Subgroup Achievement and Gap Trends — New Jersey

K-12 enrollment — 1,271,481

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.

At grade 4, all the major student groups in New Jersey showed clear trend of gains in math at the proficient and advanced achievement levels, but subgroup trends in reading were mixed. A clear trend of narrowing gaps was evident for all major subgroups at the elementary and high school levels. (Data were not available to determine trends at the basic achievement level or for middle school.)

Subgroup trends by achievement level at grade 4

- Reading: Trends in grade 4 reading varied by subgroup and achievement level. Of the 10 trend lines analyzed across two achievement levels in reading, 5 showed gains, 4 showed no net change, and 1 showed declines.

- Math: The five subgroups analyzed made moderate-to-large gains in math at the proficient-and-above and advanced levels. Gains were notably large for African American and low-income students at the proficient-and-above level.

Gap trends at three grade levels

- General trend: With just one exception, achievement gaps for African American, Latino, and low-income students narrowed in reading and math at the elementary and high school levels. The exception was for African American students in grade 11 reading, where the gap narrowed according to average test scores but remained the same according to percentages scoring proficient.

- Progress: Notable progress in closing achievement gaps was made by African American students and low-income students in grade 4 math.

- Asian subgroup: The Asian subgroup consistently outperformed white students in grade 4 reading and math and in grade 11 math. In grade 11 reading, Asian students started out behind white students in 2002 but surpassed them by 2008.

Data notes

- Limited data: Trends for grade 8 were not analyzed because New Jersey began administering a new middle school test in 2007-08. None of New Jersey's three achievement levels is equivalent to the basic level, so trends at this level could not be determined.

- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Asian American, and low-income students. The Native American subgroup is too small in New Jersey 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 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 grades 4 and 11.

Data Limitations

Years of comparable percentage proficient data	2004 – 2008: Grade 3 2001– 2008: Grade 4 reading 1999 – 2008: Grade 4 math 2006 – 2007: Grades 5–7 (new grades 5-7 tests implemented in 2008) 1999 – 2007: Grade 8 (new grade 8 test implemented in 2008) 2002 – 2008: Grade 11
Years of comparable mean scale score data	Available for the following years: 2003–2008: Grade 4 and grade 11 2003–2007: Grade 8 reading
Disaggregated data for all subgroups and comparison groups	Percentage proficient data available 2002 through 2008 for grades 4 and 11; available 2002 through 2007 for grade 8 (new grade 8 test implemented in 2008) Mean scale score data available 2003 through 2008 for grades 4 and 11; available 2003 through 2007 for grade 8 (new grade 8 test implemented in 2008) Percentage proficient data and mean scale score data not available until 2007 for comparison group of students who are *not* disabled and not available for any year for students who are *not* English language learners (ELL), so the students with disabilities

	and ELL subgroups are compared with all tested students in the state Percentage proficient data for comparison group of students who are *not* low-income not available until 2003 for grades 4 and 11. Mean scale score data not available for students with disabilities and ELLs until 2006.f
Numbers of test-takers by subgroup	Not available until 2003 for most subgroups for grade 4

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 Jersey Assessment of Skills and Knowledge, grades 3–7 (NJ ASK 3, 4, 5, 6, 7; NJ ASK grade 8 implemented in 2008) Grade Eight Proficiency Assessment (GEPA; last administered 2007) High School Proficiency Assessment (HSPA), grade 11 Alternate Proficiency Assessment
Grades tested for NCLB accountability	3–8, 11
State labels for achievement levels	NJ uses three achievement levels: Partially Proficient, Proficient, and Advanced Proficient. For our analyses we treated Proficient as Proficient and Advanced Proficient as Advanced. No NJ achievement level was treated as our Basic.
High school NCLB test also used as an exit exam?	Yes
First year test used	1998: GEPA *(last administered in 2006-07)* 1999: NJ ASK 4 math 2001: NJ ASK 4 language arts 2002: HSPA 2004: NJ ASK 3 2006: NJ ASK 5, 6, 7 *(last administered in 2006-07)* 2008: NJ ASK 5-8 *(implemented to replace GEPA and 2006 versions of the NJ ASK 5, 6, 7).*
Time of test administration	Spring
Major changes in testing system (2002–present)	1999: Standards set for the Elementary School Proficiency Assessment (ESPA) and NJASK 4 in math

2001: Standards set for the ESPA and NJ ASK 4 in language arts
March 2004: NJ ASK 4 replaced ESPA for accountability purposes (name changed but test content and structure remained the same)
March 2005: NJ ASK 3 first used for accountability purposes
2005–06: Grades 5, 6, and 7 added to testing
Spring 2007: HSPA science assessments began
2008: New NJ ASK grade 5-8 programs were implemented, with new standard settings; replaced GEPA for grade 8
2009: New grade 3-4 programs established in 2009, with standards to be set June 2009.

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 NJ-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	6%	4%	5%	4%	4%	7%	5%	-0.2
Proficient and Above	79%	78%	82%	82%	80%	81%	83%	0.6
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
White								
Advanced	8%	5%	6%	6%	5%	8%	6%	-0.4
Proficient and Above	87%	87%	90%	89%	88%	88%	89%	0.4
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
African American								
Advanced	1%	1%	1%	1%	1%	2%	1%	0.0
Proficient and Above	61%	58%	67%	65%	63%	63%	67%	1.0
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Latino								
Advanced	2%	1%	1%	1%	1%	2%	1%	0.0
Proficient and Above	67%	63%	69%	71%	67%	69%	73%	0.9
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Asian								
Advanced	12%	8%	10%	10%	9%	16%	11%	0.0
Proficient and Above	90%	89%	92%	92%	91%	92%	93%	0.4
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Native American[2]								
Advanced	6%	2%	4%	2%	3%	4%	5%	-0.1
Proficient and Above	74%	79%	80%	82%	73%	74%	72%	-0.3
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test decreased from 8% in 2002 to 6% in 2008. During this period, the average yearly decline in the percentage advanced in reading for white 4th graders was 0.4 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 NJ-8. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced	6%	4%	5%	4%	4%	7%	5%	-0.2
Proficient and Above	79%	78%	82%	82%	80%	81%	83%	0.6
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Low-income students								
Advanced	1%	1%	1%	1%	1%	2%	1%	0.0
Proficient and Above	62%	58%	66%	67%	63%	65%	69%	1.1
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Students with disabilities[3]								
Advanced	1%	0%	1%	1%	1%	1%	1%	0.1
Proficient and Above	43%	42%	49%	49%	49%	50%	55%	3.1
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
English language learners[3]								
Advanced	0%	0%	1%	0%	1%	1%	1%	-0.1
Proficient and Above	45%	31%	49%	46%	44%	45%	61%	8.1
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Female								
Advanced	9%	6%	7%	7%	6%	9%	7%	-0.3
Proficient and Above	85%	83%	87%	87%	84%	84%	86%	0.3
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Male								
Advanced	4%	2%	3%	2%	2%	4%	3%	-0.2
Proficient and Above	74%	72%	78%	77%	76%	77%	79%	0.9
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test was 1% in 2002 and 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 0.0 percentage points per year.

[1]Averages are subject to rounding error.

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Table NJ-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	27%	25%	26%	32%	41%	41%	40%	2.2
Proficient and Above	69%	68%	72%	80%	82%	85%	85%	2.7
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
White								
Advanced	36%	32%	31%	37%	49%	50%	49%	2.2
Proficient and Above	80%	79%	81%	88%	90%	92%	92%	1.9
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
African American								
Advanced	7%	9%	11%	15%	18%	19%	19%	2.0
Proficient and Above	39%	42%	50%	60%	63%	68%	68%	4.9
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Latino								
Advanced	12%	13%	15%	20%	27%	25%	25%	2.1
Proficient and Above	53%	52%	59%	70%	72%	75%	76%	3.9
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Asian								
Advanced	47%	48%	47%	56%	66%	66%	64%	2.8
Proficient and Above	86%	87%	88%	92%	94%	95%	95%	1.4
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Native American[2]								
Advanced	33%	26%	27%	35%	40%	31%	39%	1.0
Proficient and Above	67%	68%	73%	79%	78%	81%	83%	2.8
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 36% in 2002 to 49% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 2.2 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.

Table NJ-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	27%	25%	26%	32%	41%	41%	40%	2.2
Proficient and Above	69%	68%	72%	80%	82%	85%	85%	2.7
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Low-income students								
Advanced	9%	11%	13%	17%	23%	22%	22%	2.1
Proficient and Above	45%	47%	54%	65%	68%	71%	72%	4.5
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Students with disabilities[3]								
Advanced	10%	8%	10%	13%	20%	21%	21%	0.4
Proficient and Above	40%	38%	46%	55%	60%	64%	65%	3.0
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
English language learners[3]								
Advanced	6%	7%	11%	12%	18%	15%	19%	0.8
Proficient and Above	36%	34%	47%	51%	55%	55%	65%	4.7
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Female								
Advanced	25%	23%	24%	31%	40%	39%	40%	2.4
Proficient and Above	67%	67%	72%	81%	82%	85%	85%	3.1
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Male								
Advanced	29%	27%	27%	32%	42%	43%	41%	2.0
Proficient and Above	70%	69%	73%	80%	83%	85%	85%	2.4
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 9% in 2002 to 22% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 2.1 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 NJ-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	02-08	79%	83%	0.6		02-07	73%	74%	NA		02-08	81%	83%	0.3	
White	02-08	87%	89%	0.4		02-07	84%	84%	NA		02-08	88%	90%	0.3	
African American	02-08	61%	67%	1.0	L	02-07	46%	50%	NA	NA	02-08	63%	65%	0.3	E
Latino	02-08	67%	73%	0.9	L	02-07	54%	58%	NA	NA	02-08	64%	69%	0.7	L
Asian	02-08	90%	93%	0.4	E	02-07	87%	87%	NA	NA	02-08	87%	91%	0.6	L
Native American	02-08	74%	72%	-0.3[2]	S	02-07	68%	70%	NA	NA	02-08	63%	77%	2.3[2]	L
Not low-income	03-08	86%	89%	0.6		02-07	82%	82%	NA		03-08	84%	87%	0.6	
Low-income	03-08	58%	69%	2.1	L	02-07	47%	52%	NA	NA	03-08	57%	65%	1.5	L
All tested students	06-08	80%	83%	1.3		06-07	74%	74%	NA		06-08	84%	83%	-0.4	
Students with disabilities[3]	06-08	49%	55%	3.1	L	06-07	33%	33%	NA	NA	06-08	45%	43%	-0.8	S
All tested students	06-08	80%	83%	1.3		06-07	74%	74%	NA		06-08	84%	83%	-0.4	
English language learners[3]	06-08	44%	61%	8.1	L	06-07	16%	19%	NA	NA	06-08	22%	29%	3.4	L
Female	02-08	85%	86%	0.3		02-07	79%	81%	NA		02-08	86%	87%	0.3	
Male	02-08	74%	79%	0.9	L	02-07	67%	67%	NA	NA	02-08	77%	78%	0.3	E

Table reads: In 2002, 87% of white 4th graders and 61% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 89% of

white 4th graders and 67% of African American 4th graders scored at the proficient level in reading. Between 2002 and 2008, the percentage proficient improved at an average rate of 0.4 percentage point per year for white students and 1.0 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

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

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table NJ-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	02-08	69%	85%	2.7		02-07	58%	68%	NA		02-08	69%	75%	1.0	
White	02-08	80%	92%	1.9		02-07	70%	81%	NA		02-08	79%	85%	1.0	
African American	02-08	39%	68%	4.9	L	02-07	25%	38%	NA	NA	02-08	36%	45%	1.6	L
Latino	02-08	53%	76%	3.9	L	02-07	37%	51%	NA	NA	02-08	45%	57%	2.0	L
Asian	02-08	86%	95%	1.4	S	02-07	83%	88%	NA	NA	02-08	84%	91%	1.1	L
Native American	02-08	67%	83%	2.8[2]	L	02-07	55%	57%	NA	NA	02-08	57%	69%	1.9[2]	L
Not low-income	03-08	77%	91%	2.7		02-07	67%	77%	NA		03-08	71%	80%	1.8	
Low-income	03-08	47%	72%	5.0	L	02-07	30%	45%	NA	NA	03-08	36%	52%	3.2	L
All tested students	06-08	82%	85%	1.2		06-07	65%	68%	NA		06-08	76%	75%	-0.6	
Students with disabilities[3]	06-08	60%	65%	3.0	L	06-07	25%	29%	NA	NA	06-08	32%	32%	0.0	L
All tested students	06-08	82%	85%	1.2		06-07	65%	68%	NA		06-08	76%	75%	-0.6	
English language learners[3]	06-08	55%	65%	4.7	L	06-07	23%	26%	NA	NA	06-08	33%	36%	1.6	L
Female	02-08	67%	85%	3.1		02-07	59%	68%	NA		02-08	68%	75%	1.1	
Male	02-08	70%	85%	2.4	S	02-07	58%	69%	NA	NA	02-08	69%	75%	1.0	S

Table reads: In 2002, 80% of white 4th graders and 39% of African American 4th graders scored at the proficient level on the state math test. In 2008, 92% of white 4th graders and 68% of African American 4th graders scored at the proficient level in math. Between 2002 and 2008, the percentage proficient improved at an average rate of 1.9 percentage points per year for white students and 4.9 percentage points per year for African American students, indicating a larger rate of gain

and a narrowing of the achievement gap for African American 4th graders.

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

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table NJ-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	03-08	214.6	215.6	0.2		03-07	212.8	214.9	NA		03-08	219.8	220.8	0.2	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
White	Mean SS	03-08	220.9	220.6	-0.1		03-07	220.8	222.5	NA		03-08	227.5	228.0	0.1	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
African American	Mean SS	03-08	201.8	203.6	0.4	L	03-07	194.3	197.3	NA	NA	03-08	199.8	202.8	0.6	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Latino	Mean SS	03-08	203.1	207.1	0.8	L	03-07	197.8	201.7	NA	NA	03-08	201.5	206.1	0.9	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Asian	Mean SS	03-08	224.9	226.1	0.2	L	03-07	225.6	229.4	NA	NA	03-08	229.5	232.0	0.5	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Native American	Mean SS	03-08	213.8	210.0	-0.8[2]	S	03-07	205.5	210.3	NA	NA	03-08	215.6	215.6	0.0[2]	S
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Not Low-income	Mean SS	03-08	220.3	220.5	0.0		03-07	219.4	221.1	NA		03-08	223.9	225.1	0.2	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Low-income	Mean SS	03-08	201.1	204.3	0.6	L	03-07	193.8	198.1	NA	NA	03-08	196.2	202.7	1.3	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
All tested students	Mean SS	06-08	214.6	215.6	0.5		06-07	212.8	214.9	NA		06-08	219.8	220.8	0.5	
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
Students with disabilities[3]	Mean SS	06-08	194.3	195.6	0.7	L	06-07	184.2	185.1	NA	NA	06-08	187.0	185.6	-0.7	S
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
All tested students	Mean SS	06-08	214.6	215.6	0.5		06-07	212.8	214.9	NA		06-08	219.8	220.8	0.5	
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
English language learners[3]	Mean SS	06-08	191.1	199.1	4.0	L	06-07	170.7	173.4	NA	NA	06-08	171.0	175.4	2.2	L
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
Female	Mean SS	03-08	219.1	219.4	0.1		03-07	218.3	221.1	NA		03-08	225.2	226.3	0.2	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	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	03-08	210.3	212.1	0.4	L	03-07	207.6	209.0	NA	NA	03-08	214.4	215.4	0.2	E
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		

Table reads: In 2003, the mean scale score on the state 4th grade reading test was 220.9 for white students and 201.8 for African American students. In 2008, the mean scale score in 4th grade reading was 220.6 for white students and 203.6 for African American students. Between 2003 and 2008, the mean scale score declined at an average yearly rate of 0.1 points for white students and improved at an average yearly rate of 0.4 points for African American students, indicating a narrowing 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 NJ-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	03-08	217.3	234.6	3.5		03-07	209.2	215.5	NA		03-08	214.9	221.2	1.3	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
White	Mean SS	03-08	226.5	242.2	3.1		03-07	218.2	224.8	NA		03-08	223.7	229.5	1.2	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
African American	Mean SS	03-08	194.3	215.3	4.2	L	03-07	185.1	191.8	NA	NA	03-08	188.5	196.2	1.5	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Latino	Mean SS	03-08	202.9	222.3	3.9	L	03-07	192.8	200.1	NA	NA	03-08	194.5	204.3	2.0	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Asian	Mean SS	03-08	238.3	251.5	2.6	S	03-07	232.0	238.1	NA	NA	03-08	233.9	241.8	1.6	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Native American	Mean SS	03-08	216.3	233.1	3.4[2]	L	03-07	204.0	207.9	NA	NA	03-08	208.4	214.1	1.1[2]	S
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Not Low-income	Mean SS	03-08	225.3	241.5	3.2		03-07	216.5	222.8	NA		03-08	219.2	226.0	1.4	
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Low-income	Mean SS	03-08	198.3	218.9	4.1	L	03-07	188.6	196.1	NA	NA	03-08	190.2	200.7	2.1	L
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
All tested students	Mean SS	06-08	217.3	234.6	8.7		06-07	209.2	215.5	NA		06-08	214.9	221.2	3.2	
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
Students with disabilities[3]	Mean SS	06-08	208.9	213.9	2.5	S	06-07	182.9	185.2	NA	NA	06-08	187.7	187.0	-0.4	S
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
All tested students	Mean SS	06-08	217.3	234.6	8.7		06-07	209.2	215.5	NA		06-08	214.9	221.2	3.2	
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
English language learners[3]	Mean SS	06-08	205.8	213.2	3.7	S	06-07	180.8	183.8	NA	NA	06-08	190.4	190.5	0.1	S
	SD	06-08	NA	NA			06-07	NA	NA			06-08	NA	NA		
Female	Mean SS	03-08	215.8	234.6	3.8		03-07	207.9	214.6	NA		03-08	212.9	219.9	1.4	

		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	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		
Male	Mean SS	03-08	218.8	234.6	3.2	S	03-07	210.6	216.4	NA	NA	03-08	216.7	222.4	1.1	S
	SD	03-08	NA	NA			03-07	NA	NA			03-08	NA	NA		

Table reads: In 2003, the mean scale score on the state 4th grade math test was 226.5 for white students and 194.3 for African American students. In 2008, the mean scale score in 4th grade math was 242.2 for white students and 215.3 for African American students. Between 2003 and 2008, the mean scale score improved at an average yearly rate of 3.1 points for white students and 4.2 points for African American students, indicating a narrowing 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 NJ-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 in End Year
All tested students	Reading	02-08	103,507	100,740	-2.7%	100.0%	02-07	100,543	105,865	5.3%	100.0%	02-08	84,509	98,056	16.0%	100.0%
	Math	02-08	103,870	101,526	-2.3%	100.0%	02-07	101,223	106,980	5.7%	100.0%	02-08	84,030	97,985	16.6%	100.0%
White	Reading	03-08	60,327	55,408	-8.2%	55.0%	02-07	61,143	60,739	-0.7%	57.4%	03-08	54,778	58,608	7.0%	59.8%
	Math	03-08	60,205	55,527	-7.8%	54.7%	02-07	61,400	60,943	-0.7%	57.0%	03-08	54,713	58,572	7.1%	59.8%
African American	Reading	03-08	19,224	16,985	-11.6%	16.9%	02-07	17,014	18,590	9.3%	17.6%	03-08	12,358	15,464	25.1%	15.8%
	Math	03-08	19,203	17,073	-11.1%	16.8%	02-07	17,285	18,823	8.9%	17.6%	03-08	12,289	15,449	25.7%	15.8%
Latino	Reading	03-08	17,377	18,853	8.5%	18.7%	02-07	13,986	18,173	29.9%	17.2%	03-08	11,163	15,122	35.5%	15.4%
	Math	03-08	17,377	19,274	10.9%	19.0%	02-07	14,101	18,700	32.6%	17.5%	03-08	11,122	15,098	35.7%	15.4%
Asian	Reading	03-08	6,450	8,497	31.7%	8.4%	02-07	5,712	7,565	32.4%	7.1%	03-08	5,165	7,657	48.2%	7.8%
	Math	03-08	6,441	8,637	34.1%	8.5%	02-07	5,720	7,688	34.4%	7.2%	03-08	5,163	7,660	48.4%	7.8%
Native American	Reading	03-08	112	81	-27.7%	0.1%	02-07	115	109	-5.2%	0.1%	03-08	359	134	-62.7%	0.1%
	Math	03-08	112	83	-25.9%	0.1%	02-07	115	111	-3.5%	0.1%	03-08	360	135	-62.5%	0.1%
Low-income	Reading	03-08	31,458	30,537	-2.9%	30.3%	02-07	24,458	28,558	16.8%	27.0%	03-08	13,345	18,849	41.2%	19.2%
	Math	03-08	31,449	30,942	-1.6%	30.5%	02-07	24,792	29,182	17.7%	27.3%	03-08	13,287	18,833	41.7%	19.2%
Students w/ disabilities	Reading	06-08	15,553	15,665	0.7%	15.5%	06-07	17,076	16,971	-0.6%	16.0%	06-08	14,038	14,460	3.0%	14.7%
	Math	06-08	15,639	15,749	0.7%	15.5%	06-07	17,279	17,190	-0.5%	16.1%	06-08	13,963	14,422	3.3%	14.7%
English language learners	Reading	06-08	3,017	4,593	52.2%	4.6%	06-07	2,437	2,384	-2.2%	2.3%	06-08	2,581	3,066	18.8%	3.1%
	Math	06-08	3,725	5,260	41.2%	5.2%	06-07	3,149	2,962	-5.9%	2.8%	06-08	2,583	3,075	19.0%	3.1%
Female	Reading	03-08	51,820	48,900	-5.6%	48.5%	02-07	49,183	51,579	4.9%	48.7%	03-08	43,598	48,543	11.3%	49.5%
	Math	03-08	51,747	49,205	-4.9%	48.5%	02-07	49,431	54,871	11.0%	51.3%	03-08	43,509	48,511	11.5%	49.5%
Male	Reading	03-08	54,330	51,824	-4.6%	51.4%	02-07	51,234	54,235	5.9%	51.2%	03-08	44,646	49,486	10.8%	50.5%
	Math	03-08	54,253	52,299	-3.6%	51.5%	02-07	51,656	52,049	0.8%	48.7%	03-08	44,539	49,447	11.0%	50.5%

Table reads: In 2003, 60,327 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 55,408 students, a decrease of 8.2%. In 2008, the white subgroup made up 55.0% of the 100,740 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.