Subgroup Achievement and Gap Trends — Connecticut

K-12 enrollment — 556,371

The raw data used to develop these state profiles, including data for additional grade levels and years before 2002, can be found on the CEP Web site at www.cep-dc.org. Click on the link on the left for State Testing Data. Below the name of the report, click on the link for View State Profiles and Worksheets. Scroll down the page, and click on the Worksheet links for any state.

Subgroup Achievement Trends and Gap Trends — Key Findings

Summary

This year the Center on Education Policy analyzed data on the achievement of different groups of students in two distinct ways. First, we looked at grade 4 test results to determine whether the performance of various groups improved at three achievement levels—basic and above, proficient and above, and advanced. Second, we looked at gaps between these groups at the proficient level across three grades (grade 4, grade 8 in most cases, and a high school grade). These two types of analyses show whether elementary school achievement has generally gone up for different groups of students and whether achievement gaps at different grade levels have narrowed, widened, or stayed the same.

Connecticut had a mixed picture in on state test results. Achievement trends were more positive in math than reading, and there was a mixed picture on achievement gaps.

Subgroup trends by achievement level at grade 4

- Main trend: In reading, declines predominated in the percentage of students scoring at three achievement levels—basic-and-above, proficient-and-above, and advanced. All subgroups posted declines at the basic and proficient levels, while improvements were shown at the advanced level. In math, however, gains were made by almost all subgroups at all three achievement levels.

Gap trends at three grade levels

- Main trend: There was a mixed picture in gaps in the percentages of students scoring at the proficient level between the African American and Latino subgroups and the white subgroup, and between low-income and non-low-income students, at grades 4 and 8 (there was inadequate data for the high school grade). Specifically, 5 of the 6 trend lines analyzed in reading showed evidence of gaps widening. For math, gaps were shown to narrow across the board, in 6 of 6 trend lines. The mean scale score measure (the second achievement measure used for this study) showed gaps narrowing in 2 of 6 trend lines in math.

Data notes

- Limited data: Trends are limited to 2006–2008 for the elementary and middle grades analyzed, and there were an inadequate number of years of data for the high school grade to discern trends.

- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Asian American, and low-income students. The Native American subgroup is too small in Connecticut to yield reliable trend data. Trends for students with disabilities, English language learners, and male and female students have not been summarized because they will be discussed in separate reports.

- Grades analyzed: Analyses of subgroup trends by three achievement levels are limited to one elementary grade because of the massive amounts of data involved and because this is the pilot year of a process that CEP hopes to extend to the middle and high school levels in future years. Analyses of achievement gap trends cover three grade levels: grade 4, grade 8, and the high school grade tested for NCLB.

Data Limitations

Years of comparable percentage proficient data	Grades 3 – 8: 2006 through 2008 Grade 10: 2007 through 2008
Years of comparable mean scale score data	Grades 3 – 8: 2006 through 2008 Grade 10: 2007 through 2008
Disaggregated data for all subgroups and comparison groups	Grades 3 – 8: 2006 through 2008 Grade 10: 2007 through 2008

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	Connecticut Mastery Test (CMT), grades 3–8 CMT Skills Checklist (for special education students) Connecticut Academic Performance Test (CAPT), grade 10 CAPT Skills Checklist (for special education students)
Grades tested for NCLB accountability	3-8, 10
State labels for achievement levels	CT uses five achievement levels: Below Basic, Basic, Proficient, Goal, and Advanced. For our analyses we treated Basic as Basic, Proficient as Proficient, and Goal + Advanced as Advanced.
High school NCLB test also used as an exit exam?	No

First year test used	2006: CMT 2007: CAPT
Time of test administration	Spring
Major changes in testing system (2002–present)	2005–06: Added grades 3, 5, 7 2006: Introduced new generation of CMT, switched to spring testing 2007: Introduced new generation of CAPT

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 CT-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					17%	16%	17%	0.1
Proficient and Above					72%	71%	70%	-1.1
Basic and Above					81%	80%	79%	-1.2
White								
Advanced					22%	21%	22%	0.1
Proficient and Above					82%	82%	81%	-0.5
Basic and Above					89%	89%	88%	-0.6
African American								
Advanced					3%	3%	4%	0.2
Proficient and Above					48%	46%	45%	-1.2
Basic and Above					62%	61%	58%	-1.8
Latino								
Advanced					4%	3%	4%	0.2
Proficient and Above					44%	42%	43%	-0.6
Basic and Above					58%	57%	56%	-0.9
Asian								
Advanced					25%	25%	28%	2.0
Proficient and Above					83%	83%	82%	-0.1
Basic and Above					90%	90%	89%	-0.1
Native American[2]								
Advanced					11%	10%	14%	1.5
Proficient and Above					63%	62%	64%	0.3
Basic and Above					71%	78%	74%	1.9

Table reads: The percentage of white 4th graders who scored at the advanced level on their state reading test was 22% in 2006 and in 2008. Due to a rise and fall over these years, however, the average yearly gain in the percentage advanced was 0.1 percentage points per year in grade 4 reading.

[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 CT-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 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced					17%	16%	17%	0.1
Proficient and Above					72%	71%	70%	-1.1
Basic and Above					81%	80%	79%	-1.2
Low-income students								
Advanced					3%	3%	4%	0.3
Proficient and Above					45%	44%	44%	-0.7
Basic and Above					60%	59%	57%	-1.3
Students with disabilities[3]								
Advanced					3%	2%	2%	-0.2
Proficient and Above					29%	28%	26%	-1.7
Basic and Above					40%	39%	36%	-2.2
English language learners[3]								
Advanced					1%	1%	0%	-0.4
Proficient and Above					30%	19%	18%	-6.4
Basic and Above					44%	34%	31%	-6.8
Female								
Advanced					18%	17%	18%	0.2
Proficient and Above					74%	73%	72%	-1.3
Basic and Above					83%	82%	81%	-1.3
Male								
Advanced					15%	15%	15%	0.0
Proficient and Above					69%	68%	68%	-0.9
Basic and Above					78%	78%	76%	-0.9

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test increased from 3% in 2006 to 4% in 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 0.3 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 CT-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					22%	26%	27%	2.3
Proficient and Above					80%	81%	82%	0.6
Basic and Above					89%	90%	90%	0.2
White								
Advanced					28%	34%	34%	3.0
Proficient and Above					89%	90%	90%	0.6
Basic and Above					95%	95%	95%	0.4
African American								
Advanced					5%	7%	8%	1.1
Proficient and Above					57%	59%	61%	1.8
Basic and Above					76%	77%	77%	0.3
Latino								
Advanced					7%	8%	9%	1.3
Proficient and Above					60%	61%	63%	1.4
Basic and Above					77%	78%	78%	0.7
Asian								
Advanced					39%	45%	47%	3.7
Proficient and Above					92%	93%	93%	0.5
Basic and Above					97%	97%	97%	0.0
Native American[2]								
Advanced					14%	22%	16%	1.0
Proficient and Above					70%	75%	78%	3.6
Basic and Above					83%	88%	89%	3.2

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 28% in 2006 to 34% in 2008. During this period, the average yearly gain in the percentage advanced in math 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 CT-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 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced					22%	26%	27%	2.3
Proficient and Above					80%	81%	82%	0.6
Basic and Above					89%	90%	90%	0.2
Low-income students								
Advanced					6%	8%	9%	1.2
Proficient and Above					60%	61%	63%	1.5
Basic and Above					77%	78%	78%	0.5
Students with disabilities[3]								
Advanced					5%	6%	5%	0.2
Proficient and Above					46%	47%	46%	-0.2
Basic and Above					62%	64%	62%	0.1
English language learners[3]								
Advanced					5%	4%	4%	-0.2
Proficient and Above					54%	49%	50%	-2.1
Basic and Above					73%	69%	68%	-2.5
Female								
Advanced					20%	24%	25%	2.2
Proficient and Above					80%	81%	82%	0.8
Basic and Above					90%	91%	90%	0.2
Male								
Advanced					24%	28%	29%	2.4
Proficient and Above					80%	81%	81%	0.4
Basic and Above					89%	90%	89%	0.2

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 6% in 2006 to 9% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 1.2 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 CT-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	06-08	72%	70%	-1.1		06-08	77%	77%	0.2		07-08	80%	83%	NA	
White	06-08	82%	81%	-0.5		06-08	87%	87%	0.3		07-08	89%	91%	NA	
African American	06-08	48%	45%	-1.2	S	06-08	53%	54%	0.5	L	07-08	54%	61%	NA	NA
Latino	06-08	44%	43%	-0.6	S	06-08	50%	50%	0.0	S	07-08	57%	62%	NA	NA
Asian	06-08	83%	82%	-0.1	L	06-08	87%	89%	1.2	L	07-08	86%	90%	NA	NA
Native American	06-08	63%	64%	0.3[2]	L	06-08	71%	71%	0.0[2]	S	07-08	65%	70%	NA	NA
Not low-income	06-08	83%	82%	-0.5		06-08	86%	87%	0.7		07-08	87%	90%	NA	
Low-income	06-08	45%	44%	-0.7	S	06-08	52%	52%	0.0	S	07-08	55%	60%	NA	NA
Not disabled	06-08	77%	75%	-1.1		06-08	82%	82%	0.2		07-08	84%	87%	NA	
Students with disabilities[3]	06-08	29%	26%	-1.7	S	06-08	35%	35%	-0.2	S	07-08	40%	47%	NA	NA
Not ELL	06-08	74%	72%	-0.9		06-08	79%	79%	0.3		07-08	81%	84%	NA	
English language learners[3]	06-08	30%	18%	-6.4	S	06-08	24%	19%	-2.9	S	07-08	38%	38%	NA	NA
Female	06-08	74%	72%	-1.3		06-08	79%	80%	0.3		07-08	84%	86%	NA	
Male	06-08	69%	68%	-0.9	L	06-08	74%	74%	0.1	S	07-08	75%	79%	NA	NA

Table reads: In 2006, 82% of white 4th graders and 48% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 81% of white 4th graders and 45% of African American 4th graders scored at the proficient level in reading. Between 2006 and 2008, the percentage proficient decreased at an average rate of 0.5 percentage point per year for white students and 1.2 percentage points per year for African American students, indicating a larger rate of

decline and a widening 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]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 CT-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 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	06-08	80%	82%	0.6		06-08	79%	81%	1.1		07-08	77%	80%	NA	
White	06-08	89%	90%	0.6		06-08	89%	91%	0.8		07-08	88%	90%	NA	
African American	06-08	57%	61%	1.8	L	06-08	53%	58%	2.5	L	07-08	43%	50%	NA	NA
Latino	06-08	60%	63%	1.4	L	06-08	54%	59%	2.7	L	07-08	51%	55%	NA	NA
Asian	06-08	92%	93%	0.5	S	06-08	92%	93%	0.1	S	07-08	87%	89%	NA	NA
Native American	06-08	70%	78%	3.6[2]	L	06-08	76%	71%	-2.8[2]	S	07-08	63%	73%	NA	NA
Not low-income	06-08	89%	90%	0.8		06-08	88%	91%	1.3		07-08	86%	88%	NA	
Low-income	06-08	60%	63%	1.5	L	06-08	55%	58%	1.8	L	07-08	49%	53%	NA	NA
Not disabled	06-08	85%	86%	0.6		06-08	84%	87%	1.2		07-08	82%	84%	NA	
Students with disabilities[3]	06-08	46%	46%	-0.2	S	06-08	38%	40%	1.2	E	07-08	39%	44%	NA	NA
Not ELL	06-08	82%	83%	0.7		06-08	80%	83%	1.3		07-08	79%	81%	NA	
English language learners[3]	06-08	54%	50%	-2.1	S	06-08	40%	34%	-2.9	S	07-08	34%	35%	NA	NA
Female	06-08	80%	82%	0.8		06-08	80%	82%	1.4		07-08	77%	79%	NA	
Male	06-08	80%	81%	0.4	S	06-08	78%	80%	0.9	S	07-08	78%	81%	NA	NA

Table reads: In 2006, 89% of white 4th graders and 57% of African American 4th graders scored at the proficient level on the state math test. In 2008, 90% of white 4th graders and 61% of African American 4th graders scored at the proficient level in math. Between 2006 and 2008, the percentage proficient improved at an average rate of 0.6 percentage point per year for white students and 1.8 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]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 CT-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					Grade 10				
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	249.9	248.7	-0.6		06-08	249.7	247.6	-1.1		07-08	242.9	243.9	NA	
	SD	06-08	44.9	46.1			06-08	44.9	42.2			07-08	47.4	45.6		
White	Mean SS	06-08	261.5	261.1	-0.2		06-08	261.5	259.0	-1.3		07-08	254.8	255.9	NA	
	SD	06-08	41.1	42.0			06-08	41.2	38.8			07-08	43.4	41.0		
African American	Mean SS	06-08	222.5	221.6	-0.5	S	06-08	221.2	220.9	-0.2	L	07-08	209.0	211.8	NA	NA
	SD	06-08	39.1	41.1			06-08	37.2	34.4			07-08	40.6	39.5		
Latino	Mean SS	06-08	219.0	219.1	0.1	L	06-08	217.9	218.1	0.1	L	07-08	211.9	213.0	NA	NA
	SD	06-08	40.8	42.5			06-08	39.6	36.5			07-08	42.9	42.1		
Asian	Mean SS	06-08	264.0	266.4	1.2	L	06-08	267.1	265.1	-1.0	L	07-08	256.2	259.3	NA	NA
	SD	06-08	42.6	43.2			06-08	46.6	43.1			07-08	48.9	47.0		
Native American	Mean SS	06-08	237.9	242.2	2.2[2]	L	06-08	239.0	236.9	-1.1[2]	L	07-08	220.6	225.1	NA	NA
	SD	06-08	45.3	42.2			06-08	40.5	38.8			07-08	40.7	40.5		
Not Low-income	Mean SS	06-08	262.4	262.5	0.1		06-08	261.0	259.3	-0.9		07-08	253.1	254.5	NA	
	SD	06-08	40.8	41.5			06-08	41.8	38.8			07-08	44.1	41.8		
Low-income	Mean SS	06-08	219.9	219.6	-0.2	S	06-08	219.5	218.9	-0.3	L	07-08	209.5	211.4	NA	NA
	SD	06-08	39.7	41.5			06-08	38.2	35.8			07-08	42.2	41.2		
Not disabled	Mean SS	06-08	256.1	255.1	-0.5		06-08	255.7	253.3	-1.2		07-08	248.5	248.9	NA	
	SD	06-08	41.1	42.2			06-08	41.7	39.3			07-08	44.4	43.0		
Students with disabilities[3]	Mean SS	06-08	201.9	198.0	-2.0	S	06-08	203.3	203.4	0.1	L	07-08	193.8	198.5	NA	NA
	SD	06-08	43.9	44.5			06-08	40.9	37.1			07-08	45.0	43.1		
Not ELLs	Mean SS	06-08	252.5	251.6	-0.5		06-08	251.6	249.6	-1.0		07-08	244.5	245.5	NA	
	SD	06-08	43.9	44.9			06-08	44.0	41.2			07-08	46.7	44.7		
English language learners[3]	Mean SS	06-08	205.1	195.4	-4.9	S	06-08	196.2	192.5	-1.9	S	07-08	191.4	188.5	NA	NA
	SD	06-08	38.0	34.6			06-08	34.2	28.0			07-08	41.9	40.0		
Female	Mean SS	06-08	253.5	252.2	-0.7		06-08	253.9	251.4	-1.3		07-08	251.4	250.0	NA	
	SD	06-08	43.7	45.0			06-08	44.1	41.3			07-08	46.3	44.5		

		Grade 4					Grade 8					Grade 10				
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	246.5	245.4	-0.6	L	06-08	245.8	244.0	-0.9	L	07-08	234.7	237.8	NA	NA
	SD	06-08	45.7	46.8			06-08	45.2	42.7			07-08	47.1	45.9		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 261.5 for white students and 222.5 for African American students. In 2008, the mean scale score in 4th grade reading was 261.1 for white students and 221.6 for African American students. Between 2006 and 2008, the mean scale scored declined at an average yearly rate of 0.2 points for white students and 0.5 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The Connecticut Mastery Test (CMT) for grades 3-8 and Connecticut Academic Performance Test (CAPT) for grade 10 are scored on a scale of 100-400.

[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 CT-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					Grade 10				
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	252.6	258.1	2.8		06-08	251.8	255.4	1.8		07-08	250.0	252.9	NA	
	SD	06-08	46.4	50.3			06-08	45.7	44.8			07-08	47.5	45.3		
White	Mean SS	06-08	263.9	270.8	3.5		06-08	264.5	267.8	1.7		07-08	263.5	266.4	NA	
	SD	06-08	42.4	46.3			06-08	40.7	39.8			07-08	40.4	37.3		
African American	Mean SS	06-08	221.2	225.7	2.3	S	06-08	217.7	222.9	2.6	L	07-08	208.7	214.7	NA	NA
	SD	06-08	41.0	44.2			06-08	38.5	38.0			07-08	43.2	43.6		
Latino	Mean SS	06-08	224.8	229.4	2.3	S	06-08	218.7	224.3	2.8	L	07-08	215.1	219.4	NA	NA
	SD	06-08	43.0	45.8			06-08	39.8	40.1			07-08	44.1	44.5		
Asian	Mean SS	06-08	276.0	283.9	4.0	L	06-08	279.0	281.6	1.3	S	07-08	269.6	271.5	NA	NA
	SD	06-08	45.6	48.5			06-08	44.5	44.5			07-08	47.9	41.4		
Native American	Mean SS	06-08	239.0	244.4	2.7[2]	S	06-08	240.4	241.2	0.4[2]	S	07-08	231.6	238.9	NA	NA
	SD	06-08	43.6	46.0			06-08	42.0	42.3			07-08	46.8	43.6		
Not Low-income	Mean SS	06-08	264.6	272.2	3.8		06-08	263.9	268.3	2.2		07-08	260.9	264.3	NA	
	SD	06-08	42.8	46.3			06-08	41.8	40.1			07-08	42.6	39.1		
Low-income	Mean SS	06-08	224.0	228.2	2.1	S	06-08	219.2	223.6	2.2	E	07-08	213.9	218.2	NA	NA
	SD	06-08	42.0	45.2			06-08	39.4	39.4			07-08	45.0	45.1		
Not disabled	Mean SS	06-08	258.3	264.2	3.0		06-08	258.1	261.6	1.8		07-08	255.5	258.0	NA	
	SD	06-08	43.3	47.3			06-08	42.2	41.4			07-08	43.8	41.7		
Students with disabilities[3]	Mean SS	06-08	209.4	209.6	0.1	S	06-08	203.0	206.8	1.9	L	07-08	201.1	206.8	NA	NA
	SD	06-08	46.6	47.2			06-08	42.0	40.5			07-08	51.4	49.7		
Not ELLs	Mean SS	06-08	254.6	260.4	2.9		06-08	253.4	257.3	2.0		07-08	251.6	254.7	NA	
	SD	06-08	45.9	49.6			06-08	45.1	43.9			07-08	46.5	44.1		
English language learners[3]	Mean SS	06-08	218.8	214.1	-2.4	S	06-08	206.7	202.5	-2.1	S	07-08	197.9	198.6	NA	NA
	SD	06-08	42.1	42.6			06-08	38.5	34.3			07-08	48.6	47.0		
Female	Mean SS	06-08	251.5	256.8	2.7		06-08	251.5	256.1	2.3		07-08	248.5	250.3	NA	

		Grade 4					Grade 8					Grade 10				
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	44.6	48.4			06-08	44.2	43.7			07-08	46.1	44.2		
Male	Mean SS	06-08	253.7	259.3	2.8	L	06-08	252.1	254.7	1.3	S	07-08	251.3	255.4	NA	NA
	SD	06-08	48.1	52.1			06-08	47.1	45.8			07-08	48.9	46.2		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 263.9 for white students and 221.2 for African American students. In 2008, the mean scale score in 4th grade math was 270.8 for white students and 225.7 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 3.5 points for white students and 2.3 points African American students, indicating a widening of the achievement gap for African Americans.

Note: The Connecticut Mastery Test (CMT) for grades 3-8 and Connecticut Academic Performance Test (CAPT) for grade 10 are scored on a scale of 100-400.

[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 CT-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					Grade 10				
		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	42,179	41,715	-1.1%	100.0%	06-08	43,831	42,843	-2.3%	100.0%	07-08	42,056	41,781	-0.7%	100.0%
	Math	06-08	42,308	41,775	-1.3%	100.0%	06-08	43,944	42,891	-2.4%	100.0%	07-08	41,966	41,694	-0.6%	100.0%
White	Reading	06-08	28,446	27,092	-4.8%	64.9%	06-08	29,912	28,738	-3.9%	67.1%	07-08	29,391	28,579	-2.8%	68.4%
	Math	06-08	28,495	27,115	-4.8%	64.9%	06-08	29,957	28,731	-4.1%	67.0%	07-08	29,365	28,536	-2.8%	68.4%
African American	Reading	06-08	5,673	5,621	-0.9%	13.5%	06-08	6,044	5,822	-3.7%	13.6%	07-08	5,745	5,676	-1.2%	13.6%
	Math	06-08	5,704	5,631	-1.3%	13.5%	06-08	6,067	5,846	-3.6%	13.6%	07-08	5,680	5,621	-1.0%	13.5%
Latino	Reading	06-08	6,327	7,104	12.3%	17.0%	06-08	6,327	6,613	4.5%	15.4%	07-08	5,449	5,918	8.6%	14.2%
	Math	06-08	6,373	7,127	11.8%	17.1%	06-08	6,367	6,640	4.3%	15.5%	07-08	5,439	5,914	8.7%	14.2%
Asian	Reading	06-08	1,580	1,734	9.7%	4.2%	06-08	1,408	1,517	7.7%	3.5%	07-08	1,361	1,483	9.0%	3.5%
	Math	06-08	1,584	1,737	9.7%	4.2%	06-08	1,411	1,521	7.8%	3.5%	07-08	1,373	1,495	8.9%	3.6%
Native American	Reading	06-08	153	**164**	7.2%	0.4%	06-08	140	**153**	9.3%	0.4%	07-08	110	**125**	13.6%	0.3%
	Math	06-08	152	**165**	8.6%	0.4%	06-08	142	**153**	7.7%	0.4%	07-08	109	**128**	17.4%	0.3%
Low-income	Reading	06-08	12,406	13,390	7.9%	32.1%	06-08	11,868	12,413	4.6%	29.0%	07-08	9,845	10,349	5.1%	24.8%
	Math	06-08	12,474	13,426	7.6%	32.1%	06-08	11,935	12,439	4.2%	29.0%	07-08	9,793	10,320	5.4%	24.8%
Students w/ disabilities	Reading	06-08	4,854	4,637	-4.5%	11.1%	06-08	4,977	4,857	-2.4%	11.3%	07-08	4,274	4,207	-1.6%	10.1%
	Math	06-08	4,924	4,681	-4.9%	11.2%	06-08	5,035	4,882	-3.0%	11.4%	07-08	4,254	4,168	-2.0%	10.0%
English language learners	Reading	06-08	2,319	2,095	-9.7%	5.0%	06-08	1,483	1,510	1.8%	3.5%	07-08	1,242	1,230	-1.0%	2.9%
	Math	06-08	2,351	2,114	-10.1%	5.1%	06-08	1,504	1,530	1.7%	3.6%	07-08	1,310	1,324	1.1%	3.2%
Female	Reading	06-08	20,557	20,317	-1.2%	48.7%	06-08	21,416	20,934	-2.3%	48.9%	07-08	20,774	20,703	-0.3%	49.6%
	Math	06-08	20,593	20,339	-1.2%	48.7%	06-08	21,452	20,952	-2.3%	48.8%	07-08	20,746	20,677	-0.3%	49.6%
Male	Reading	06-08	21,622	21,398	-1.0%	51.3%	06-08	22,415	21,909	-2.3%	51.1%	07-08	21,282	21,078	-1.0%	50.4%
	Math	06-08	21,715	21,436	-1.3%	51.3%	06-08	22,492	21,939	-2.5%	51.2%	07-08	21,220	21,017	-1.0%	50.4%

Table reads: In 2006, 28,446 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 27,092 students, a decrease of 4.8%. In 2008, the white subgroup made up 64.9% of the 41,715 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.