Subgroup Achievement and Gap Trends — Iowa

K-12 enrollment — 470,537

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 Trends and Gap Trends — Key Findings

Summary. In grade 8 (the only grade in which subgroup trends were analyzed by achievement level), Iowa had data for racial/ethnic subgroups, low income students, and boys and girls at the proficient and advanced levels. Trends at the proficient and advanced levels were upward for must subgroups, with just a few exceptions. Progress was made in narrowing achievement gaps between all subgroups. Comparable data were available from 2004 through 2009, and from 2005 through 2009 for the grade 8 achievement levels.

- ***Slight declines.*** The African American and Latino subgroups had slight declines in the percentage of students reaching the advanced level in grade 8 reading.

- ***Notable progress on gaps.*** African American and Latino students narrowed gaps in the percentage proficient with their white counterparts across the board – at all three grade levels in both reading and math.

Data Limitations

Years of comparable percentage proficient data	2004 through 2009 (earlier years are three-year average scores, not comparable) Data by achievement levels (i.e., Low, Intermediate, High) are not available until 2005.
Years of comparable mean scale score data	2004 through 2009 (earlier years are three-year average scores, not comparable)
Disaggregated data for all subgroups and comparison groups	Percentage proficient data are not available until 2007 for students who are *not* low-income, disabled, or English language learners. Mean scale scores and standard deviations are available for subgroups and comparison groups from 2004-2009; disability and English language subgroups 2006-2009.

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	Iowa Tests of Basic Skills (ITBS) – primary grades (3-8) Iowa Tests of Educational Development (ITED) – high school Iowa Alternate Assessment (3-8, 11)
Grades tested for NCLB accountability	3-8, 11
State labels for achievement levels	IA uses three achievement levels: Low, Intermediate, and High. For our analyses we treated Intermediate as Proficient and High as Advanced. No IA achievement level was treated as our Basic.
High school NCLB test also used as an exit exam?	No
First year test used	2000: Grades 4, 8, 11 2006: Grades 3, 5, 6, 7 Test comparisons are made with the 2000 norming study for the Iowa Tests
Time of test administration	Spring (test windows also in fall and midyear)
Major changes in testing system (2002–present)	2004–05: Changed from biennial to annual data in AYP 2005–06: Began assessing all students in grades 3–8, 11 for inclusion in AYP reporting 2005–06: AYP computed by collapsing grades rather than using grades 4, 8, and 11

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 IA-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			NA	16%	14%	17%	14%	17%	0.2
Proficient-and-above			69%	72%	71%	73%	72%	74%	1.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
White									
Advanced			NA	17%	15%	18%	15%	19%	0.4
Proficient-and-above			72%	74%	74%	76%	75%	77%	1.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
African American									
Advanced			NA	6%	4%	5%	4%	5%	-0.2
Proficient-and-above			37%	47%	44%	47%	45%	50%	2.6
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Latino									
Advanced			NA	6%	5%	5%	5%	5%	-0.3
Proficient-and-above			42%	46%	49%	50%	48%	52%	2.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Asian									
Advanced			NA	20%	18%	23%	19%	21%	0.2
Proficient-and-above			69%	72%	73%	78%	72%	78%	1.8
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Native American[2]									
Advanced			NA	10%	6%	9%	6%	7%	-0.8
Proficient-and-above			52%	61%	57%	63%	62%	65%	2.5
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 8th graders who scored at the advanced level on the state reading test increased from 17% in 2005 to 19% in 2009. During this period, the average yearly gain in the percentage advanced in reading for white 8th graders was 0.4 percentage points per year.

[1]Averages are subject to rounding error.

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

Table IA-8. Percentage of grade 8 students by demographic 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			NA	16%	14%	17%	14%	17%	0.2
Proficient-and-above			69%	72%	71%	73%	72%	74%	1.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Low-income students									
Advanced			NA	8%	6%	7%	5%	8%	0.0
Proficient-and-above			50%	54%	54%	56%	54%	58%	1.6
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Students with disabilities[3]									
Advanced			NA	1%	3%	2%	2%	3%	0.0
Proficient-and-above			20%	27%	27%	27%	26%	28%	0.3
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
English language learners[3]									
Advanced			NA	1%	1%	2%	1%	1%	0.0
Proficient-and-above			26%	24%	29%	32%	32%	35%	2.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Female									
Advanced			NA	17%	13%	18%	13%	18%	0.2
Proficient-and-above			72%	75%	73%	75%	73%	77%	1.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Male									
Advanced			NA	16%	15%	16%	14%	17%	0.2
Proficient-and-above			67%	69%	69%	71%	70%	72%	0.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state reading test remained the same at 8% from 2005 to 2009. During this period, the average yearly change in the percentage advanced in reading for low-income 8th graders was 0.0 percentage points per year.

[1]Averages are subject to rounding error.

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

Table IA-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			NA	17%	19%	18%	20%	19%	0.6
Proficient-and-above			72%	75%	75%	76%	76%	77%	1.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
White									
Advanced			NA	18%	21%	20%	22%	21%	0.7
Proficient-and-above			75%	77%	78%	79%	79%	80%	0.9
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
African American									
Advanced			NA	3%	5%	3%	5%	5%	0.4
Proficient-and-above			34%	44%	41%	47%	46%	47%	2.7
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Latino									
Advanced			NA	5%	6%	6%	7%	5%	0.1
Proficient-and-above			43%	53%	54%	55%	55%	58%	3.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Asian									
Advanced			NA	23%	29%	28%	27%	29%	1.5
Proficient-and-above			78%	76%	81%	83%	81%	83%	1.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Native American[2]									
Advanced			NA	6%	8%	10%	10%	3%	-0.9
Proficient-and-above			51%	59%	56%	63%	57%	64%	2.5
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 8th graders who scored at the advanced level on the state math test increased from 18% in 2005 to 21% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8th graders was 0.7 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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table IA-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			NA	17%	19%	18%	20%	19%	0.6
Proficient-and-above			72%	75%	75%	76%	76%	77%	1.0
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Low-income students									
Advanced			NA	7%	8%	8%	8%	8%	0.3
Proficient-and-above			52%	58%	58%	60%	59%	61%	1.8
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Students with disabilities[3]									
Advanced			NA	1%	4%	2%	2%	3%	-0.5
Proficient-and-above			24%	31%	30%	32%	31%	33%	0.8
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
English language learners[3]									
Advanced			NA	3%	3%	4%	3%	3%	-0.1
Proficient-and-above			34%	37%	43%	44%	44%	44%	0.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Female									
Advanced			NA	15%	16%	16%	17%	16%	0.4
Proficient-and-above			72%	75%	75%	76%	76%	77%	0.8
Basic-and-above			NA	NA	NA	NA	NA	NA	NA
Male									
Advanced			NA	19%	22%	21%	24%	22%	0.7
Proficient-and-above			72%	74%	75%	77%	76%	78%	1.1
Basic-and-above			NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state math test increased from 7% in 2005 to 8% 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.

[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 2009 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 2006-2009 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table IA-11. Subgroup achievement trends in reading by percentages proficient

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

	Grade 4					Grade 8					Grade 11				
Subgroup	Year span	Starting PP	Ending PP	Average annual gain[1]	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain[1]	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain[1]	Gain larger or smaller than comparison group
All tested students	04-09	77%	81%	0.9		04-09	69%	74%	1.0		04-09	77%	77%	0.0	
White	04-09	80%	84%	0.9		04-09	72%	77%	1.1		04-09	79%	79%	0.1	
African American	04-09	50%	60%	2.0	L	04-09	37%	50%	2.6	L	04-09	50%	52%	0.5	L
Latino	04-09	52%	67%	2.8	L	04-09	42%	52%	2.0	L	04-09	51%	57%	1.2	L
Asian	04-09	77%	84%	1.3	L	04-09	69%	78%	1.8	L	04-09	74%	77%	0.6	L
Native American	04-09	65%	67%	0.4[2]	S	04-09	52%	65%	2.5[2]	L	04-09	62%	56%	-1.1[2]	S
Not low-income	07-09	87%	88%	0.4		07-09	81%	82%	0.7		07-09	82%	82%	0.2	
Low-income	07-09	67%	70%	1.1	L	07-09	56%	58%	0.7	E	07-09	59%	61%	1.1	L
Not disabled	07-09	87%	87%	0.1		07-09	82%	82%	0.0		07-09	84%	83%	-0.2	
Students with disabilities[3]	07-09	42%	45%	1.4	L	07-09	27%	28%	0.6	L	07-09	27%	29%	0.6	L
Not ELLs	07-09	82%	82%	0.3		07-09	74%	76%	0.6		07-09	77%	78%	0.1	
English language learners[3]	07-09	54%	58%	2.1	L	07-09	32%	35%	1.4	L	07-09	29%	35%	3.0	L
Female	04-09	79%	83%	0.9		04-09	72%	77%	1.1		04-09	82%	80%	-0.2	
Male	04-09	74%	79%	1.0	L	04-09	67%	72%	0.9	S	04-09	72%	73%	0.2	L

Table reads: In 2004, 80% of white 4th graders and 50% of African American 4th graders scored at the proficient level on the state reading test. In 2009, 84% of white 4th graders and 60% of African American 4th graders scored at the proficient level in reading. Between 2004 and 2009, the percentage proficient improved at an average rate of 0.9 percentage points per year for white students and 2.0 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

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

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 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 IA-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	04-09	77%	81%	0.9		04-09	72%	77%	1.0		04-09	79%	78%	-0.2	
White	04-09	80%	84%	0.9		04-09	75%	80%	0.9		04-09	81%	80%	0.0	
African American	04-09	46%	58%	2.5	L	04-09	34%	47%	2.7	L	04-09	44%	50%	1.1	L
Latino	04-09	56%	65%	1.9	L	04-09	43%	58%	3.1	L	04-09	52%	56%	0.9	L
Asian	04-09	82%	82%	0.0	S	04-09	78%	83%	1.0	L	04-09	79%	80%	0.2	L
Native American	04-09	58%	60%	0.3[2]	S	04-09	51%	64%	2.5[2]	L	04-09	60%	63%	0.7[2]	L
Not low-income	07-09	88%	88%	0.0		07-09	84%	85%	0.5		07-09	84%	83%	-0.3	
Low-income	07-09	70%	70%	0.0	E	07-09	60%	61%	0.6	L	07-09	61%	62%	0.1	L
Not disabled	07-09	87%	86%	-0.3		07-09	84%	84%	-0.2		07-09	85%	84%	-0.7	
Students with disabilities[3]	07-09	51%	50%	-0.4	S	07-09	32%	33%	0.4	L	07-09	35%	35%	0.1	L
Not ELLs	07-09	83%	82%	-0.2		07-09	77%	78%	0.4		07-09	79%	78%	-0.5	
English language learners[3]	07-09	58%	59%	0.3	L	07-09	44%	44%	-0.1	S	07-09	39%	41%	0.9	L
Female	04-09	76%	81%	0.9		04-09	72%	77%	0.8		04-09	78%	77%	-0.4	
Male	04-09	78%	82%	0.8	S	04-09	72%	78%	1.1	L	04-09	79%	79%	0.1	L

Table reads: In 2004, 80% of white 4th graders and 46% of African American 4th graders scored at the proficient level on the state math test. In 2009, 84% of white 4th graders and 58% of African American 4th graders scored at the proficient level in math. Between 2004 and 2009, the percentage proficient improved at an average rate of 0.9 percentage points per year for white students and 2.5 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

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

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

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

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table IA-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.

		Grade 4					Grade 8					Grade 11				
Subgroup	Statistic	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	Mean SS	04-09	207.0	212.8	1.2		04-09	252.3	259.5	1.4		04-09	286.0	288.4	0.5	
	SD	04-09	27.5	27.3			04-09	38.4	37.1			04-09	42.6	41.8		
White	Mean SS	04-09	209.2	215.1	1.2		04-09	255.0	262.4	1.5		04-09	288.1	290.9	0.6	
	SD	04-09	27.2	27.0			04-09	37.6	36.3			04-09	41.9	41.2		
African American	Mean SS	04-09	189.4	196.3	1.4	L	04-09	224.4	235.4	2.2	L	04-09	256.3	262.1	1.2	L
	SD	04-09	23.9	25.7			04-09	34.6	35.0			04-09	40.9	38.6		
Latino	Mean SS	04-09	189.5	199.3	2.0	L	04-09	225.9	237.8	2.4	L	04-09	258.6	264.5	1.2	L
	SD	04-09	23.9	24.3			04-09	37.1	34.7			04-09	42.0	37.5		
Asian	Mean SS	04-09	207.3	214.8	1.5	L	04-09	254.1	265.4	2.3	L	04-09	285.7	293.6	1.6	L
	SD	04-09	29.3	27.0			04-09	40.7	37.2			04-09	43.0	44.8		
Native American	Mean SS	04-09	198.4	200.6	0.4[2]	S	04-09	235.6	244.6	1.8[2]	L	04-09	268.3	268.5	0.0[2]	S
	SD	04-09	25.2	25.4			04-09	38.3	33.1			04-09	38.5	39.3		
Not Low-income	Mean SS	04-09	212.7	219.0	1.3		04-09	259.7	267.2	1.5		04-09	290.8	294.6	0.8	
	SD	04-09	26.8	26.4			04-09	36.6	34.9			04-09	41.2	40.5		
Low-income	Mean SS	04-09	195.6	202.2	1.3	E	04-09	234.0	243.0	1.8	L	04-09	265.9	270.1	0.8	E
	SD	04-09	25.4	25.6			04-09	36.8	36.2			04-09	42.5	40.1		
Not disabled	Mean SS	06-09	213.1	216.7	1.2		06-09	261.7	265.9	1.4		06-09	294.4	294.7	0.1	
	SD	06-09	25.7	25.7			06-09	33.8	33.5			06-09	38.5	38.8		
Students with disabilities[3]	Mean SS	06-09	173.6	186.7	4.4	L	06-09	204.4	216.9	4.1	L	06-09	232.1	241.1	3.0	L
	SD	06-09	46.6	23.6			06-09	54.3	30.8			06-09	61.2	32.5		
Not ELLs	Mean SS	06-09	208.5	213.8	1.8		06-09	253.9	260.6	2.2		06-09	287.0	289.3	0.8	
	SD	06-09	32.5	27.2			06-09	42.7	36.7			06-09	46.9	41.5		
English language learners[3]	Mean SS	06-09	187.7	193.9	2.1	L	06-09	218.8	223.1	1.4	S	06-09	244.1	246.3	0.8	E
	SD	06-09	21.4	21.8			06-09	32.3	30.2			06-09	35.8	33.0		
Female	Mean SS	04-09	208.9	214.5	1.1		04-09	253.6	262.0	1.7		04-09	289.5	292.9	0.7	
	SD	04-09	27.3	27.0			04-09	37.0	35.9			04-09	40.2	40.9		
Male	Mean SS	04-09	205.1	211.2	1.2	L	04-09	251.1	257.1	1.2	S	04-09	282.7	284.1	0.3	S
	SD	04-09	27.6	27.5			04-09	39.8	38.0			04-09	44.4	42.2		

Table reads: In 2004, the mean scale score on the state 4th grade reading test was 209.2 for white students and 189.4 for African American students. In 2009, the mean scale score in 4th grade reading was 215.1 for white students and 196.3 for African American students. Between 2004 and 2009, the mean scale score improved at an average yearly rate of 1.2 points for white students and 1.4 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The Iowa Tests of Basic Skills (ITBS) for grades 3-8 and Iowa Tests of Educational Development (ITED) for grade 11 are scored on a vertical scale. Developmental scores are established by assigning a score of 200 to the median performance of students in the spring of grade 4 and 250 to the median performance of students in the spring of grade 8.

[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 2009 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 IA-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.

		Grade 4					Grade 8					Grade 11				
Subgroup	Statistic	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	Mean SS	04-09	205.0	210.9	1.2		04-09	257.2	262.7	1.1		04-09	288.4	290.8	0.5	
	SD	04-09	22.6	23.0			04-09	34.9	32.8			04-09	39.1	39.6		
White	Mean SS	04-09	206.9	212.9	1.2		04-09	259.8	265.3	1.1		04-09	290.7	293.5	0.6	
	SD	04-09	22.2	22.6			04-09	34.1	32.1			04-09	38.2	38.6		
African American	Mean SS	04-09	187.6	196.0	1.7	L	04-09	225.9	238.3	2.5	L	04-09	252.1	259.7	1.5	L
	SD	04-09	19.5	21.1			04-09	29.6	30.7			04-09	36.5	37.5		
Latino	Mean SS	04-09	191.3	199.4	1.6	L	04-09	231.4	244.2	2.6	L	04-09	262.1	265.8	0.8	L
	SD	04-09	19.4	20.9			04-09	31.1	29.7			04-09	38.1	37.4		
Asian	Mean SS	04-09	207.9	213.4	1.1	S	04-09	264.6	272.6	1.6	L	04-09	290.2	297.3	1.4	L
	SD	04-09	23.7	23.3			04-09	37.8	33.5			04-09	40.4	42.3		
Native American	Mean SS	04-09	196.8	198.2	0.3[2]	S	04-09	239.9	245.9	1.2[2]	L	04-09	272.3	271.6	-0.2[2]	S
	SD	04-09	19.9	22.9			04-09	32.4	26.3			04-09	36.1	37.0		
Not Low-income	Mean SS	04-09	209.6	215.8	1.3		04-09	264.4	270.0	1.1		04-09	293.2	297.3	0.8	
	SD	04-09	21.9	22.4			04-09	33.2	30.9			04-09	37.5	37.7		
Low-income	Mean SS	04-09	195.8	202.4	1.3	E	04-09	239.5	247.3	1.6	L	04-09	268.5	271.4	0.6	S
	SD	04-09	21.1	21.5			04-09	32.7	31.4			04-09	39.3	38.7		
Not disabled	Mean SS	06-09	211.3	213.8	0.8		06-09	267.4	268.3	0.3		06-09	296.6	296.7	0.0	
	SD	06-09	21.6	21.9			06-09	30.8	29.9			06-09	34.9	36.3		
Students with disabilities[3]	Mean SS	06-09	179.8	191.3	3.8	L	06-09	212.1	226.0	4.6	L	06-09	234.7	246.1	3.8	L
	SD	06-09	46.7	20.6			06-09	53.8	26.9			06-09	59.7	34.1		
Not ELLs	Mean SS	06-09	207.5	211.7	1.4		06-09	259.7	263.6	1.3		06-09	289.2	291.6	0.8	
	SD	06-09	28.8	22.9			06-09	40.4	32.6			06-09	44.0	39.2		
English language learners[3]	Mean SS	06-09	194.8	195.7	0.3	S	06-09	233.4	234.1	0.2	S	06-09	250.9	253.5	0.9	L
	SD	06-09	19.4	19.7			06-09	30.9	27.5			06-09	34.3	37.4		
Female	Mean SS	04-09	203.6	210.2	1.3		04-09	255.7	261.0	1.1		04-09	286.3	286.9	0.1	
	SD	04-09	21.7	22.6			04-09	33.1	31.6			04-09	36.8	38.2		
Male	Mean SS	04-09	206.3	211.5	1.1	S	04-09	258.6	264.4	1.2	L	04-09	290.5	294.6	0.8	L
	SD	04-09	23.3	23.4			04-09	36.5	33.9			04-09	41.0	40.5		

Table reads: In 2004, the mean scale score on the state 4th grade math test was 206.9 for white students and 187.6 for African American students. In 2009, the mean scale score in 4th grade math was 212.9 for white students and 196.0 for African American students. Between 2004 and 2009, the mean scale score

improved at an average yearly rate of 1.2 points for white students and 1.7 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The Iowa Tests of Basic Skills (ITBS) for grades 3-8 and Iowa Tests of Educational Development (ITED) for grade 11 are scored on a vertical scale. Developmental scores are established by assigning a score of 200 to the median performance of students in the spring of grade 4 and 250 to the median performance of students in the spring of grade 8.

[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 2009 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 IA-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	04-09	34,055	31,505	-7.5%	100.0%	04-09	37,883	32,153	-15.1%	100.0%	04-09	34,511	33,426	-3.1%	100.0%
	Math	04-09	34,025	31,525	-7.3%	100.0%	04-09	37,811	32,089	-15.1%	100.0%	04-09	34,501	33,428	-3.1%	100.0%
White	Reading	04-09	28,945	26,603	-8.1%	84.4%	04-09	33,188	27,760	-16.4%	86.3%	04-09	31,088	29,686	-4.5%	88.8%
	Math	04-09	28,901	26,628	-7.9%	84.5%	04-09	33,119	27,713	-16.3%	86.4%	04-09	31,071	29,685	-4.5%	88.8%
African American	Reading	04-09	1,647	1,807	9.7%	5.7%	04-09	1,513	1,655	9.4%	5.1%	04-09	977	1,345	37.7%	4.0%
	Math	04-09	1,652	1,805	9.3%	5.7%	04-09	1,514	1,641	8.4%	5.1%	04-09	969	1,346	38.9%	4.0%
Latino	Reading	04-09	1,818	2,223	22.3%	7.1%	04-09	1,470	1,924	30.9%	6.0%	04-09	1,036	1,569	51.4%	4.7%
	Math	04-09	1,822	2,223	22.0%	7.1%	04-09	1,457	1,922	31.9%	6.0%	04-09	1,037	1,569	51.3%	4.7%
Asian	Reading	04-09	599	691	15.4%	2.2%	04-09	596	637	6.9%	2.0%	04-09	627	658	4.9%	2.0%
	Math	04-09	597	688	15.2%	2.2%	04-09	596	638	7.0%	2.0%	04-09	627	658	4.9%	2.0%
Native American	Reading	04-09	206	180	-12.6%	0.6%	04-09	236	173	-26.7%	0.5%	04-09	168	165	-1.8%	0.5%
	Math	04-09	208	180	-13.5%	0.6%	04-09	246	171	-30.5%	0.5%	04-09	178	166	-6.7%	0.5%
Low-income	Reading	04-09	11,373	11,626	2.2%	36.9%	04-09	10,977	10,319	-6.0%	32.1%	04-09	6,709	8,383	25.0%	25.1%
	Math	04-09	11,364	11,634	2.4%	36.9%	04-09	10,941	10,271	-6.1%	32.0%	04-09	6,699	8,381	25.1%	25.1%
Students w/ disabilities	Reading	06-09	4,261	4,076	-4.3%	12.9%	06-09	5,322	4,245	-20.2%	13.2%	06-09	4,453	3,887	-12.7%	11.6%
	Math	06-09	4,263	4,080	-4.3%	12.9%	06-09	5,296	4,221	-20.3%	13.2%	06-09	4,439	3,893	-12.3%	11.6%
English language learners	Reading	06-09	1,201	1,581	31.6%	5.0%	06-09	801	938	17.1%	2.9%	06-09	497	667	34.2%	2.0%
	Math	06-09	1,201	1,578	31.4%	5.0%	06-09	801	937	17.0%	2.9%	06-09	500	672	34.4%	2.0%
Female	Reading	04-09	16,632	15,390	-7.5%	48.8%	04-09	18,539	15,670	-15.5%	48.7%	04-09	16,809	16,564	-1.5%	49.6%
	Math	04-09	16,603	15,391	-7.3%	48.8%	04-09	18,494	15,644	-15.4%	48.8%	04-09	16,801	16,561	-1.4%	49.5%
Male	Reading	04-09	17,373	16,115	-7.2%	51.2%	04-09	19,293	16,481	-14.6%	51.3%	04-09	17,652	16,861	-4.5%	50.4%
	Math	04-09	17,365	16,134	-7.1%	51.2%	04-09	19,252	16,443	-14.6%	51.2%	04-09	17,641	16,866	-4.4%	50.5%

Table reads: In 2004, 28,945 students in the white subgroup took the state 4th grade reading test. By 2009, the number of white test-takers had fallen to 26,603 students, a decrease of 8.1%. In 2009, the white subgroup made up 84.4% of the 31,505 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.