Subgroup Achievement and Gap Trends — Minnesota

K-12 enrollment — 824,783

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.

A clear trend of gains for nearly all student groups at all three achievement levels could be seen in math, while an opposite trend of declines for almost all groups at all three achievement levels was apparent in reading. Achievement gaps widened more often than they narrowed.

Subgroup trends by achievement level at grade 4

- General: Almost all subgroups showed declines in reading at three achievement levels—basic-and-above, proficient-and-above, and advanced. The opposite was true in math—gains predominated at all achievement levels.

- Notable exceptions: The low-income subgroup showed improvement in reading at the basic-and-above level, the only positive trend line. In math, however, the low-income subgroup posted declines at the basic and advanced achievement levels.

Gap trends at three grade levels

- General: In the majority of instances, achievement gaps widened in reading for African American, Latino, Native American, and low-income students at grades 4, 8, and 10. In math, gaps widened or stayed the same more often than they narrowed.

- Notable exceptions: Native American students narrowed the gap with white students in reading at grade 10 and in math at grade 4, according to the percentage of students scoring proficient and mean (average) test scores.

Data notes

- Limited data: Trends are limited to 2006–2008.
- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Asian American, Native American, and low-income students. 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: grades 4, 8, and 10.

Data Limitations

Years of comparable percentage proficient data	2006 through 2008
Years of comparable mean scale score data	2006 through 2008
Disaggregated data for all subgroups and comparison groups	2006 through 2008 Because of changes to English language learner (ELL) MCA-II participation in 2007 (see details in the Major Changes section below), MN recommends against making comparisons for this subgroup from 2006 to 2007. As a result, ELL and non-ELL comparisons were be conducted using 2007 as the base year

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	Minnesota Comprehensive Assessments-Series II (MCA-II) Mathematics Test for English Language Learners (MTELL), a reduced language, accommodated form of the MCA-II math test Minnesota Test of Academic Skills (MTAS), a revised alternate assessment for the “1%” population of students with disabilities
Grades tested for NCLB accountability	3–8 and 10 (reading), 11 (math)
State labels for achievement levels	MN uses four achievement levels: Does Not Meet the Standards, Partially Meets the Standards, Meets the Standards, and Exceeds the Standards. For our analyses we treated Partially Meets the

	Standards as Basic, Meets the Standards as Proficient, and Exceeds the Standards as Advanced.
High school NCLB test also used as an exit exam?	MN uses the Graduation-Required Assessment for Diploma, or GRAD exam, as its exit exam. The GRAD exam consists of a specific subset of items from the MCA-II reading and math test.
First year test used	2006 (New test standards were set based on new content standards, so comparisons with previous years' results are not appropriate)
Time of test administration	Spring
Major changes in testing system (2002–present)	2006: Assessments and adequate yearly progress calculations expanded to include all students in grades 3–8, 10, and 11 2006: Spring test administration became baseline for equating results from reading and math MCA-II tests for all grades; new standard setting conducted in summer 2006 2007–08: Science tests administered at grades 5, 8, and high school 2007: The following major changes were made affecting participation of English language learners (ELLs) in the MCA-II assessments; these changes suggest caution should be used in interpreting MCA-II trends between 2006 and 2007: (a) In 2007, all ELLs were given the MCA-II reading test for NCLB purposes; previously, in 2006, many ELLs substituted scores on the Title III reading assessment (Test of Emerging Academic English) for NCLB purposes. (b) In 2007, many ELLs took the MTELL in place of the MCA-II math test; their scores and proficiency data are not included in the 2007 MCA-II math results. The psychometric equivalence of the MTELL to the MCA-II math test has yet to be fully established.

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 MN-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 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced					42%	38%	39%	-1.8
Proficient and Above					77%	72%	72%	-2.2
Basic and Above					91%	88%	88%	-1.4
White								
Advanced					47%	45%	45%	-0.8
Proficient and Above					81%	79%	79%	-1.0
Basic and Above					93%	93%	92%	-0.4
African American								
Advanced					18%	14%	14%	-2.0
Proficient and Above					50%	44%	44%	-3.0
Basic and Above					73%	70%	68%	-2.3
Latino								
Advanced					22%	14%	15%	-3.6
Proficient and Above					58%	43%	47%	-5.9
Basic and Above					81%	70%	71%	-4.8
Asian								
Advanced					34%	25%	30%	-2.1
Proficient and Above					67%	55%	62%	-2.7
Basic and Above					86%	78%	82%	-2.1
Native American								
Advanced					21%	18%	19%	-1.3
Proficient and Above					56%	53%	53%	-1.6
Basic and Above					79%	79%	78%	-0.7

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test decreased from 47% in 2006 to 45% in 2008. During this period, the average yearly loss in the percentage advanced in reading for white 4th graders was 0.8 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 MN-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					42%	38%	39%	-1.8
Proficient and Above					77%	72%	72%	-2.2
Basic and Above					91%	88%	88%	-1.4
Low-income students								
Advanced					35%	33%	33%	-0.8
Proficient and Above					59%	52%	54%	-2.8
Basic and Above					76%	81%	79%	1.9
Students with disabilities[3]								
Advanced					27%	25%	23%	-1.7
Proficient and Above					48%	42%	40%	-3.8
Basic and Above					79%	83%	83%	2.1
English language learners[3]								
Advanced						24%	27%	NA
Proficient and Above						31%	36%	NA
Basic and Above						93%	91%	NA
Female								
Advanced					44%	41%	42%	-1.0
Proficient and Above					79%	75%	76%	-1.5
Basic and Above					92%	90%	90%	-0.9
Male								
Advanced					40%	36%	35%	-2.6
Proficient and Above					75%	68%	69%	-3.1
Basic and Above					89%	86%	85%	-1.8

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test decreased from 35% in 2006 to 33% in 2008. During this period, the average yearly loss in the percentage advanced in reading for low-income 4th graders was 0.8 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 MN-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%	30%	30%	1.6
Proficient and Above					69%	68%	70%	0.3
Basic and Above					88%	89%	89%	0.2
White								
Advanced					31%	34%	35%	1.9
Proficient and Above					76%	75%	77%	0.4
Basic and Above					93%	93%	93%	0.3
African American								
Advanced					8%	9%	10%	0.7
Proficient and Above					38%	37%	38%	0.4
Basic and Above					66%	68%	68%	0.7
Latino								
Advanced					9%	12%	11%	0.9
Proficient and Above					43%	43%	43%	0.3
Basic and Above					72%	71%	73%	0.4
Asian								
Advanced					21%	26%	28%	3.3
Proficient and Above					59%	61%	64%	2.9
Basic and Above					83%	82%	86%	1.7
Native American								
Advanced					9%	13%	12%	1.4
Proficient and Above					49%	46%	50%	0.9
Basic and Above					78%	78%	80%	1.2

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 31% in 2006 to 35% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 1.9 percentage points per year.

[1]Averages are subject to rounding error.

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

Table MN-10. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced					27%	30%	30%	1.6
Proficient and Above					69%	68%	70%	0.3
Basic and Above					88%	89%	89%	0.2
Low-income students								
Advanced					37%	34%	36%	-0.6
Proficient and Above					49%	49%	51%	0.7
Basic and Above					88%	86%	85%	-1.3
Students with disabilities[3]								
Advanced					30%	28%	29%	-0.7
Proficient and Above					43%	41%	42%	-0.8
Basic and Above					87%	87%	87%	0.1
English language learners[3]								
Advanced						29%	29%	NA
Proficient and Above						36%	38%	NA
Basic and Above						93%	91%	NA
Female								
Advanced					27%	30%	29%	0.9
Proficient and Above					69%	68%	69%	-0.2
Basic and Above					89%	89%	89%	0.1
Male								
Advanced					26%	30%	31%	2.2
Proficient and Above					69%	68%	70%	0.7
Basic and Above					88%	88%	89%	0.3

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test decreased from 37% in 2006 to 36% in 2008. During this period, the average yearly loss in the percentage advanced in math for low-income 4th graders was 0.6 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 MN-11. Subgroup Achievement Trends in Reading by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.
If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

	Grade 4					Grade 8					Grade 10				
Subgroup	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group
All tested students	06-08	77%	72%	-2.2		06-08	65%	66%	0.6		06-08	65%	71%	2.7	
White	06-08	81%	79%	-1.0		06-08	69%	72%	1.6		06-08	70%	78%	3.9	
African American	06-08	50%	44%	-3.0	S	06-08	36%	36%	-0.1	S	06-08	33%	36%	1.6	S
Latino	06-08	58%	47%	-5.9	S	06-08	44%	41%	-1.2	S	06-08	41%	42%	0.6	S
Asian	06-08	67%	62%	-2.7	S	06-08	58%	54%	-2.1	S	06-08	54%	58%	2.0	S
Native American	06-08	56%	53%	-1.6	S	06-08	40%	42%	1.0	S	06-08	38%	48%	5.0	L
Not low-income	06-08	84%	82%	-1.2		06-08	73%	75%	1.2		06-08	73%	80%	3.3	
Low-income	06-08	59%	54%	-2.8	S	06-08	45%	44%	-0.1	S	06-08	42%	48%	2.9	S
Not disabled	06-08	82%	77%	-2.2		06-08	70%	72%	0.6		06-08	71%	76%	2.7	
Students with disabilities[3]	06-08	48%	40%	-3.8	S	06-08	23%	24%	0.5	S	06-08	20%	26%	3.2	L
Not ELL	07-08	76%	76%	NA		07-08	66%	69%	NA		07-08	65%	74%	NA	
English language learners[3]	07-08	31%	36%	NA	NA	07-08	26%	21%	NA	NA	07-08	19%	23%	NA	NA
Female	06-08	79%	76%	-1.5		06-08	70%	71%	0.9		06-08	71%	74%	1.5	
Male	06-08	75%	69%	-3.1	S	06-08	60%	60%	0.3	S	06-08	60%	68%	3.9	L

Table reads: In 2006, 81% of white 4th graders and 50% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 79% of white 4th graders and 44% 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 1.0 percentage point per year for white students and 3.0 percentage points per year for African American students, indicating 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]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 MN-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	69%	70%	0.3		06-08	57%	57%	-0.1		06-08	30%	34%	2.0	
White	06-08	76%	77%	0.4		06-08	63%	63%	0.2		06-08	33%	38%	2.5	
African American	06-08	38%	38%	0.4	E	06-08	22%	23%	0.2	E	06-08	5%	7%	1.3	S
Latino	06-08	43%	43%	0.3	S	06-08	28%	28%	-0.3	S	06-08	10%	12%	0.8	S
Asian	06-08	59%	64%	2.9	L	06-08	52%	52%	-0.3	S	06-08	24%	29%	2.4	S
Native American	06-08	49%	50%	0.9	L	06-08	27%	28%	0.8	L	06-08	10%	11%	0.6	S
Not low-income	06-08	79%	80%	0.3		06-08	67%	67%	-0.2		06-08	36%	40%	2.4	
Low-income	06-08	49%	51%	0.7	L	06-08	34%	34%	0.0	L	06-08	12%	14%	1.3	S
Not disabled	06-08	73%	74%	0.3		06-08	62%	62%	-0.2		06-08	33%	37%	2.2	
Students with disabilities[3]	06-08	43%	42%	-0.8	S	06-08	16%	18%	0.7	L	06-08	4%	5%	0.3	S
Not ELL	07-08	71%	73%	NA		07-08	59%	59%	NA		07-08	33%	35%	NA	
English language learners[3]	07-08	36%	38%	NA	NA	07-08	24%	17%	NA	NA	07-08	4%	4%	NA	NA
Female	06-08	69%	69%	-0.2		06-08	58%	57%	-0.8		06-08	28%	32%	2.3	
Male	06-08	69%	70%	0.7	L	06-08	56%	57%	0.5	L	06-08	32%	35%	1.6	S

Table reads: In 2006, 76% of white 4th graders and 38% of African American 4th graders scored at the proficient level on the state math test. In 2008, 77% of white 4th graders and 38% 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 0.4 percentage point per year for white students and for African American students, indicating an equal rate of gain and no change in 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 MN-13. Achievement Gap Trends in Reading by Mean Scale Scores

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.
If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

		Grade 4					Grade 8					Grade 10				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	06-08	459.6	457.2	-1.2		06-08	853.3	853.4	0.1		06-08	1053.8	1055.8	1.0	
	SD	06-08	16.0	15.6			06-08	13.7	14.3			06-08	14.7	13.6		
White	Mean SS	06-08	461.5	460.0	-0.8		06-08	854.7	855.6	0.5		06-08	1055.4	1058.0	1.3	
	SD	06-08	15.2	14.3			06-08	13.1	13.3			06-08	14.1	12.5		
African American	Mean SS	06-08	448.2	446.1	-1.1	S	06-08	843.7	843.0	-0.4	S	06-08	1042.0	1044.3	1.2	S
	SD	06-08	16.3	16.0			06-08	14.0	14.7			06-08	15.3	14.4		
Latino	Mean SS	06-08	451.8	447.1	-2.4	S	06-08	846.3	845.1	-0.6	S	06-08	1045.7	1047.0	0.7	S
	SD	06-08	15.5	15.8			06-08	14.3	14.2			06-08	14.8	13.7		
Asian	Mean SS	06-08	456.5	453.4	-1.6	S	06-08	852.0	850.3	-0.9	S	06-08	1051.1	1052.3	0.6	S
	SD	06-08	16.7	16.3			06-08	13.0	15.1			06-08	14.6	13.8		
Native American	Mean SS	06-08	451.2	449.8	-0.7	L	06-08	845.3	845.3	0.0	S	06-08	1045.0	1048.9	2.0	L
	SD	06-08	15.4	14.7			06-08	14.0	13.9			06-08	14.1	13.0		
Not Low-income	Mean SS	06-08	462.9	461.1	-0.9		06-08	856.0	856.7	0.4		06-08	1056.5	1058.8	1.2	
	SD	06-08	14.8	14.1			06-08	12.7	13.0			06-08	13.7	12.4		
Low-income	Mean SS	06-08	452.3	449.9	-1.2	S	06-08	846.6	846.1	-0.3	S	06-08	1045.8	1048.3	1.3	L
	SD	06-08	16.0	15.6			06-08	13.7	14.1			06-08	14.8	13.7		
Not disabled	Mean SS	06-08	461.6	459.2	-1.2		06-08	855.3	855.5	0.1		06-08	1055.9	1057.7	0.9	
	SD	06-08	14.6	14.2			06-08	12.2	13.0			06-08	13.4	12.4		
Students with disabilities[3]	Mean SS	06-08	448.1	444.8	-1.7	S	06-08	838.3	838.5	0.1	E	06-08	1037.1	1041.0	2.0	L
	SD	06-08	18.4	17.8			06-08	14.5	14.2			06-08	14.5	13.8		
Not ELLs	Mean SS	07-08	458.4	458.5	NA		07-08	854.3	854.4	NA		07-08	1053.6	1056.8	NA	
	SD	07-08	15.2	15.0			07-08	14.2	13.8			07-08	14.8	13.0		
English language learners[3]	Mean SS	07-08	441.9	443.5	NA	NA	07-08	840.5	838.6	NA	NA	07-08	1036.8	1040.2	NA	NA
	SD	07-08	14.6	14.8			07-08	13.5	13.0			07-08	14.2	13.5		
Female	Mean SS	06-08	460.7	458.9	-0.9		06-08	855.2	855.7	0.3		06-08	1056.1	1057.4	0.7	
	SD	06-08	15.6	15.1			06-08	13.2	13.9			06-08	14.1	13.5		

		Grade 4					Grade 8					Grade 10				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
Male	Mean SS	06-08	458.6	455.6	-1.5	S	06-08	851.4	851.2	-0.1	S	06-08	1051.6	1054.2	1.3	L
	SD	06-08	16.2	15.8			06-08	14.0	14.2			06-08	14.9	13.6		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 461.5 for white students and 448.2 for African American students. In 2008, the mean scale score in 4th grade reading was 460.0 for white students and 446.1 for African American students. Between 2006 and 2008, the mean scale score declined at an average yearly rate of 0.8 points for white students and 1.1 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The MCA-II is scored on separate scales by grade level and subject.

[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 MN-14. Subgroup Achievement Trends in Mathematics by Mean Scale Score

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	455.0	456.0	0.5		06-08	850.8	850.6	-0.1		06-08	1138.9	1140.6	0.9	
	SD	06-08	13.4	14.1			06-08	15.0	15.7			06-08	19.6	20.8		
White	Mean SS	06-08	457.2	458.4	0.6		06-08	853.0	853.2	0.1		06-08	1141.3	1143.6	1.2	
	SD	06-08	12.4	13.1			06-08	13.9	14.4			06-08	18.8	19.7		
African American	Mean SS	06-08	444.8	445.4	0.3	S	06-08	838.0	837.1	-0.5	S	06-08	1119.8	1121.3	0.8	S
	SD	06-08	13.9	14.1			06-08	15.0	16.0			06-08	16.1	17.6		
Latino	Mean SS	06-08	446.8	447.1	0.2	S	06-08	840.9	839.8	-0.6	S	06-08	1126.2	1127.1	0.5	S
	SD	06-08	12.8	13.4			06-08	14.7	15.7			06-08	17.5	18.4		
Asian	Mean SS	06-08	452.3	454.9	1.3	L	06-08	850.1	849.3	-0.4	S	06-08	1136.3	1138.7	1.2	L
	SD	06-08	14.4	15.0			06-08	15.0	16.3			06-08	20.3	21.1		
Native American	Mean SS	06-08	448.1	449.4	0.7	L	06-08	840.2	839.8	-0.2	S	06-08	1126.7	1127.3	0.3	S
	SD	06-08	12.5	12.4			06-08	15.0	15.3			06-08	17.0	17.5		
Not Low-income	Mean SS	06-08	458.3	459.5	0.6		06-08	854.5	854.4	-0.1		06-08	1142.4	1144.6	1.1	
	SD	06-08	12.2	13.1			06-08	13.5	14.2			06-08	18.7	19.8		
Low-income	Mean SS	06-08	448.5	449.4	0.5	S	06-08	842.7	842.1	-0.3	S	06-08	1127.7	1129.1	0.7	S
	SD	06-08	13.3	13.6			06-08	14.9	15.7			06-08	17.9	19.0		
Not disabled	Mean SS	06-08	456.5	457.5	0.5		06-08	853.0	852.8	-0.1		06-08	1141.0	1143.1	1.1	
	SD	06-08	12.6	13.4			06-08	13.5	14.3			06-08	18.8	19.7		
Students with disabilities[3]	Mean SS	06-08	446.6	446.5	-0.1	S	06-08	834.7	834.5	-0.1	E	06-08	1119.6	1118.6	-0.5	S
	SD	06-08	14.9	15.1			06-08	15.3	16.0			06-08	15.6	16.6		
Not ELLs	Mean SS	07-08	456.8	457.0	NA		07-08	851.3	851.6	NA		07-08	1140.5	1141.7	NA	
	SD	07-08	14.2	13.7			07-08	15.6	15.2			07-08	20.0	20.4		
English language learners[3]	Mean SS	07-08	443.6	445.5	NA	NA	07-08	838.7	835.1	NA	NA	07-08	1120.2	1117.9	NA	NA
	SD	07-08	14.4	13.6			07-08	15.0	15.6			07-08	15.6	15.7		
Female	Mean SS	06-08	455.3	455.8	0.3		06-08	851.3	850.7	-0.3		06-08	1138.4	1140.5	1.1	

		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	13.6	13.9			06-08	14.7	15.4			06-08	18.6	19.5		
Male	Mean SS	06-08	454.8	456.2	0.7	L	06-08	850.4	850.5	0.1	L	06-08	1139.4	1140.7	0.7	S
	SD	06-08	13.2	14.4			06-08	15.2	16.0			06-08	20.5	21.9		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 457.2 for white students and 444.8 for African American students. In 2008, the mean scale score in 4th grade math was 458.4 for white students and 445.4 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 0.6 points for white students and 0.3 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The MCA-II is scored on separate scales by grade level and subject.

[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 MN-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					Grade 10 Reading/Grade 11 Math				
		Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year	Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year	Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year
All tested students	Reading	06-08	53,935	57,940	7.4%	100.0%	06-08	61,499	61,544	0.1%	100.0%	06-08	64,682	65,352	1.0%	100.0%
	Math	06-08	57,299	58,178	1.5%	100.0%	06-08	63,498	61,626	-2.9%	100.0%	06-08	62,642	62,717	0.1%	100.0%
White	Reading	06-08	43,892	43,935	0.1%	75.8%	06-08	50,458	48,038	-4.8%	78.1%	06-08	54,139	51,803	-4.3%	79.3%
	Math	06-08	44,237	43,994	-0.5%	75.6%	06-08	50,564	48,017	-5.0%	77.9%	06-08	52,070	50,476	-3.1%	80.5%
African American	Reading	06-08	4,346	5,425	24.8%	9.4%	06-08	4,725	5,282	11.8%	8.6%	06-08	4,232	5,601	32.3%	8.6%
	Math	06-08	4,952	5,472	10.5%	9.4%	06-08	5,150	5,322	3.3%	8.6%	06-08	4,121	4,895	18.8%	7.8%
Latino	Reading	06-08	2,072	3,761	81.5%	6.5%	06-08	2,097	3,208	53.0%	5.2%	06-08	1,979	2,864	44.7%	4.4%
	Math	06-08	3,413	3,833	12.3%	6.6%	06-08	2,876	3,253	13.1%	5.3%	06-08	1,977	2,419	22.4%	3.9%
Asian	Reading	06-08	2,448	3,517	43.7%	6.1%	06-08	2,830	3,623	28.0%	5.9%	06-08	3,048	3,640	19.4%	5.6%
	Math	06-08	3,474	3,572	2.8%	6.1%	06-08	3,514	3,651	3.9%	5.9%	06-08	3,318	3,572	7.7%	5.7%
Native American	Reading	06-08	1,113	1,257	12.9%	2.2%	06-08	1,318	1,250	-5.2%	2.0%	06-08	1,157	1,181	2.1%	1.8%
	Math	06-08	1,159	1,262	8.9%	2.2%	06-08	1,324	1,245	-6.0%	2.0%	06-08	1,040	1,075	3.4%	1.7%
Low-income	Reading	06-08	16,439	20,033	21.9%	34.6%	06-08	17,838	18,796	5.4%	30.5%	06-08	16,181	18,106	11.9%	27.7%
	Math	06-08	19,254	20,209	5.0%	34.7%	06-08	19,591	18,882	-3.6%	30.6%	06-08	14,831	15,605	5.2%	24.9%
Students w/ disabilities	Reading	06-08	7,807	7,860	0.7%	13.6%	06-08	7,453	7,422	-0.4%	12.1%	06-08	7,084	7,108	0.3%	10.9%
	Math	06-08	8,323	7,942	-4.6%	13.7%	06-08	7,580	7,395	-2.4%	12.0%	06-08	6,291	6,243	-0.8%	10.0%
English language learners	Reading	07-08	5,162	5,020	-2.8%	8.7%	07-08	3,875	3,613	-6.8%	5.9%	07-08	3,796	3,612	-4.8%	5.5%
	Math	07-08	4,986	5,197	4.2%	8.9%	07-08	3,846	3,734	-2.9%	6.1%	07-08	2,799	2,640	-5.7%	4.2%
Female	Reading	06-08	26,495	28,599	7.9%	49.4%	06-08	30,017	30,042	0.1%	48.8%	06-08	31,761	31,972	0.7%	48.9%
	Math	06-08	28,047	28,678	2.2%	49.3%	06-08	30,976	30,099	-2.8%	48.8%	06-08	30,969	30,544	-1.4%	48.7%
Male	Reading	06-08	27,437	29,341	6.9%	50.6%	06-08	31,480	31,500	0.1%	51.2%	06-08	32,914	33,378	1.4%	51.1%
	Math	06-08	29,248	29,500	0.9%	50.7%	06-08	32,520	31,525	-3.1%	51.2%	06-08	31,671	32,167	1.6%	51.3%

Table reads: In 2006, 43,892 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had risen to 43,935 students, an increase of 0.1%. In 2008, the white subgroup made up 75.8% of the 57,940 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.