Subgroup Achievement and Gap Trends — Michigan

K-12 enrollment — 1,612,425

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), Michigan showed across-the-board gains—improvements in both reading and math at the basic, proficient and advanced levels for all racial/ethnic subgroups, low income students, and boys and girls. Results on achievement gaps were mixed. Comparable data were available from 2006 through 2009 for grades 4 and 8, and from 2007 through 2009 for grade 11.

- ***Notable gains at advanced.*** All subgroups made the largest gains at the advanced level in reading. This pattern was not as evident in math.

- ***Mixed gap trends.*** In reading across the three grade levels, the majority of gaps narrowed using the percentage proficient measure, but gaps widened more often than they narrowed using average (mean) test scores. There was less of a discrepancy between the two indicators in math; both showed the majority of gaps narrowing.

Data Limitations

Years of comparable percentage proficient data	2006 through 2009, grades 3–8 2007 through 2009, grade 11
Years of comparable mean scale score data	2006 through 2009, grades 3–8 2007 through 2009, grade 11
Disaggregated data for all subgroups and comparison groups	For proficiency and effect sizes, comparison group data for low-income students, students with disabilities, and English language learners were not available for 2009, so these subgroups are compared with all tested students in the state.

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	Michigan Educational Assessment Program (MEAP), grades 3–9 Michigan Merit Exam (MME), high school MI-Access (for students with significant cognitive disabilities, grades 3–8 and 11)
Grades tested for NCLB accountability	3–8, 11
State labels for achievement levels	MI uses four achievement levels. The MEAP elementary and middle school exam uses different labels for these levels than the MME high school exam: Not Proficient (MME: Apprentice), Partially Proficient (MME: Basic), Proficient (MME: Met), and Advanced (MME: Exceeded). For our analyses we treated Partially Proficient (Basic) as Basic, Proficient (Met) as Proficient, and Advanced (Exceeded) as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	2005–06: Grades 3–9 2006–07: High school
Time of test administration	Fall, grades 3–9 Spring, high school only
Major changes in testing system (2002–present)	2002–03: Proficiency levels changed

Fall 2005: All students in grades 3–8 assessed for the first time (prior assessment included one administration in elementary school and one in middle school)
2005–06: Separate scale implemented for each grade, although standards are vertically articulated; comparisons cannot be made across grades
2005–06: MEAP content standards revised, new standards set, and assessment window shifted from winter to fall; cannot compare these scores with scores from previous years
2006–07: MME replaced previous high school test

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 MI-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					19%	33%	25%	32%	4.1
Proficient-and-above					73%	76%	77%	76%	0.9
Basic-and-above					89%	91%	92%	92%	1.3
White									
Advanced					23%	39%	29%	37%	4.6
Proficient-and-above					79%	82%	83%	81%	0.6
Basic-and-above					92%	94%	95%	94%	0.8
African American									
Advanced					7%	14%	9%	14%	2.2
Proficient-and-above					53%	56%	58%	57%	1.2
Basic-and-above					78%	81%	83%	85%	2.2
Latino									
Advanced					10%	19%	14%	18%	2.5
Proficient-and-above					58%	64%	65%	65%	2.4
Basic-and-above					81%	85%	86%	88%	2.4
Asian									
Advanced					37%	51%	37%	50%	4.3
Proficient-and-above					84%	85%	87%	86%	0.7
Basic-and-above					93%	95%	96%	96%	1.1
Native American									
Advanced					12%	24%	18%	24%	4.1
Proficient-and-above					64%	71%	72%	73%	2.9
Basic-and-above					84%	87%	91%	91%	2.4

Table reads: The percentage of white 8th graders who scored at the advanced level on the state reading test increased from 23% in 2006 to 37% in 2009. During this period, the average yearly gain in the percentage advanced in reading for white 8th graders was 4.6 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 MI-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					19%	33%	25%	32%	4.1
Proficient-and-above					73%	76%	77%	76%	0.9
Basic-and-above					89%	91%	92%	92%	1.3
Low-income students									
Advanced					9%	18%	13%	18%	2.9
Proficient-and-above					59%	62%	65%	63%	1.2
Basic-and-above					81%	84%	86%	87%	2.1
Students with disabilities[3]									
Advanced					3%	7%	5%	7%	1.4
Proficient-and-above					33%	36%	40%	35%	0.7
Basic-and-above					59%	64%	70%	69%	3.3
English language learners[3]									
Advanced					5%	8%	4%	7%	0.5
Proficient-and-above					47%	48%	47%	46%	-0.2
Basic-and-above					73%	76%	78%	81%	2.6
Female									
Advanced					22%	38%	28%	33%	3.7
Proficient-and-above					78%	81%	82%	79%	0.2
Basic-and-above					92%	94%	94%	94%	0.8
Male									
Advanced					17%	28%	21%	30%	4.3
Proficient-and-above					69%	70%	72%	73%	1.2
Basic-and-above					86%	87%	89%	90%	1.4

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state reading test increased from 9% in 2006 to 18% in 2009. During this period, the average yearly gain in the percentage advanced in reading for low-income 8th graders was 2.9 percentage points per year.

[1]Averages are subject to rounding error.

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 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 MI-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					31%	29%	41%	43%	4.1
Proficient-and-above					63%	68%	71%	75%	3.8
Basic-and-above					86%	93%	90%	93%	2.4
White									
Advanced					37%	35%	49%	50%	4.2
Proficient-and-above					72%	76%	79%	81%	2.9
Basic-and-above					91%	96%	94%	95%	1.4
African American									
Advanced					9%	8%	15%	17%	2.6
Proficient-and-above					34%	41%	45%	52%	5.9
Basic-and-above					69%	84%	78%	85%	5.2
Latino									
Advanced					15%	15%	24%	27%	3.9
Proficient-and-above					46%	54%	59%	65%	6.2
Basic-and-above					77%	90%	86%	90%	4.4
Asian									
Advanced					58%	55%	69%	72%	4.5
Proficient-and-above					83%	85%	89%	89%	2.1
Basic-and-above					95%	98%	97%	98%	0.9
Native American									
Advanced					18%	18%	33%	32%	4.6
Proficient-and-above					55%	60%	67%	72%	5.6
Basic-and-above					84%	91%	89%	93%	3.1

Table reads: The percentage of white 8th graders who scored at the advanced level on the state math test increased from 37% in 2006 to 50% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8th graders was 4.2 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 MI-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					31%	29%	41%	43%	4.1
Proficient-and-above					63%	68%	71%	75%	3.8
Basic-and-above					86%	93%	90%	93%	2.4
Low-income students									
Advanced					14%	13%	23%	25%	3.7
Proficient-and-above					45%	51%	56%	62%	5.5
Basic-and-above					76%	88%	84%	89%	4.2
Students with disabilities[3]									
Advanced					6%	6%	10%	10%	1.4
Proficient-and-above					24%	30%	31%	39%	4.9
Basic-and-above					56%	78%	66%	78%	7.2
English language learners[3]									
Advanced					12%	10%	18%	20%	2.8
Proficient-and-above					41%	46%	51%	57%	5.4
Basic-and-above					73%	86%	82%	87%	4.6
Female									
Advanced					29%	27%	40%	41%	3.9
Proficient-and-above					63%	68%	72%	74%	3.8
Basic-and-above					87%	93%	91%	93%	2.1
Male									
Advanced					32%	30%	43%	45%	4.2
Proficient-and-above					64%	68%	72%	75%	3.6
Basic-and-above					86%	93%	91%	93%	2.3

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state math test increased from 14% in 2006 to 25% in 2009. During this period, the average yearly gain in the percentage advanced in math for low-income 8th graders was 3.7 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 MI-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	06-09	83%	83%	-0.1		06-09	73%	76%	0.9		07-09	60%	60%	0.0	
White	06-09	88%	88%	0.0		06-09	79%	81%	0.6		07-09	65%	66%	0.5	
African American	06-09	68%	66%	-0.8	S	06-09	53%	57%	1.2	L	07-09	32%	33%	0.7	L
Latino	06-09	72%	73%	0.2	L	06-09	58%	65%	2.4	L	07-09	44%	45%	0.3	S
Asian	06-09	91%	92%	0.2	L	06-09	84%	86%	0.7	L	07-09	66%	67%	0.5	E
Native American	06-09	81%	82%	0.2	L	06-09	64%	73%	2.9	L	07-09	49%	52%	1.4	L
All tested students	06-09	83%	83%	-0.1		06-09	73%	76%	0.9		07-09	60%	60%	0.0	
Low-income	06-09	73%	73%	0.0	L	06-09	59%	63%	1.2	L	07-09	40%	42%	1.2	L
All tested students	06-09	83%	83%	-0.1		06-09	73%	76%	0.9		07-09	60%	60%	0.0	
Students with disabilities[3]	06-09	56%	55%	-0.4	S	06-09	33%	35%	0.7	S	07-09	19%	23%	2.0	L
All tested students	06-09	83%	83%	-0.1		06-09	73%	76%	0.9		07-09	60%	60%	0.0	
English language learners[3]	06-09	66%	61%	-1.6	S	06-09	47%	46%	-0.2	S	07-09	15%	19%	1.8	L
Female	06-09	86%	85%	-0.4		06-09	78%	79%	0.2		07-09	63%	64%	0.6	
Male	06-09	81%	81%	0.0	L	06-09	69%	73%	1.2	L	07-09	56%	56%	-0.3	S

Table reads: In 2006, 88% of white 4th graders and 68% of African American 4th graders scored at the proficient level on the state reading test. In 2009, 88% of white 4th graders and 66% of African American 4th graders scored at the proficient level in reading. Between 2006 and 2009, the percentage proficient remained

the same at an average rate of 0.0 percentage points per year for white students and declined 0.8 percentage points per year for African American students, indicating a smaller rate of gain and a widening of the achievement gap for African American 4th graders.

[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 MI-12. Subgroup achievement trends in mathematics by percentages proficient

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

	Grade 4					Grade 8					Grade 11				
Subgroup	Year span	Starting PP	Ending PP	Average annual gain[1]	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain[1]	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain[1]	Gain larger or smaller than comparison group
All tested students	06-09	82%	88%	2.1		06-09	63%	75%	3.8		07-09	47%	49%	1.0	
White	06-09	88%	92%	1.3		06-09	72%	81%	2.9		07-09	53%	56%	1.5	
African American	06-09	60%	74%	4.6	L	06-09	34%	52%	5.9	L	07-09	14%	16%	1.0	S
Latino	06-09	71%	81%	3.3	L	06-09	46%	65%	6.2	L	07-09	27%	32%	2.5	L
Asian	06-09	92%	95%	1.0	S	06-09	83%	89%	2.1	S	07-09	65%	72%	3.5	L
Native American	06-09	82%	87%	1.7	L	06-09	55%	72%	5.6	L	07-09	36%	36%	0.0	S
All tested students	06-09	82%	88%	2.1		06-09	63%	75%	3.8		07-09	47%	49%	1.0	
Low-income	06-09	70%	80%	3.5	L	06-09	45%	62%	5.5	L	07-09	24%	29%	2.5	L
All tested students	06-09	82%	88%	2.1		06-09	63%	75%	3.8		07-09	47%	49%	1.0	
Students with disabilities[3]	06-09	59%	68%	3.0	L	06-09	24%	39%	4.9	L	07-09	9%	10%	0.5	S
All tested students	06-09	82%	88%	2.1		06-09	63%	75%	3.8		07-09	47%	49%	1.0	
English language learners[3]	06-09	68%	76%	2.6	L	06-09	41%	57%	5.4	L	07-09	15%	20%	2.5	L
Female	06-09	81%	88%	2.3		06-09	63%	74%	3.8		07-09	45%	47%	1.0	
Male	06-09	81%	88%	2.3	E	06-09	64%	75%	3.6	S	07-09	49%	52%	1.5	L

Table reads: In 2006, 88% of white 4th graders and 60% of African American 4th graders scored at the proficient level on the state math test. In 2009, 92% of white 4th graders and 74% of African American 4th graders scored at the proficient level in math. Between 2006 and 2009, the percentage proficient improved at an average rate of 1.3 percentage points per year for white students and 4.6 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 MI-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	06-09	424	427.9	1.3		06-09	812	820.2	2.7		07-09	1104	1105.6	0.8	
	SD	06-09	25.2	30.6			06-09	25.0	28.9			07-09	32.5	32.8		
White	Mean SS	06-09	427	433.2	2.1		06-09	816	824.4	2.8		07-09	1108	1110.1	1.0	
	SD	06-09	24.0	29.7			06-09	23.8	28.1			07-09	31.0	31.2		
African American	Mean SS	06-09	412	410.7	-0.4	S	06-09	799	805.3	2.1	S	07-09	1085	1086.6	0.8	S
	SD	06-09	25.3	27.0			06-09	23.9	26.1			07-09	31.4	30.9		
Latino	Mean SS	06-09	413	415.6	0.9	S	06-09	803	810.4	2.5	S	07-09	1091	1093.5	1.2	L
	SD	06-09	23.8	27.5			06-09	24.5	26.6			07-09	34.0	34.2		
Asian	Mean SS	06-09	434	439.5	1.8	S	06-09	824	833.3	3.1	L	07-09	1110	1114.7	2.3	L
	SD	06-09	25.6	30.5			06-09	27.0	30.4			07-09	36.5	39.5		
Native American	Mean SS	06-09	420	422.8	0.9	S	06-09	806	815.1	3.0	L	07-09	1096	1097.5	0.7	S
	SD	06-09	24.0	28.2			06-09	23.9	26.4			07-09	33.3	32.7		
All tested students	Mean SS	06-09	424	427.9	1.3		06-09	812	820.2	2.7		07-09	1104	1105.6	0.8	
	SD	06-09	25.2	30.6			06-09	25.0	28.9			07-09	32.5	32.8		
Low-income	Mean SS	06-09	414	416.5	0.8	S	06-09	802	809.5	2.5	S	07-09	1089	1092.5	1.7	L
	SD	06-09	24.2	28.0			06-09	24.1	26.9			07-09	33.3	32.7		
All tested students	Mean SS	06-09	424	427.9	1.3		06-09	812	820.2	2.7		07-09	1104	1105.6	0.8	
	SD	06-09	25.2	30.6			06-09	25.0	28.9			07-09	32.5	32.8		
Students with disabilities[3]	Mean SS	06-09	405	406.0	0.3	S	06-09	788	793.1	1.7	S	07-09	1068	1073.4	2.7	L
	SD	06-09	25.9	29.6			06-09	23.5	25.7			07-09	39.3	38.3		
All tested students	Mean SS	06-09	424	427.9	1.3		06-09	812	820.2	2.7		07-09	1104	1105.6	0.8	
	SD	06-09	25.2	30.6			06-09	25.0	28.9			07-09	32.5	32.8		
English language learners[3]	Mean SS	06-09	409	406.1	-1.0	S	06-09	796.0	799.0	1.0	S	07-09	1067	1070.1	1.5	L
	SD	06-09	24.1	23.6			06-09	23.4	23.6			07-09	35.7	38.4		
Female	Mean SS	06-09	426	429.3	1.1		06-09	815	822.4	2.5		07-09	1107	1109.1	1.1	
	SD	06-09	24.7	30.0			06-09	23.9	28.1			07-09	29.4	30.5		
Male	Mean SS	06-09	421	426.5	1.8	L	06-09	809	818.1	3.0	L	07-09	1100	1102.1	1.1	E

		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
	SD	06-09	25.5	31.0			06-09	25.7	29.4			07-09	35.6	34.6	06-09	25.5

Table reads: In 2006, the mean scale score on the state 4th grade reading test was 427 for white students and 412 for African American students. In 2009, the mean scale score in 4th grade reading was 433.2 for white students and 410.7 for African American students. Between 2006 and 2009, the mean scale score improved at an average yearly rate of 2.1 points for white students and declined at an average yearly rate of 0.4 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The Michigan Educational Assessment Program (MEAP) for grades 4 and 8 is scored so that a score of x00 is proficient (with x indicating grade level), and the Michigan Merit Exam (MME) for grade 11 is scored on a scale of 950-1250.

[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 MI-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	MSS	06-09	422	428.7	2.2		06-09	809	819.4	3.5		07-09	1093	1094.5	0.7	
	SD	06-09	25.1	24.6			06-09	25.0	28.9			07-09	30.6	33.1		
White	MSS	06-09	427	432.6	1.9		06-09	813	823.7	3.6		07-09	1098	1099.7	0.9	
	SD	06-09	23.5	23.6			06-09	24.0	28.4			07-09	28.2	29.8		
African American	MSS	06-09	406	414.9	3.0	L	06-09	799	802.5	1.2	S	07-09	1069	1069.3	0.1	S
	SD	06-09	22.8	22.0			06-09	20.1	21.3			07-09	30.3	34.4		
Latino	MSS	06-09	412	419.6	2.5	L	06-09	799	809.4	3.5	S	07-09	1080	1083.4	1.7	L
	SD	06-09	22.7	21.7			06-09	20.8	23.9			07-09	29.6	32.2		
Asian	MSS	06-09	437	447.2	3.4	L	06-09	830	846.3	5.4	L	07-09	1109	1114.5	2.8	L
	SD	06-09	26.3	29.8			06-09	34.2	38.9			07-09	33.3	35.1		
Native American	MSS	06-09	420	423.8	1.3	S	06-09	802	812.7	3.6	E	07-09	1087	1086.5	-0.3	S
	SD	06-09	22.9	21.0			06-09	20.0	23.4			07-09	29.2	31.7		
All tested students	MSS	06-09	422	428.7	2.2		06-09	809	819.4	3.5		07-09	1093	1094.5	0.7	
	SD	06-09	25.1	24.6			06-09	25.0	28.9			07-09	30.6	33.1		
Low-income	MSS	06-09	412	419.5	2.5	L	06-09	798	807.9	3.3	S	07-09	1078	1079.6	0.8	L
	SD	06-09	23.5	22.0			06-09	20.8	23.3			07-09	31.2	34.0		
All tested students	MSS	06-09	422	428.7	2.2		06-09	809	819.4	3.5		07-09	1093	1094.5	0.7	
	SD	06-09	25.1	24.6			06-09	25.0	28.9			07-09	30.6	33.1		
Students with disabilities[3]	MSS	06-09	406	413.4	2.5	L	06-09	787	796.8	3.3	S	07-09	1057	1055.8	-0.6	S
	SD	06-09	25.7	24.2			06-09	19.2	20.2			07-09	35.7	40.1		
All tested students	MSS	06-09	422	428.7	2.2		06-09	809	819.4	3.5		07-09	1093	1094.5	0.7	
	SD	06-09	25.1	24.6			06-09	25.0	28.9			07-09	30.6	33.1		
English language learners[3]	MSS	06-09	411	416.4	1.8	S	06-09	796	805.3	3.1	S	07-09	1066	1071.2	2.6	L
	SD	06-09	24.8	22.6			06-09	21.9	22.8			07-09	33.2	37.4		
Female	MSS	06-09	422	427.7	1.9		06-09	808	818.0	3.3		07-09	1092	1093.5	0.7	
	SD	06-09	24.5	23.7			06-09	23.8	27.7			07-09	28.3	31.2		
Male	MSS	06-09	423	429.7	2.2	L	06-09	809	820.7	3.9	L	07-09	1094	1095.5	0.7	E
	SD	06-09	25.6	25.4			06-09	26.1	30.0			07-09	32.8	34.8		

Table reads: In 2006, the mean scale score on the state 4th grade math test was 427 for white students and 406 for African American students. In 2009, the mean scale score in 4th grade math was 432.6 for white students and 414.9 for African American students. Between 2006 and 2009, the mean scale score improved at an average yearly rate of 1.9 points for white students and 3.0 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The Michigan Educational Assessment Program (MEAP) for grades 4 and 8 is scored so that a score of x00 is proficient (with x indicating grade level), and the Michigan Merit Exam (MME) for grade 11 is scored on a scale of 950-1250.

[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 MI-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	06-09	117,477	113,561	-3.3%	100.0%	06-09	129,510	119,665	-7.6%	100.0%	07-09	113,956	111,804	-1.9%	100.0%
	Math	06-09	118,193	114,239	-3.3%	100.0%	06-09	129,646	120,049	-7.4%	100.0%	07-09	113,839	110,876	-2.6%	100.0%
White	Reading	06-09	83,432	79,840	-4.3%	70.3%	06-09	92,752	86,283	-7.0%	72.1%	07-09	89,081	85,067	-4.5%	76.1%
	Math	06-09	83,851	80,232	-4.3%	70.2%	06-09	92,902	86,454	-6.9%	72.0%	07-09	89,023	84,664	-4.9%	76.4%
African American	Reading	06-09	23,184	22,240	-4.1%	19.6%	06-09	26,385	22,781	-13.7%	19.0%	07-09	17,032	18,392	8.0%	16.5%
	Math	06-09	23,245	22,363	-3.8%	19.6%	06-09	26,367	22,866	-13.3%	19.0%	07-09	16,986	17,939	5.6%	16.2%
Latino	Reading	06-09	5,313	5,879	10.7%	5.2%	06-09	4,992	5,444	9.1%	4.5%	07-09	3,407	3,721	9.2%	3.3%
	Math	06-09	5,418	5,941	9.7%	5.2%	06-09	5,055	5,504	8.9%	4.6%	07-09	3,398	3,682	8.4%	3.3%
Asian	Reading	06-09	2,941	3,093	5.2%	2.7%	06-09	2,671	2,934	9.8%	2.5%	07-09	2,732	2,758	1.0%	2.5%
	Math	06-09	3,039	3,180	4.6%	2.8%	06-09	2,730	2,990	9.5%	2.5%	07-09	2,731	2,751	0.7%	2.5%
Native American	Reading	06-09	1,113	1,031	-7.4%	0.9%	06-09	1,235	1,109	-10.2%	0.9%	07-09	979	1,005	2.7%	0.9%
	Math	06-09	1,128	1,037	-8.1%	0.9%	06-09	1,242	1,112	-10.5%	0.9%	07-09	977	994	1.7%	0.9%
Low-income	Reading	06-09	43,303	49,950	15.3%	44.0%	06-09	42,598	46,849	10.0%	39.2%	07-09	28,028	33,715	20.3%	30.2%
	Math	06-09	43,643	50,401	15.5%	44.1%	06-09	42,685	47,099	10.3%	39.2%	07-09	27,975	33,204	18.7%	29.9%
Students w/ disabilities	Reading	06-09	12,145	13,418	10.5%	11.8%	06-09	13,519	13,486	-0.2%	11.3%	07-09	9,716	10,163	4.6%	9.1%
	Math	06-09	12,506	13,856	10.8%	12.1%	06-09	13,522	13,549	0.2%	11.3%	07-09	9,675	10,032	3.7%	9.0%
English language learners	Reading	06-09	4,811	4,528	-5.9%	4.0%	06-09	3,641	3,465	-4.8%	2.9%	07-09	1,908	2,174	13.9%	1.9%
	Math	06-09	5,083	4,755	-6.5%	4.2%	06-09	3,821	3,658	-4.3%	3.0%	07-09	1,901	2,147	12.9%	1.9%
Female	Reading	06-09	57,888	55,999	-3.3%	49.3%	06-09	63,450	58,533	-7.7%	48.9%	07-09	57,684	56,075	-2.8%	50.2%
	Math	06-09	58,139	56,211	-3.3%	49.2%	06-09	63,560	58,666	-7.7%	48.9%	07-09	57,645	55,676	-3.4%	50.2%
Male	Reading	06-09	59,589	57,562	-3.4%	50.7%	06-09	66,060	61,132	-7.5%	51.1%	07-09	56,272	55,729	-1.0%	49.8%
	Math	06-09	60,054	58,028	-3.4%	50.8%	06-09	66,086	61,383	-7.1%	51.1%	07-09	56,194	55,200	-1.8%	49.8%

Table reads: In 2006, 83,432 students in the white subgroup took the state 4th grade reading test. By 2009, the number of white test-takers had fallen to 79,840 students, a decrease of 4.3%. In 2009, the white subgroup made up 70.3% of the 113,561 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.