

Subgroup Achievement and Gap Trends — Delaware

K-12 enrollment — 123,364

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.

Delaware showed upward trends in test scores and achievement gaps closing in reading. The picture was more mixed for math.

Subgroup trends by achievement level at grade 4

- **Main trend:** In reading, almost all subgroups showed gains in the percentage of students scoring at three achievement levels—basic-and-above, proficient-and-above, and advanced. In math, results were more mixed, with the African American, Latino, and low income subgroups showing declines at one or more achievement levels.

Gap trends at three grade levels

- **Main trend:** There was improvement in the closing of 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, 8 and high school. Most trend lines showed gaps closing in reading. In math, gaps widened in the elementary grade analyzed but improved in the upper grades.

Data notes

- **Limited data:** Percentage proficient trends are limited to 2006–2008.

- Subgroups analyzed: Trends were analyzed for white, African American, Latino, and low-income students. The Native American and Asian American subgroups are too small in Delaware 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	2006 through 2008 (prior years not comparable due to change in proficiency cut scores in 2006)
Years of comparable mean scale score data	Grade 4: 2006 through 2008 (grade 4 added in 2006) Grades 8 and 10: 2002 through 2008 Students with disabilities and English language learners: 2006 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	Delaware Student Testing Program (DSTP) Delaware Alternate Portfolio Assessment (DAPA)
Grades tested for NCLB accountability	3-8, 10
State labels for achievement levels	DE uses five achievement levels: PL 1, PL 2, PL 3, PL 4, and PL 5. For our analyses we treated PL 2 as Basic, PL 3 as Proficient, and PL 4 + PL 5 as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	1998 for grades 3, 5, 8, and 10; 2006 for grades 4, 6, and 7
Time of test administration	Spring
Major changes in testing system (2002–present)	Cut scores for reading and math proficiency levels changed in spring 2006

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 DE-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			
All tested students							
Advanced				33%	36%	35%	0.9
Proficient and Above				82%	82%	81%	-0.2
Basic and Above				95%	95%	95%	0.0
White							
Advanced				43%	46%	46%	1.2
Proficient and Above				89%	89%	89%	0.0
Basic and Above				97%	97%	98%	0.1
African American							
Advanced				17%	18%	20%	1.1
Proficient and Above				69%	70%	69%	0.2
Basic and Above				90%	92%	90%	0.1
Latino							
Advanced				22%	26%	24%	1.2
Proficient and Above				77%	79%	77%	0.2
Basic and Above				93%	94%	94%	0.1
Asian ²							
Advanced				53%	62%	61%	4.1
Proficient and Above				94%	95%	94%	0.1
Basic and Above				99%	99%	99%	0.1
Native American ²							
Advanced				43%	38%	25%	-8.8
Proficient and Above				88%	86%	89%	0.9
Basic and Above				100%	100%	94%	-2.9

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test increased from 43% in 2006 to 46% in 2008. During this period, the average yearly gain in the percentage advanced in reading for white 4th graders was 1.2 percentage points per year.

¹Averages are subject to rounding error.

²The 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 DE-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					33%	36%	35%	0.9
Proficient and Above					82%	82%	81%	-0.2
Basic and Above					95%	95%	95%	0.0
Low-income students								
Advanced					19%	21%	20%	0.6
Proficient and Above					73%	72%	71%	-0.9
Basic and Above					91%	92%	92%	0.1
Students with disabilities ^{2,3}								
Advanced					11%	13%	11%	-0.2
Proficient and Above					51%	59%	59%	4.2
Basic and Above					76%	82%	80%	2.0
English language learners ^{2,3}								
Advanced					6%	14%	23%	8.4
Proficient and Above					50%	72%	75%	12.2
Basic and Above					79%	92%	94%	7.3
Female								
Advanced					37%	40%	38%	0.5
Proficient and Above					84%	84%	83%	-0.9
Basic and Above					96%	96%	95%	-0.2
Male								
Advanced					30%	32%	33%	1.3
Proficient and Above					79%	80%	80%	0.6
Basic and Above					94%	94%	94%	0.2

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test increased from 19% in 2006 to 20% in 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 0.6 percentage points per year.

¹Averages are subject to rounding error.

²The 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.

³Gap 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 DE-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					32%	37%	35%	1.7
Proficient and Above					78%	76%	77%	-0.5
Basic and Above					92%	90%	90%	-0.8
White								
Advanced					42%	48%	48%	3.0
Proficient and Above					87%	85%	88%	0.5
Basic and Above					95%	95%	95%	0.1
African American								
Advanced					16%	19%	17%	0.7
Proficient and Above					64%	61%	62%	-0.9
Basic and Above					86%	82%	83%	-1.5
Latino								
Advanced					23%	27%	25%	1.1
Proficient and Above					73%	69%	73%	0.2
Basic and Above					92%	87%	90%	-0.8
Asian ²								
Advanced					63%	71%	71%	4.2
Proficient and Above					96%	94%	93%	-1.1
Basic and Above					98%	99%	97%	-0.5
Native American ²								
Advanced					26%	29%	44%	8.8
Proficient and Above					88%	86%	69%	-9.7
Basic and Above					98%	95%	91%	-3.5

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 42% in 2006 to 48% 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.

¹Averages are subject to rounding error.

²The 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 DE-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					32%	37%	35%	1.7
Proficient and Above					78%	76%	77%	-0.5
Basic and Above					92%	90%	90%	-0.8
Low-income students								
Advanced					18%	23%	21%	1.6
Proficient and Above					68%	64%	66%	-1.0
Basic and Above					88%	84%	85%	-1.6
Students with disabilities ³								
Advanced					9%	11%	8%	-0.5
Proficient and Above					44%	41%	41%	-1.5
Basic and Above					67%	64%	62%	-2.4
English language learners ^{2,3}								
Advanced					7%	20%	26%	9.4
Proficient and Above					44%	61%	72%	14.2
Basic and Above					76%	83%	88%	6.3
Female								
Advanced					31%	36%	33%	1.4
Proficient and Above					77%	76%	76%	-0.9
Basic and Above					92%	90%	90%	-0.8
Male								
Advanced					33%	37%	37%	1.9
Proficient and Above					78%	76%	78%	0.2
Basic and Above					91%	90%	90%	-0.4

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 18% in 2006 to 21% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 1.6 percentage points per year.

¹Averages are subject to rounding error.

²The 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.

³Gap 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 DE-11. Subgroup Achievement Trends in Reading by Percentages Proficient**

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

Subgroup	Grade 4					Grade 8					Grade 10				
	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	82%	81%	-0.2		06-08	84%	81%	-1.4		06-08	71%	71%	0.1	
White	06-08	89%	89%	0.0		06-08	90%	89%	-0.7		06-08	80%	80%	0.2	
African American	06-08	69%	69%	0.2	L	06-08	73%	68%	-2.4	S	06-08	53%	54%	0.6	L
Latino	06-08	77%	77%	0.2	L	06-08	77%	76%	-0.5	L	06-08	54%	56%	1.3	L
Asian	06-08	94%	94%	0.1 ²	L	06-08	94%	94%	-0.2 ²	L	06-08	81%	84%	1.5 ²	L
Native American	06-08	88%	89%	0.9 ²	L	06-08	90%	91%	0.3 ²	L	06-08	64%	74%	5.0 ²	L
Not low-income	06-08	88%	89%	0.5		06-08	90%	88%	-0.8		06-08	77%	78%	0.3	
Low-income	06-08	73%	71%	-0.9	S	06-08	74%	69%	-2.1	S	06-08	52%	54%	0.7	L
Not disabled	06-08	83%	82%	-0.5		06-08	87%	82%	-2.4		06-08	76%	82%	3.4	
Students with disabilities ³	06-08	51%	59%	4.2 ²	L	06-08	45%	46%	0.5	L	06-08	21%	26%	2.5	S
Not ELL	06-08	82%	82%	-0.3		06-08	84%	81%	-1.3		06-08	71%	71%	0.2	
English language learners ³	06-08	50%	75%	12.2 ²	L	06-08	48%	56%	3.8 ²	L	06-08	25%	33%	3.9 ²	L
Female	06-08	84%	83%	-0.9		06-08	88%	84%	-2.1		06-08	74%	73%	-0.5	
Male	06-08	79%	80%	0.6	L	06-08	79%	78%	-0.7	L	06-08	67%	68%	0.5	L

Table reads: In 2006, 89% of white 4th graders and 69% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 89% of white 4th graders and 69% of African American 4th graders scored at the proficient level in reading. Between 2006 and 2008, the percentage proficient improved at an average rate of 0.0 percentage point per year for white students and 0.2 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.

¹Numbers in these columns are subject to rounding error.

²The 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.

³Gap 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 DE-12. Subgroup Achievement Trends in Mathematics by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

Subgroup	Grade 4					Grade 8					Grade 10				
	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	78%	77%	-0.5		06-08	62%	65%	1.3		06-08	59%	58%	-0.5	
White	06-08	87%	88%	0.5		06-08	76%	77%	0.6		06-08	70%	69%	-0.6	
African American	06-08	64%	62%	-0.9	S	06-08	42%	46%	2.3	L	06-08	35%	58%	11.2	L
Latino	06-08	73%	73%	0.2	S	06-08	49%	56%	3.5	L	06-08	44%	47%	1.4	L
Asian	06-08	96%	96%	0.2 ²	S	06-08	88%	91%	1.4 ²	L	06-08	79%	84%	2.3 ²	L
Native American	06-08	88%	69%	-9.7 ²	S	06-08	51%	78%	13.3 ²	L	06-08	65%	58%	-3.5 ²	S
Not low-income	06-08	86%	86%	0.2		06-08	73%	75%	1.0		06-08	67%	66%	-0.6	
Low-income	06-08	68%	66%	-1.0	S	06-08	45%	49%	1.9	L	06-08	39%	40%	0.4	L
Not disabled	06-08	84%	82%	-0.7		06-08	69%	82%	6.9		06-08	65%	82%	8.9	
Students with disabilities ³	06-08	44%	41%	-1.5	S	06-08	23%	22%	-0.6	S	06-08	16%	16%	0.4	S
Not ELL	06-08	79%	77%	-0.6		06-08	63%	65%	1.3		06-08	59%	58%	-0.5	
English language learners ³	06-08	44%	72%	14.2 ²	L	06-08	31%	44%	6.3 ²	L	06-08	33%	39%	2.7 ²	L
Female	06-08	77%	76%	-0.9		06-08	61%	65%	1.7		06-08	58%	57%	-0.8	
Male	06-08	78%	78%	0.2	L	06-08	63%	65%	1.0	S	06-08	59%	59%	-0.2	L

Table reads: In 2006, 87% of white 4th graders and 64% of African American 4th graders scored at the proficient level on the state math test. In 2008, 88% of white 4th graders and 62% 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 0.5 percentage point per year for white students and declined 0.9 percentage points per year for African American students, indicating a smaller rate of gain and a widening of the achievement gap for African American 4th graders.

¹Numbers in these columns are subject to rounding error.

²The 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.

³Gap 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 DE-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.

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		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	467.7	468.5	0.4		02-08	519.3	523.1	0.6		02-08	513.2	518.4	0.9	
	SD	06-08	33.1	34.1			02-08	36.7	35.5			02-08	39.3	37.3		
White	Mean SS	06-08	476.3	477.9	0.8		02-08	527.5	533.1	0.9		02-08	522.6	527.6	0.8	
	SD	06-08	30.9	32.1			02-08	34.5	33.3			02-08	35.0	34.8		
African American	Mean SS	06-08	453.1	454.3	0.6	S	02-08	502.2	507.8	0.94	L	02-08	492.6	501.2	1.4	L
	SD	06-08	31.6	32.5			02-08	34.9	32.6			02-08	38.9	33.8		
Latino	Mean SS	06-08	459.7	460.8	0.6	S	02-08	504.9	513.5	1.4	L	02-08	493.8	505.3	1.9	L
	SD	06-08	30.9	30.4			02-08	33.9	33.2			02-08	40.1	37.1		
Asian	Mean SS	06-08	486.3	488.5	1.1 ²	L	02-08	542.0	546.4	0.7 ²	S	02-08	528.0	540.9	2.2 ²	L
	SD	06-08	31.7	32.1			02-08	37.2	36.5			02-08	47.7	43.0		
Native American	Mean SS	06-08	473.7	465.6	-4.0 ²	S	02-08	519.8	527.1	1.2 ²	L	02-08	511.8	519.7	1.3 ²	L
	SD	06-08	27.5	29.6			02-08	33.6	29.5			02-08	44.2	37.2		
Not Low-income	Mean SS	06-08	476.2	478.0	0.9		02-08	527.3	532.1	0.8		02-08	518.9	525.2	1.0	
	SD	06-08	32.1	32.7			02-08	34.8	34.1			02-08	37.3	36.1		
Low-income	Mean SS	06-08	455.6	455.7	0.1	S	02-08	502.3	509.0	1.1	L	02-08	491.8	501.8	1.7	L
	SD	06-08	30.7	31.7			02-08	35.0	32.9			02-08	39.3	34.9		
Not disabled	Mean SS	06-08	469.3	469.7	0.2		06-08	528.1	526.4	-0.9		06-08	523.4	522.2	-0.6	
	SD	06-08	32.2	33.6			06-08	32.6	33.5			06-08	33.3	35.0		
Students with disabilities ³	Mean SS	06-08	437.8	440.5	1.4 ²	L	06-08	488.0	484.9	-1.6	S	06-08	471.6	475.1	1.8	L
	SD	06-08	35.9	34.6			06-08	37.2	35.6			06-08	34.3	36.1		
Not ELLs	Mean SS	06-08	468.2	469.1	0.4		06-08	525.0	523.7	-0.6		06-08	519.0	519.1	0.1	
	SD	06-08	32.9	34.2			06-08	34.7	35.2			06-08	36.5	37.0		
English language learners ³	Mean SS	06-08	436.2	458.1	11.0 ²	L	06-08	489.7	494.0	2.1 ²	L	06-08	481.0	483.5	1.3 ²	L
	SD	06-08	32.3	34.1			06-08	39.2	34.7			06-08	30.7	36.7		
Female	Mean SS	06-08	470.9	471.1	0.1		02-08	525.1	527.3	0.4		02-08	518.1	522.2	0.7	
	SD	06-08	32.8	34.5			02-08	35.9	34.8			02-08	38.3	37.0		

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		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	464.3	466.0	0.8	L	02-08	513.8	518.9	0.9	L	02-08	508.3	514.5	1.0	L
	SD	06-08	33.1	33.6			02-08	36.7	35.6			02-08	39.7	37.3		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 476.3 for white students and 453.1 for African American students. In 2008, the mean scale score in 4th grade reading was 477.9 for white students and 454.3 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 0.8 points for white students and 0.6 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The Delaware Student Testing Program (DSTP) is scored on a scale of 150-800.

¹Numbers in these columns are subject to rounding error.

²The 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.

³Gap 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 DE-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.

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		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	460.8	462.0	0.6		02-08	493.8	506.7	2.2		02-08	521.7	535.4	2.3	
	SD	06-08	38.4	40.6			02-08	40.4	44.5			02-08	39.9	39.9		
White	Mean SS	06-08	470.7	474.6	1.9		02-08	503.8	519.4	2.6		02-08	531.5	544.5	2.2	
	SD	06-08	37.3	38.2			02-08	39.3	43.7			02-08	38.4	39.2		
African American	Mean SS	06-08	443.4	443.0	-0.2	S	02-08	472.0	486.6	2.4	S	02-08	498.3	516.3	3.0	L
	SD	06-08	33.3	36.5			02-08	31.8	36.0			02-08	30.5	29.3		
Latino	Mean SS	06-08	454.0	454.1	0.1	S	02-08	477.5	494.9	2.9	L	02-08	505.2	524.3	3.2	L
	SD	06-08	34.5	35.4			02-08	33.4	38.3			02-08	30.2	33.7		
Asian	Mean SS	06-08	492.3	495.8	1.7 ²	S	02-08	534.4	550.6	2.7 ²	L	02-08	551.8	577.5	4.3 ²	L
	SD	06-08	41.8	40.8			02-08	48.1	52.8			02-08	54.3	57.3		
Native American	Mean SS	06-08	465.7	460.5	-2.6 ²	S	02-08	484.6	517.9	5.6 ²	L	02-08	512.9	529.9	2.8 ²	L
	SD	06-08	33.7	38.9			02-08	28.1	43.4			02-08	44.2	43.0		
Not Low-income	Mean SS	06-08	470.9	474.0	1.6		02-08	503.1	518.7	2.6		02-08	527.3	542.5	2.5	
	SD	06-08	38.6	39.4			02-08	40.0	45.0			02-08	39.7	41.1		
Low-income	Mean SS	06-08	447.6	447.3	-0.2	S	02-08	474.1	489.0	2.5	S	02-08	500.6	518.7	3.0	L
	SD	06-08	34.0	37.2			02-08	33.7	37.2			02-08	32.7	30.8		
Not disabled	Mean SS	06-08	466.4	468.1	0.8		06-08	508.5	513.5	2.5		06-08	540.2	539.9	-0.2	
	SD	06-08	35.9	37.7			06-08	42.8	42.6			06-08	38.7	39.1		
Students with disabilities ³	Mean SS	06-08	426.8	424.6	-1.1	S	06-08	462.1	465.1	1.5	S	06-08	497.6	499.6	1.0	L
	SD	06-08	35.8	37.5			06-08	33.2	30.9			06-08	26.2	25.2		
Not ELLs	Mean SS	06-08	461.3	462.4	0.5		06-08	502.5	507.2	2.4		06-08	535.5	535.7	0.1	
	SD	06-08	38.3	40.8			06-08	44.6	44.4			06-08	39.9	39.8		
English language learners ³	Mean SS	06-08	432.0	453.8	10.9 ²	L	06-08	472.6	483.9	5.7 ²	L	06-08	514.5	520.7	3.1 ²	L
	SD	06-08	35.1	37.0			06-08	33.8	43.7			06-08	33.6	40.9		
Female	Mean SS	06-08	459.9	460.5	0.3		02-08	492.5	506.1	2.3		02-08	519.2	534.5	2.6	

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		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	37.7	40.0			02-08	39.0	43.1			02-08	36.9	38.2		
Male	Mean SS	06-08	461.7	463.4	0.8	L	02-08	495.0	507.3	2.1	S	02-08	524.2	536.4	2.0	S
	SD	06-08	39.1	41.2			02-08	41.7	45.8			02-08	42.5	41.5		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 470.7 for white students and 443.4 for African American students. In 2008, the mean scale score in 4th grade math was 474.6 for white students and 443.0 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 1.9 points for white students and declined at an average yearly rate of 0.2 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The Delaware Student Testing Program (DSTP) is scored on a scale of 150-800.

¹Numbers in these columns are subject to rounding error.

²The 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.

³Gap 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 DE-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	7,734	7,862	1.7%	100.0%	02-08	8,767	9,325	6.4%	100.0%	02-08	7,872	8,393	6.6%	100.0%
	Math	06-08	8,623	8,820	2.3%	100.0%	02-08	8,847	10,032	13.4%	100.0%	02-08	7,891	8,733	10.7%	100.0%
White	Reading	06-08	4,307	4,181	-2.9%	53.2%	02-08	5,571	5,003	-10.2%	53.7%	02-08	5,149	4,945	-4.0%	58.9%
	Math	06-08	4,735	4,575	-3.4%	51.9%	02-08	5,603	5,328	-4.9%	53.1%	02-08	5,171	5,096	-1.5%	58.4%
African American	Reading	06-08	2,481	2,724	9.8%	34.6%	02-08	2,575	3,246	26.1%	34.8%	02-08	2,183	2,581	18.2%	30.8%
	Math	06-08	2,844	3,165	11.3%	35.9%	02-08	2,607	3,550	36.2%	35.4%	02-08	2,182	2,730	25.1%	31.3%
Latino	Reading	06-08	660	678	2.7%	8.6%	02-08	410	750	82.9%	8.0%	02-08	313	550	75.7%	6.6%
	Math	06-08	752	787	4.7%	8.9%	02-08	425	821	93.2%	8.2%	02-08	311	580	86.5%	6.6%
Asian	Reading	06-08	246	251	2.0%	3.2%	02-08	187	294	57.2%	3.2%	02-08	197	294	49.2%	3.5%
	Math	06-08	250	261	4.4%	3.0%	02-08	187	301	61.0%	3.0%	02-08	197	303	53.8%	3.5%
Native American	Reading	06-08	40	28	-30.0%	0.4%	02-08	24	32	33.3%	0.3%	02-08	30	23	-23.3%	0.3%
	Math	06-08	42	32	-23.8%	0.4%	02-08	25	32	28.0%	0.3%	02-08	30	24	-20.0%	0.3%
Low-income	Reading	06-08	3,177	3,341	5.2%	42.5%	02-08	2,799	3,619	29.3%	38.8%	02-08	1,655	2,418	46.1%	28.8%
	Math	06-08	3,733	3,974	6.5%	45.1%	02-08	2,863	4,028	40.7%	40.2%	02-08	1,658	2,595	56.5%	29.7%
Students w/ disabilities	Reading	06-08	377	322	-14.6%	4.1%	06-08	813	727	-10.6%	7.8%	06-08	703	674	-4.1%	8.0%
	Math	06-08	1,219	1,244	2.1%	14.1%	06-08	1,391	1,402	0.8%	14.0%	06-08	874	963	10.2%	11.0%
English language learners	Reading	06-08	119	374	214.3%	4.8%	06-08	95	177	86.3%	1.9%	06-08	72	146	102.8%	1.7%
	Math	06-08	148	438	195.9%	5.0%	06-08	139	200	43.9%	2.0%	06-08	87	163	87.4%	1.9%
Female	Reading	06-08	3,979	3,928	-1.3%	50.0%	02-08	4,294	4,719	9.9%	50.6%	02-08	3,926	4,313	9.9%	51.4%
	Math	06-08	4,300	4,266	-0.8%	48.4%	02-08	4,307	4,970	15.4%	49.5%	02-08	3,928	4,441	13.1%	50.9%
Male	Reading	06-08	3,755	3,934	4.8%	50.0%	02-08	4,473	4,606	3.0%	49.4%	02-08	3,946	4,080	3.4%	48.6%
	Math	06-08	4,323	4,554	5.3%	51.6%	02-08	4,540	5,062	11.5%	50.5%	02-08	3,963	4,292	8.3%	49.1%

Table reads: In 2006, 4,307 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 4,181 students, a decrease of 2.9%. In 2008, the white subgroup made up 53.2% of the 7,862 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.