

Subgroup Achievement and Gap Trends — South Dakota

K-12 enrollment — 121,015

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 labeled State Testing Data. In the list of results that appears, look for the most recent report on student achievement since 2002. Below the name of the report, click on the link for State Profiles and Worksheets. Scroll down the page until you reach the list of states. Click on the Worksheet link for proficiency data or scale score data for a particular state.

Subgroup Achievement and Gap Trends — Key Findings

Summary. South Dakota's demographic profile is such that, with the exception of Native American students, there are fewer than 500 students in the racial/ethnic subgroups at the various grade levels, and therefore these groups are too small to count for this study. In grade 8 (the only grade in which subgroup trends were analyzed by achievement level), the white, Native American, low-income, male and female subgroups made progress at the *proficient-and-above*, and *advanced* levels in math. Progress in narrowing achievement gaps at grades 4, 8, and 11 was mixed. The state introduced new reading test in 2009, so trend data for reading that include 2009 are not available. Comparable data were available in math for 2006-2009.

- **Notable gains.** In grade 8 math, the largest gains occurred among *Native American* students at the proficient level and above
- **Mixed gap trends.** In math across three grade levels, achievement gaps between Native American and white students narrowed and gaps between low-income and non-low-income students widened using percentages proficient. Using mean (average) test scores, the opposite pattern was apparent: gaps widened between Native American and white students and narrowed between low-income and non-low-income students.

Data Limitations

Years of comparable percentage proficient data	2005 through 2008 for reading (new trend for 2009) 2006 through 2009 for math
Years of comparable mean scale score data	2007 through 2008 for reading 2007 through 2009 for math (Baseline year for scale score data is 2007)
Disaggregated data for all subgroups and comparison groups	<p>Percentage proficient data are only available for 2007 and 2008 for the comparison group of students who are <i>not</i> low-income so the subgroup of low-income students is compared with all students in the state</p> <p>Percentage proficient data not available for 2009 for comparison groups of students who are <i>not</i> disabled or English language learners (ELLs), so the subgroups of students with disabilities and ELLs are compared with all tested students in the state for mathematics analyses (reading trend lines end in 2008 due to change in assessment)</p> <p>Data not reported for some student subgroups in some years due to small N-Counts; SD requested suppression of results for groups with N<100</p>

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	State Test of Educational Progress (Dakota STEP) Statewide Team-led Alternate Assessment and Reporting System (STAARS)
Grades tested for NCLB accountability	3–8 and 11
State labels for achievement levels	SD uses four achievement levels: Below Basic, Basic, Proficient, and Advanced. For our analyses we treated Basic as Basic, Proficient as Proficient, and Advanced as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	2005 reading and 2006 math; new reading assessment in 2009

Time of test administration

Spring

Major changes in testing system (2002–present)

2002–03: Switched from a norm-referenced test (Stanford Achievement Test, 10th Edition) to the Dakota STEP

2004–05: Developed new reading and math standards and new reading assessment

2005–06: Developed new math assessment

2008–09: New reading standards and assessment developed

Achievement by Subgroup — Trends at the Middle School 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 SD-7. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in reading

	Reporting year								Average yearly percentage point gain ¹
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced				12%	12%	12%	12%		NA
Proficient-and-above				76%	77%	78%	80%		NA
Basic-and-above				100%	100%	100%	100%		NA
White									
Advanced				14%	15%	14%	14%		NA
Proficient-and-above				79%	84%	82%	84%		NA
Basic-and-above				100%	100%	100%	100%		NA
African American ²									
Advanced				2%	6%	7%	6%		NA
Proficient-and-above				64%	68%	63%	66%		NA
Basic-and-above				99%	100%	100%	99%		NA
Latino ²									
Advanced				3%	5%	5%	3%		NA
Proficient-and-above				51%	64%	56%	68%		NA
Basic-and-above				100%	100%	100%	100%		NA
Asian ²									
Advanced				NA	NA	NA	10%		NA
Proficient-and-above				NA	NA	NA	71%		NA
Basic-and-above				NA	NA	NA	100%		NA
Native American									
Advanced				1%	2%	2%	3%		NA
Proficient-and-above				39%	46%	50%	50%		NA
Basic-and-above				100%	100%	100%	100%		NA

Table reads: The percentage of white 8th graders who scored at the advanced level on the state reading test remained the same at 14% in 2005 and in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

¹Averages are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table SD-8. Percentage of grade 8 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		2009
All tested students									
Advanced				12%	12%	12%	12%		NA
Proficient-and-above				76%	77%	78%	80%		NA
Basic-and-above				100%	100%	100%	100%		NA
Low-income students									
Advanced				7%	7%	6%	6%		NA
Proficient-and-above				66%	67%	67%	68%		NA
Basic-and-above				99%	99%	100%	100%		NA
Students with disabilities ³									
Advanced				0%	0%	2%	2%		NA
Proficient-and-above				31%	32%	33%	46%		NA
Basic-and-above				100%	100%	100%	100%		NA
English language learners ^{2,3}									
Advanced				NA	1%	1%	2%		NA
Proficient-and-above				NA	31%	45%	50%		NA
Basic-and-above				NA	100%	100%	100%		NA
Female									
Advanced				14%	13%	13%	12%		NA
Proficient-and-above				81%	81%	81%	83%		NA
Basic-and-above				100%	100%	100%	100%		NA
Male									
Advanced				10%	11%	12%	12%		NA
Proficient-and-above				72%	73%	75%	77%		NA
Basic-and-above				100%	100%	100%	100%		NA

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state reading test decreased from 7% in 2005 to 6% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

¹Averages are subject to rounding error.

²The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 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 2006-2009 results.

Table SD-9. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

	Reporting year								Average yearly percentage point gain ¹
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced					12%	12%	17%	16%	1.2
Proficient-and-above					68%	72%	75%	75%	2.4
Basic-and-above					100%	100%	100%	100%	0.0
White									
Advanced					15%	14%	19%	18%	1.0
Proficient-and-above					77%	78%	81%	80%	1.2
Basic-and-above					100%	100%	100%	100%	0.0
African American ²									
Advanced					7%	3%	7%	7%	0.1
Proficient-and-above					56%	50%	55%	50%	-1.9
Basic-and-above					100%	100%	99%	100%	0.0
Latino ²									
Advanced					1%	4%	5%	4%	1.0
Proficient-and-above					48%	51%	57%	56%	2.6
Basic-and-above					100%	100%	99%	100%	0.0
Asian ²									
Advanced					NA	NA	16%	NA	NA
Proficient-and-above					NA	NA	70%	NA	NA
Basic-and-above					NA	NA	100%	NA	NA
Native American									
Advanced					1%	1%	3%	4%	1.0
Proficient-and-above					26%	37%	38%	40%	4.5
Basic-and-above					100%	100%	99%	99%	-0.3

Table reads: The percentage of white 8th graders who scored at the advanced level on the state math test increased from 15% in 2006 to 18% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8th graders was 1.0 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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table SD-10. Percentage of grade 8 students by demographic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

	Reporting year								Average yearly percentage point gain ¹
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced					12%	12%	17%	16%	1.2
Proficient-and-above					68%	72%	75%	75%	2.4
Basic-and-above					100%	100%	100%	100%	0.0
Low-income students									
Advanced					6%	5%	8%	7%	0.3
Proficient-and-above					54%	58%	61%	58%	1.3
Basic-and-above					99%	100%	100%	99%	0.0
Students with disabilities ³									
Advanced					1%	1%	2%	5%	1.5
Proficient-and-above					20%	25%	38%	33%	4.3
Basic-and-above					100%	100%	100%	98%	-0.5
English language learners ^{2,3}									
Advanced					2%	3%	7%	0%	-0.5
Proficient-and-above					24%	37%	48%	17%	-2.3
Basic-and-above					100%	100%	99%	98%	-0.7
Female									
Advanced					10%	11%	16%	15%	1.6
Proficient-and-above					67%	73%	77%	76%	2.9
Basic-and-above					100%	100%	100%	99%	-0.3
Male									
Advanced					14%	13%	18%	17%	0.9
Proficient-and-above					68%	71%	74%	73%	1.6
Basic-and-above					100%	100%	100%	100%	0.0

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state math test increased from 6% in 2006 to 7% in 2009. During this period, the average yearly gain in the percentage advanced in math for low-income 8th graders was 0.3 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 2009 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 2006-2009 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table SD-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 11				
	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	05-08	86%	89%	NA		05-08	76%	80%	NA		05-08	71%	68%	NA	
White	05-08	87%	93%	NA		05-08	79%	84%	NA		05-08	73%	71%	NA	
African American	05-08	79%	82%	NA	NA	05-08	64%	66%	NA	NA	05-08	NA	54%	NA	NA
Latino	05-08	72%	82%	NA	NA	05-08	51%	68%	NA	NA	05-08	NA	49%	NA	NA
Asian	05-08	NA	NA	NA	NA	05-08	NA	71%	NA	NA	05-08	NA	NA	NA	NA
Native American	05-08	54%	71%	NA	NA	05-08	39%	50%	NA	NA	05-08	32%	42%	NA	NA
All tested students	05-08	86%	89%	NA		05-08	76%	80%	NA		05-08	71%	68%	NA	
Low-income	05-08	77%	83%	NA	NA	05-08	66%	68%	NA	NA	05-08	59%	55%	NA	NA
Not disabled	06-08	91%	92%	NA		06-08	82%	83%	NA		06-08	75%	73%	NA	
Students with disabilities ³	06-08	57%	74%	NA	NA	06-08	32%	46%	NA	NA	06-08	16%	19%	NA	NA
Not ELLs	06-08	88%	90%	NA		06-08	78%	81%	NA		06-08	72%	69%	NA	
English language learners ³	06-08	60%	73%	NA	NA	06-08	31%	50%	NA	NA	06-08	14%	30%	NA	NA
Female	05-08	88%	92%	NA		05-08	81%	83%	NA		05-08	75%	72%	NA	
Male	05-08	84%	87%	NA	NA	05-08	72%	77%	NA	NA	05-08	68%	64%	NA	NA

Table reads: In 2005, 87% of white 4th graders and 79% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 93% of white 4th graders and 82% of African American 4th graders scored at the proficient level in reading. Average annual percentage point gains were not calculated because the trend lines ended before 2009.

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 2009 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 SD-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 11				
	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	06-09	78%	78%	0.1		06-09	68%	75%	2.4		06-09	63%	66%	1.1	
White	06-09	85%	84%	-0.4		06-09	77%	80%	1.2		06-09	68%	69%	0.3	
African American	06-09	58%	59%	0.4 ²	L	06-09	56%	50%	-1.9 ²	S	06-09	NA	51%	NA	NA
Latino	06-09	64%	66%	0.8 ²	L	06-09	48%	56%	2.6 ²	L	06-09	45%	45%	-0.1 ²	S
Asian	06-09	NA	77%	NA	NA	06-09	NA	NA	NA	NA	06-09	72%	NA	NA	NA
Native American	06-09	44%	46%	0.6	L	06-09	26%	40%	4.5	L	06-09	21%	33%	3.9	L
All tested students	06-09	78%	78%	0.1		06-09	68%	75%	2.4		06-09	63%	66%	1.1	
Low-income	06-09	65%	64%	-0.3	S	06-09	54%	58%	1.3	S	06-09	48%	51%	1.0	S
All tested students	06-09	78%	78%	0.1		06-09	68%	75%	2.4		06-09	63%	66%	1.1	
Students with disabilities ³	06-09	45%	50%	1.7	L	06-09	20%	33%	4.3	L	06-09	9%	19%	3.3	L
All tested students	06-09	78%	78%	0.1		06-09	68%	75%	2.4		06-09	63%	66%	1.1	
English language learners ³	06-09	38%	21%	-5.6 ²	S	06-09	24%	17%	-2.3 ²	S	06-09	15%	12%	-0.9 ²	S
Female	06-09	78%	78%	0.1		06-09	67%	76%	2.9		06-09	63%	67%	1.3	
Male	06-09	78%	77%	-0.2	S	06-09	68%	73%	1.6	S	06-09	63%	66%	1.1	S

Table reads: In 2006, 85% of white 4th graders and 58% of African American 4th graders scored at the proficient level on the state math test. In 2009, 84% of white 4th graders and 59% of African American 4th graders scored at the proficient level in math. Between 2006 and 2009, the percentage proficient declined at an average rate of 0.4 percentage points per year for white students and improved at an average rate of 0.4 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 2009 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 SD-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. MSS = mean scale score. SD = standard deviation. 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 11				
		Year span	Start year	End year	Avg. gain, MSS ¹	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain, MSS ¹	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain, MSS ¹	Gain larger or smaller than comp. group
All tested students	MSS	07-08	646.6	649.2	NA		07-08	692.3	693.7	NA		07-08	734.8	733.7	NA	
	SD	07-08	34.6	34.5			07-08	30.7	29.8			07-08	37.6	37.3		
White	MSS	07-08	651.2	654.0	NA		07-08	696.0	697.5	NA		07-08	737.2	736.1	NA	
	SD	07-08	33.4	33.2			07-08	29.6	28.5			07-08	37.1	36.4		
African American	MSS	07-08	630.4	635.9	NA	NA	07-08	677.3	682.8	NA	NA	07-08	712.9	718.0	NA	NA
	SD	07-08	31.9	33.1			07-08	29.9	34.1			07-08	38.4	39.1		
Latino	MSS	07-08	627.3	636.4	NA	NA	07-08	676.2	680.7	NA	NA	07-08	720.1	719.3	NA	NA
	SD	07-08	34.4	32.6			07-08	30.0	25.6			07-08	34.8	38.7		
Asian	MSS	07-08	NA	NA	NA	NA	07-08	NA	694.1	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	NA	NA			07-08	NA	30.6			07-08	NA	NA		
Native American	MSS	07-08	621.3	624.2	NA	NA	07-08	669.5	669.8	NA	NA	07-08	710.9	712.2	NA	NA
	SD	07-08	29.4	30.3			07-08	26.9	27.1			07-08	34.4	36.7		
Not low-income	MSS	07-08	652.8	655.3	NA		07-08	697.1	698.3	NA		07-08	738.5	736.8	NA	
	SD	07-08	34.0	33.5			07-08	30.1	29.0			07-08	37.1	36.9		
Low-income	MSS	07-08	634.5	637.2	NA	NA	07-08	681.6	682.7	NA	NA	07-08	720.3	721.0	NA	NA
	SD	07-08	32.3	33.1			07-08	29.1	29.0			07-08	35.9	36.4		
Not disabled	MSS	07-08	650.4	652.7	NA		07-08	696.1	696.5	NA		07-08	738.7	737.5	NA	
	SD	07-08	33.1	33.3			07-08	28.9	28.9			07-08	35.6	35.5		
Students with disabilities ³	MSS	07-08	623.0	629.3	NA	NA	07-08	659.6	668.1	NA	NA	07-08	689.3	693.8	NA	NA
	SD	07-08	34.2	34.5			07-08	25.5	25.8			07-08	29.9	32.7		
Not ELLs	MSS	07-08	648.6	650.9	NA		07-08	693.4	694.8	NA		07-08	735.4	734.4	NA	
	SD	07-08	34.0	34.1			07-08	30.4	29.5			07-08	37.3	37.0		
English language learners ³	MSS	07-08	616.2	623.1	NA	NA	07-08	665.0	670.3	NA	NA	07-08	697.5	699.3	NA	NA
	SD	07-08	28.8	29.5			07-08	24.7	27.1			07-08	34.4	37.4		
Female	MSS	07-08	649.5	652.2	NA		07-08	695.0	695.5	NA		07-08	737.7	736.9	NA	
	SD	07-08	34.1	33.5			07-08	29.3	28.9			07-08	36.0	36.1		
Male	MSS	07-08	643.8	646.3	NA	NA	07-08	689.7	692.0	NA	NA	07-08	731.9	730.6	NA	NA
	SD	07-08	34.8	35.1			07-08	31.6	30.6			07-08	38.9	38.2		

Table reads: In 2007, the mean scale score on the state 4th grade reading test was 651.2 for white students and 630.4 for African American students. In 2008, the mean scale score in 4th grade reading was 654.0 for white students and 635.9 for African American students. Average annual mean scale score gains were not calculated because the trend lines ended before 2009.

Note: The Dakota STEP is scored on a linear transformation scale, such that scale scores (SS) = $35(\theta) + 600$.

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 2009 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 SD-14. Achievement gap 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. MSS = mean scale score. SD = standard deviation. 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 11				
		Year span	Start year	End year	Avg. gain MSS ¹	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS ¹	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS ¹	Gain larger or smaller than comp. group
All tested students	MSS	07-09	646.4	648.8	1.2		07-09	710.1	714.5	2.2		07-09	730.5	731.8	0.6	
	SD	07-09	36.0	40.0			07-09	36.9	39.9			07-09	38.0	38.7		
White	MSS	07-09	651.4	655.2	1.9		07-09	714.7	719.9	2.6		07-09	733.5	735.1	0.8	
	SD	07-09	34.7	37.8			07-09	36.0	38.6			07-09	37.3	38.0		
African American	MSS	07-09	626.9	623.7	-1.6 ²	S	07-09	690.6	690.6	0.0 ²	S	07-09	703.2	716.0	6.4 ²	L
	SD	07-09	33.5	47.8			07-09	33.4	36.6			07-09	33.3	37.8		
Latino	MSS	07-09	624.4	635.8	5.7 ²	L	07-09	689.4	693.5	2.1 ²	S	07-09	710.1	714.3	2.1 ²	L
	SD	07-09	31.8	40.5			07-09	29.4	31.2			07-09	32.6	31.5		
Asian	MSS	07-09	NA	652.3	NA	NA	07-09	NA	NA	NA	NA	07-09	736.4	NA	NA	NA
	SD	07-09	NA	47.0			07-09	NA	NA			07-09	41.7	NA		
Native American	MSS	07-09	619.5	617.7	-0.9	S	07-09	681.3	683.9	1.3	S	07-09	700.0	700.8	0.4	S
	SD	07-09	30.9	32.4			07-09	27.7	33.1			07-09	31.8	30.9		
Not low-income	MSS	07-09	653.0	654.7	0.9		07-09	716.6	720.1	1.8		07-09	734.5	734.3	-0.1	
	SD	07-09	35.2	39.6			07-09	37.1	40.0			07-09	37.4	38.9		
Low-income	MSS	07-09	633.6	636.3	1.4	L	07-09	695.9	700.2	2.1	L	07-09	715.3	720.4	2.5	L
	SD	07-09	34.1	37.8			07-09	32.2	35.9			07-09	36.4	35.8		
Not disabled	MSS	07-09	650.3	652.7	1.2		07-09	714.4	718.4	2.0		07-09	734.3	735.4	0.5	
	SD	07-09	34.7	38.9			07-09	35.6	38.9			07-09	36.7	37.4		
Students with disabilities ³	MSS	07-09	621.8	627.8	3.0	L	07-09	673.7	678.8	2.5	L	07-09	686.9	687.8	0.5	E
	SD	07-09	34.3	39.2			07-09	25.9	30.6			07-09	22.5	23.8		
Not ELLs	MSS	07-09	648.5	650.0	0.8		07-09	711.3	715.6	2.1		07-09	731.2	732.2	0.5	
	SD	07-09	35.3	39.3			07-09	36.6	39.5			07-09	37.7	38.6		
English language learners ³	MSS	07-09	614.5	598.8	-7.9 ²	S	07-09	680.9	668.2	-6.4 ²	S	07-09	693.3	686.5	-3.4 ²	S
	SD	07-09	31.3	35.3			07-09	31.1	26.1			07-09	36.5	26.6		
Female	MSS	07-09	645.8	648.0	1.1		07-09	709.3	714.3	2.5		07-09	729.9	730.5	0.3	
	SD	07-09	34.5	38.3			07-09	34.5	38.3			07-09	35.8	36.7		
Male	MSS	07-09	646.9	649.5	1.3	L	07-09	710.9	714.7	1.9	S	07-09	731.2	733.0	0.9	L
	SD	07-09	37.4	41.5			07-09	39.0	41.4			07-09	40.1	40.5		

Table reads: In 2007, the mean scale score on the state 4th grade math test was 651.4 for white students and 626.9 for African American students. In 2009, the mean scale score in 4th grade math was 655.2 for white students and 623.7 for African American students. Between 2007 and 2009, 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 1.6 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The Dakota STEP is scored on a linear transformation scale, such that scale scores (SS) = $35(\theta) + 600$.

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 2009 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 SD-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	07-08	8,924	8,882	-0.5%	100.0%	07-08	9,592	9,305	-3.0%	100.0%	07-08	8,646	8,313	-3.9%	100.0%
	Math	07-09	8,942	9,032	1.0%	100.0%	07-09	9,593	9,186	-4.2%	100.0%	07-09	8,668	8,452	-2.5%	100.0%
White	Reading	07-08	7,351	7,192	-2.2%	81.0%	07-08	8,058	7,743	-3.9%	83.2%	07-08	7,728	7,326	-5.2%	88.1%
	Math	07-09	7,359	7,220	-1.9%	79.9%	07-09	8,056	7,607	-5.6%	82.8%	07-09	7,740	7,411	-4.3%	87.7%
African American	Reading	07-08	178	211	18.5%	2.4%	07-08	152	183	20.4%	2.0%	07-08	112	129	15.2%	1.6%
	Math	07-09	182	220	20.9%	2.4%	07-09	155	234	51.0%	2.5%	07-09	117	152	29.9%	1.8%
Latino	Reading	07-08	218	237	8.7%	2.7%	07-08	176	215	22.2%	2.3%	07-08	121	144	19.0%	1.7%
	Math	07-09	223	262	17.5%	2.9%	07-09	178	237	33.1%	2.6%	07-09	121	156	28.9%	1.8%
Asian	Reading	07-08	99	94	-5.1%	1.1%	07-08	89	123	38.2%	1.3%	07-08	99	95	-4.0%	1.1%
	Math	07-09	99	110	11.1%	1.2%	07-09	91	96	5.5%	1.0%	07-09	100	89	-11.0%	1.1%
Native American	Reading	07-08	1,078	1,146	6.3%	12.9%	07-08	1,117	1,034	-7.4%	11.1%	07-08	586	612	4.4%	7.4%
	Math	07-09	1,079	1,210	12.1%	13.4%	07-09	1,113	1,002	-10.0%	10.9%	07-09	590	640	8.5%	7.6%
Low-income	Reading	07-08	3,037	2,975	-2.0%	33.5%	07-08	3,001	2,730	-9.0%	29.3%	07-08	1,771	1,593	-10.1%	19.2%
	Math	07-09	3,052	2,904	-4.8%	32.2%	07-09	3,003	2,602	-13.4%	28.3%	07-09	1,778	1,506	-15.3%	17.8%
Students w/ disabilities	Reading	07-08	1,235	1,317	6.6%	14.8%	07-08	1,001	923	-7.8%	9.9%	07-08	686	714	4.1%	8.6%
	Math	07-09	1,237	1,412	14.1%	15.6%	07-09	1,003	901	-10.2%	9.8%	07-09	693	642	-7.4%	7.6%
English language learners	Reading	07-08	544	540	-0.7%	6.1%	07-08	370	418	13.0%	4.5%	07-08	141	149	5.7%	1.8%
	Math	07-09	553	222	-59.9%	2.5%	07-09	374	208	-44.4%	2.3%	07-09	147	75	-49.0%	0.9%
Female	Reading	07-08	4,340	4,376	0.8%	49.3%	07-08	4,625	4,487	-3.0%	48.2%	07-08	4,305	4,109	-4.6%	49.4%
	Math	07-09	4,347	4,319	-0.6%	47.8%	07-09	4,627	4,469	-3.4%	48.7%	07-09	4,317	4,159	-3.7%	49.2%
Male	Reading	07-08	4,584	4,506	-1.7%	50.7%	07-08	4,967	4,818	-3.0%	51.8%	07-08	4,341	4,204	-3.2%	50.6%
	Math	07-09	4,595	4,713	2.6%	52.2%	07-09	4,966	4,717	-5.0%	51.3%	07-09	4,351	4,293	-1.3%	50.8%

Table reads: In 2007, 7,351 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 7,192 students, a decrease of 2.2%. In 2008, the white subgroup made up 81.0% of the 8,882 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 2009 or the most recent year with available data.

Key Terms

Percentage proficient (and above) — The percentage of students in a group who score at or 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 or 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 point 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 end 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 in this profile 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.