Subgroup Achievement and Gap Trends — Wisconsin

K-12 enrollment — 830,433

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. In grade 8 (the only grade in which subgroup trends were analyzed by achievement level), Wisconsin showed across-the-board gains—improvements in reading and math at the *basic-and-above, proficient-and-above,* and *advanced* levels for all racial/ethnic subgroups, low-income students, and boys and girls. Progress was made in narrowing achievement gaps between most subgroups in math but was mixed in reading. Comparable data were available for 2003-2009.

- ***Mixed gap trends.*** In math across three grade levels, the majority of gaps narrowed. In reading gaps widened between African American and whites students at grade 4, Native American and white students at grade 10 as well as between low-income and non-low-income students at grades 4 and 10.

- ***Gaps widen between boys and girls in reading.*** The gap in the percentage proficient also widened between boys and girls in reading at grade 8.

Data Limitations

Years of comparable percentage proficient data	2003 through 2009
Years of comparable mean scale score data	2006 through 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	Wisconsin Knowledge and Concepts Examinations–Criterion-Referenced Tests (WKCE-CRT) Wisconsin Alternate Assessment for Students with Disabilities (WAA–SwD)
Grades tested for NCLB accountability	3–8, 10
State labels for achievement levels	WI uses four achievement levels: Minimal, 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	2002-03 (score scale changed in 2005-06)
Time of test administration	Fall
Major changes in testing system (2002–present)	2002–03: Test window changed to November from February Fall 2005: Switched to WKCE-CRT (from a state-augmented version of the off-the-shelf TerraNova test); grades 3–8 and 10 assessed (previously only grades 4, 8, and 10 were assessed) Fall 2005: Scale scores rescaled to reflect move to completely customized tests in reading and math. Proficiency standards were equated and can be compared across assessments.

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 WI-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		39%	32%	41%	42%	43%	44%	43%	0.7
Proficient-and-above		83%	80%	85%	85%	84%	84%	85%	0.3
Basic-and-above		92%	91%	93%	94%	94%	94%	94%	0.3
White									
Advanced		45%	37%	48%	49%	49%	51%	49%	0.8
Proficient-and-above		89%	86%	90%	90%	89%	90%	90%	0.1
Basic-and-above		95%	95%	96%	96%	96%	96%	96%	0.2
African American									
Advanced		10%	8%	11%	11%	15%	15%	16%	0.9
Proficient-and-above		54%	50%	57%	56%	61%	59%	62%	1.3
Basic-and-above		76%	72%	78%	79%	83%	80%	83%	1.1
Latino									
Advanced		17%	13%	19%	18%	21%	21%	22%	0.9
Proficient-and-above		60%	60%	66%	68%	67%	68%	70%	1.6
Basic-and-above		77%	82%	83%	86%	84%	84%	86%	1.5
Asian									
Advanced		22%	17%	27%	26%	30%	31%	34%	2.0
Proficient-and-above		69%	63%	75%	77%	79%	76%	80%	1.8
Basic-and-above		87%	84%	90%	91%	91%	90%	92%	0.8
Native American									
Advanced		24%	18%	24%	21%	24%	28%	27%	0.5
Proficient-and-above		74%	68%	75%	75%	75%	75%	76%	0.3
Basic-and-above		88%	85%	91%	90%	90%	91%	92%	0.6

Table reads: The percentage of white 8th graders who scored at the advanced level on the state reading test increased from 45% in 2003 to 49% in 2009. During this period, the average yearly gain in the percentage advanced in reading for white 8th 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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table WI-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		39%	32%	41%	42%	43%	44%	43%	0.7
Proficient-and-above		83%	80%	85%	85%	84%	84%	85%	0.3
Basic-and-above		92%	91%	93%	94%	94%	94%	94%	0.3
Low-income students									
Advanced		18%	14%	20%	20%	23%	23%	24%	1.0
Proficient-and-above		65%	61%	68%	70%	70%	70%	71%	1.1
Basic-and-above		83%	81%	85%	87%	87%	86%	88%	0.8
Students with disabilities[3]									
Advanced		7%	7%	8%	10%	11%	12%	13%	0.7
Proficient-and-above		46%	42%	49%	49%	48%	47%	48%	-0.3
Basic-and-above		70%	65%	73%	73%	74%	72%	73%	0.1
English language learners[3]									
Advanced		6%	4%	8%	9%	9%	9%	8%	-0.1
Proficient-and-above		39%	41%	50%	56%	56%	58%	58%	0.5
Basic-and-above		64%	72%	74%	81%	77%	79%	79%	-0.6
Female									
Advanced		43%	33%	49%	45%	47%	47%	47%	0.7
Proficient-and-above		86%	84%	88%	87%	87%	87%	88%	0.3
Basic-and-above		94%	92%	94%	95%	95%	95%	96%	0.3
Male									
Advanced		35%	31%	34%	40%	40%	39%	39%	0.7
Proficient-and-above		81%	77%	81%	83%	82%	82%	82%	0.1
Basic-and-above		91%	88%	90%	90%	92%	91%	92%	0.2

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state reading test increased from 18% in 2003 to 24% in 2009. During this period, the average yearly gain in the percentage advanced in reading for low-income 8th graders was 1.0 percentage point 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 WI-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		26%	22%	25%	25%	27%	27%	29%	0.5
Proficient-and-above		73%	66%	74%	74%	75%	75%	78%	0.9
Basic-and-above		86%	82%	88%	88%	89%	88%	91%	0.9
White									
Advanced		31%	26%	29%	30%	32%	31%	34%	0.6
Proficient-and-above		81%	74%	81%	81%	82%	83%	85%	0.6
Basic-and-above		92%	88%	93%	92%	93%	93%	95%	0.5
African American									
Advanced		4%	3%	4%	4%	5%	6%	6%	0.4
Proficient-and-above		31%	25%	32%	37%	38%	37%	46%	2.5
Basic-and-above		55%	46%	56%	62%	66%	60%	73%	3.0
Latino									
Advanced		8%	7%	9%	8%	9%	9%	11%	0.5
Proficient-and-above		47%	42%	53%	54%	55%	55%	60%	2.2
Basic-and-above		69%	67%	78%	78%	80%	78%	83%	2.3
Asian									
Advanced		19%	16%	19%	22%	25%	24%	31%	2.0
Proficient-and-above		68%	57%	70%	73%	74%	73%	79%	1.8
Basic-and-above		86%	78%	89%	89%	89%	89%	92%	1.0
Native American									
Advanced		10%	8%	10%	11%	11%	14%	14%	0.6
Proficient-and-above		56%	46%	55%	56%	60%	64%	64%	1.4
Basic-and-above		79%	69%	79%	75%	83%	83%	87%	1.3

Table reads: The percentage of white 8th graders who scored at the advanced level on the state math test increased from 31% in 2003 to 34% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8th 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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

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

Subgroup	Reporting year								Average yearly percentage point gain[1]
	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced		26%	22%	25%	25%	27%	27%	29%	0.5
Proficient-and-above		73%	66%	74%	74%	75%	75%	78%	0.9
Basic-and-above		86%	82%	88%	88%	89%	88%	91%	0.9
Low-income students									
Advanced		9%	8%	9%	10%	11%	11%	13%	0.7
Proficient-and-above		50%	42%	52%	55%	56%	55%	61%	1.9
Basic-and-above		70%	64%	74%	76%	79%	76%	83%	2.1
Students with disabilities[3]									
Advanced		5%	4%	5%	7%	7%	8%	8%	0.6
Proficient-and-above		34%	26%	34%	35%	37%	37%	41%	2.2
Basic-and-above		57%	47%	58%	58%	62%	61%	67%	3.2
English language learners[3]									
Advanced		6%	3%	6%	7%	8%	6%	7%	0.0
Proficient-and-above		40%	34%	49%	52%	52%	52%	53%	0.5
Basic-and-above		67%	62%	78%	79%	77%	76%	79%	0.1
Female									
Advanced		25%	21%	23%	25%	24%	28%	28%	0.5
Proficient-and-above		74%	66%	74%	75%	75%	75%	78%	0.7
Basic-and-above		87%	82%	87%	89%	88%	91%	92%	0.8
Male									
Advanced		27%	22%	26%	28%	28%	30%	31%	0.6
Proficient-and-above		73%	66%	73%	74%	75%	76%	78%	0.9
Basic-and-above		85%	80%	85%	88%	87%	90%	91%	1.0

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state math test increased from 9% in 2003 to 13% in 2009. During this period, the average yearly gain in the percentage advanced in math for low-income 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.

[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 WI-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	03-09	81%	82%	0.1		03-09	83%	85%	0.3		03-09	71%	75%	0.7	
White	03-09	87%	87%	0.0		03-09	89%	90%	0.1		03-09	78%	82%	0.6	
African American	03-09	62%	59%	-0.5	S	03-09	54%	62%	1.3	L	03-09	36%	41%	0.9	L
Latino	03-09	63%	65%	0.4	L	03-09	60%	70%	1.6	L	03-09	45%	53%	1.3	L
Asian	03-09	70%	75%	0.9	L	03-09	69%	80%	1.8	L	03-09	55%	63%	1.3	L
Native American	03-09	71%	74%	0.5	L	03-09	74%	76%	0.3	L	03-09	59%	58%	-0.1	S
Not low-income	03-09	87%	90%	0.4		03-09	90%	91%	0.2		03-09	76%	83%	1.1	
Low-income	03-09	68%	68%	0.0	S	03-09	65%	71%	1.1	L	03-09	50%	55%	0.9	S
Not disabled	06-09	87%	87%	-0.1		06-09	91%	91%	0.0		06-09	82%	81%	-0.1	
Students with disabilities[3]	06-09	53%	50%	-1.1	S	06-09	49%	48%	-0.3	S	06-09	32%	34%	0.8	L
Not ELLs	06-09	84%	83%	-0.2		06-09	86%	86%	0.2		06-09	76%	77%	0.1	
English language learners[3]	06-09	56%	58%	0.7	L	06-09	56%	58%	0.5	L	06-09	34%	30%	-1.3	S
Female	03-09	85%	84%	-0.1		03-09	86%	88%	0.3		03-09	75%	78%	0.5	
Male	03-09	78%	79%	0.2	L	03-09	81%	82%	0.1	S	03-09	69%	72%	0.5	E

Table reads: In 2003, 87% of white 4th graders and 62% of African American 4th graders scored at the proficient level on the state reading test. In 2009, 87% of white 4th graders and 59% of African American 4th graders scored at the proficient level in reading. Between 2003 and 2009, the percentage proficient remained the same at an average rate of 0.0 percentage points per year for white students and declined 0.5 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 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 WI-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 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	03-09	71%	81%	1.7		03-09	73%	78%	0.9		03-09	69%	69%	0.0	
White	03-09	76%	87%	1.8		03-09	81%	85%	0.6		03-09	76%	77%	0.1	
African American	03-09	42%	55%	2.1	L	03-09	31%	46%	2.5	L	03-09	23%	26%	0.6	L
Latino	03-09	54%	67%	2.1	L	03-09	47%	60%	2.2	L	03-09	40%	45%	0.8	L
Asian	03-09	66%	80%	2.3	L	03-09	68%	79%	1.8	L	03-09	55%	65%	1.7	L
Native American	03-09	54%	72%	3.0	L	03-09	56%	64%	1.4	L	03-09	49%	51%	0.4	L
Not low-income	03-09	79%	89%	1.7		03-09	82%	87%	0.8		03-09	74%	78%	0.7	
Low-income	03-09	53%	68%	2.5	L	03-09	50%	61%	1.9	L	03-09	43%	46%	0.6	S
Not disabled	06-09	77%	85%	2.8		06-09	81%	84%	1.2		06-09	78%	76%	-0.9	
Students with disabilities[3]	06-09	48%	57%	2.8	E	06-09	35%	41%	2.2	L	06-09	28%	28%	-0.3	L
Not ELLS	06-09	74%	82%	2.8		06-09	75%	80%	1.5		06-09	73%	71%	-0.7	
English language learners[3]	06-09	52%	64%	4.2	L	06-09	52%	53%	0.5	S	06-09	39%	32%	-2.3	S
Female	03-09	70%	80%	1.7		03-09	74%	78%	0.7		03-09	70%	69%	-0.2	
Male	03-09	73%	82%	1.4	S	03-09	73%	78%	0.9	L	03-09	68%	70%	0.3	L

Table reads: In 2003, 76% of white 4th graders and 42% of African American 4th graders scored at the proficient level on the state math test. In 2009, 87% of white 4th graders and 55% of African American 4th graders scored at the proficient level in math. Between 2003 and 2009, the percentage proficient improved at an average rate of 1.8 percentage points per year for white students and 2.1 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 WI-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 10				
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	MSS	06-09	476.8	476.9	0.0		06-09	525.8	527.5	0.6		06-09	540.1	540.0	0.0	
	SD	06-09	46.1	46.7			06-09	50.1	51.2			06-09	63.2	63.2		
White	MSS	06-09	484.0	484.9	0.3		06-09	534.7	535.9	0.4		06-09	549.3	549.9	0.2	
	SD	06-09	42.9	43.1			06-09	45.2	47.3			06-09	58.4	58.4		
African American	MSS	06-09	442.5	444.2	0.6	L	06-09	480.7	488.1	2.5	L	06-09	479.9	485.2	1.8	L
	SD	06-09	49.6	49.4			06-09	54.1	53.7			06-09	67.5	66.3		
Latino	MSS	06-09	455.6	453.4	-0.7	S	06-09	498.6	501.8	1.1	L	06-09	505.1	506.8	0.6	L
	SD	06-09	44.0	46.8			06-09	50.7	51.2			06-09	62.0	63.8		
Asian	MSS	06-09	470.5	470.7	0.1	S	06-09	514.2	520.0	1.9	L	06-09	526.4	524.1	-0.8	S
	SD	06-09	46.5	47.4			06-09	48.2	52.4			06-09	59.1	62.1		
Native American	MSS	06-09	462.7	462.8	0.0	S	06-09	504.6	508.5	1.3	L	06-09	516.5	513.1	-1.1	S
	SD	06-09	41.8	45.5			06-09	48.4	48.6			06-09	61.6	59.8		
Not low-income	MSS	06-09	487.5	489.4	0.6		06-09	537.1	539.8	0.9		06-09	550.5	552.9	0.8	
	SD	06-09	41.1	41.0			06-09	44.6	46.0			06-09	58.9	57.9		
Low-income	MSS	06-09	454.7	455.8	0.4	S	06-09	498.7	502.5	1.3	L	06-09	505.0	506.8	0.6	S
	SD	06-09	48.2	48.0			06-09	52.2	52.3			06-09	64.4	64.1		
Not disabled	MSS	06-09	482.8	483.5	0.2		06-09	534.4	535.7	0.4		06-09	550.3	549.3	-0.3	
	SD	06-09	40.9	40.9			06-09	42.6	44.7			06-09	55.9	57.1		
Students with disabilities[3]	MSS	06-09	434.7	433.5	-0.4	S	06-09	469.0	470.8	0.6	L	06-09	466.8	472.3	1.8	L
	SD	06-09	57.8	58.0			06-09	58.3	57.3			06-09	64.1	63.9		
Not ELLs	MSS	06-09	478.5	479.3	0.3		06-09	527.2	529.8	0.9		06-09	541.5	542.2	0.2	
	SD	06-09	45.7	46.0			06-09	49.6	50.3			06-09	62.7	62.3		
English language learners[3]	MSS	06-09	445.7	444.5	-0.4	S	06-09	485.7	484.0	-0.6	S	06-09	484.3	475.5	-2.9	S
	SD	06-09	42.7	44.5			06-09	48.0	48.7			06-09	54.8	53.9		
Female	MSS	06-09	479.1	480.5	0.5		06-09	529.9	533.4	1.2		06-09	547.9	545.5	-0.8	
	SD	06-09	44.2	44.4			06-09	47.5	48.8			06-09	59.7	60.4		
Male	MSS	06-09	474.6	473.5	-0.4	S	06-09	522.0	522.0	0.0	S	06-09	532.4	534.7	0.8	L
	SD	06-09	47.8	48.5			06-09	52.1	52.9			06-09	65.5	65.3		

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 484.0 for white students and 442.5 for African American students. In 2009, the mean scale score in 4th grade reading was 484.9 for white students and 444.2 for African American students. Between 2006 and 2009, the mean scale score improved at an average yearly rate of 0.3 points for white students and 0.6 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The WKCE is scored on a scale of 270-820; grade 4 scale scores range from 280-650, grade 8: 330-650, and grade 10: 350-820.

[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 WI-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 10				
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	MSS	06-09	462.9	471.9	3.0		06-09	540.0	546.3	2.1		06-09	563.5	560.3	-1.1	
	SD	06-09	45.6	44.2			06-09	48.9	48.6			06-09	50.2	46.1		
White	MSS	06-09	470.5	479.3	2.9		06-09	548.4	554.7	2.1		06-09	571.4	568.2	-1.1	
	SD	06-09	42.5	41.1			06-09	44.5	44.3			06-09	45.4	42.0		
African American	MSS	06-09	423.1	438.2	5.0	L	06-09	493.5	503.8	3.4	L	06-09	508.5	512.9	1.5	L
	SD	06-09	45.7	46.5			06-09	50.0	50.2			06-09	53.4	46.0		
Latino	MSS	06-09	442.7	452.8	3.4	L	06-09	514.3	520.4	2.0	S	06-09	533.8	533.4	-0.1	L
	SD	06-09	40.3	41.1			06-09	47.1	46.9			06-09	48.2	43.4		
Asian	MSS	06-09	463.3	472.7	3.1	L	06-09	541.3	549.6	2.8	L	06-09	560.4	557.8	-0.9	L
	SD	06-09	46.2	45.9			06-09	46.9	51.1			06-09	48.7	47.7		
Native American	MSS	06-09	445.1	456.8	3.9	L	06-09	515.5	526.1	3.5	L	06-09	541.9	540.9	-0.3	L
	SD	06-09	39.7	39.8			06-09	49.0	44.6			06-09	47.7	41.0		
Not low-income	MSS	06-09	473.5	483.3	3.3		06-09	550.9	558.6	2.6		06-09	572.4	570.5	-0.6	
	SD	06-09	42.0	40.8			06-09	44.2	43.6			06-09	46.0	42.1		
Low-income	MSS	06-09	440.8	452.9	4.0	L	06-09	513.8	521.3	2.5	S	06-09	533.6	534.1	0.2	L
	SD	06-09	44.7	43.1			06-09	49.7	48.7			06-09	51.9	45.5		
Not disabled	MSS	06-09	467.4	476.6	3.1		06-09	548.0	553.6	1.9		06-09	571.4	567.0	-1.5	
	SD	06-09	43.2	41.6			06-09	42.9	43.3			06-09	44.4	42.0		
Students with disabilities[3]	MSS	06-09	432.1	441.0	3.0	S	06-09	486.8	495.8	3.0	L	06-09	506.8	511.5	1.6	L
	SD	06-09	49.6	48.5			06-09	53.1	53.0			06-09	52.8	44.9		
Not ELLs	MSS	06-09	464.0	473.7	3.2		06-09	540.9	548.2	2.4		06-09	564.4	561.7	-0.9	
	SD	06-09	45.6	44.0			06-09	48.8	48.0			06-09	49.9	45.6		
English language learners[3]	MSS	06-09	441.7	448.9	2.4	S	06-09	514.1	511.9	-0.7	S	06-09	527.8	519.5	-2.8	S
	SD	06-09	40.3	40.1			06-09	46.2	46.7			06-09	47.4	41.3		
Female	MSS	06-09	460.8	471.4	3.5		06-09	540.3	545.8	1.8		06-09	563.4	558.2	-1.7	
	SD	06-09	44.7	44.2			06-09	47.0	46.4			06-09	47.1	44.3		
Male	MSS	06-09	464.8	472.4	2.5	S	06-09	539.7	546.8	2.4	L	06-09	563.6	562.2	-0.5	L
	SD	06-09	46.3	44.2			06-09	50.7	50.6			06-09	52.9	47.6		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 470.5 for white students and 423.1 for African American students. In 2009, the mean scale score in 4th grade math was 479.3 for white students and 438.2 for African American students. Between 2006 and 2009, the mean scale score

improved at an average yearly rate of 2.9 points for white students and 5.0 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The WKCE is scored on a scale of 270-820; grade 4 scale scores range from 280-650, grade 8: 330-650, and grade 10: 350-820.

[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 WI-15. Numbers of test-takers

Subgroup	Subject	Grade 4					Grade 8					Grade 10				
		Year span	# of test-takers start year	# of test-takers end year	Change in # of test-takers over time	% of test-takers in subgroup in end year	Year span	# of test-takers start year	# of test-takers end year	Change in # of test-takers over time	% of test-takers in subgroup in end year	Year span	# of test-takers start year	# of test-takers end year	Change in # of test-takers over time	% of test-takers in subgroup in end year
All tested students	Reading	03-09	60,520	59,219	-2.1%	100.0%	03-09	65,920	61,073	-7.4%	100.0%	03-09	68,202	66,928	-1.9%	100.0%
	Math	03-09	60,788	59,400	-2.3%	100.0%	03-09	65,898	61,222	-7.1%	100.0%	03-09	68,137	67,098	-1.5%	100.0%
White	Reading	03-09	47,266	44,648	-5.5%	75.4%	03-09	53,420	47,284	-11.5%	77.4%	03-09	57,760	53,471	-7.4%	79.9%
	Math	03-09	47,438	44,641	-5.9%	75.2%	03-09	53,430	47,289	-11.5%	77.2%	03-09	57,744	53,508	-7.3%	79.7%
African American	Reading	03-09	6,870	6,316	-8.1%	10.7%	03-09	6,372	6,339	-0.5%	10.4%	03-09	4,937	6,125	24.1%	9.2%
	Math	03-09	6,941	6,322	-8.9%	10.6%	03-09	6,344	6,343	0.0%	10.4%	03-09	4,901	6,105	24.6%	9.1%
Latino	Reading	03-09	3,178	5,214	64.1%	8.8%	03-09	2,752	4,359	58.4%	7.1%	03-09	2,293	3,922	71.0%	5.9%
	Math	03-09	3,186	5,355	68.1%	9.0%	03-09	2,755	4,470	62.3%	7.3%	03-09	2,282	4,041	77.1%	6.0%
Asian	Reading	03-09	2,142	2,150	0.4%	3.6%	03-09	2,193	2,233	1.8%	3.7%	03-09	2,020	2,386	18.1%	3.6%
	Math	03-09	2,142	2,190	2.2%	3.7%	03-09	2,188	2,264	3.5%	3.7%	03-09	2,017	2,425	20.2%	3.6%
Native American	Reading	03-09	908	891	-1.9%	1.5%	03-09	997	858	-13.9%	1.4%	03-09	908	1,022	12.6%	1.5%
	Math	03-09	922	892	-3.3%	1.5%	03-09	998	856	-14.2%	1.4%	03-09	904	1,017	12.5%	1.5%
Low-income	Reading	03-09	18,105	22,009	21.6%	37.2%	03-09	16,040	20,014	24.8%	32.8%	03-09	12,057	18,805	56.0%	28.1%
	Math	03-09	18,251	22,171	21.5%	37.3%	03-09	16,013	20,145	25.8%	32.9%	03-09	12,018	18,925	57.5%	28.2%
Students w/ disabilities	Reading	06-09	7,229	7,760	7.3%	13.1%	06-09	8,569	7,711	-10.0%	12.6%	06-09	8,609	8,122	-5.7%	12.1%
	Math	06-09	7,447	7,793	4.6%	13.1%	06-09	8,573	7,735	-9.8%	12.6%	06-09	8,596	8,125	-5.5%	12.1%
English language learners	Reading	06-09	2,957	4,021	36.0%	6.8%	06-09	2,127	2,976	39.9%	4.9%	06-09	1,757	2,203	25.4%	3.3%
	Math	06-09	2,904	4,218	45.2%	7.1%	06-09	2,073	3,126	50.8%	5.1%	06-09	1,726	2,370	37.3%	3.5%
Female	Reading	03-09	29,466	28,871	-2.0%	48.8%	03-09	32,007	29,883	-6.6%	48.9%	03-09	33,489	32,645	-2.5%	48.8%
	Math	03-09	29,522	28,959	-1.9%	48.8%	03-09	31,988	29,953	-6.4%	48.9%	03-09	33,441	32,736	-2.1%	48.8%
Male	Reading	03-09	30,969	30,347	-2.0%	51.2%	03-09	33,849	31,190	-7.9%	51.1%	03-09	34,618	34,283	-1.0%	51.2%
	Math	03-09	31,180	30,440	-2.4%	51.2%	03-09	33,846	31,269	-7.6%	51.1%	03-09	34,602	34,362	-0.7%	51.2%

Table reads: In 2003, 47,266 students in the white subgroup took the state 4th grade reading test. By 2009, the number of white test-takers had fallen to 44,648 students, a decrease of 5.5%. In 2009, the white subgroup made up 75.4% of the 59,219 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.