Subgroup Achievement and Gap Trends — Vermont

K-12 enrollment — 94,114

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.

Overall, achievement trends in Vermont have shown a mixed picture in reading and declines in math. There is also a mixed picture on achievement gaps.

Subgroup trends by achievement level at grade 4

- Main trend: In most instances the white and low-income subgroups showed declines in reading and math at three achievement levels—basic-and-above, proficient-and-above, and advanced. Specifically, 3 of the 6 trend lines analyzed across the three achievement levels in reading showed declines, as did all 6 trend lines in math.

- Notable exceptions: Performance for the white and low-income students increased at the advanced achievement level in reading.

Gap trends at three grade levels

- Main trend: In reading, gaps in the percentages of students scoring at the proficient level narrowed between low-income and non-low-income students, at grades 4 and 8. These results were not confirmed by the mean scale score measure. In math, gaps remained equal between low-income and non-low-income students in grade 4 but gaps widened in grade 8.

Data notes

- Limited data: Vermont has made a number of changes to its testing program in recent years. As a result, comparable test data are available at the elementary and middle school levels for only three years (2006-2008), the minimum span necessary to identify a trend. At the high school level, trends could not be determined because Vermont began administering a new test in 2007-08.

- Subgroups analyzed: Trends were analyzed for white and low-income students. The African American, Latino, Asian, and Native American subgroups are too small in Vermont 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 two grade levels: grade 4 and grade 8.

Data Limitations

Years of comparable percentage proficient data	2006 through 2008, grades 3 through 8 2008, grade 11 (VT began operationally administering the NECAP in grade 11 in Fall 2007)
Years of comparable mean scale score data	2006 through 2008, grades 3 through 8 2008, grade 11 (VT began operationally administering the NECAP in grade 11 in Fall 2007)
Disaggregated data for all subgroups and comparison groups	Data not available for the Latino and Native American subgroups for some grades and years Percentage proficient and mean scale score data not available in 2006 for comparison group of students who are *not* English language learners, so the ELL subgroup is compared with all students in the state
Numbers of test-takers by subgroup	Not available for Latino or Native American students in some years. Not available for grade 11 until 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	New England Common Assessment Program New Standards Reference Exams (grade 10 only, last administered in fall 2006) Vermont Alternate Assessment (alternate assessment of alternate standards)
Grades tested for NCLB accountability	3–8, 11 (NECAP)
State labels for achievement levels	VT uses four achievement levels: Substantially Below Proficient, Partially Proficient, Proficient, and Proficient with Distinction. For our analyses we treated Partially Proficient as Basic, Proficient as Proficient, and Proficient with Distinction as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	2005-06, grades 3-8; 2007-08, grade 11
Time of test administration	Fall
Major changes in testing system (2002–present)	2005–06: Switched to new assessment system (NECAP), a collaboration with Rhode Island and New Hampshire; replaced NSRE assessments Fall 2006: NECAP grade 11 assessment piloted Fall 2007: NECAP grade 11 assessment administered

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 VT-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					15%	17%	19%	2.0
Proficient and Above					69%	68%	68%	-0.5
Basic and Above					89%	88%	87%	-1.0
White								
Advanced					15%	18%	19%	2.0
Proficient and Above					70%	69%	69%	-0.5
Basic and Above					90%	88%	88%	-1.0
African American[2]								
Advanced					7%	4%	8%	0.5
Proficient and Above					57%	58%	49%	-4.0
Basic and Above					80%	78%	75%	-2.5
Latino[2]								
Advanced					NA	7%	7%	NA
Proficient and Above					NA	59%	60%	NA
Basic and Above					NA	91%	85%	NA
Asian[2]								
Advanced					28%	23%	35%	3.5
Proficient and Above					71%	77%	77%	3.0
Basic and Above					94%	89%	95%	0.5
Native American[2]								
Advanced					NA	0%	NA	NA
Proficient and Above					NA	35%	NA	NA
Basic and Above					NA	70%	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test increased from 15% in 2006 to 19% in 2008. During this period, the average yearly gain in the percentage advanced in reading for white 4th 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 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table VT-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					15%	17%	19%	2.0
Proficient and Above					69%	68%	68%	-0.5
Basic and Above					89%	88%	87%	-1.0
Low-income students								
Advanced					7%	8%	10%	1.5
Proficient and Above					52%	52%	52%	0.0
Basic and Above					81%	78%	78%	-1.5
Students with disabilities[3]								
Advanced					2%	1%	2%	0.0
Proficient and Above					27%	20%	21%	-3.0
Basic and Above					56%	45%	50%	-3.0
English language learners[2,3]								
Advanced					9%	8%	18%	4.5
Proficient and Above					52%	54%	61%	4.5
Basic and Above					80%	80%	82%	1.0
Female								
Advanced					18%	22%	24%	3.0
Proficient and Above					72%	73%	73%	0.5
Basic and Above					91%	90%	91%	0.0
Male								
Advanced					11%	13%	14%	1.5
Proficient and Above					65%	63%	63%	-1.0
Basic and Above					87%	85%	84%	-1.5

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test increased from 7% in 2006 to 10% in 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 1.5 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 VT-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 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced					18%	16%	17%	-0.5
Proficient and Above					64%	64%	62%	-1.0
Basic and Above					86%	85%	84%	-1.0
White								
Advanced					19%	16%	17%	-1.0
Proficient and Above					66%	64%	63%	-1.5
Basic and Above					88%	84%	85%	-1.5
African American[2]								
Advanced					5%	7%	2%	-1.5
Proficient and Above					37%	37%	31%	-3.0
Basic and Above					70%	68%	63%	-3.5
Latino[2]								
Advanced					NA	6%	19%	NA
Proficient and Above					NA	50%	58%	NA
Basic and Above					NA	82%	81%	NA
Asian[2]								
Advanced					20%	27%	26%	3.0
Proficient and Above					69%	75%	70%	0.5
Basic and Above					90%	87%	84%	-3.0
Native American[2]								
Advanced					NA	0%	NA	NA
Proficient and Above					NA	29%	NA	NA
Basic and Above					NA	70%	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test decreased from 19% in 2006 to 17% in 2008. During this period, the average yearly loss in the percentage advanced in math for white 4th graders was 1.0 percentage point 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 VT-10. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced					18%	16%	17%	-0.5
Proficient and Above					64%	64%	62%	-1.0
Basic and Above					86%	85%	84%	-1.0
Low-income students								
Advanced					8%	6%	7%	-0.5
Proficient and Above					47%	46%	45%	-1.0
Basic and Above					77%	73%	74%	-1.5
Students with disabilities[3]								
Advanced					3%	3%	2%	-0.5
Proficient and Above					27%	25%	20%	-3.5
Basic and Above					56%	48%	47%	-4.5
English language learners[2,3]								
Advanced					12%	11%	15%	1.5
Proficient and Above					48%	46%	54%	3.0
Basic and Above					76%	73%	74%	-1.0
Female								
Advanced					18%	16%	16%	-1.0
Proficient and Above					64%	64%	62%	-1.0
Basic and Above					87%	85%	85%	-1.0
Male								
Advanced					19%	17%	18%	-0.5
Proficient and Above					65%	64%	62%	-1.5
Basic and Above					86%	84%	84%	-1.0

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test decreased from 8% in 2006 to 7% in 2008. During this period, the average yearly loss in the percentage advanced in math for low-income 4th graders was 0.5 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 VT-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 11				
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	69%	68%	-0.5		06-08	65%	69%	2.0		08	68%		NA	
White	06-08	70%	69%	-0.5		06-08	66%	69%	1.5		08	68%		NA	
African American	06-08	57%	49%	-4.0[2]	S	06-08	50%	48%	-1.0[2]	S	08	44%		NA	NA
Latino	07-08	59%	60%	NA	NA	07-08	55%	69%	NA	NA	08	70%		NA	NA
Asian	06-08	71%	77%	3.0[2]	L	06-08	62%	81%	9.5[2]	L	08	65%		NA	NA
Native American	07-08	35%	NA	NA	NA	06-08	22%	NA	NA	NA	08	54%		NA	NA
Not low-income	06-08	77%	76%	-0.5		06-08	72%	76%	2.0		08	73%		NA	
Low-income	06-08	52%	52%	0.0	L	06-08	46%	52%	3.0	L	08	47%		NA	NA
Not disabled	06-08	73%	74%	0.5		06-08	70%	76%	3.0		08	74%		NA	
Students with disabilities[3]	06-08	27%	21%	-3.0	S	06-08	21%	21%	0.0	S	08	15%		NA	NA
All tested students	06-08	69%	68%	-0.5		06-08	65%	69%	2.0		08	68%		NA	
English language learners[3]	06-08	52%	61%	4.5[2]	L	06-08	40%	55%	7.5[2]	L	08	36%		NA	NA
Female	06-08	72%	73%	0.5		06-08	72%	77%	2.5		08	75%		NA	
Male	06-08	65%	63%	-1.0	S	06-08	59%	62%	1.5	S	08	59%		NA	NA

Table reads: In 2006, 70% of white 4th graders and 57% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 69% of white 4th graders and 49% of African American 4th graders scored at the proficient level in reading. Between 2006 and 2008, the percentage proficient declined at

an average rate of 0.5 percentage point per year for white students and 4.0 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 VT-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 11				
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	64%	62%	-1.0		06-08	60%	59%	-0.5		08	30%		NA	
White	06-08	66%	63%	-1.5		06-08	60%	59%	-0.5		08	30%		NA	
African American	06-08	37%	31%	-3.0[2]	S	06-08	37%	37%	0.0[2]	L	08	12%		NA	NA
Latino	07-08	50%	58%	NA	NA	07-08	53%	55%	NA	NA	08	16%		NA	NA
Asian	06-08	69%	70%	0.5[2]	L	06-08	69%	77%	4.0[2]	L	08	34%		NA	NA
Native American	07-08	29%	NA	NA	NA	06-08	22%	NA	NA	NA	08	10%		NA	NA
Not low-income	06-08	73%	71%	-1.0		06-08	66%	67%	0.5		08	33%		NA	
Low-income	06-08	47%	45%	-1.0	E	06-08	41%	39%	-1.0	S	08	15%		NA	NA
Not disabled	06-08	68%	67%	-0.5		06-08	64%	66%	1.0		08	33%		NA	
Students with disabilities[3]	06-08	27%	20%	-3.5	S	06-08	16%	13%	-1.5	S	08	2%		NA	NA
All tested students	06-08	64%	62%	-1.0		06-08	60%	59%	-0.5		08	30%		NA	
English language learners[3]	06-08	48%	54%	3.0[2]	L	06-08	32%	49%	8.5[2]	L	08	8%		NA	NA
Female	06-08	64%	62%	-1.0		06-08	62%	60%	-1.0		08	29%		NA	
Male	06-08	65%	62%	-1.5	S	06-08	58%	57%	-0.5	L	08	30%		NA	NA

Table reads: In 2006, 66% of white 4th graders and 37% of African American 4th graders scored at the proficient level on the state math test. In 2008, 63% of white 4th graders and 31% of African American 4th graders scored at the proficient level in math. Between 2006 and 2008, the percentage proficient declined at an average rate of 1.5 percentage point per year for white students and 3.0 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.

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table VT-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 11				
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	445	445	0		06-08	845	847	1		2008	1144	NA	NA	
	SD	06-08	11.9	13.5			06-08	12.7	13.9			2008	11.8	NA		
White	Mean SS	06-08	445	445	0		06-08	845	847	1		2008	1144	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
African American	Mean SS	06-08	439	438	-0.5[2]	S	06-08	841	838	-1.5[2]	S	2008	1135	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Latino	Mean SS	06-08	NA	444	NA	NA	06-08	NA	845	NA	NA	2008	1143	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Asian	Mean SS	06-08	447	450	1.5[2]	L	06-08	845	852	3.5[2]	L	2008	1144	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Native American	Mean SS	06-08	NA	440	NA	NA	06-08	835	837	1[2]	E	2008	1141	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Not Low-income	Mean SS	06-08	447	447	0		06-08	847	849	1		2008	1145	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Low-income	Mean SS	06-08	440	440	0	E	06-08	839	840	0.5	S	2008	1139	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Not disabled	Mean SS	06-08	446	447	0.5		06-08	846	849	1.5		2008	1146	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Students with disabilities[3]	Mean SS	06-08	432	428	-2	S	06-08	830	830	0	S	2008	1130	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
All tested students	Mean SS	06-08	445	445	0		06-08	845	847	1		2008	1144	NA	NA	
	SD	06-08	11.9	13.5			06-08	12.7	13.9			2008	NA	NA		
English language learners[3]	Mean SS	06-08	439	441	1[2]	L	06-08	837	838	0.5[2]	S	2008	1132	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Female	Mean SS	06-08	446	447	0.5		06-08	847	850	1.5		2008	1147	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		

		Grade 4					Grade 8					Grade 11				
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	443	443	0	S	06-08	842	843	0.5	S	2008	1142	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 445 for white students and 439 for African American students. In 2008, the mean scale score in 4th grade reading was 445 for white students and 438 for African American students. Between 2006 and 2008, the mean scale score remained the same for white students and declined at an average yearly rate of 0.5 points for African American students, indicating a widening of the achievement gap for African Americans.

[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 VT-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 11				
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	444	443	-0.5		06-08	842	841	-0.5		2008	1134	NA	NA	
	SD	06-08	12.4	12.6			06-08	10.8	11.7			2008	10.7	NA		
White	Mean SS	06-08	444	443	-0.5		06-08	842	842	0		2008	1134	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
African American	Mean SS	06-08	435	433	-1[2]	S	06-08	837	833	-2[2]	S	2008	1125	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Latino	Mean SS	06-08	NA	441	NA	NA	06-08	NA	839	NA	NA	2008	1131	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Asian	Mean SS	06-08	446	446	0[2]	L	06-08	842	847	2.5[2]	L	2008	1134	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Native American	Mean SS	06-08	NA	439	NA	NA	06-08	836	832	-2[2]	S	2008	1131	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Not Low-income	Mean SS	06-08	447	446	-0.5		06-08	843	844	0.5		2008	1135	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Low-income	Mean SS	06-08	439	438	-0.5	E	06-08	837	836	-0.5	S	2008	1129	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Not disabled	Mean SS	06-08	445	445	0		06-08	843	844	0.5		2008	1136	NA	NA	
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Students with disabilities[3]	Mean SS	06-08	433	430	-1.5	S	06-08	829	827	-1	S	2008	1120	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
All tested students	Mean SS	06-08	444	443	-0.5		06-08	842	841	-0.5		2008	1134	NA	NA	
	SD	06-08	12.4	12.6			06-08	10.8	11.7			2008	NA	NA		
English language learners[3]	Mean SS	06-08	439	438	-0.5[2]	E	06-08	835	835	0[2]	L	2008	1124	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		
Female	Mean SS	06-08	444	443	-0.5		06-08	842	842	0		2008	1134	NA	NA	

		Grade 4					Grade 8					Grade 11				
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	NA	NA			06-08	NA	NA			2008	NA	NA		
Male	Mean SS	06-08	444	443	-0.5	E	06-08	841	841	0	E	2008	1134	NA	NA	NA
	SD	06-08	NA	NA			06-08	NA	NA			2008	NA	NA		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 444 for white students and 435 for African American students. In 2008, the mean scale score in 4th grade math was 443 for white students and 433 for African American students. Between 2006 and 2008, the mean scale score declined at an average yearly rate of 0.5 points for white students and 1.0 points for African American students, indicating a widening of the achievement gap for African Americans.

[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 VT-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					Grade 11				
		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
All tested students	Reading	06-08	6,210	6,429	3.5%	100.0%	06-08	7,249	7,086	-2.2%	100.0%	08	7,240	NA	NA	102.2%
	Math	06-08	6,274	6,436	2.6%	100.0%	06-08	7,262	7,087	-2.4%	100.0%	08	7,187	NA	NA	101.4%
White	Reading	06-08	5,890	6,013	2.1%	93.5%	06-08	6,945	6,668	-4.0%	94.1%	08	6,865	NA	NA	96.9%
	Math	06-08	5,947	6,015	1.1%	93.5%	06-08	6,956	6,667	-4.2%	94.1%	08	6,817	NA	NA	96.2%
African American	Reading	06-08	92	90	-2.2%	1.4%	06-08	95	87	-8.4%	1.2%	08	110	NA	NA	1.6%
	Math	06-08	95	90	-5.3%	1.4%	06-08	96	88	-8.3%	1.2%	08	107	NA	NA	1.5%
Latino	Reading	06-08	NA	64	NA	1.0%	06-08	NA	78	NA	1.1%	08	63	NA	NA	0.9%
	Math	06-08	NA	64	NA	1.0%	06-08	NA	79	NA	1.1%	08	62	NA	NA	0.9%
Asian	Reading	06-08	90	100	11.1%	1.6%	06-08	69	106	53.6%	1.5%	08	88	NA	NA	1.2%
	Math	06-08	91	104	14.3%	1.6%	06-08	69	106	53.6%	1.5%	08	89	NA	NA	1.3%
Native American	Reading	06-08	NA	13	NA	0.2%	06-08	32	23	-28.1%	0.3%	08	41	NA	NA	0.6%
	Math	06-08	NA	13	NA	0.2%	06-08	32	23	-28.1%	0.3%	08	41	NA	NA	0.6%
Low-income	Reading	06-08	1,888	2,104	11.4%	32.7%	06-08	1,872	1,970	5.2%	27.8%	08	1,489	NA	NA	21.0%
	Math	06-08	1,931	2,105	9.0%	32.7%	06-08	1,880	1,973	4.9%	27.8%	08	1,469	NA	NA	20.7%
Students w/ disabilities	Reading	06-08	479	682	42.4%	10.6%	06-08	706	933	32.2%	13.2%	08	849	NA	NA	12.0%
	Math	06-08	519	682	31.4%	10.6%	06-08	720	932	29.4%	13.2%	08	827	NA	NA	11.7%
English language learners	Reading	06-08	140	139	-0.7%	2.2%	06-08	86	100	16.3%	1.4%	08	81	NA	NA	1.1%
	Math	06-08	151	141	-6.6%	2.2%	06-08	93	101	8.6%	1.4%	08	81	NA	NA	1.1%
Female	Reading	06-08	3,033	3,151	3.9%	49.0%	06-08	3,588	3,478	-3.1%	49.1%	08	3,569	NA	NA	50.4%
	Math	06-08	3,040	3,152	3.7%	49.0%	06-08	3,586	3,478	-3.0%	49.1%	08	3,542	NA	NA	50.0%
Male	Reading	06-08	3,177	3,238	1.9%	50.4%	06-08	3,661	3,608	-1.4%	50.9%	08	3,671	NA	NA	51.8%
	Math	06-08	3,234	3,243	0.3%	50.4%	06-08	3,676	3,609	-1.8%	50.9%	08	3,645	NA	NA	51.4%

Table reads: In 2006, 5,890 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had risen to 6,013 students, an increase of 2.1%. In 2008, the white subgroup made up 93.5% of the 6,429 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.