Subgroup Achievement and Gap Trends — Michigan

K-12 enrollment — 1,645,742

The raw data used to develop these state profiles, including data for additional grade levels and years before 2002, can be found on the CEP Web site at www.cep-dc.org. Click on the link on the left for State Testing Data. Below the name of the report, click on the link for View State Profiles and Worksheets. Scroll down the page, and click on the Worksheet links for any state.

Subgroup Achievement Trends and Gap Trends — Key Findings

Summary

This year the Center on Education Policy analyzed data on the achievement of different groups of students in two distinct ways. First, we looked at grade 4 test results to determine whether the performance of various groups improved at three achievement levels—basic and above, proficient and above, and advanced. Second, we looked at gaps between these groups at the proficient level across three grades (grade 4, grade 8 in most cases, and a high school grade). These two types of analyses show whether elementary school achievement has generally gone up for different groups of students and whether achievement gaps at different grade levels have narrowed, widened, or stayed the same.

All subgroups showed a clear trend of gains in grade 4 reading and math at all three achievement levels except at the basic level in reading, where declines occurred for several subgroups. Trends in achievement gaps were mixed—the two indicators of achievement used in this study showed contradictory gap trends.

Contradicting gap trends at grades 4 and 8 using different measures

- According to the percentages of students scoring at the proficient level, gaps for racial/ethnic minority subgroups and the low-income subgroup narrowed at grades 4 and 8 in the majority of cases (7 of 8 trend lines analyzed in reading and the same number in math). But according to mean (average) test scores, the second achievement measure used for this study, gaps widened or stayed the same in a substantial number of cases (7 of 8 trend lines in reading and 5 of 8 trend lines in math). High school trend data were not available.

Data notes

- Limited data: Trends are limited to 2006 to 2008. Due to changes in the state's testing program, data were unavailable to determine trends in achievement gaps at the high school level.

- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Native American, Asian American and low-income students. Trends for students with disabilities, English language learners, and male and female students have not been summarized because they will be discussed in separate reports.

- Grades analyzed: Analyses of subgroup trends by three achievement levels are limited to one elementary grade because of the massive amounts of data involved and because this is the pilot year of a process that CEP hopes to extend to the middle and high school levels in future years. Analyses of achievement gap trends cover grades 4 and 8.

Data Limitations

Years of comparable percentage proficient data	2006 through 2008, grades 3–8 2007 through 2008, grade 11
Years of comparable means scale score data	2006 through 2008, grades 3–8 2007 through 2008, grade 11

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 (Apprentice) 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 Elementary Level

Note: The tables in this profile of subgroup achievement and gap trends begin with table 7. Tables 1 through 6 can be found in the companion state profile of general achievement trends.

Table MI-7. Percentages of Grade 4 Students by Racial or Ethnic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced					22%	33%	32%	5.1
Proficient and Above					83%	85%	84%	0.4
Basic and Above					98%	98%	96%	-0.8
White								
Advanced					25%	38%	38%	6.5
Proficient and Above					88%	89%	89%	0.5
Basic and Above					99%	99%	98%	-0.5
African American								
Advanced					11%	17%	13%	1.0
Proficient and Above					68%	72%	69%	0.5
Basic and Above					95%	96%	93%	-1.0
Latino								
Advanced					10%	18%	18%	4.0
Proficient and Above					72%	77%	77%	2.5
Basic and Above					95%	97%	96%	0.5
Asian								
Advanced					36%	48%	44%	4.0
Proficient and Above					91%	92%	92%	0.5
Basic and Above					99%	99%	99%	0.0
Native American								
Advanced					17%	26%	27%	5.0
Proficient and Above					81%	81%	83%	1.0
Basic and Above					98%	98%	96%	-1.0

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test increased from 25% in 2006 to 38% in 2008. During this period, the average yearly gain in the percentage advanced in reading for white 4th graders was 6.5 percentage points per year.

[1]Averages are subject to rounding error.

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

Table MI-8. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced					22%	33%	32%	5.1
Proficient and Above					83%	85%	84%	0.4
Basic and Above					98%	98%	96%	-0.8
Low-income students								
Advanced					11%	19%	19%	4.0
Proficient and Above					73%	76%	76%	1.5
Basic and Above					96%	97%	95%	-0.5
Students with disabilities[3]								
Advanced					8%	12%	12%	2.0
Proficient and Above					56%	57%	56%	0.0
Basic and Above					92%	91%	86%	-3.0
English language learners[3]								
Advanced					8%	11%	8%	0.0
Proficient and Above					66%	68%	63%	-1.5
Basic and Above					95%	95%	92%	-1.5
Female								
Advanced					24%	37%	34%	5.0
Proficient and Above					86%	88%	86%	0.0
Basic and Above					98%	99%	97%	-0.5
Male								
Advanced					20%	30%	30%	5.0
Proficient and Above					81%	83%	82%	0.5
Basic and Above					98%	98%	96%	-1.0

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test increased from 11% in 2006 to 19% in 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 4.0 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 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Table MI-9. Percentages of Grade 4 Students by Racial or Ethnic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced					36%	34%	41%	2.3
Proficient and Above					82%	84%	86%	2.2
Basic and Above					96%	97%	98%	1.0
White								
Advanced					43%	40%	48%	2.5
Proficient and Above					88%	89%	91%	1.5
Basic and Above					98%	98%	99%	0.5
African American								
Advanced					13%	15%	18%	2.5
Proficient and Above					60%	67%	69%	4.5
Basic and Above					90%	93%	94%	2.0
Latino								
Advanced					20%	19%	26%	3.0
Proficient and Above					71%	76%	79%	4.0
Basic and Above					93%	96%	96%	1.5
Asian								
Advanced					59%	57%	66%	3.5
Proficient and Above					92%	93%	95%	1.5
Basic and Above					98%	99%	99%	0.5
Native American								
Advanced					30%	24%	34%	2.0
Proficient and Above					82%	81%	85%	1.5
Basic and Above					97%	97%	98%	0.5

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 43% in 2006 to 48% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 2.5 percentage points per year.

[1]Averages are subject to rounding error.

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

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

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced					36%	34%	41%	2.3
Proficient and Above					82%	84%	86%	2.2
Basic and Above					96%	97%	98%	1.0
Low-income students								
Advanced					20%	20%	26%	3.0
Proficient and Above					70%	75%	77%	3.5
Basic and Above					93%	95%	96%	1.5
Students with disabilities[3]								
Advanced					17%	16%	20%	1.5
Proficient and Above					59%	64%	65%	3.0
Basic and Above					86%	91%	91%	2.5
English language learners[3]								
Advanced					21%	17%	22%	0.5
Proficient and Above					68%	69%	74%	3.0
Basic and Above					92%	94%	95%	1.5
Female								
Advanced					35%	33%	39%	2.0
Proficient and Above					81%	84%	86%	2.5
Basic and Above					96%	97%	98%	1.0
Male								
Advanced					37%	36%	43%	3.0
Proficient and Above					81%	85%	86%	2.5
Basic and Above					95%	98%	98%	1.5

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 20% in 2006 to 26% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 3.0 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 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table 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	06-08	83%	84%	0.4		06-08	73%	77%	2.1		07-08	60%	62%	NA	
White	06-08	88%	89%	0.5		06-08	79%	83%	2.0		07-08	65%	68%	NA	
African American	06-08	68%	69%	0.5	E	06-08	53%	58%	2.5	L	07-08	32%	34%	NA	NA
Latino	06-08	72%	77%	2.5	L	06-08	58%	65%	3.5	L	07-08	44%	43%	NA	NA
Asian	06-08	91%	92%	0.5	E	06-08	84%	87%	1.5	S	07-08	66%	69%	NA	NA
Native American	06-08	81%	83%	1.0	L	06-08	64%	72%	4.0	L	07-08	49%	56%	NA	NA
Not low-income	06-08	89%	91%	1.0		06-08	80%	84%	2.0		07-08	66%	69%	NA	
Low-income	06-08	73%	76%	1.5	L	06-08	59%	65%	3.0	L	07-08	40%	43%	NA	NA
Not disabled	06-08	87%	88%	0.5		06-08	77%	82%	2.5		07-08	63%	67%	NA	
Students with disabilities[3]	06-08	56%	56%	0.0	S	06-08	33%	40%	3.5	L	07-08	19%	19%	NA	NA
Not ELL	06-08	83%	85%	1.0		06-08	74%	78%	2.0		07-08	60%	63%	NA	
English language learners[3]	06-08	66%	63%	-1.5	S	06-08	47%	47%	0.0	S	07-08	15%	18%	NA	NA
Female	06-08	86%	86%	0.0		06-08	78%	82%	2.0		07-08	63%	66%	NA	
Male	06-08	81%	82%	0.5	L	06-08	69%	72%	1.5	S	07-08	56%	58%	NA	NA

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 2008, 89% of white 4th graders and 69% of African American 4th graders scored at the proficient level in reading. Between 2006 and 2008, the percentage proficient improved at an average rate of 0.5 percentage point per year for white students and for African American students, indicating an equal rate of gain and no change in the

achievement gap for African American 4th graders.

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

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

[3]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	06-08	82%	86%	2.2		06-08	63%	71%	3.9		07-08	47%	46%	NA	
White	06-08	88%	91%	1.5		06-08	72%	79%	3.5		07-08	53%	53%	NA	
African American	06-08	60%	69%	4.5	L	06-08	34%	45%	5.5	L	07-08	14%	13%	NA	NA
Latino	06-08	71%	79%	4.0	L	06-08	46%	59%	6.5	L	07-08	27%	28%	NA	NA
Asian	06-08	92%	95%	1.5	E	06-08	83%	89%	3.0	S	07-08	65%	67%	NA	NA
Native American	06-08	82%	85%	1.5	E	06-08	55%	67%	6.0	L	07-08	36%	35%	NA	NA
Not low-income	06-08	89%	92%	1.5		06-08	72%	81%	4.5		07-08	54%	54%	NA	
Low-income	06-08	70%	77%	3.5	L	06-08	45%	56%	5.5	L	07-08	24%	25%	NA	NA
Not disabled	06-08	85%	89%	2.0		06-08	67%	77%	5.0		07-08	50%	50%	NA	
Students with disabilities[3]	06-08	59%	65%	3.0	L	06-08	24%	31%	3.5	S	07-08	9%	8%	NA	NA
Not ELL	06-08	82%	87%	2.5		06-08	64%	72%	4.0		07-08	47%	47%	NA	
English language learners[3]	06-08	68%	74%	3.0	L	06-08	41%	51%	5.0	L	07-08	15%	18%	NA	NA
Female	06-08	81%	86%	2.5		06-08	63%	72%	4.5		07-08	45%	43%	NA	
Male	06-08	81%	86%	2.5	E	06-08	64%	72%	4.0	S	07-08	49%	49%	NA	NA

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 2008, 91% of white 4th graders and 69% of African American 4th graders scored at the proficient level in math. Between 2006 and 2008, the percentage proficient improved at an average rate of 1.5 percentage point per year for white students and 4.5 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 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

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

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.
If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

		Grade 4					Grade 8					Grade 11				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	06-08	424	430.7	3.4		06-08	812	817.3	2.7		07-08	1104	1105	NA	
	SD	06-08	25.2	33.2			06-08	25.0	27.2			07-08	32.5	32.3		
White	Mean SS	06-08	427	436.2	4.6		06-08	816	821.7	2.9		07-08	1108	1109	NA	
	SD	06-08	24.0	32.4			06-08	23.8	26.2			07-08	31.0	30.9		
African American	Mean SS	06-08	412	412.9	0.5	S	06-08	799	802.8	1.9	S	07-08	1085	1086	NA	NA
	SD	06-08	25.3	29.7			06-08	23.9	25.0			07-08	31.4	30.5		
Latino	Mean SS	06-08	413	418.5	2.8	S	06-08	803	807.2	2.1	S	07-08	1091	1091	NA	NA
	SD	06-08	23.8	29.9			06-08	24.5	25.6			07-08	34.0	33.6		
Asian	Mean SS	06-08	434	441.1	3.6	S	06-08	824	827.3	1.7	S	07-08	1110	1113	NA	NA
	SD	06-08	25.6	33.0			06-08	27.0	27.4			07-08	36.5	37.0		
Native American	Mean SS	06-08	420	426.8	3.4	S	06-08	806	813.1	3.6	L	07-08	1096	1100	NA	NA
	SD	06-08	24.0	31.5			06-08	23.9	25.7			07-08	33.3	31.7		
Not Low-income	Mean SS	06-08	429	439.4	5.2		06-08	817	823.3	3.2		07-08	1108	1110	NA	
	SD	06-08	24.0	32.1			06-08	24.0	26.3			07-08	30.9	30.5		
Low-income	Mean SS	06-08	414	418.4	2.2	S	06-08	802	807.2	2.6	S	07-08	1089	1091	NA	NA
	SD	06-08	24.2	30.8			06-08	24.1	25.5			07-08	33.3	32.7		
Not disabled	Mean SS	06-08	426	433.9	4.0		06-08	815	820.4	2.7		07-08	1107	1109	NA	
	SD	06-08	24.2	31.9			06-08	23.6	25.9			07-08	29.7	29.4		
Students with disabilities[3]	Mean SS	06-08	405	406.4	0.7	S	06-08	788	793.0	2.5	S	07-08	1068	1068	NA	NA
	SD	06-08	25.9	32.5			06-08	23.5	24.3			07-08	39.3	38.9		
Not ELLs	Mean SS	06-08	424	431.6	3.8		06-08	813	817.9	2.5		07-08	1104	1106	NA	
	SD	06-08	25.1	33.1			06-08	24.9	27.1			07-08	32.5	31.8		
English language learners[3]	Mean SS	06-08	409	407.4	-0.8	S	06-08	796.0	796.1	0.1	S	07-08	1067	1068	NA	NA
	SD	06-08	24.1	26.7			06-08	23.4	22.7			07-08	35.7	36.3		
Female	Mean SS	06-08	426	433.0	3.5		06-08	815	821.0	3.0		07-08	1107	1108	NA	
	SD	06-08	24.7	32.7			06-08	23.9	26.3			07-08	29.4	29.9		

		Grade 4					Grade 8					Grade 11				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
Male	Mean SS	06-08	421	428.4	3.7	L	06-08	809	813.7	2.4	S	07-08	1100	1102	NA	NA
	SD	06-08	25.5	33.6			06-08	25.7	27.5			07-08	35.6	34.3		

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 2008, the mean scale score in 4th grade reading was 436.2 for white students and 412.9 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 4.6 points for white students and 0.5 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The Michigan Educational Assessment Program (grades 3-9) assigns scaled scores such that a score of 300 indicates proficiency for grade 3, 400 indicates proficiency for grade 4, etc. The Michigan Merit Exam (grade 11) assigns scaled scores such that a score of 1100 indicates proficiency.

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

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

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

Table MI-14. Subgroup Achievement 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.
If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

		Grade 4					Grade 8					Grade 11				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	06-08	422	426.0	2.0		06-08	809	815.6	3.3		07-08	1093	1093	NA	
	SD	06-08	25.1	24.8			06-08	25.0	27.9			07-08	30.6	31.2		
White	Mean SS	06-08	427	430.2	1.6		06-08	813	820.4	3.7		07-08	1098	1098	NA	
	SD	06-08	23.5	23.6			06-08	24.0	27.3			07-08	28.2	28.5		
African American	Mean SS	06-08	406	411.1	2.6	L	06-08	799	798.3	-0.4	S	07-08	1069	1068	NA	NA
	SD	06-08	22.8	22.3			06-08	20.1	20.8			07-08	30.3	30.6		
Latino	Mean SS	06-08	412	417.3	2.7	L	06-08	799	805.4	3.2	S	07-08	1080	1081	NA	NA
	SD	06-08	22.7	22.1			06-08	20.8	22.5			07-08	29.6	29.7		
Asian	Mean SS	06-08	437	442.6	2.8	L	06-08	830	840.5	5.3	L	07-08	1109	1111	NA	NA
	SD	06-08	26.3	27.6			06-08	34.2	37.1			07-08	33.3	34.4		
Native American	Mean SS	06-08	420	422.3	1.2	S	06-08	802	810.1	4.1	L	07-08	1087	1087	NA	NA
	SD	06-08	22.9	22.4			06-08	20.0	23.9			07-08	29.2	28.7		
Not Low-income	Mean SS	06-08	428	432.6	2.3		06-08	814	822.5	4.3		07-08	1098	1098	NA	
	SD	06-08	24.0	24.0			06-08	25.1	28.4			07-08	28.7	29.4		
Low-income	Mean SS	06-08	412	416.5	2.3	E	06-08	798	803.9	3.0	S	07-08	1078	1078	NA	NA
	SD	06-08	23.5	22.9			06-08	20.8	22.7			07-08	31.2	31.7		
Not disabled	Mean SS	06-08	424	428.1	2.1		06-08	811	818.6	3.8		07-08	1096	1096	NA	
	SD	06-08	24.3	24.1			06-08	24.4	27.3			07-08	27.9	28.6		
Students with disabilities[3]	Mean SS	06-08	406	410.5	2.3	L	06-08	787	792.4	2.7	S	07-08	1057	1058	NA	NA
	SD	06-08	25.7	24.8			06-08	19.2	20.6			07-08	35.7	34.3		
Not ELLs	Mean SS	06-08	423	426.4	1.7		06-08	809	816.0	3.5		07-08	1093	1093	NA	
	SD	06-08	25.0	24.8			06-08	25.0	28.0			07-08	30.4	30.9		
English language learners[3]	Mean SS	06-08	411	414.3	1.7	E	06-08	796	801.4	2.7	S	07-08	1066	1068	NA	NA
	SD	06-08	24.8	23.2			06-08	21.9	22.2			07-08	33.2	34.6		
Female	Mean SS	06-08	422	425.0	1.5		06-08	808	814.6	3.3		07-08	1092	1091	NA	

		Grade 4					Grade 8					Grade 11				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
	SD	06-08	24.5	23.9			06-08	23.8	26.5			07-08	28.3	29.6		
Male	Mean SS	06-08	423	426.9	2.0	L	06-08	809	816.6	3.8	L	07-08	1094	1094	NA	NA
	SD	06-08	25.6	25.6			06-08	26.1	29.2			07-08	32.8	32.6		

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 2008, the mean scale score in 4th grade math was 430.2 for white students and 411.1 for African American students. Between 2006 and 2008, the mean scale score improved at an average yearly rate of 1.6 points for white students and 2.6 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The Michigan Educational Assessment Program (grades 3-9) assigns scaled scores such that a score of 300 indicates proficiency for grade 3, 400 indicates proficiency for grade 4, etc. The Michigan Merit Exam (grade 11) assigns scaled scores such that a score of 1100 indicates proficiency.

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

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

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

Table 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	06-08	117,477	114,950	-2.2%	100.0%	06-08	129,510	122,418	-5.5%	100.0%	07-08	113,956	113,642	-0.3%	100.0%
	Math	06-08	118,193	115,702	-2.1%	100.0%	06-08	129,646	122,797	-5.3%	100.0%	07-08	113,839	113,234	-0.5%	100.0%
White	Reading	06-08	83,432	80,927	-3.0%	70.4%	06-08	92,752	87,723	-5.4%	71.7%	07-08	89,081	87,636	-1.6%	77.1%
	Math	06-08	83,851	81,351	-3.0%	70.3%	06-08	92,902	87,879	-5.4%	71.6%	07-08	89,023	87,461	-1.8%	77.2%
African American	Reading	06-08	23,184	22,666	-2.2%	19.7%	06-08	26,385	24,587	-6.8%	20.1%	07-08	17,032	18,082	6.2%	15.9%
	Math	06-08	23,245	22,789	-2.0%	19.7%	06-08	26,367	24,705	-6.3%	20.1%	07-08	16,986	17,883	5.3%	15.8%
Latino	Reading	06-08	5,313	5,866	10.4%	5.1%	06-08	4,992	5,199	4.1%	4.2%	07-08	3,407	3,660	7.4%	3.2%
	Math	06-08	5,418	5,953	9.9%	5.1%	06-08	5,055	5,248	3.8%	4.3%	07-08	3,398	3,642	7.2%	3.2%
Asian	Reading	06-08	2,941	3,169	7.8%	2.8%	06-08	2,671	2,746	2.8%	2.2%	07-08	2,732	2,707	-0.9%	2.4%
	Math	06-08	3,039	3,275	7.8%	2.8%	06-08	2,730	2,803	2.7%	2.3%	07-08	2,731	2,700	-1.1%	2.4%
Native American	Reading	06-08	1,113	1,048	-5.8%	0.9%	06-08	1,235	1,204	-2.5%	1.0%	07-08	979	924	-5.6%	0.8%
	Math	06-08	1,128	1,054	-6.6%	0.9%	06-08	1,242	1,209	-2.7%	1.0%	07-08	977	920	-5.8%	0.8%
Low-income	Reading	06-08	43,303	47,677	10.1%	41.5%	06-08	42,598	45,272	6.3%	37.0%	07-08	28,028	30,898	10.2%	27.2%
	Math	06-08	43,643	48,080	10.2%	41.6%	06-08	42,685	45,490	6.6%	37.0%	07-08	27,975	30,694	9.7%	27.1%
Students w/ disabilities	Reading	06-08	12,145	13,454	10.8%	11.7%	06-08	13,519	13,849	2.4%	11.3%	07-08	9,716	10,548	8.6%	9.3%
	Math	06-08	12,506	13,877	11.0%	12.0%	06-08	13,522	13,956	3.2%	11.4%	07-08	9,675	10,472	8.2%	9.2%
English language learners	Reading	06-08	4,811	4,274	-11.2%	3.7%	06-08	3,641	3,186	-12.5%	2.6%	07-08	1,908	2,087	9.4%	1.8%
	Math	06-08	5,083	4,502	-11.4%	3.9%	06-08	3,821	3,342	-12.5%	2.7%	07-08	1,901	2,072	9.0%	1.8%
Female	Reading	06-08	57,888	56,332	-2.7%	49.0%	06-08	63,450	59,949	-5.5%	49.0%	07-08	57,684	57,318	-0.6%	50.4%
	Math	06-08	58,139	56,584	-2.7%	48.9%	06-08	63,560	60,075	-5.5%	48.9%	07-08	57,645	57,131	-0.9%	50.5%
Male	Reading	06-08	59,589	58,618	-1.6%	51.0%	06-08	66,060	62,469	-5.4%	51.0%	07-08	56,272	56,324	0.1%	49.6%
	Math	06-08	60,054	59,118	-1.6%	51.1%	06-08	66,086	62,722	-5.1%	51.1%	07-08	56,194	56,103	-0.2%	49.5%

Table reads: In 2006, 83,432 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had fallen to 80,927 students, a decrease of 3.0%. In 2008, the white subgroup made up 70.4% of the 114,950 4th graders taking the reading test that year.

Note: **Bold** type indicates that the number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data.

Key Terms

Percentage proficient (and above) — The percentage of students in a group who score at and above the cut score for "proficient" performance on the state test used to determine progress under NCLB. The Act requires states to report student test performance in terms of at least three achievement levels: basic, proficient, and advanced. Adequate yearly progress determinations are based on the percentage of students scoring at the proficient level and above.

Percentage basic (and above) — The percentage of students in a group who score at and above the cut score for "basic" performance on the state test used to determine progress under NCLB.

Percentage advanced — The percentage of students in a group who reach or exceed the cut score for "advanced" performance on the state test used to determine progress under NCLB.

Moderate-to-large gain — For the percentage basic, proficient, or advanced, an average gain of 1 or more percentage points per year. For effect size, an average gain of 0.02 or greater per year.

Slight gain — For the percentage basic, proficient, or advanced, an average gain of less than 1 percentage point per year. For effect size, an average gain of less than 0.02 per year.

Moderate-to-large decline — For the percentage basic, proficient, or advanced, an average decline of 1 or more percentage points per year. For effect size, an average decline of 0.02 or greater per year.

Slight decline — For the percentage basic, proficient, or advanced, an average decline of less than 1 percentage points per year. For effect size, an average decline of less than 0.02 per year.

Effect size — A statistical tool that conveys the amount of difference between test results using a common unit of measurement which does not depend on the scoring scale for a particular test.

Accumulated annual effect size — The cumulative gain in effect size over a range of years.

Mean scale score — The arithmetical average of a group of test scores, expressed on a common scale for a particular state's test. The mean is calculated by adding the scores and dividing the sum by the number of scores.

Standard deviation — A measure of how much test scores tend to deviate from the mean—in other words, how spread out or bunched together test scores are. If students' scores are bunched together, with many scores close to the mean, then the standard deviation will be small. If scores are spread out, with many students scoring at the high or low ends of the scale, then the standard deviation will be large.

Cautions and Explanations

Different labels for achievement levels — For consistency, all of the state profiles developed for this report use a common set of labels (basic, proficient, and advanced) for the main achievement levels required by NCLB. In practice, however, some states may use different labels, such as "meets standard" instead of proficient, and some states have established additional achievement levels beyond those required by NCLB.

Different names for subgroups — For the sake of consistency and ease of data tabulation, all of the state profiles developed for this report use a common set of names for the major student subgroups. In practice, however, states use various names for subgroups that may differ from those used here (such as using "Hispanic" instead of "Latino," or "special education students" instead of "students with disabilities"). Moreover, a few states separately track the performance of subgroups not included in the analyses for this report.

Special caution for students with disabilities and English language learners — Trends for students with disabilities and English language learners should be interpreted with caution because changes in federal guidance and state accountability plans may have altered which students in these subgroups are tested for accountability purposes, how they are tested, and when their test scores are counted as proficient under NCLB. These factors could affect the year-to-year comparability of test results.

Inclusion of former English language learners — In many states, the subgroup of English language learners (also known as limited English proficient students) includes students who were formerly English language learners but who have achieved English language proficiency or fluency in the last two years. Federal NCLB regulations permit states to include these formerly ELL students (sometimes referred to as "redesignated fluent English proficient" students) in the ELL subgroup for up to two years for purposes of NCLB accountability.

Limitations of percentage proficient measure — The percentage proficient, the main gauge of student performance under NCLB, can be easily understood and gives a snapshot of how many students have met their state's performance expectations. But it also has several limitations as a measure of student achievement. Users of percentage proficient data should keep in mind these limitations, particularly the following:

* "Proficient" means different things across different states. States vary widely in curriculum, learning expectations, and tests, and state tests differ considerably in their difficulty and cut scores for proficient performance.
* Although this study has taken steps to avoid comparing test data where there have been "breaks" in comparability resulting from new tests, changes in content standards, revised cut scores, or other major changes in testing programs, the year-to-year comparability of test results in the same state may still be affected by less obvious policy and demographic changes.
* Changes in student performance may occur that are not reflected in percentage proficient data, such as an increase in the number of students reaching performance levels below and above proficient (such as the basic or advanced levels).
* The size of the achievement gaps between various subgroups depends in part on where a state sets its cut score for proficiency. For example, if a proficiency cut score is set so high that almost nobody reaches it or so low that almost everyone reaches it, there will be little apparent achievement gap. By contrast, if the cut score is closer to the mean test score, the gaps between subgroups will be more apparent.

Difficulty of attributing causes — Although the tables above show trends in test scores since the enactment of NCLB, one cannot assume that these trends have occurred *because* of NCLB. It is always difficult to determine a cause-and-effect relationship between test score trends and any specific education policy or program due to the many federal, state, and local reforms undertaken in recent years and due to the lack of an appropriate "control" group of students not affected by NCLB.