Subgroup Achievement and Gap Trends — Tennessee

K-12 enrollment — 930,525

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 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 and Gap Trends — Key Findings

Summary. In grade 8 (the only grade in which subgroup trends were analyzed by achievement level), Tennessee showed across-the-board gains—improvements in reading and math at the *proficient-and-above,* and *advanced* levels for all racial/ethnic subgroups, low-income students, and boys and girls. (Trends were not available at the *basic* achievement level.) Progress was also made in narrowing achievement gaps between all subgroups in both subjects at grades 4, 8, and high school. Comparable data were available for 2004-2009.

Data Limitations

Years of comparable percentage proficient data	2004 through 2009
Years of comparable mean scale score data	2004 through 2009

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	Tennessee Comprehensive Assessment Program (TCAP): Achievement Test Writing Assessment TCAP Gateway Tests (high school end-of-course) TCAP-Alt (for students with disabilities)
Grades tested for NCLB accountability	3–8 (reading and math), 9 (math), 10 (reading)
State labels for achievement levels	TN uses three achievement levels: Below Proficient, Proficient, and Advanced. For our analyses we treated Proficient as Proficient and Advanced as Advanced. No TN achievement level was treated as our Basic.
High school NCLB test also used as an exit exam?	Yes
First year test used	2003–04
Time of test administration	Spring (grades 3–8 and writing) Fall, spring, and summer (high school)
Major changes in testing system (2002–present)	2005–06: AYP calculations based on grades 3–8 reading and math (previously based only on grades 3, 5, and 8) 2004–05: The TCAP became strictly criterion-referenced (concordance study completed to ensure comparability with 2003–04 data)

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 TN-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

	Reporting year								Average yearly percentage point gain[1]
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced			35%	39%	44%	48%	54%	53%	3.6
Proficient-and-above			81%	88%	90%	92%	94%	93%	2.4
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
White									
Advanced			43%	47%	52%	55%	63%	61%	3.7
Proficient-and-above			86%	91%	92%	95%	96%	95%	1.8
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
African American									
Advanced			14%	18%	23%	28%	33%	31%	3.4
Proficient-and-above			66%	78%	83%	86%	90%	86%	4.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Latino									
Advanced			24%	33%	30%	33%	42%	40%	3.2
Proficient-and-above			66%	88%	81%	85%	88%	87%	4.2
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Asian									
Advanced			46%	60%	58%	66%	71%	69%	4.6
Proficient-and-above			89%	96%	96%	96%	97%	94%	1.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Native American[2]									
Advanced			31%	33%	38%	43%	60%	52%	4.1
Proficient-and-above			81%	85%	90%	95%	96%	91%	2.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 8th graders who scored at the advanced level on the state reading test increased from 43% in 2004 to 61% in 2009. During this period, the average yearly gain in the percentage advanced in reading for white 8th graders was 3.7 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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table TN-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[1]
	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced			35%	39%	44%	48%	54%	53%	3.6
Proficient-and-above			81%	88%	90%	92%	94%	93%	2.4
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Low-income students									
Advanced			18%	23%	27%	32%	38%	37%	3.9
Proficient-and-above			69%	81%	84%	87%	91%	88%	3.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Students with disabilities[3]									
Advanced			5%	8%	12%	9%	12%	12%	0.1
Proficient-and-above			38%	57%	64%	70%	77%	72%	2.7
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
English language learners[3]									
Advanced			3%	9%	6%	3%	8%	5%	-0.2
Proficient-and-above			36%	41%	58%	57%	66%	61%	0.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Female									
Advanced			40%	44%	49%	53%	60%	58%	3.7
Proficient-and-above			86%	91%	93%	94%	96%	96%	1.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Male									
Advanced			30%	34%	39%	42%	49%	48%	3.6
Proficient-and-above			75%	83%	86%	89%	92%	90%	2.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state reading test increased from 18% in 2004 to 37% in 2009. During this period, the average yearly gain in the percentage advanced in reading for low-income 8th graders was 3.9 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 2009 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 2006-2009 results.

Table TN-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

	Reporting year								Average yearly percentage point gain[1]
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced			33%	36%	36%	39%	41%	42%	1.9
Proficient-and-above			83%	87%	85%	88%	90%	90%	1.4
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
White									
Advanced			40%	43%	43%	46%	49%	50%	1.9
Proficient-and-above			88%	92%	89%	91%	93%	93%	0.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
African American									
Advanced			12%	16%	16%	19%	21%	22%	1.9
Proficient-and-above			68%	76%	74%	79%	82%	83%	2.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Latino									
Advanced			24%	24%	25%	28%	30%	31%	1.5
Proficient-and-above			75%	80%	77%	82%	87%	86%	2.3
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Asian									
Advanced			55%	63%	64%	68%	66%	67%	2.4
Proficient-and-above			92%	96%	96%	96%	96%	96%	0.8
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Native American[2]									
Advanced			30%	33%	31%	36%	36%	35%	1.0
Proficient-and-above			81%	89%	86%	88%	92%	96%	3.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 8th graders who scored at the advanced level on the state math test increased from 40% in 2004 to 50% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8th graders was 1.9 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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table TN-10. Percentage of grade 8 students by demographic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

	Reporting year								Average yearly percentage point gain[1]
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced			33%	36%	36%	39%	41%	42%	1.9
Proficient-and-above			83%	87%	85%	88%	90%	90%	1.4
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Low-income students									
Advanced			17%	20%	21%	24%	26%	27%	2.0
Proficient-and-above			73%	80%	77%	81%	84%	85%	2.5
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Students with disabilities[3]									
Advanced			5%	10%	10%	5%	6%	7%	-0.8
Proficient-and-above			39%	51%	47%	51%	58%	61%	4.5
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
English language learners[3]									
Advanced			11%	12%	11%	11%	13%	10%	-0.3
Proficient-and-above			59%	63%	59%	59%	71%	70%	3.6
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Female									
Advanced			32%	36%	36%	40%	43%	43%	2.2
Proficient-and-above			85%	88%	87%	90%	92%	92%	1.5
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Male									
Advanced			34%	35%	35%	38%	40%	42%	1.6
Proficient-and-above			81%	86%	83%	85%	88%	88%	1.4
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state math test increased from 17% in 2004 to 27% in 2009. During this period, the average yearly gain in the percentage advanced in math for low-income 8th graders was 2.0 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 2009 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 2006-2009 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table TN-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					Grade 10				
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	04-09	81%	90%	1.9		04-09	81%	93%	2.4		04-09	92%	98%	1.1	
White	04-09	86%	94%	1.6		04-09	86%	95%	1.8		04-09	94%	98%	0.8	
African American	04-09	68%	81%	2.7	L	04-09	66%	86%	4.0	L	04-09	85%	95%	2.1	L
Latino	04-09	71%	85%	2.9	L	04-09	66%	87%	4.2	L	04-09	86%	97%	2.2	L
Asian	04-09	89%	94%	1.2	S	04-09	89%	94%	1.0	S	04-09	94%	99%	1.0	L
Native American	04-09	81%	89%	1.6[2]	E	04-09	81%	91%	2.1[2]	L	04-09	88%	98%	2.1[2]	L
Not low-income	04-09	90%	97%	1.4		04-09	89%	97%	1.5		04-09	96%	99%	0.7	
Low-income	04-09	71%	85%	2.8	L	04-09	69%	88%	3.9	L	04-09	84%	96%	2.3	L
Not disabled	06-09	91%	92%	0.5		06-09	93%	95%	0.5		06-09	98%	99%	0.1	
Students with disabilities[3]	06-09	67%	73%	2.0	L	06-09	64%	72%	2.7	L	06-09	83%	87%	1.5	L
Not ELLs	06-09	89%	91%	0.7		06-09	90%	93%	1.0		06-09	97%	98%	0.2	
English language learners[3]	06-09	56%	73%	5.5	L	06-09	58%	61%	0.9	S	06-09	75%	86%	3.6[2]	L
Female	04-09	85%	93%	1.6		04-09	86%	96%	1.9		04-09	94%	98%	0.9	
Male	04-09	77%	88%	2.3	L	04-09	75%	90%	2.9	L	04-09	90%	97%	1.4	L

Table reads: In 2004, 86% of white 4th graders and 68% of African American 4th graders scored at the proficient level on the state reading test. In 2009, 94% of white 4th graders and 81% of African American 4th graders scored at the proficient level in reading. Between 2004 and 2009, the percentage proficient improved at an average rate of 1.6 percentage points per year for white students and 2.7 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 2009 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 TN-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					Grade 9				
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	04-09	80%	90%	2.0		04-09	83%	90%	1.4		04-09	86%	89%	0.5	
White	04-09	86%	92%	1.3		04-09	88%	93%	0.9		04-09	94%	94%	0.1	
African American	04-09	65%	83%	3.7	L	04-09	68%	83%	2.9	L	04-09	66%	76%	2.0	L
Latino	04-09	72%	89%	3.3	L	04-09	75%	86%	2.3	L	04-09	76%	87%	2.1	L
Asian	04-09	92%	96%	0.9	S	04-09	92%	96%	0.8	S	04-09	93%	94%	0.4	L
Native American	04-09	78%	90%	2.5[2]	L	04-09	81%	96%	3.0[2]	L	04-09	94%	94%	0.0[2]	S
Not low-income	04-09	90%	96%	1.2		04-09	91%	95%	0.9		04-09	97%	94%	-0.6	
Low-income	04-09	70%	85%	3.1	L	04-09	73%	85%	2.5	L	04-09	73%	83%	1.9	L
Not disabled	06-09	92%	93%	0.6		06-09	91%	93%	1.0		06-09	89%	90%	0.6	
Students with disabilities[3]	06-09	59%	64%	1.7	L	06-09	47%	61%	4.5	L	06-09	58%	59%	0.4	S
Not ELLS	06-09	88%	90%	0.7		06-09	85%	90%	1.6		06-09	88%	89%	0.5	
English language learners[3]	06-09	69%	82%	4.5	L	06-09	59%	70%	3.6	L	06-09	70%	72%	1.0	L
Female	04-09	82%	91%	2.0		04-09	85%	92%	1.5		04-09	87%	90%	0.7	
Male	04-09	79%	89%	2.0	E	04-09	81%	88%	1.4	S	04-09	85%	87%	0.4	S

Table reads: In 2004, 86% of white 4th graders and 65% of African American 4th graders scored at the proficient level on the state math test. In 2009, 92% of white 4th graders and 83% of African American 4th graders scored at the proficient level in math. Between 2004 and 2009, the percentage proficient improved at an average rate of 1.3 percentage points per year for white students and 3.7 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 2009 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.

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table TN-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.

		Grade 4					Grade 8					Grade 10				
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group
All tested students	MSS	04-09	491.2	500.2	1.8		04-09	528.0	546.5	3.7		04-09	519.6	538.5	3.8	
	SD	04-09	38.9	34.8			04-09	43.6	36.7			04-09	52.1	42.1		
White	MSS	04-09	497.7	506.4	1.7		04-09	536.1	553.1	3.4		04-09	528.7	545.0	3.3	
	SD	04-09	37.3	32.4			04-09	41.1	34.5			04-09	50.6	40.6		
African American	MSS	04-09	474.4	483.7	1.9	L	04-09	506.6	528.9	4.5	L	04-09	491.6	520.3	5.7	L
	SD	04-09	37.2	34.9			04-09	41.9	35.5			04-09	45.0	40.6		
Latino	MSS	04-09	477.5	490.2	2.5	L	04-09	509.7	534.1	4.9	L	04-09	506.9	531.6	4.9	L
	SD	04-09	42.4	35.4			04-09	49.2	38.9			04-09	54.1	41.5		
Asian	MSS	04-09	505.4	516.6	2.2	L	04-09	540.0	561.6	4.3	L	04-09	535.2	556.1	4.2	L
	SD	04-09	40.1	38.4			04-09	43.3	43.3			04-09	56.3	47.6		
Native American	MSS	04-09	490.1	499.5	1.9[2]	L	04-09	524.7	541.0	3.3[2]	S	04-09	512.5	538.8	5.3[2]	L
	SD	04-09	33.9	32.5			04-09	43.3	30.7			04-09	59.5	39.6		
Not low-income	MSS	04-09	504.5	514.3	2.0		04-09	541.6	559.8	3.6		04-09	532.0	549.8	3.6	
	SD	04-09	35.6	30.4			04-09	38.9	32.5			04-09	49.2	39.8		
Low-income	MSS	04-09	477.6	489.0	2.3	L	04-09	510.6	533.4	4.6	L	04-09	494.4	523.7	5.9	L
	SD	04-09	37.4	34.0			04-09	43.0	35.9			04-09	48.2	40.2		
Not disabled	MSS	06-09	502.7	503.5	0.3		06-09	545.5	550.7	1.7		06-09	537.7	542.8	1.7	
	SD	06-09	34.8	33.2			06-09	35.7	34.3			06-09	40.5	39.6		
Students with disabilities[3]	MSS	06-09	468.9	474.2	1.8	L	06-09	501.0	510.2	3.1	L	06-09	485.0	493.3	2.8	L
	SD	06-09	33.6	36.1			06-09	40.1	36.6			06-09	46.4	42.2		
Not ELLs	MSS	06-09	499.8	501.0	0.4		06-09	541.1	547.2	2.0		06-09	533.3	538.8	1.8	
	SD	06-09	35.5	34.4			06-09	38.4	36.2			06-09	43.4	42.0		
English language learners[3]	MSS	06-09	456.7	472.1	5.1	L	06-09	494.0	498.0	1.3	S	06-09	476.5	489.3	4.3[2]	L
	SD	06-09	45.6	37.7			06-09	42.4	37.2			06-09	56.0	43.2		
Female	MSS	04-09	496.0	504.1	1.6		04-09	534.8	551.5	3.3		04-09	524.7	543.1	3.7	
	SD	04-09	36.6	33.0			04-09	39.9	33.7			04-09	50.0	40.7		
Male	MSS	04-09	486.7	496.6	2.0	L	04-09	521.4	541.6	4.0	L	04-09	514.6	534.0	3.9	L
	SD	04-09	40.5	36.1			04-09	45.9	38.8			04-09	53.6	43.0		

Table reads: In 2004, the mean scale score on the state 4th grade reading test was 497.7 for white students and 474.4 for African American students. In 2009, the mean scale score in 4th grade reading was 506.4 for white students and 483.7 for African American students. Between 2004 and 2009, the mean scale score improved at an average yearly rate of 1.7 points for white students and 1.9 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The TCAP is scored on a scale of 0-999.

[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 2009 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 TN-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.

		Grade 4					Grade 8					Grade 9				
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group
All tested students	MSS	04-09	486.0	499.1	2.6		04-09	536.7	550.9	2.8		04-09	542.6	542.2	-0.1	
	SD	04-09	36.0	34.5			04-09	48.0	47.9			04-09	51.6	46.2		
White	MSS	04-09	492.5	503.8	2.3		04-09	546.1	558.6	2.5		04-09	556.1	552.1	-0.8	
	SD	04-09	34.7	34.0			04-09	45.5	46.3			04-09	45.2	40.9		
African American	MSS	04-09	468.7	485.5	3.4	L	04-09	510.4	528.9	3.7	L	04-09	508.2	518.2	2.0	L
	SD	04-09	33.2	31.9			04-09	43.7	44.2			04-09	50.2	48.8		
Latino	MSS	04-09	475.2	493.4	3.6	L	04-09	523.6	538.9	3.1	L	04-09	529.7	537.1	1.5	L
	SD	04-09	35.1	31.2			04-09	49.1	47.2			04-09	55.3	48.1		
Asian	MSS	04-09	507.5	522.1	2.9	L	04-09	566.5	582.2	3.1	L	04-09	559.7	561.7	0.4	L
	SD	04-09	36.3	39.6			04-09	56.4	53.6			04-09	52.2	44.6		
Native American	MSS	04-09	486.0	497.4	2.3[2]	E	04-09	533.6	548.3	2.9[2]	L	04-09	552.8	549.1	-0.7[2]	L
	SD	04-09	34.7	36.7			04-09	47.4	34.3			04-09	44.5	42.8		
Not low-income	MSS	04-09	498.5	511.8	2.7		04-09	551.9	567.6	3.1		04-09	553.3	553.4	0.0	
	SD	04-09	33.2	33.2			04-09	44.2	44.6			04-09	46.6	41.5		
Low-income	MSS	04-09	473.4	489.0	3.1	L	04-09	517.4	534.5	3.4	L	04-09	520.7	529.5	1.8	L
	SD	04-09	34.3	32.1			04-09	45.6	45.2			04-09	53.9	47.7		
Not disabled	MSS	06-09	500.7	503.0	0.8		06-09	548.8	556.7	2.6		06-09	544.9	544.4	-0.2	
	SD	06-09	34.2	32.4			06-09	44.0	44.4			06-09	47.7	44.4		
Students with disabilities[3]	MSS	06-09	460.7	468.2	2.5	L	06-09	483.5	500.4	5.6	L	06-09	495.8	495.3	-0.2	E
	SD	06-09	39.0	35.5			06-09	51.6	47.0			06-09	62.9	58.1		
Not ELLs	MSS	06-09	496.7	499.6	1.0		06-09	541.9	551.5	3.2		06-09	543.5	542.6	-0.3	
	SD	06-09	36.8	34.6			06-09	49.2	47.6			06-09	48.9	45.9		
English language learners[3]	MSS	06-09	470.4	482.7	4.1	L	06-09	501.0	508.1	2.4	S	06-09	517.3	516.3	-0.3	E
	SD	06-09	35.4	29.2			06-09	53.7	46.8			06-09	61.1	59.8		
Female	MSS	04-09	487.0	500.0	2.6		04-09	537.3	552.5	3.0		04-09	543.4	544.1	0.1	
	SD	04-09	34.3	32.9			04-09	45.0	44.4			04-09	49.9	43.6		
Male	MSS	04-09	485.1	498.3	2.6	E	04-09	536.2	549.4	2.6	S	04-09	541.7	540.4	-0.3	S
	SD	04-09	37.5	35.9			04-09	50.8	50.9			04-09	53.3	48.6		

Table reads: In 2004, the mean scale score on the state 4th grade math test was 492.5 for white students and 468.7 for African American students. In 2009, the mean scale score in 4th grade math was 503.8 for white students and 485.5 for African American students. Between 2004 and 2009, the mean scale score

improved at an average yearly rate of 2.3 points for white students and 3.4 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The TCAP is scored on a scale of 0-999.

[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 2009 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 TN-15. Numbers of test-takers

Subgroup	Subject	Grade 4					Grade 8					Grade 10 Reading/Grade 9 Math				
		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	04-09	70,205	74,241	5.7%	100.0%	04-09	71,793	70,800	-1.4%	100.0%	04-09	61,002	67,364	10.4%	100.0%
	Math	04-09	70,363	74,328	5.6%	100.0%	04-09	71,779	70,871	-1.3%	100.0%	04-09	31,297	40,275	28.7%	100.0%
White	Reading	04-09	48,796	51,015	4.5%	68.7%	04-09	50,572	49,341	-2.4%	69.7%	04-09	44,354	47,013	6.0%	69.8%
	Math	04-09	48,799	51,025	4.6%	68.6%	04-09	50,526	49,341	-2.3%	69.6%	04-09	21,412	26,734	24.9%	66.4%
African American	Reading	04-09	18,058	17,872	-1.0%	24.1%	04-09	17,985	17,175	-4.5%	24.3%	04-09	13,947	16,691	19.7%	24.8%
	Math	04-09	18,055	17,883	-1.0%	24.1%	04-09	17,925	17,175	-4.2%	24.2%	04-09	8,390	11,048	31.7%	27.4%
Latino	Reading	04-09	2,167	3,965	83.0%	5.3%	04-09	1,852	3,090	66.8%	4.4%	04-09	1,178	2,365	100.8%	3.5%
	Math	04-09	2,300	4,006	74.2%	5.4%	04-09	1,932	3,133	62.2%	4.4%	04-09	676	1,792	165.1%	4.4%
Asian	Reading	04-09	931	1,247	33.9%	1.7%	04-09	943	1,047	11.0%	1.5%	04-09	874	1,022	16.9%	1.5%
	Math	04-09	956	1,271	32.9%	1.7%	04-09	956	1,075	12.4%	1.5%	04-09	490	538	9.8%	1.3%
Native American	Reading	04-09	106	142	34.0%	0.2%	04-09	225	147	-34.7%	0.2%	04-09	228	210	-7.9%	0.3%
	Math	04-09	106	143	34.9%	0.2%	04-09	224	147	-34.4%	0.2%	04-09	113	111	-1.8%	0.3%
Low-income	Reading	04-09	34,537	41,182	19.2%	55.5%	04-09	31,159	35,702	14.6%	50.4%	04-09	19,171	28,649	49.4%	42.5%
	Math	04-09	34,661	41,232	19.0%	55.5%	04-09	31,156	35,747	14.7%	50.4%	04-09	9,777	17,977	83.9%	44.6%
Students w/ disabilities	Reading	06-09	7,987	8,332	4.3%	11.2%	06-09	8,377	7,314	-12.7%	10.3%	06-09	5,719	5,790	1.2%	8.6%
	Math	06-09	7,988	8,334	4.3%	11.2%	06-09	8,354	7,298	-12.6%	10.3%	06-09	1,179	1,761	49.4%	4.4%
English language learners	Reading	06-09	1,564	2,083	33.2%	2.8%	06-09	1,078	1,014	-5.9%	1.4%	06-09	309	362	17.2%	0.5%
	Math	06-09	1,575	2,100	33.3%	2.8%	06-09	1,078	1,022	-5.2%	1.4%	06-09	365	538	47.4%	1.3%
Female	Reading	04-09	33,995	35,914	5.6%	48.4%	04-09	35,286	34,660	-1.8%	49.0%	04-09	30,625	33,542	9.5%	49.8%
	Math	04-09	34,071	35,946	5.5%	48.4%	04-09	35,282	34,697	-1.7%	49.0%	04-09	16,497	20,247	22.7%	50.3%
Male	Reading	04-09	36,055	38,327	6.3%	51.6%	04-09	36,395	36,140	-0.7%	51.0%	04-09	30,238	33,747	11.6%	50.1%
	Math	04-09	36,135	38,382	6.2%	51.6%	04-09	36,386	36,174	-0.6%	51.0%	04-09	14,718	19,967	35.7%	49.6%

Table reads: In 2004, 48,796 students in the white subgroup took the state 4th grade reading test. By 2009, the number of white test-takers had risen to 51,015 students, an increase of 4.5%. In 2009, the white subgroup made up 68.7% of the 74,241 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 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.