.8	NA	
	SD	06-08	73.9	62.0			06-08	75.8	62.9			03-08	66.2	67.7		
Male	MSS	06-08	762.4	778.0	NA	NA	06-08	735.3	751.4	NA	NA	03-08	692.7	725.2	NA	NA
	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 4<sup>th</sup> grade reading test was 782.5 for white students and 736.9 for African American students. In 2008, the mean scale score in 4<sup>th</sup> grade reading was 791.2 for white students and 757.4 for African American students. Average annual mean scale score gains were not calculated because the trend lines ended before 2009.

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.

<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 2009 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 OK-14. Achievement gap 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. MSS = mean scale score. SD = standard deviation. 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					EOI Algebra I				
		Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group
All tested students	MSS	06-08	751.9	763.1	NA		06-08	733.5	753.9	NA		07-09	718.2	725.5	3.7	
	SD	06-08	84.9	76.3			06-08	88.2	77.0			07-09	71.3	58.6		
White	MSS	06-08	765.9	774.2	NA		06-08	746.6	764.9	NA		07-09	NA	NA	NA	
	SD	06-08	82.0	73.7			06-08	84.3	72.6			07-09	NA	NA		
African American	MSS	06-08	709.7	727.7	NA	NA	06-08	689.7	719.9	NA	NA	07-09	NA	NA	NA	NA
	SD	06-08	84.0	79.1			06-08	94.0	84.8			07-09	NA	NA		
Latino	MSS	06-08	726.0	743.0	NA	NA	06-08	712.9	734.2	NA	NA	07-09	NA	NA	NA	NA
	SD	06-08	85.5	77.4			06-08	88.4	79.9			07-09	NA	NA		
Asian	MSS	06-08	793.2	799.8	NA	NA	06-08	787.3	807.0	NA	NA	07-09	NA	NA	NA	NA
	SD	06-08	84.9	82.2			06-08	86.7	80.2			07-09	NA	NA		
Native American	MSS	06-08	743.9	758.4	NA	NA	06-08	722.2	743.2	NA	NA	07-09	NA	NA	NA	NA
	SD	06-08	81.2	71.9			06-08	84.2	73.3			07-09	NA	NA		
Not low-income	MSS	06-08	778.6	785.3	NA		06-08	755.9	771.3	NA		07-09	NA	NA	NA	
	SD	06-08	78.7	72.4			06-08	81.9	73.1			07-09	NA	NA		
Low-income	MSS	06-08	730.5	745.5	NA	NA	06-08	709.8	734.8	NA	NA	07-09	NA	NA	NA	NA
	SD	06-08	83.6	74.7			06-08	88.5	76.5			07-09	NA	NA		
Not disabled	MSS	07-08	765.6	767.5	NA		07-08	753.7	759.5	NA		07-09	NA	NA	NA	
	SD	07-08	72.0	74.1			07-08	75.0	72.8			07-09	NA	NA		
Students with disabilities <sup>3</sup>	MSS	07-08	704.1	723.3	NA	NA	07-08	669.9	691.1	NA	NA	07-09	NA	NA	NA	NA
	SD	07-08	90.1	84.6			07-08	97.4	93.3			07-09	NA	NA		
Not ELLs	MSS	07-08	760.6	765.1	NA		07-08	747.3	755.7	NA		07-09	NA	NA	NA	
	SD	07-08	76.3	75.6			07-08	80.5	76.1			07-09	NA	NA		
English language learners <sup>3</sup>	MSS	07-08	728.7	731.0	NA	NA	07-08	700.9	713.1	NA	NA	07-09	NA	NA	NA	NA
	SD	07-08	78.4	80.0			07-08	90.0	86.2			07-09	NA	NA		
Female	MSS	06-08	749.3	759.0	NA		06-08	733.4	752.3	NA		07-09	718.8	725.2	3.2	
	SD	06-08	80.9	74.9			06-08	83.7	73.7			07-09	68.4	57.4		
Male	MSS	06-08	754.4	767.2	NA	NA	06-08	733.6	755.7	NA	NA	07-09	717.6	725.7	4.1	L
	SD	06-08	88.4	77.4			06-08	92.3	80.0			07-09	73.9	59.7		

Table reads: In 2006, the mean scale score on the state 4<sup>th</sup> grade math test was 765.9 for white students and 709.7 for African American students. In 2008, the mean scale score in 4<sup>th</sup> grade math was 774.2 for white students and 727.7 for African American students. Average annual mean scale score gains were not

calculated because the trend lines ended before 2009.

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.

<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 2009 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 OK-15. Numbers of test-takers

Subgroup	Subject	Grade 4					Grade 8					EOI English II/EOI Algebra I				
		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%	07-09	41,831	35,736	-14.6%	100.0%
White	Reading	06-08	24,714	24,334	-1.5%	56.9%	06-08	27,240	24,083	-11.6%	58.3%	03-08	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%	07-09	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%	03-08	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%	07-09	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%	03-08	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%	07-09	NA	NA	NA	NA
Asian	Reading	06-08	744	763	2.6%	1.8%	06-08	748	766	2.4%	1.9%	03-08	NA	NA	NA	NA
	Math	06-08	760	791	4.1%	1.8%	06-08	764	782	2.4%	1.9%	07-09	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%	03-08	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%	07-09	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%	03-08	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%	07-09	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%	07-08	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%	07-09	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%	07-08	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%	07-09	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%	07-09	20,906	17,919	-14.3%	50.1%
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%	07-09	20,909	17,817	-14.8%	49.9%

Table reads: In 2006, 24,714 students in the white subgroup took the state 4<sup>th</sup> 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 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 2009 or the most recent year with available data.

## Key Terms

*Percentage proficient (and above)* — The percentage of students in a group who score at or 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 or 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 point 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 end 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 in this profile 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.