General Achievement Trends — Georgia

K-12 enrollment — 1,609,681

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 No Child Left Behind. In the Document Library, look for the most recent report on student achievement since 2002. 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.

Overall Achievement — Key Findings

General results

The tables in this profile present state test results in reading and math at two achievement levels (proficient and advanced) and at one grade each at the elementary, middle, and high school levels. (None of Georgia's achievement levels is equivalent to the basic level, so trends at this level could not be determined.) These data are more complete than the percentage of students scoring proficient that is the main indicator used to determine adequate yearly progress under the No Child Left Behind Act.

Georgia changed the scoring scales in 2006 on its elementary and middle school reading tests, implemented a new test in 2008 in high school reading, and administered new tests in 2008 in elementary and middle school math. As a result, trends in elementary and middle school reading cover only three years of comparable test data (2006-2008), the minimum span needed to discern a trend. In addition, Georgia did not have three or more years of comparable data through 2007-08 in high school reading and in elementary and middle school math, so trends could not be determined. In high school math, comparable data are available for 2004-2008.

In reading, Georgia students made gains at both the **proficient** and **advanced** levels at the elementary and middle school grades analyzed. In high school math, there was a slight gain at the proficient level but a slight decline at the advanced level.

Specific results

- Between 2006 and 2008, the percentage of students scoring at or above the **proficient** level in reading increased at a moderate-to-large rate at both the elementary and middle school grades analyzed. In math, there was a slight increase at the high school level between 2004 and 2008.

- In reading, the percentage of students reaching the **advanced** level rose at a moderate-to-large rate at both the elementary and middle school levels. In high school math, the percentage advanced decreased slightly.

Data Limitations

Years of comparable percentage proficient data	Reading: 2006–2008, grades 3-8 (prior years not comparable due to change in scoring scale) 2006–2007, grade 11 (new test implemented in 2008) Math: 2002–2007, grades 3-5, 8 (new test implemented in 2008) 2006–2008, grade 6 2007–2008, grade 7 2004–2008, grade 11
Years of data needed to compute effect sizes	Reading: 2006–2008, grades 3-8 (prior years not comparable due to change in scoring scale) Math: 2002–2007, grades 3-5, 8 (new test implemented in 2008) 2006–2008, grade 6 2007–2008, grade 7 Not available for high school until 2007
Disaggregated data for all subgroups and comparison groups	Standard deviations are not available by subgroup until 2007 Data are not available for the comparison group of students who are *not* English language learners, so the ELL subgroup is compared with all tested students in the state For low-income and *not* low-income students, percentage proficient data are only available from 2003 through 2007 and effect size data are not available.
Other data limitations	Georgia reports results separately for reading and English language arts (ELA); to be consistent with other states, the results reported here are for reading, except in grade 11, where ELA results are reported.

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	Criterion-Referenced Competency Tests (CRCT) in reading and

	English language arts combined and in mathematics (grades 3-8) Georgia High School Graduation Tests (GHSGT) in English language arts and mathematics (gr. 11) Georgia Alternate Assessment (GAA) (standards-based portfolio assessment) For small schools without typical grade configurations tests above may not apply; in these instances, the CRCT in grades 1 and 2 and/or End-of-Course Tests (EOCT) may be used to measure adequate yearly progress (AYP). All schools are included in the accountability system with some evidence of academic achievement on a state-mandated assessment.
Grades tested for NCLB accountability	3–8, 11 primarily. Schools that do not use these grade configurations have an alternate determination using other assessments for AYP.
State labels for achievement levels	GA uses three achievement levels: Does Not Meet (GHSGT: Fail), Meets (GHSGT: Pass), and Exceeds (GHSGT: Pass Plus). A fourth level, GHSGT Honors, is used for Grade 11 Language. For our analyses we did not have a category to treat as Basic; we treated Meets (Pass) as Proficient, and Exceeds (Pass Plus) + GHSGT Honors as Advanced.
High school NCLB test also used as an exit exam?	Yes
First year test used	Reading: 2006, grades 3-8; 2008, grade 11 Math: 2002, grades 3-5, 8 (terminated in 2007; new test in 2008) 2004, grade 11 2006, grade 6; 2007, grade 7
Time of test administration	Spring for CRCT and GHSGT for AYP purposes. For grade 11 only, first-time test-takers are considered in AYP determinations. Summer retest opportunity for CRCT for grade promotion purposes Summer, fall, and winter retest opportunities for GHSGT for graduation purposes EOCTs are offered various times throughout the year depending on when specific course is offered
Major changes in testing system (2002–present)	2004: GHSGT was enhanced to meet U.S. Department of Education criteria for peer review approval. New annual measurable

objectives were set for schools, based on new standards; scale range of 400 to 600 remained unchanged.
2004: EOCTs became requirement for course grades.
2006: Reading scores on the CRCT and English language arts scores on the GHSGT were linked to the national Lexile scale.
2008: The Georgia Performance Standards (GPS) were phased in to replace Georgia's Quality Core Curriculum (QCC); scores are changing accordingly as tests are phased in.
2008: Students in grade 11 who took the GHSGT in English language arts for the first time took a new version of the test based solely on the GPS. The GHSGT math test was still based on the QCC.
2008: New tests administered in math in grades 3-5 and 8.

Comments

The test data in this profile were obtained from the state's testing files rather than from the AYP and accountability information posted on the state Web site, so they may not always match the data on the Web site.
Although CEP's 2008 report on achievement included trends in grade 11 math beginning in 2002, a Georgia official has since indicated that 2004 is the most appropriate baseline year for data from the grade 11math test. For that reason, all grade 11 math trends displayed below begin with 2004.

Overall Achievement — Percentages Proficient

Figure GA-1. Percentage of Students Scoring at the Proficient Level and Above in Reading

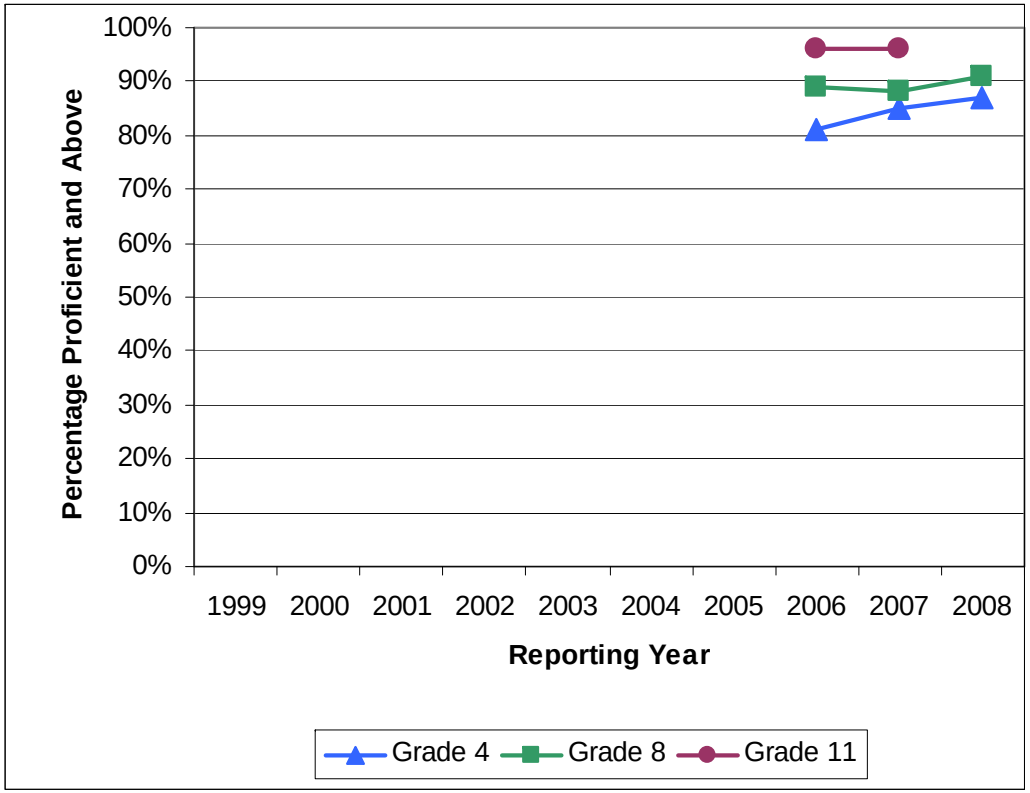


Table GA-1. Percentage of Students Scoring at the Proficient Level and Above in Reading

Grade Level	Reporting Year										Pre-NCLB Average Yearly Percentage Point Gain 1999-2002[1]	Post-NCLB Average Yearly Percentage Point Gain 2002-2008[1]
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Grade 3								83%	85%	87%	NA	2.0
Grade 4								**81%**	**85%**	**87%**	**NA**	**3.0**
Grade 5								81%	86%	87%	NA	3.0
Grade 6								86%	89%	91%	NA	2.5
Grade 7								80%	85%	88%	NA	4.0
Grade 8								**89%**	**88%**	**91%**	**NA**	**1.0**
Grade 11								**96%**	**96%**		**NA**	**NA**

Table reads: The percentage of 3rd graders who scored at the proficient level and above on the state reading test increased from 83% in 2006 to 87% in 2008. The average yearly gain in the percentage proficient in grade 3 reading was 2.0 percentage points per year after NCLB was enacted.

[1]Averages are subject to rounding error.

Figure GA-2. Percentage of Students Scoring at the Proficient Level and Above in Mathematics

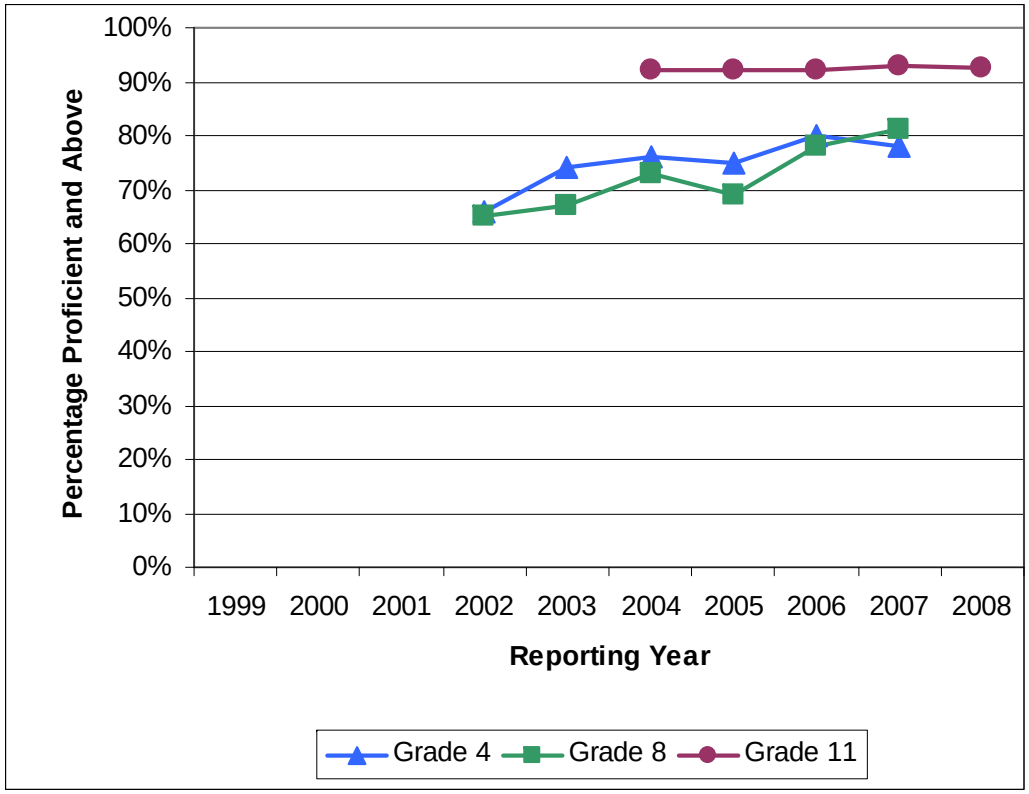


Table GA-2. Percentage of Students Scoring at the Proficient Level and Above in Mathematics

Grade Level	Reporting Year										Pre-NCLB Average Yearly Percentage Point Gain 1999-2002[1]	Post-NCLB Average Yearly Percentage Point Gain 2002-2008[1]
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Grade 3				82%	NA	90%	90%	91%	91%		NA	1.8
Grade 4				**66%**	**74%**	**76%**	**75%**	**80%**	**78%**		**NA**	**NA**
Grade 5				77%	NA	84%	87%	88%	88%		NA	2.2
Grade 6								62%	65%	69%	NA	3.5
Grade 7									74%	80%	NA	NA
Grade 8				**65%**	**67%**	**73%**	**69%**	**78%**	**81%**		**NA**	**NA**
Grade 11						**92%**	**92%**	**92%**	**93%**	**93%**	**NA**	**0.1**

Table reads: The percentage of 3rd graders who scored at the proficient level and above on the state math test increased from 82% in 2002 to 91% in 2007. The average yearly gain in the percentage proficient in grade 3 math was 1.8 percentage points per year after NCLB was enacted.

[1]Averages are subject to rounding error.

Overall Achievement — Percentages Advanced, Proficient, and Basic

How to read figures 3 and 4 and tables 3 and 4

The stacked bars in figures 3 and 4 show the percentages of students scoring at the proficient and advanced levels on the state tests used for NCLB accountability. Because none of Georgia's achievement levels is equivalent to the NCLB basic achievement level, no analyses could be conducted of performance at the basic level and above.

The following information may be helpful in interpreting the figures:

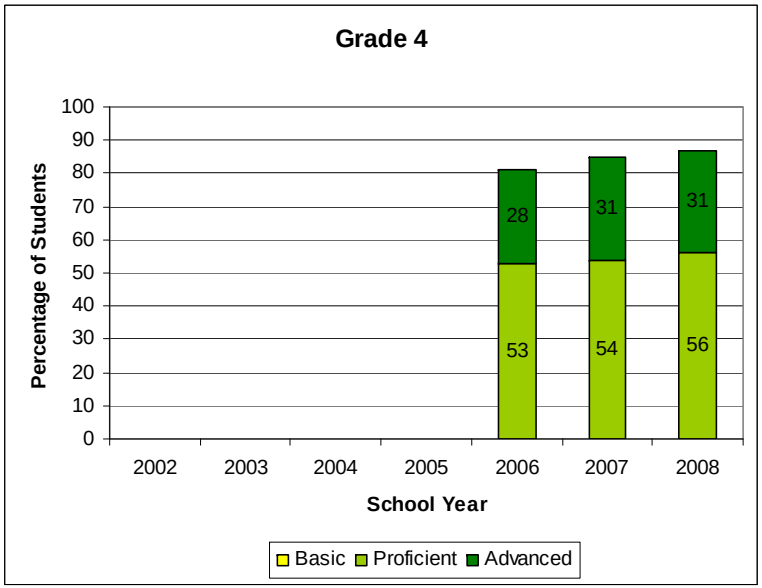
- The percentage proficient and above—the benchmark used to determine adequate yearly progress under NCLB—is the sum of the middle and top segments of the bars (percentage proficient plus percentage advanced). The resulting sum corresponds with the percentage proficient and above shown in tables 3 and 4. In a few instances, however, the sums in the figures may differ from those in the tables by a percentage point due to rounding.

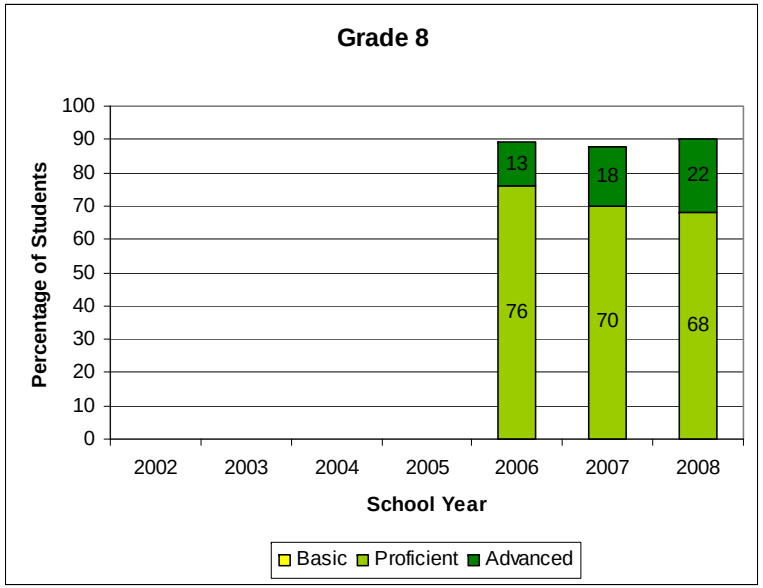
- The bars do not total 100% because students who score at the basic or *below* basic levels are not displayed.

- By looking at the percentages in each segment of the bars, one can see how achievement trends at different levels interact. Ideally, one would want to see increases at all three levels, as more students move from below basic to basic achievement, from basic to proficient, and from proficient to advanced. But other scenarios may also be illuminating. For example, if the percentage proficient has grown while the percentages advanced has shrunk, this suggests most of the academic attention was focused on moving "bubble kids" from the basic to proficient levels, with little or no attention to the highest-performing students.

- Some states use different labels for their achievement levels instead of basic, proficient, and advanced. The specific state labels are listed in the Test Characteristics section at the beginning of this profile.

Figure GA-3. Percentages of Students Scoring at the Advanced, Proficient, and Basic Levels in Reading





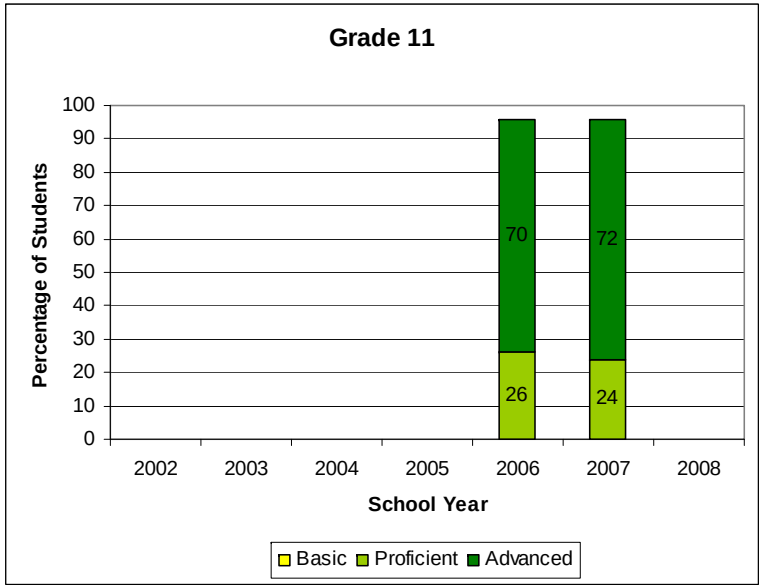


Table GA-3. Percentages of Students Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Achievement Level	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
Grade 4								
Advanced					28%	31%	31%	1.5
Proficient and Above					81%	85%	87%	3.0
Basic and Above					NA	NA	NA	NA
Grade 8								
Advanced					13%	18%	22%	4.5
Proficient and Above					89%	88%	91%	1.0
Basic and Above					NA	NA	NA	NA
Grade 11								
Advanced					70%	72%		NA
Proficient and Above					96%	96%		NA
Basic and Above					NA	NA		NA

Table reads: The percentage of 4th graders who scored at the advanced level on their state reading test increased from 28% in 2006 to 31% in 2008. During this period, the average yearly gain in the percentage advanced was 1.5 percentage points per year in grade 4 reading.

[1]Averages are subject to rounding error.

Figure GA-4. Percentages of Students Scoring at the Advanced, Proficient, and Basic Levels in Mathematics

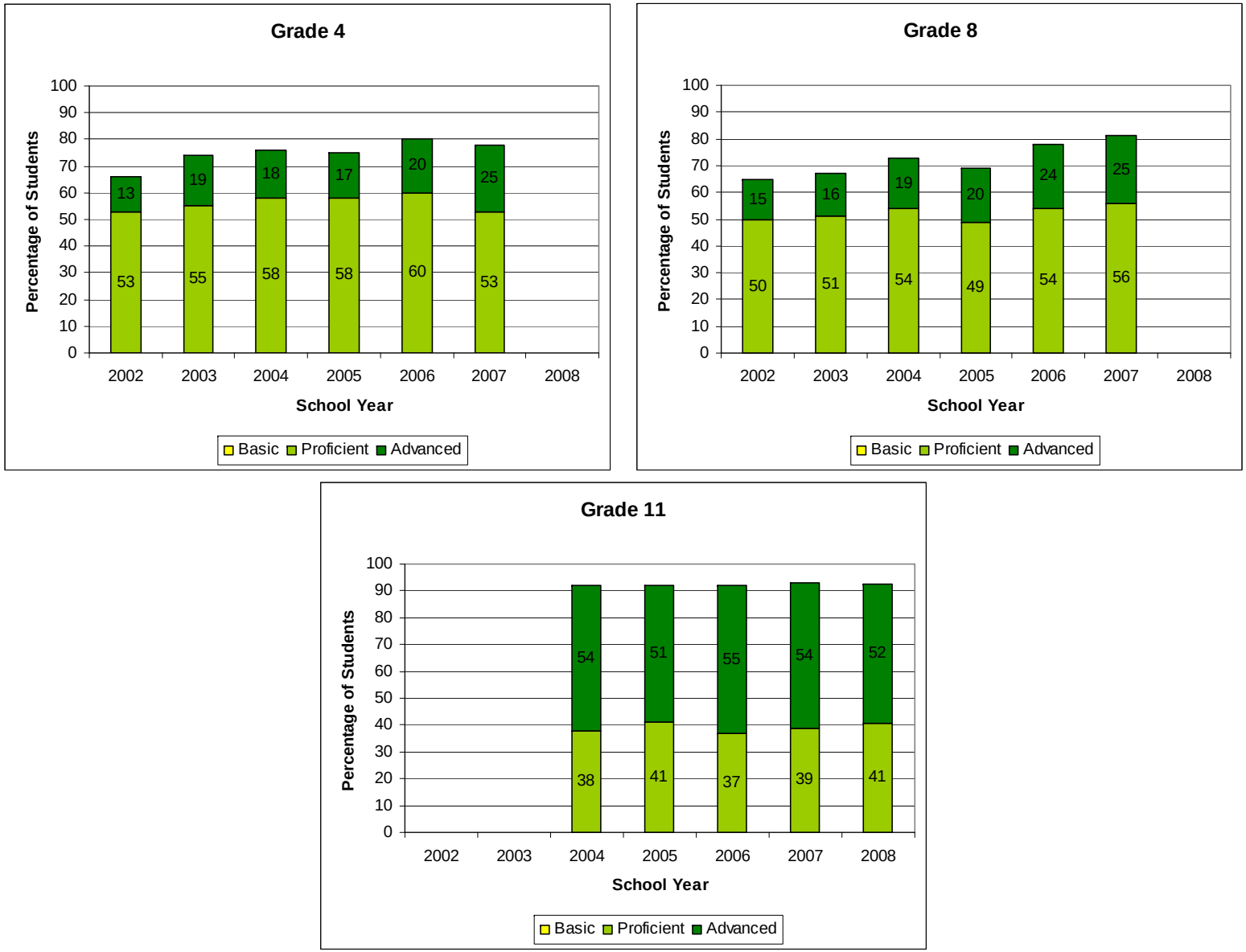


Table GA-4. Percentages of Students Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Achievement Level	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
Grade 4								
Advanced	13%	19%	18%	17%	20%	25%		NA
Proficient and Above	66%	74%	76%	75%	80%	78%		NA
Basic and Above	NA	NA	NA	NA	NA	NA		NA
Grade 8								
Advanced	15%	16%	19%	20%	24%	25%		NA
Proficient and Above	65%	67%	73%	69%	78%	81%		NA
Basic and Above	NA	NA	NA	NA	NA	NA		NA
Grade 11								
Advanced			54%	51%	55%	54%	52%	-0.5
Proficient and Above			92%	92%	92%	93%	93%	0.1
Basic and Above			NA	NA	NA	NA	NA	NA

Table reads: The percentage of 11th graders who scored at the advanced level on their state math test decreased from 54% in 2004 to 52% in 2008. During this period, the average yearly gain in the percentage advanced was -0.5 percentage points per year in grade 11 math.

[1]Averages are subject to rounding error.

Overall Achievement — Effect Sizes

How to read figures 5 and 6 and tables 5 and 6

An **effect size** is 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. An effect size is computed by subtracting the **mean scale score** (the average score) on a test for one year, such as 2006, from the mean scale score for another year, such as 2007, then dividing the result by the average standard deviation. (The **standard deviation** is a measure of how much test scores tend to deviate from the mean—in other words, how spread out or bunched together scores are.) If the mean score has not changed, then the effect size is 0. An effect size of +1 indicates an increase of 1 standard deviation from the previous year's mean score. Effect sizes can also be used to calculate differences in scores between two subgroups of students.

Tables 5 and 6 show mean scale scores, standard deviations, and the **accumulated annual effect size** (AAES), which is the cumulative gain in effect size over a range of years. For example, to determine the accumulated annual effect size between 2006 and 2008, one would calculate the change in effect size from 2006 to 2007, and from 2007 to 2008, then add the results together. In figures and tables 5 and 6, 2002 (or the closest year with comparable data) was used as a starting point (0.00) to calculate accumulated annual effect sizes after NCLB was enacted (and before, if available). Steady gains in AAES are represented by negative numbers before 2002 rising to positive numbers after 2002, so that pre- and post-NCLB trends can be shown on the same trend line. A positive AAES before 2002 or a negative AAES after 2002 indicates a decline in performance over time.

Figure GA-5. Reading Achievement Trends in Terms of Effect Sizes

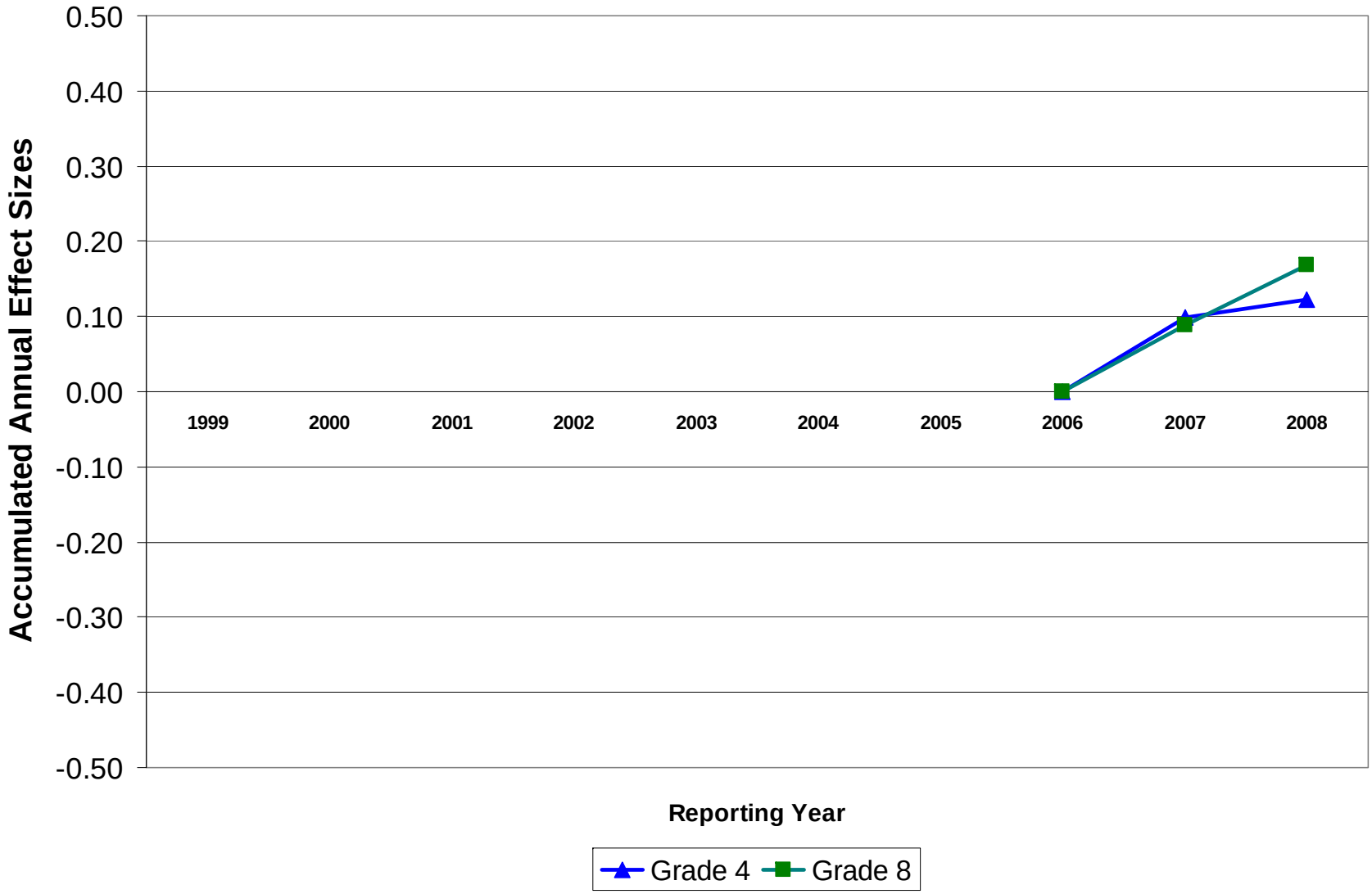


Table GA-5. Reading Achievement Trends in Terms of Effect Sizes

Grade Level		Reporting Year										Pre-NCLB Average Yearly Effect Size Gain 1999-2002[1]	Post-NCLB Average Yearly Effect Size Gain 2002-2008[1]
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Grade 4	MSS *(SD)*								827 *(30)*	830 *(31)*	830.7 *(29.6)*		
	AAES								0.00	0.10	0.12	NA	0.06
Grade 8	MSS *(SD)*								825 *(21)*	827 *(24)*	828.9 *(22.7)*		
	AAES								0.00	0.09	0.17	NA	0.08
Grade 11	MSS *(SD)*												
	AAES												

Table reads: The mean scale score (MSS) of 4th graders on the state reading test increased from 827 in 2006 to 830.7 in 2008. The standard deviation (SD) for the mean scale score in 2006 was 30. Using 2006 as a starting point (0.00), the accumulated annual effect size (AAES) for grade 4 reading totaled 0.12 by 2008. For the post-NCLB period, the average yearly gain in effect size at grade 4 was 0.06.

Note: The Georgia Criterion-Referenced Competency Tests (CRCT) is scored on a scale of 650-950.

[1]Averages are subject to rounding error.

Figure GA-6. Mathematics Achievement Trends in Terms of Effect Sizes

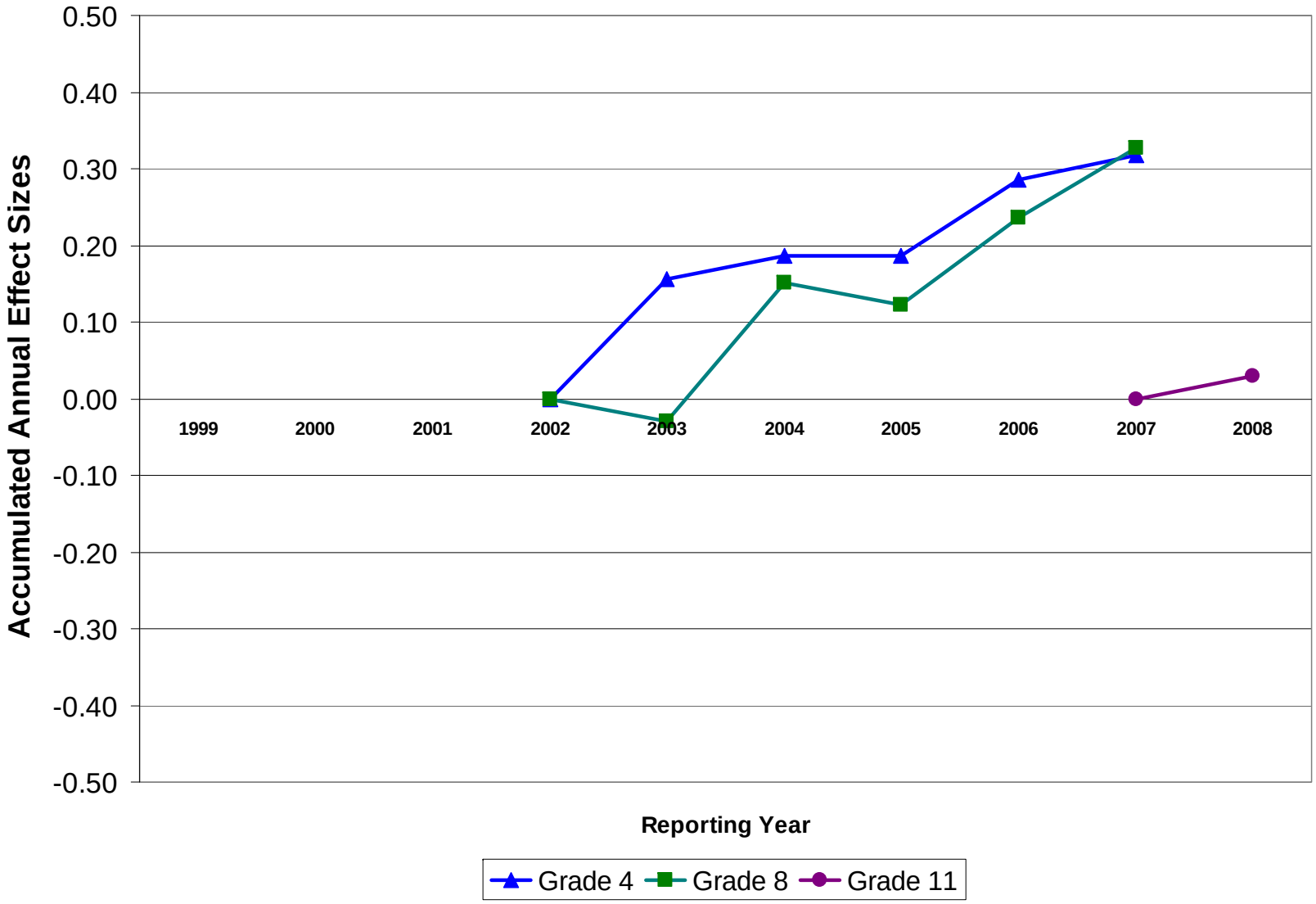


Table GA-6. Mathematics Achievement Trends in Terms of Effect Sizes

Grade Level		Reporting Year										Pre-NCLB Average Yearly Effect Size Gain 1999-2002[1]	Post-NCLB Average Yearly Effect Size Gain 2002-2008[1]
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Grade 4	MSS *(SD)*				314 *(31.5)*	319 *(32.8)*	320 *(31)*	320 *(31)*	323 *(30)*	324 *(32)*			
	AAES				0.00	0.16	0.19	0.19	0.29	0.32		NA	0.06
Grade 8	MSS *(SD)*				315 *(34.1)*	314 *(33.6)*	320 *(33)*	319 *(37)*	323 *(33)*	326 *(33)*			
	AAES				0.00	-0.03	0.15	0.12	0.24	0.33		NA	0.07
Grade 11	MSS *(SD)*									533.2 *(26.5)*	534 *(26.3)*		
	AAES									0.00	0.03	NA	NA

Table reads: The mean scale score (MSS) of 4th graders on the state math test increased from 314 in 2002 to 324 in 2007. The standard deviation (SD) for the mean scale score in 2002 was 31.5. Using 2002, the year NCLB was enacted, as a starting point (0.00), the accumulated annual effect size (AAES) for grade 4 math totaled 0.32 by 2007. For the post-NCLB period, the average yearly gain in effect size at grade 4 was 0.06.

Note: The Georgia Criterion-Referenced Competency Tests (CRCT) is scored on a scale of 150-450. The Georgia High School Graduation Tests (GHSGT) is scored on a scale of 200-1700.

[1]Averages are subject to rounding error.

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.