

Subgroup Achievement and Gap Trends — Texas

K-12 enrollment — 4,651,516

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.

Overall, student achievement trends in Texas went in an upward direction. On achievement gaps between groups of students, the overall tendency was toward narrowing of gaps; there was a mixed finding in reading using mean scores.

Subgroup trends by achievement level at grade 4

- Main trend: Most subgroups made gains in reading and math at two achievement levels—proficient-and-above and advanced. Specifically, all of the 12 trend lines analyzed across the two achievement levels in reading showed gains, as did 10 of 12 trend lines in math.
- Notable exceptions: Performance for Native American students declined slightly at the advanced achievement level in math.

Gap trends at three grade levels

- Main trend: Gaps in the percentages of students scoring at the proficient level in math narrowed between African American or Latino students and white students, and between low-income and non-low-income students, at grades 4 and 8 and at the high school grade tested. Specifically, 10 of the 12 trend lines analyzed in both reading and math showed evidence of gaps narrowing. There were a few instances of gaps widening between Native American and white students.
- Contradicting trends using two different measures (reading): According to percentages of students scoring proficient on the state test, achievement gaps in reading narrowed in most cases between African American, or Latino students and white students, and between low-

income and non-low-income students, at all three grades analyzed. Specifically, using percentages proficient, 10 of the 12 trend lines analyzed in reading showed evidence of gaps narrowing. But by the mean scale score measure, only five of the 12 trend lines in reading showed average test score gaps narrowing

Data notes

- Limited data: Trends are limited to 2005–2008. None of Texas' three achievement levels is equivalent to the basic level, so trends at this level could not be determined.
- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Asian American, Native 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 two 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 three grade levels: grade 4, grade 8, and the high school grade tested for NCLB.

Data Limitations

Years of comparable percentage proficient data	2005 through 2008
Years of comparable mean scale score data	2005 through 2008
Disaggregated data for all subgroups and comparison groups	2005 through 2008 In 2007, students who were <i>not</i> English language learners (ELLs) were further categorized as non-ELL monitored first year; non-ELL monitored second year; and other non-ELL. Because of the lack of a single non-ELL comparison group, the ELL subgroup is compared with all 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	Texas Assessment of Knowledge and Skills (TAKS), English and Spanish versions Texas Assessment of Knowledge and Skills (Accommodated) for
--------------------------------------	--

	<p>students with disabilities who meet criteria for being tested with accommodations</p> <p>Texas Assessment of Knowledge and Skills–Modified (TAKS-M) for certain students with disabilities</p> <p>Texas Assessment of Knowledge and Skills–Alternate (TAKS-Alt) for students with the most significant cognitive disabilities</p> <p>Linguistically Accommodated Testing for Mathematics (LAT) for recent immigrant English language learners (ELLs)</p> <p>Texas English Language Proficiency Assessment System (TELPAS) to measure growth in reading for certain ELLs</p>
Grades tested for NCLB accountability	3–8, 10
State labels for achievement levels	TX uses three achievement levels: Did Not Meet Standard, Met Standard, and Commended Performance. For our analyses we treated Met Standard as Proficient and Commended Performance as Advanced. No TX achievement level was treated as our Basic.
High school NCLB test also used as an exit exam?	No (grade 10 TAKS used for NCLB; grade 11 TAKS currently used as exit exam but being phased out)
First year test used	2003 for TAKS
Time of test administration	Spring
Major changes in testing system (2002–present)	<p>2002 through 2005: State phased in higher passing standards for TAKS grades 3–11. In 2003, the passing standard was 2 standard errors of measurement (SEM) below the panel-recommended standard; in 2004, it was 1 SEM below the panel-recommended standard; and in 2005, it was fully phased in.</p> <p>2004: Added following alternative assessments and English proficiency tests to AYP determinations: SDAA II, LDAA, RPTE, and LAT</p> <p>2008: SDAA II, LDAA, and RPTE no longer administered; Implemented TAKS-Modified, TAKS-Alternate, TELPAS.</p>

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 TX-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				23%	20%	30%	25%	0.7
Proficient and Above				79%	82%	84%	83%	1.3
Basic and Above				NA	NA	NA	NA	NA
White								
Advanced				33%	30%	41%	36%	1.0
Proficient and Above				88%	91%	92%	91%	1.0
Basic and Above				NA	NA	NA	NA	NA
African American								
Advanced				13%	11%	20%	15%	0.7
Proficient and Above				69%	72%	75%	73%	1.3
Basic and Above				NA	NA	NA	NA	NA
Latino								
Advanced				16%	13%	21%	17%	0.3
Proficient and Above				73%	77%	79%	78%	1.7
Basic and Above				NA	NA	NA	NA	NA
Asian								
Advanced				41%	33%	49%	45%	1.3
Proficient and Above				91%	92%	93%	94%	1.0
Basic and Above				NA	NA	NA	NA	NA
Native American								
Advanced				24%	21%	30%	26%	0.7
Proficient and Above				83%	86%	86%	85%	0.7
Basic and Above				NA	NA	NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test increased from 33% in 2005 to 36% in 2008. During this period, the average yearly gain in the percentage advanced in reading for white 4th graders was 1.0 percentage points per year.

¹Averages are subject to rounding error.

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

**Table TX-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						Average Yearly Percentage Point Gain ¹	
	2002	2003	2004	2005	2006	2007		2008
All tested students								
Advanced				23%	20%	30%	25%	0.7
Proficient and Above				79%	82%	84%	83%	1.3
Basic and Above				NA	NA	NA	NA	NA
Low-income students								
Advanced				14%	11%	19%	15%	0.3
Proficient and Above				71%	75%	77%	75%	1.3
Basic and Above				NA	NA	NA	NA	NA
Students with disabilities ³								
Advanced				16%	14%	19%	10%	-2.0
Proficient and Above				69%	74%	75%	53%	-10.5
Basic and Above				NA	NA	NA	NA	NA
English language learners ³								
Advanced				8%	6%	11%	9%	1.5
Proficient and Above				58%	63%	66%	67%	2.0
Basic and Above				NA	NA	NA	NA	NA
Female								
Advanced				24%	22%	32%	26%	0.7
Proficient and Above				81%	84%	85%	84%	1.0
Basic and Above				NA	NA	NA	NA	NA
Male								
Advanced				22%	18%	28%	24%	0.7
Proficient and Above				78%	80%	83%	81%	1.0
Basic and Above				NA	NA	NA	NA	NA

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test increased from 14% in 2005 to 15% in 2008. During this period, the average yearly gain in the percentage advanced in reading for low-income 4th graders was 0.3 percentage points per year.

¹Averages are subject to rounding error.

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

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

**Table TX-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				28%	31%	34%	30%	0.7
Proficient and Above				81%	83%	86%	84%	1.0
Basic and Above				NA	NA	NA	NA	NA
White								
Advanced				39%	42%	45%	40%	0.3
Proficient and Above				90%	91%	93%	91%	0.3
Basic and Above				NA	NA	NA	NA	NA
African American								
Advanced				14%	17%	19%	18%	1.3
Proficient and Above				67%	71%	75%	73%	2.0
Basic and Above				NA	NA	NA	NA	NA
Latino								
Advanced				21%	24%	26%	25%	1.3
Proficient and Above				76%	79%	83%	81%	1.7
Basic and Above				NA	NA	NA	NA	NA
Asian								
Advanced				56%	60%	61%	59%	1.0
Proficient and Above				95%	96%	96%	96%	0.3
Basic and Above				NA	NA	NA	NA	NA
Native American								
Advanced				33%	33%	33%	31%	-0.7
Proficient and Above				84%	85%	86%	84%	0.0
Basic and Above				NA	NA	NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 39% in 2005 to 40% in 2008. During this period, the average yearly gain in the percentage advanced in math for white 4th graders was 0.3 percentage points per year.

¹Averages are subject to rounding error.

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

**Table TX-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				28%	31%	34%	30%	0.7
Proficient and Above				81%	83%	86%	84%	1.0
Basic and Above				NA	NA	NA	NA	NA
Low-income students								
Advanced				19%	21%	24%	22%	1.0
Proficient and Above				74%	77%	80%	79%	1.7
Basic and Above				NA	NA	NA	NA	NA
Students with disabilities ³								
Advanced				21%	23%	22%	13%	-5.0
Proficient and Above				72%	78%	77%	57%	-10.5
Basic and Above				NA	NA	NA	NA	NA
English language learners ³								
Advanced				14%	16%	18%	20%	2.0
Proficient and Above				68%	72%	75%	77%	2.5
Basic and Above				NA	NA	NA	NA	NA
Female								
Advanced				27%	31%	32%	29%	0.7
Proficient and Above				80%	82%	84%	84%	1.3
Basic and Above				NA	NA	NA	NA	NA
Male								
Advanced				30%	32%	36%	32%	0.7
Proficient and Above				82%	84%	87%	85%	1.0
Basic and Above				NA	NA	NA	NA	NA

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 19% in 2005 to 22% in 2008. During this period, the average yearly gain in the percentage advanced in math for low-income 4th graders was 1.0 percentage points per year.

¹Averages are subject to rounding error.

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

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

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table TX-11. Subgroup Achievement Trends in Reading by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

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

Subgroup	Grade 4					Grade 8					Grade 10				
	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group
All tested students	05-08	79%	83%	1.3		05-08	83%	92%	3.0		05-08	67%	86%	6.3	
White	05-08	88%	91%	1.0		05-08	92%	96%	1.3		05-08	76%	92%	5.3	
African American	05-08	69%	73%	1.3	L	05-08	78%	87%	3.0	L	05-08	58%	81%	7.7	L
Latino	05-08	73%	78%	1.7	L	05-08	75%	89%	4.7	L	05-08	59%	83%	8.0	L
Asian	05-08	91%	94%	1.0	E	05-08	91%	97%	2.0	L	05-08	80%	94%	4.7	S
Native American	05-08	83%	85%	0.7	S	05-08	86%	94%	2.7	L	05-08	71%	86%	5.0	S
Not low-income	05-08	89%	91%	0.7		05-08	91%	96%	1.7		05-08	74%	91%	5.7	
Low-income	05-08	71%	75%	1.3	L	05-08	75%	88%	4.3	L	05-08	57%	80%	7.7	L
Not disabled	06-08	83%	85%	1.0		06-08	84%	95%	5.5		06-08	86%	89%	1.5	
Students with disabilities ³	06-08	74%	53%	-10.5	S	06-08	63%	60%	-1.5	S	06-08	55%	46%	-4.5	S
All tested students	06-08	82%	83%	0.5		06-08	83%	92%	4.5		06-08	85%	86%	0.5	
English language learners ³	06-08	63%	67%	2.0	L	06-08	32%	58%	13.0	L	06-08	32%	45%	6.5	L
Female	05-08	81%	84%	1.0		05-08	84%	93%	3.0		05-08	74%	90%	5.3	
Male	05-08	78%	81%	1.0	E	05-08	82%	90%	2.7	S	05-08	60%	82%	7.3	L

Table reads: In 2005, 88% of white 4th graders and 69% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 91% of

white 4th graders and 73% of African American 4th graders scored at the proficient level in reading. Between 2005 and 2008, the percentage proficient improved at an average rate of 1.0 percentage point per year for white students and 1.3 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

¹Numbers in these columns are subject to rounding error.

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

³Trends 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 TX-12. Subgroup Achievement Trends in Mathematics by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.

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

Subgroup	Grade 4					Grade 8					Grade 10				
	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain ¹	Gain Larger or Smaller Than Comparison Group
All tested students	05-08	81%	84%	1.0		05-08	61%	75%	4.7		05-08	58%	63%	1.7	
White	05-08	90%	91%	0.3		05-08	75%	85%	3.3		05-08	73%	76%	1.0	
African American	05-08	67%	73%	2.0	L	05-08	44%	61%	5.7	L	05-08	38%	46%	2.7	L
Latino	05-08	76%	81%	1.7	L	05-08	50%	69%	6.3	L	05-08	45%	54%	3.0	L
Asian	05-08	95%	96%	0.3	E	05-08	86%	93%	2.3	S	05-08	83%	87%	1.3	L
Native American	05-08	84%	84%	0.0	S	05-08	61%	78%	5.7	L	05-08	64%	63%	-0.3	S
Not low-income	05-08	90%	91%	0.3		05-08	73%	84%	3.7		05-08	68%	72%	1.3	
Low-income	05-08	74%	79%	1.7	L	05-08	48%	66%	6.0	L	05-08	43%	51%	2.7	L
Not disabled	06-08	84%	86%	1.0		06-08	68%	79%	5.5		06-08	62%	66%	2.0	
Students with disabilities ³	06-08	78%	57%	-10.5	S	06-08	40%	30%	-5.0	S	06-08	28%	17%	-5.5	S
All tested students	06-08	83%	84%	0.5		06-08	67%	75%	4.0		06-08	60%	63%	1.5	
English language learners ³	06-08	72%	77%	2.5	L	06-08	29%	41%	6.0	L	06-08	23%	26%	1.5	E
Female	05-08	80%	84%	1.3		05-08	61%	75%	4.7		05-08	57%	63%	2.0	
Male	05-08	82%	85%	1.0	S	05-08	61%	75%	4.7	E	05-08	60%	63%	1.0	S

Table reads: In 2005, 90% of white 4th graders and 67% of African American 4th graders scored at the proficient level on the state math test. In 2008, 91% of white 4th graders and 73% of African American 4th graders scored at the proficient level in math. Between 2005 and 2008, the percentage proficient improved at an average rate of 0.3 percentage point per year for white students and 2.0 percentage points per year for African American students, indicating a larger rate of gain

and a narrowing of the achievement gap for African American 4th graders.

¹Numbers in these columns are subject to rounding error.

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

³Trends 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 TX-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.

Subgroup	Statistic	Grade 4					Grade 8					Grade 10				
		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	05-08	2235	2247	4.0		05-08	2288	2351	21.0		05-08	2187	2261	24.7	
	SD	05-08	177.2	177.7			05-08	216.6	199.8			05-08	118.7	141.1		
White	Mean SS	05-08	2289	2307	6.0		05-08	2369	2415	15.3		05-08	2225	2304	26.3	
	SD	05-08	170.9	171.8			05-08	200.4	188.5			05-08	115.2	136.0		
African American	Mean SS	05-08	2176	2189	4.3	S	05-08	2232	2290	19.3	L	05-08	2149	2219	23.3	S
	SD	05-08	169.1	170.0			05-08	202.1	193.9			05-08	103.8	131.1		
Latino	Mean SS	05-08	2196	2209	4.3	S	05-08	2221	2308	29.0	L	05-08	2152	2228	25.3	S
	SD	05-08	168.5	167.8			05-08	209.2	193.6			05-08	112.2	132.8		
Asian	Mean SS	05-08	2324	2344	6.7	L	05-08	2358	2450	30.7	L	05-08	2244	2345	33.7	L
	SD	05-08	171.0	170.4			05-08	202.2	186.3			05-08	130.4	156.1		
Native American	Mean SS	05-08	2244	2267	7.7	L	05-08	2310	2365	18.3	L	05-08	2203	2268	21.7	S
	SD	05-08	171.3	176.3			05-08	209.8	190.2			05-08	116.1	137.3		
Not Low-income	Mean SS	05-08	2293	2311	6.0		05-08	2357	2412	18.3		05-08	2215	2296	27.0	
	SD	05-08	170.5	170.2			05-08	202.8	188.3			05-08	118.1	138.9		
Low-income	Mean SS	05-08	2184	2195	3.7	S	05-08	2216	2291	25.0	L	05-08	2145	2217	24.0	S
	SD	05-08	167.0	166.3			05-08	206.9	192.4			05-08	108.3	130.9		
Not disabled	Mean SS	06-08	2229	2258	14.5		06-08	2298	2370	36.0		06-08	2235	2274	19.5	
	SD	06-08	153.4	172.7			06-08	215.2	189.0			06-08	132.0	134.7		
Students with disabilities ³	Mean SS	06-08	2187	2112	-37.5	S	06-08	2147	2131	-8.0	S	06-08	2116	2098	-9.0	S
	SD	06-08	155.4	188.3			06-08	200.2	189.1			06-08	113.2	120.4		
All tested students	Mean SS	06-08	2227	2247	10.0		06-08	2292	2351	29.5		06-08	2229	2261	16.0	
	SD	06-08	154.1	177.7			06-08	216.8	199.8			06-08	133.6	141.1		
English language learners ³	Mean SS	06-08	2136	2152	8.0	S	06-08	2020.0	2115	47.5	L	06-08	2052	2090	19.0	L
	SD	06-08	140.3	158.1			06-08	163.0	167.1			06-08	102.1	107.9		
Female	Mean SS	05-08	2244	2257	4.3		05-08	2296	2368	24.0		05-08	2206	2282	25.3	
	SD	05-08	174.8	175.2			05-08	214.2	197.4			05-08	118.8	140.1		

		Grade 4					Grade 8					Grade 10				
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	05-08	2226	2238	4.0	S	05-08	2280	2335	18.3	S	05-08	2168	2241	24.3	S
	SD	05-08	179.1	179.7			05-08	218.8	200.8			05-08	116.8	138.9		

Table reads: In 2005, the mean scale score on the state 4th grade reading test was 2289 for white students and 2176 for African American students. In 2008, the mean scale score in 4th grade reading was 2307 for white students and 2189 for African American students. Between 2005 and 2008, the mean scale score improved at an average yearly rate of 6.0 points for white students and 4.3 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The TAKS is scored using linear transformations of the Rasch Partial Credit Model with proficiency estimates. Scales vary from grade to grade such that cutoffs are aligned: Met – 2100 and Commended – 2400. Standard scale scores range from approximately 1000-3200.

¹Numbers in these columns are subject to rounding error.

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

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

Table TX-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.

Subgroup	Statistic	Grade 4					Grade 8					Grade 9				
		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	05-08	2256	2271	5.0		05-08	2156	2231	25.0		05-08	2139	2173	11.3	
	SD	05-08	194.1	194.2			05-08	192.5	203.0			05-08	176.7	193.5		
White	Mean SS	05-08	2316	2321	1.7		05-08	2221	2295	24.7		05-08	2199	2231	10.7	
	SD	05-08	186.5	186.7			05-08	188.3	202.1			05-08	173.4	192.9		
African American	Mean SS	05-08	2169	2196	9.0	L	05-08	2079	2150	23.7	S	05-08	2058	2093	11.7	L
	SD	05-08	180.0	187.7			05-08	166.5	176.6			05-08	144.3	164.4		
Latino	Mean SS	05-08	2218	2244	8.7	L	05-08	2106	2190	28.0	L	05-08	2085	2129	14.7	L
	SD	05-08	183.0	187.6			05-08	175.5	185.7			05-08	155.5	175.8		
Asian	Mean SS	05-08	2391	2405	4.7	L	05-08	2315	2406	30.3	L	05-08	2283	2338	18.3	L
	SD	05-08	190.0	184.1			05-08	210.8	222.1			05-08	203.3	210.3		
Native American	Mean SS	05-08	2273	2269	-1.3	S	05-08	2160	2233	24.3	S	05-08	2152	2171	6.3	S
	SD	05-08	193.9	189.5			05-08	179.8	189.2			05-08	163.0	187.2		
Not Low-income	Mean SS	05-08	2318	2327	3.0		05-08	2214	2290	25.3		05-08	2181	2217	12.0	
	SD	05-08	189.8	186.8			05-08	193.7	205.3			05-08	179.4	197.1		
Low-income	Mean SS	05-08	2202	2226	8.0	L	05-08	2096	2173	25.7	L	05-08	2076	2115	13.0	L
	SD	05-08	181.3	188.1			05-08	171.9	182.9			05-08	152.4	172.6		
Not disabled	Mean SS	06-08	2271	2282	5.5		06-08	2190	2248	29.0		06-08	2165	2186	10.5	
	SD	06-08	191.8	188.8			06-08	192.7	196.9			06-08	182.7	189.8		
Students with disabilities ³	Mean SS	06-08	2220	2129	-45.5	S	06-08	2068	2026	-21.0	S	06-08	2032	1978	-27.0	S
	SD	06-08	187.1	205.0			06-08	162.1	160.1			06-08	139.0	131.0		
All tested students	Mean SS	06-08	2268	2271	1.5		06-08	2185	2231	23.0		06-08	2159	2173	7.0	
	SD	06-08	192.1	194.2			06-08	193.1	203.0			06-08	183.1	193.5		
English language learners ³	Mean SS	06-08	2186	2214	14.0	L	06-08	2029	2071	21.0	S	06-08	2014	2024	5.0	S
	SD	06-08	175.5	185.3			06-08	149.6	167.6			06-08	130.7	143.8		
Female	Mean SS	05-08	2249	2266	5.7		05-08	2155	2228	24.3		05-08	2130	2171	13.7	

		Grade 4					Grade 8					Grade 9				
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	05-08	193.1	191.9			05-08	190.4	197.0			05-08	169.5	188.8		
Male	Mean SS	05-08	2262	2276	4.7	S	05-08	2157	2234	25.7	L	05-08	2148	2175	9.0	S
	SD	05-08	194.9	196.3			05-08	194.7	208.7			05-08	183.5	198.2		

Table reads: In 2005, the mean scale score on the state 4th grade math test was 2316 for white students and 2169 for African American students. In 2008, the mean scale score in 4th grade math was 2321 for white students and 2196 for African American students. Between 2005 and 2008, the mean scale score improved at an average yearly rate of 1.7 points for white students and 9.0 points for African American students, indicating a narrowing of the achievement gap for African Americans.

Note: The TAKS is scored using linear transformations of the Rasch Partial Credit Model with proficiency estimates. Scales vary from grade to grade such that cutoffs are aligned: Met – 2100 and Commended – 2400. Standard scale scores range from approximately 1000-3200.

¹Numbers in these columns are subject to rounding error.

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

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

Table TX-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	05-08	273,508	311,704	14.0%	100.0%	05-08	291,845	311,264	6.7%	100.0%	05-08	270,825	298,426	10.2%	100.0%
	Math	05-08	278,466	316,549	13.7%	100.0%	05-08	291,433	309,854	6.3%	100.0%	05-08	266,419	293,041	10.0%	100.0%
White	Reading	05-08	109,123	114,202	4.7%	36.6%	05-08	120,588	117,496	-2.6%	37.7%	05-08	118,940	119,243	0.3%	40.0%
	Math	05-08	110,406	114,650	3.8%	36.2%	05-08	119,833	116,845	-2.5%	37.7%	05-08	117,385	117,468	0.1%	40.1%
African American	Reading	05-08	38,833	45,075	16.1%	14.5%	05-08	40,754	44,396	8.9%	14.3%	05-08	37,090	42,915	15.7%	14.4%
	Math	05-08	39,340	45,260	15.0%	14.3%	05-08	40,572	44,026	8.5%	14.2%	05-08	36,347	41,868	15.2%	14.3%
Latino	Reading	05-08	114,902	139,642	21.5%	44.8%	05-08	120,378	137,545	14.3%	44.2%	05-08	104,090	124,299	19.4%	41.7%
	Math	05-08	117,929	143,776	21.9%	45.4%	05-08	120,883	137,085	13.4%	44.2%	05-08	101,952	121,688	19.4%	41.5%
Asian	Reading	05-08	9,217	11,394	23.6%	3.7%	05-08	8,854	10,572	19.4%	3.4%	05-08	9,471	10,728	13.3%	3.6%
	Math	05-08	9,327	11,464	22.9%	3.6%	05-08	8,893	10,607	19.3%	3.4%	05-08	9,469	10,732	13.3%	3.7%
Native American	Reading	05-08	1,038	1,150	10.8%	0.4%	05-08	955	1,082	13.3%	0.3%	05-08	886	1,093	23.4%	0.4%
	Math	05-08	1,054	1,158	9.9%	0.4%	05-08	939	1,092	16.3%	0.4%	05-08	859	1,080	25.7%	0.4%
Low-income	Reading	05-08	145,599	170,713	17.2%	54.8%	05-08	141,873	156,718	10.5%	50.3%	05-08	109,031	130,407	19.6%	43.7%
	Math	05-08	149,297	174,920	17.2%	55.3%	05-08	142,074	155,816	9.7%	50.3%	05-08	106,327	127,130	19.6%	43.4%
Students w/ disabilities	Reading	06-08	11,452	21,725	89.7%	7.0%	06-08	11,998	24,877	107.3%	8.0%	06-08	12,771	20,912	63.7%	7.0%
	Math	06-08	12,203	23,109	89.4%	7.3%	06-08	10,408	23,421	125.0%	7.6%	06-08	10,191	18,891	85.4%	6.4%
English language learners	Reading	06-08	29,775	45,587	53.1%	14.6%	06-08	16,389	17,989	9.8%	5.8%	06-08	12,190	15,084	23.7%	5.1%
	Math	06-08	32,323	49,333	52.6%	15.6%	06-08	16,738	18,085	8.0%	5.8%	06-08	12,048	14,698	22.0%	5.0%
Female	Reading	05-08	137,265	153,833	12.1%	49.4%	05-08	146,774	153,573	4.6%	49.3%	05-08	136,529	148,341	8.7%	49.7%
	Math	05-08	138,670	155,718	12.3%	49.2%	05-08	146,272	152,717	4.4%	49.3%	05-08	134,371	146,118	8.7%	49.9%
Male	Reading	05-08	136,020	157,628	15.9%	50.6%	05-08	144,878	157,548	8.7%	50.6%	05-08	134,140	149,983	11.8%	50.3%
	Math	05-08	139,563	160,588	15.1%	50.7%	05-08	144,970	156,971	8.3%	50.7%	05-08	131,830	146,804	11.4%	50.1%

Table reads: In 2005, 109,123 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had risen to 114,202 students, an increase of 4.7%. In 2008, the white subgroup made up 36.6% of the 311,704 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.