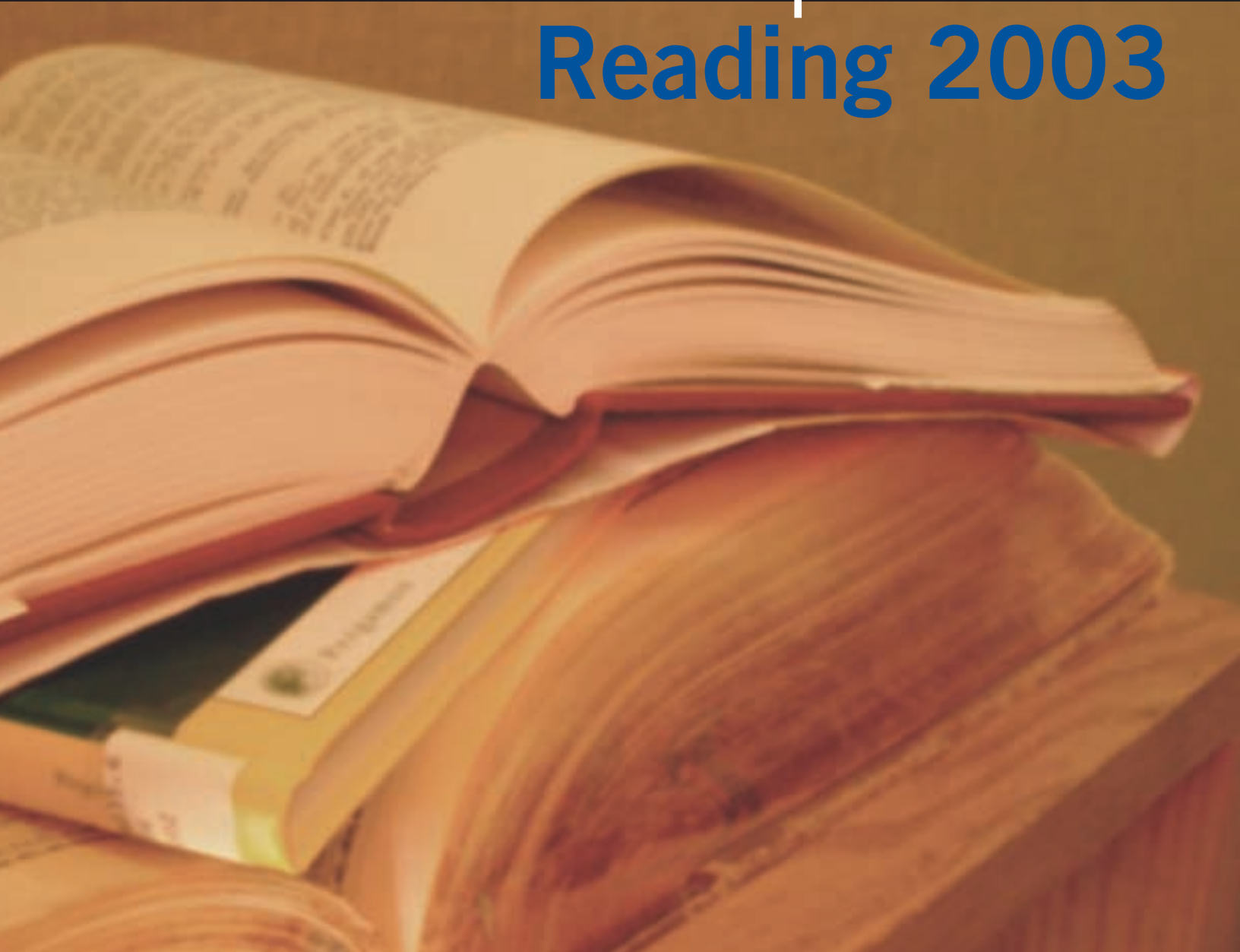




**U.S. Department of Education**  
Institute of Education Sciences  
NCES 2005-453

# The Nation's Report Card<sup>TM</sup> Reading 2003



The National Assessment of Educational Progress

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NCES 2005-453

# The Nation's Report Card™

# Reading

# 2003

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# E

## xecutive Summary

The National Assessment of Educational Progress (NAEP) is an ongoing, nationally representative sample survey of student achievement in core subject areas. Authorized by Congress and administered by the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education, NAEP regularly reports to the public on the educational progress of fourth-, eighth-, and twelfth-grade students.

This report presents results of the NAEP 2003 fourth- and eighth-grade reading assessments for the nation, for regions of the country, for participating states and other jurisdictions, and for participating urban districts. Assessment results are described in terms of students' average reading score on a 0–500 scale and in terms of the percentage of students attaining each of three achievement levels: *Basic*, *Proficient*, and *Advanced*. National and district-level scores at different percentiles on the scale (indicating the percentage of students whose scores fell below a particular point) are also discussed.

The achievement levels are performance standards adopted by the National Assessment Governing Board (NAGB) as part of its statutory responsibilities. The achievement levels are a collective judgment of what students should know and be able to do for each grade tested. As provided by law, NCES, upon review of a congressionally mandated evaluation of NAEP,

determined that the achievement levels are to be used on a trial basis and should be interpreted with caution. However, both NCES and NAGB believe these performance standards are useful for understanding trends in student achievement. They have been widely used by national and state officials and others as a common yardstick of academic performance.

Approximately 188,000 fourth-graders from 7,500 schools and 155,000 eighth-graders from 6,100 schools were assessed. The national results reflect the performance of students attending both public and nonpublic schools, while the results for participating states and other jurisdictions, and for urban districts, reflect the performance of students attending public schools. In addition to providing average scores and achievement-level percentages in reading for the nation, states and other jurisdictions, and urban districts, this report provides results for subgroups of students defined by various background characteristics.

A summary of major findings from the NAEP 2003 Reading Assessment is presented on the following pages. Comparisons are made to results from previous years in which the assessment was administered. In addition to the 2003 results, national results are reported from the 1992, 1994, 1998, 2000 (fourth grade only), and 2002 assessments. Results for participating states and other jurisdictions are also reported from the 1992, 1994, 1998, and 2002 assessments at grade 4 and from the 1998 and 2002 assessments at grade 8. Results for participating urban districts are reported for 2002 and 2003. The more recent results (those from 1998 or later) are based on

administration procedures in which testing accommodations were permitted for students with disabilities and limited-English-proficient students. Accommodations were not permitted in earlier assessments. Comparisons between results from 2003 and those from assessment years in which both types of administration procedures were used (1998 at both grades and 2000 at grade 4 only) are discussed in this executive summary based on the results when accommodations were permitted. Changes in student performance across years or differences between groups of students in 2003 are discussed only if they have been determined to be statistically significant at the .05 level.

## **Overall Reading Results for the Nation, Regions of the Country, and States and Other Jurisdictions**

### **Reading Results for the Nation**

#### **At grade 4**

- No measurable difference was detected between the fourth-grade average score in 2003 and the score in 1992.
- The score at the 75th percentile for fourth-graders was higher in 2003 than in 1992, indicating improvement among higher-performing students.
- The percentage of fourth-graders performing at or above *Proficient* was higher in 2003 than in 1992.

#### **At grade 8**

- The average eighth-grade reading score decreased by one point between 2002 and 2003; however, the score in 2003 was higher than that in 1992.

- Scores decreased from 2002 to 2003 among lower-performing eighth-graders at the 10th and 25th percentiles; however, scores at the 10th, 25th, 50th, and 75th percentiles were higher in 2003 than in 1992.
- The percentage of eighth-graders at or above *Proficient* was higher in 2003 than in 1992. The percentage of students at or above *Basic* decreased by one point between 2002 and 2003, but was higher in 2003 than in 1992.

### Reading Results for Regions of the Country

Prior to 2003, NAEP results were reported for four NAEP-defined regions of the nation: Northeast, Southeast, Central, and West. As of 2003, to align NAEP with other federal data collections, NAEP analysis and reports have used the U.S. Census Bureau's definition of "region." The four regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West.

#### At grade 4

- The average fourth-grade reading score in 2003 was higher for students in the Northeast than in the Midwest, South, and West. In the Midwest, the average score was higher than in the South and West, and the average score was higher for students in the South than for students in the West.
- The percentages of fourth-graders performing at or above the *Basic* and *Proficient* levels in 2003 were higher in the Northeast than in the Midwest, South, and West. Higher percentages of students performed at or above the *Basic* and *Proficient* levels in the Midwest than in the South and the West, and higher percentages of students performed at or above the *Basic* and *Proficient* levels in the South than in the West.

#### At grade 8

- In 2003, the average eighth-grade reading scores were higher in the Northeast and Midwest than in the South and West, and the average score was higher in the South than in the West.
- Higher percentages of eighth-graders performed at or above the *Basic* and *Proficient* levels in 2003 in the Northeast and Midwest than in the South and West. In the South, a higher percentage of students performed at or above the *Basic* level than in the West.

### Reading Results for the States and Other Jurisdictions

Results from the 2003 assessment are reported for fourth- and eighth-grade students attending public schools in 50 states and 3 other jurisdictions that participated in the assessment. (Throughout this summary, the term "jurisdiction" is used to refer to the states, the District of Columbia, and the Department of Defense schools that participated in the NAEP reading assessments.)

#### At grade 4

- Of the 42 jurisdictions that participated in both the 1992 and 2003 fourth-grade assessments, 13 showed increases and 5 showed declines in average scores.
- The percentage of fourth-graders at or above *Proficient* increased in 17 of the 42 jurisdictions that participated in both the 1992 and 2003 assessments.
- Connecticut, Massachusetts, New Hampshire, New Jersey, and Vermont were among the jurisdictions with the highest average reading scores at grade 4.

### **At grade 8**

- Of the 39 jurisdictions that participated in the eighth-grade assessment in 1998 (when accommodations were permitted) and 2003, 8 showed increases and 7 showed declines in average scores.
- Between 1998 (when accommodations were permitted) and 2003, the percentage of eighth-graders performing at or above *Proficient* increased in 5 of the 39 jurisdictions that participated in both years, and declined in one.
- Department of Defense overseas schools, Massachusetts, New Hampshire, and Vermont were among the jurisdictions with the highest average reading scores at grade 8.

### **Reading Results for Student Subgroups in the Nation and in the States and Other Jurisdictions**

In addition to reporting overall results, NAEP reports on the performance of various subgroups of students. In interpreting these data, readers are reminded that the relationship between contextual variables and student performance is not necessarily causal. There are many other educational, cultural, and social factors that play a role in student achievement in a particular subject area.

### **National Results**

#### **Gender**

- At grade 4, there was no measurable difference detected in the average reading scores for male or female students from 1992 to 2003. At grade 8, the average score for male students in 2003 was higher than in 1992, and lower than in 2002.
- In 2003, female students outperformed male students by 7 points on average at grade 4 and by 11 points on average at grade 8. The fourth- and eighth-grade reading score gaps between male and female students showed no measurable change from 1992 to 2003.
- The percentages of male and female fourth-graders performing at or above *Proficient* showed no measurable change from 1992 to 2003. The percentage of male eighth-graders at or above *Proficient* was higher in 2003 than in 1992.

## Race/Ethnicity

- At grade 4, White students and Asian/Pacific Islander students scored higher on average in 2003 than Black, Hispanic, and American Indian/Alaska Native students. White students also scored higher on average than Asian/Pacific Islander students, and Hispanic students scored higher on average than Black students. At grade 8, White and Asian/Pacific Islander students had higher average scores in 2003 than Black, Hispanic, and American Indian/Alaska Native students.
- The average scores for White, Black, and Asian/Pacific Islander fourth-graders were higher in 2003 than in 1992. The average scores for White, Black, and Hispanic eighth-graders were higher in 2003 than in 1992.
- At both grades 4 and 8, the average score gap between White students and Black students and between White students and Hispanic students showed no measurable change from 1992 to 2003.
- The percentages of White, Black, and Asian/Pacific Islander fourth-graders performing at or above *Proficient* were higher in 2003 than in 1992. At grade 8, the percentages of White students and Black students performing at or above *Proficient* were higher in 2003 than in 1992.

## Eligibility for Free/Reduced-Price School Lunch

NAEP collects data on students' eligibility for free/reduced-price lunch as an indicator of family economic status. Eligibility for free/reduced-price lunch is determined by students' family income in relation to the federally established poverty level. The reading results are reported for students classified by their eligibility from 1998 on.

- In 2003, both fourth- and eighth-grade students who were eligible for free/reduced-price lunch scored lower on average than students who were not eligible.
- The average reading score for fourth-graders was higher in 2003 than in 1998 both for students who were eligible for free/reduced-price lunch and for those who were not eligible. The average score for eighth-graders who were eligible showed a decrease between 2002 and 2003 but showed no measurable difference between 1998 and 2003.
- For fourth-graders who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* was higher in 2003 than in 1998.

### **Parents' Level of Education**

Eighth-grade students who participated in the NAEP reading assessment were asked to indicate the highest level of education completed by each parent. Results are reported based on the highest level of education for either parent. Information about parental education was not collected at grade 4.

- Overall, in 2003 there was a positive relationship between student-reported parental education and student achievement: the higher the parental education level, the higher the average reading score.
- The average score for eighth-grade students was lower in 2003 than in 2002 for students who reported that at least one parent had graduated from high school. The average score increased between 1992 and 2003 for students who reported that at least one parent had graduated from high school, and for students who reported that at least one parent had graduated from college.

### **Type of School**

The schools that participate in the NAEP assessment are classified as either public or nonpublic. A further distinction is then made between nonpublic schools that are Catholic schools and those that are some other type of nonpublic school.

- Performance results in 2003 show that, at both grades 4 and 8, students who attended nonpublic schools had a

higher average reading score than students who attended public schools.

- The average fourth-grade reading score for Catholic school students increased between 1992 and 2003. The average eighth-grade score was also higher in 2003 than in 1992 for Catholic school students. The average score for students in public schools declined between 2002 and 2003; however, the average public school score was higher in 2003 than that in 1992.
- The percentage of fourth-grade Catholic school students performing at or above *Proficient* was higher in 2003 than in 1992.

### **Type of Location**

The schools from which NAEP draws its samples of students are classified according to their type of location (central city, rural/small town, or urban fringe/large town). The methods used to identify the type of school location in 2000 (at grade 4), 2002, and 2003 were different from those used for prior assessment years; therefore, only the data from the 2000, 2002, and 2003 assessments are reported.

- In 2003, fourth- and eighth-graders in urban fringe/large town and rural/small town locations had higher average scores than students in central city locations, and students in urban fringe/large town locations scored higher on average than those in rural/small town locations.



- The average reading scores for fourth-graders in central city and urban fringe/large town locations were higher in 2003 than in 2000. The average score for eighth-graders in rural/small town locations declined between 2002 and 2003.
- In 2003, higher percentages of fourth- and eighth-graders performed at or above *Proficient* in urban fringe/large town and rural/small town locations than in central city locations.

### State and Other Jurisdiction Results

#### Gender

- In 2003, female students scored higher on average than male students in all 53 of the jurisdictions that participated at grades 4 and 8.
- Among the 42 jurisdictions that participated in both the 1992 and 2003 fourth-grade reading assessments, 10 showed increases in the average score for both male and female students. New Mexico and Oklahoma showed decreases for both male and female students.
- Among the 39 jurisdictions that participated in both the 1998 and 2003 eighth-grade reading assessments, Delaware and Missouri showed average score increases for both male and female students, and Arizona, Nevada, and New Mexico showed decreases for both male and female students.

#### Race/Ethnicity

- The average fourth-grade reading score was higher in 2003 than in 1992 for White students in 19 jurisdictions, for Black students in 8 jurisdictions, for Hispanic students in 5 jurisdictions, and for Asian/Pacific Islander students in 4 jurisdictions. The average score declined between 1992 and 2003 for Black students in Iowa and for American Indian/Alaska Native students in New Mexico. Average score increases were observed between 1992 and 2003 for three or more racial/ethnic subgroups in California, Florida, Maryland, and New York.
- The average eighth-grade reading score was higher in 2003 than in 1998 for White students in six jurisdictions, Black students in Delaware, and Asian/Pacific Islander students in Hawaii and Minnesota. A decrease in the average score was detected between 1998 and 2003 for White students in Maine, Black students in Oklahoma, and Hispanic students in New Mexico.

#### Eligibility for Free/Reduced-Price School Lunch

- The average fourth-grade reading score was higher in 2003 than in 1998 both for students who were eligible and students who were not eligible for free/reduced-price school lunch in 11 jurisdictions, for eligible students in 5 jurisdictions, and for students who were not eligible in 5 jurisdictions. In the District of Columbia, the average score increased for eligible students and decreased for students who were not eligible.

- The average eighth-grade reading score was higher in 2003 than in 1998 both for students who were eligible and students who were not eligible in Delaware and Missouri. Average scores were lower in 2003 than in 1998 for eligible students in New Mexico and Oklahoma, and for students who were not eligible in Nevada.

### Urban District Results

The 2002 Trial Urban District Assessment (TUDA) included five urban public school districts (Atlanta City School District, City of Chicago School District 299, Houston Independent School District, Los Angeles Unified School District, and New York City Public Schools) plus the District of Columbia. The same districts, plus four more (Boston Public School District, Charlotte-Mecklenburg Schools, Cleveland Municipal School District, and San Diego City Unified School District), participated in the 2003 TUDA.

### Overall Reading Results for the Urban Districts

#### At grade 4

- The average fourth-grade reading score in 9 of the 10 districts participating in 2003 was lower than the national public school score. Average fourth-grade reading scores in Atlanta, Chicago, Cleveland, the District of Columbia, and Los Angeles were lower than the average score for large central cities. Average scores in Charlotte and New York were higher than the large central city score.

- When compared to fourth-grade public school students in large central cities, scores at the 10th percentile were higher in Boston, Charlotte, Houston, and New York; scores at the 25th percentile were higher in Charlotte, Houston, and New York; scores at the 50th percentile were higher in Charlotte and New York; and scores at the 75th and 90th percentiles were higher in Charlotte.

- The percentage of fourth-graders at or above *Proficient* in 2003 was lower in 9 of the 10 districts when compared to the nation. In Charlotte, the percentage of students at or above *Proficient* was higher than the percentage for large central cities.

#### At grade 8

- Average eighth-grade reading scores in 9 of the 10 districts that participated in 2003 were lower than the national average score. Students in Atlanta, Cleveland, the District of Columbia, Houston, and Los Angeles scored lower on average than students in large central cities. Students in Boston and Charlotte had higher average scores than students in large central cities.
- In comparison to the scores for eighth-grade public school students in large central cities, scores at the 10th and 25th percentiles were higher in Charlotte, scores at the 50th percentile were higher in Charlotte and New York, and scores at the 75th and 90th percentiles were higher in Boston and Charlotte.



- In 2003, the percentage of eighth-graders at or above *Proficient* was lower in 9 of the 10 districts as compared to the nation. The percentages at or above *Proficient* were higher in Boston and Charlotte than in large central cities.

## Results for Student Subgroups in Urban Districts

### Gender

- At grade 4, the average score for female students in Charlotte was higher than that in the nation. Reading scores for male and female students in Charlotte were both higher on average than for male and female students in large central cities. Female students in New York had higher average scores than female students in large central cities.
- At grade 8, male and female students in all the districts that participated in 2003, except Charlotte, had lower average scores than their counterparts in the nation. Average scores for both male and female students in Charlotte were higher than for their counterparts in large central cities.

### Race/Ethnicity

- At grade 4, the average scores in 2003 for White students in Atlanta, Charlotte, the District of Columbia, and Houston; Black students in Charlotte and Houston; and Hispanic students in New York were higher than the corresponding scores in the nation and large central cities. The average scores for White students in Cleveland and Los Angeles; Black students in the District of Columbia; and Hispanic students in the District of Columbia and Los Angeles were lower than the corresponding scores in the nation and large central cities.
- In 2003 at grade 8, average reading scores for both White and Black students in Charlotte, and Hispanic students in Chicago were higher than comparable scores in the nation and large central cities. The average scores for White students in Cleveland; Black students in Atlanta, the District of Columbia, and Los Angeles; and Hispanic students in Los Angeles were lower than the scores in the nation and large central cities.

### ***Eligibility for Free/Reduced-Price Lunch***

- At grade 4, average scores in 2003 were higher for eligible students in New York and for students who were not eligible in Charlotte and New York compared to the corresponding scores in the nation and large central cities. Eligible students in Atlanta, the District of Columbia, and Los Angeles, and students who were not eligible in the District of Columbia, scored lower on average than comparable groups of students in the nation and large central cities.
- At grade 8, eligible students in Boston, Chicago, and New York, and students who were not eligible in Charlotte and New York scored higher on average than their counterparts in large central cities. Eligible students in Atlanta, the District of Columbia, and Los Angeles, and students who were not eligible in Atlanta, the District of Columbia, Houston, and Los Angeles, scored lower on average than their counterparts in the nation and large central cities.

### ***Parents' Level of Education***

- In 2003, the average score for eighth-grade students who indicated that a parent had graduated from college was lower in Atlanta, Chicago, Cleveland, the District of Columbia, and Los Angeles than the average score for students in the same parental education category in public schools in the nation and large central cities. The average score for students who reported that a parent graduated from college was higher in Charlotte than for comparable students in large central cities.

# 1

## Introduction

The importance of being able to read has long been acknowledged as the foundation for learning and as essential for participation in society. This report presents major results from the National Assessment of Educational Progress (NAEP) 2003 reading assessment of the nation's fourth- and eighth-grade students. Results are presented for the nation overall, for the 53 states and other jurisdictions that participated in the 2003 assessment, and for the 9 districts that participated in the Trial Urban District Assessment (TUDA). The results reported here are intended to inform educators, policymakers, parents, and the general public about students' progress in reading.

### **Overview of the 2003 National Assessment of Educational Progress in Reading**

For more than 30 years, NAEP has regularly collected, analyzed, and reported valid and reliable information about what students know and can do in a variety of subject areas. As authorized by the U.S. Congress, NAEP assesses representative national samples of fourth-, eighth-, and twelfth-grade students. Since 1992, NAEP has also assessed representative samples of fourth- and eighth-grade students in states and other jurisdictions that participate in the NAEP state-by-state assessments.

NAEP is administered and overseen by the National Center for Education Statistics (NCES), within the U.S. Department of Education's Institute of Education Sciences.

The content of all NAEP assessments is determined by subject-area frameworks that are developed by the National Assessment Governing Board (NAGB) in a comprehensive process involving a broad spectrum of interested parties, including teachers, curriculum specialists, subject-matter specialists, school administrators, parents, and members of the general public. The framework for the NAEP 2003 reading assessment, while updated and expanded, is in essence the same framework that has guided development of the NAEP reading assessments since 1992.

This report describes the results of the NAEP 2003 reading assessment at grades 4 and 8. National results for 2003 are compared to those from 1992, 1994, 1998, 2000, and 2002 at grade 4, and 1992, 1994, 1998, and 2002 at grade 8. Comparisons across assessment years are possible because the assessments were developed under the same basic framework and shared a common set of reading questions.

Using the same test as that used nationally, state-level assessments were conducted at grade 4 in 1992, 1994, 1998, 2002, and 2003. At grade 8, state-level assessments were conducted in 1998, 2002, and 2003. District-level results are presented for 9 districts in 2003 and for 5 districts in 2002.

Prior to 1998, administration procedures for NAEP reading assessments did not permit the use of accommodations for special needs students who could not

participate without them (e.g., extra time; individual rather than group administration). For the 1998 assessment, however, administration procedures were introduced that allowed the use of accommodations by students with disabilities (SD) and limited-English-proficient (LEP) students (see appendix A). A split-sample design was used in 1998 at all three grades (and again in 2000 at grade 4) so that both administration procedures could be used during the same assessment, but with different samples of students. This made it possible to report trends in students' reading achievement across all the assessment years and, at the same time, examine the effects of including students assessed with accommodations in overall assessment results. Based on an examination of how permitting accommodations affected overall population results, it was decided that, beginning with the 2002 assessment, NAEP would use only one set of procedures—permitting the use of accommodations.

During the period in which accommodations were not permitted, special-needs students could only be included in the assessment if it was determined by school staff that they could be assessed meaningfully without accommodations. The change in administration procedures makes it possible for more students to be included in the assessments; however, it also represents an important altering of procedures from previous assessments. (See the section on Students with Disabilities and/or Limited-English-Proficient students in appendix A for a more detailed discussion.) The reader is encouraged to consider the difference in accommodation procedures when interpreting comparisons between the two sets of results.

The charts and tables throughout this report distinguish between results from assessment years in which accommodations were not permitted and results from assessment years in which accommodations were permitted. In the tables and charts that display results across assessment years, all previous assessment results that were found to be significantly different (at the .05 level) from the 2003 results are marked with an asterisk (\*). Two sets of results are presented for assessment years in which both administration procedures were used (accommodations not permitted and accommodations permitted). Both sets of results may be notated, if found to be significantly different from 2003. The text that accompanies these tables and charts indicates which previous assessment results were significantly different from 2003. Comparisons between the 2003 results, when accommodations were permitted, and the 1992 and 1994 results, when they were not permitted, are discussed in the text. However, for assessment years with both accommodations-not-permitted results and accommodations-permitted results, the text describes comparisons only between the accommodations-permitted results and 2003.

### **Framework for the 1992, 1994, 1998, 2000, 2002, and 2003 NAEP Reading Assessments**

The reading framework is the blueprint that has specified the content and guided the development of each NAEP reading assessment administered since 1992. The framework resulted from a national process involving many organizations concerned with reading education. This cooperative effort was directed by the National Assessment Governing Board (NAGB) and managed by the

Council of Chief State School Officers (CCSSO). In 2002, the NAEP reading framework was updated to provide more explicit detail regarding the assessment design.<sup>1</sup> At that time, NAGB altered slightly some of the terms used to describe elements of the reading assessment. The following description of the reading framework incorporates these changes. It should be noted, however, that this updating of the framework does not represent a change in the content or design of the NAEP reading assessment.

The framework is founded on research from the field of education that defines reading as an interactive and dynamic process involving the reader, the text, and the context of the reading experience. Reading involves the development of an understanding of text, thinking about text in different ways, and using a variety of text types for different purposes. For example, readers may read stories to enjoy and appreciate the human experience, study science texts to form new hypotheses about knowledge, or use directions to learn how to do something.

Recognizing that readers vary their approach to reading according to the demands of any particular text, the framework specifies the assessment of reading in three “contexts for reading”: reading for literary experience, reading to gain information, and reading to perform a task. Each context for reading is associated with a range of different types of texts that are included in the NAEP reading assessment. All three contexts for reading are assessed at grade 8, but reading to perform a task is not assessed at grade 4. The three contexts for reading as specified in the framework are described in figure 1.1.

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<sup>1</sup> National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

**Figure 1.1** Descriptions of the three contexts for reading in the NAEP reading assessment

<b>Contexts for Reading</b>	
<b>Reading for literary experience</b>	<p><i>Involves the reader in exploring themes, events, characters, settings, plots, actions, and the language of literary works.</i></p> <p>Various types of texts are associated with reading for literary experience, including novels, short stories, poems, plays, legends, biographies, myths, and folktales.</p>
<b>Reading for information</b>	<p><i>Involves the engagement of the reader with aspects of the real world.</i></p> <p>Reading for information is most commonly associated with textbooks, primary and secondary sources, newspapers and magazine articles, essays, and speeches.</p>
<b>Reading to perform a task</b>	<p><i>Involves reading in order to accomplish or do something.</i></p> <p>Practical text read to perform a task may include charts, bus or train schedules, directions for games or repairs, classroom or library procedures, tax or insurance forms, recipes, voter registration materials, maps, referenda, consumer warranties, or office memos.</p>

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

As readers attempt to develop understanding of text, they focus on general topics or themes, interpret and integrate ideas, make connections to background knowledge and experiences, and examine the content and structure of the text. The framework accounts for these different approaches to understanding text by

specifying four “aspects of reading” that represent the types of comprehension questions asked of students. All four aspects of reading are assessed at both grades 4 and 8 within each context of reading described above. The four aspects of reading as specified in the framework are described in figure 1.2.

**Figure 1.2 Descriptions of the four aspects of reading in the NAEP reading assessment**

Aspects of Reading	
<b>Forming a general understanding<sup>1</sup></b>	<p><i>To form a general understanding, the reader must consider the text as a whole and provide a global understanding of it.</i></p> <p>Students may be asked, for example, to demonstrate a general understanding by giving the topic of a passage, explaining the purpose of an article, or reflecting on the theme of a story.</p>
<b>Developing interpretation</b>	<p><i>To develop an interpretation, the reader must extend initial impressions to develop a more complete understanding of what was read.</i></p> <p>This process involves linking information across parts of a text as well as focusing on specific information. Questions that assess this aspect of reading include drawing inferences about the relationship of two pieces of information and providing evidence to determine the reason for an action.</p>
<b>Making reader/text connections<sup>2</sup></b>	<p><i>To make reader/text connections, the reader must connect information in the text with knowledge and experience.</i></p> <p>This process might include applying ideas in the text to the real world. All student responses to these types of questions must be text-based to receive full-credit.</p>
<b>Examining content and structure<sup>3</sup></b>	<p><i>Examining text content and structure requires critically evaluating, comparing and contrasting, and understanding the effect of such features as irony, humor, and organization.</i></p> <p>Questions used to assess this aspect of reading require readers to stand apart from the text, consider it objectively, and evaluate its quality and appropriateness. Questions ask readers to determine the usefulness of a text for a specific purpose, evaluate the language and textual elements, and think about the author's purpose and style.</p>

<sup>1</sup>This aspect of reading was referred to as "forming an initial understanding" in previous versions of the NAEP reading framework.

<sup>2</sup>This aspect of reading was referred to as "personal reflection and response" in previous versions of the NAEP reading framework.

<sup>3</sup>This aspect of reading was referred to as "demonstrating a critical stance" in previous versions of the NAEP reading framework.

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

## The 2003 NAEP Reading Assessment Instrument

The NAEP reading assessment is the only federally authorized, ongoing, nationwide assessment of student reading achievement. It is governed by the framework and reflects expert perspectives on the measurement of reading comprehension. During the development process, the assessment undergoes stringent review by teachers and teacher educators, as well as by state officials and measurement specialists. All components of the assessment are evaluated for curricular relevance, developmental appropriateness, and fairness concerns.

The NAEP reading assessment measures understanding by having students read passages and answer comprehension questions. The reading passages used in the NAEP assessment are drawn from the types of books and publications that students might encounter in school, in the library, or at home. NAEP assessment developers strive to replicate authentic reading experiences in the assessment items presented to student participants. The passages students are asked to read are neither abridged nor contrived especially for the assessment. Instead, full-length reading selections are reprinted in test booklets to resemble as closely as possible the format of their



original publication. To demonstrate their comprehension of these passages, students answer a combination of multiple-choice and constructed-response questions. The multiple-choice questions include four options from which students are asked to select the best answer. The constructed-response questions require students to write their own responses. Short constructed-response questions can be completed in no more than a few sentences, while extended constructed-response questions may require students to provide responses as long as a paragraph or a full page. Both types of constructed-response questions require students to support their answers by using information in the reading passage.

In order to ensure reliable and valid scoring of constructed-response questions, a unique scoring guide, describing the specific criteria for assigning a score level to each student's response, is developed for each question. Expert scorers go through extensive training to understand how to apply these scoring criteria fairly and consistently. Scorers are consistently monitored to ensure that scoring standards are being applied appropriately and to ensure a high degree of scorer agreement (i.e., interrater reliability). In addition, for those constructed-response questions that were used in previous assessments, monitoring of scorers includes checking to make sure that scoring standards remain consistent from year to year.

At each grade, the entire reading assessment is divided into sections referred to as blocks. Each block contains at least one text and a related set of approximately 10 to 12 comprehension

questions (a combination of multiple-choice and constructed-response). Most of the blocks are presented to students as 25-minute timed sections, but some are presented as 50-minute timed sections. The total number of blocks that make up the NAEP reading assessment at each grade are as follows:

Grade 4—five 25-minute literary blocks and five 25-minute informative blocks

Grade 8—four 25-minute literary blocks, four 25-minute informative blocks, four 25-minute task blocks, and one 50-minute informative block

In order to minimize the burden on any individual student, NAEP uses a procedure referred to as matrix sampling, in which an individual student is administered only a small portion of the entire assessment at any grade. For example, at grade 4, students are given a test booklet that contains only two 25-minute blocks. At grade 8, students are given a test booklet that contains either two 25-minute blocks or one 50-minute block. Because each block is administered to a representative sample at each grade, the results can then be combined to produce average group and subgroup results based on the entire assessment. In addition to the two 25-minute blocks or one 50-minute block in each student's test booklet, students are asked to complete two sections of background questions that ask about their background and home or school experiences related to reading achievement. The time required for each student to participate in the NAEP reading assessment is approximately one hour.



## Description of School and Student Samples

The NAEP 2003 reading assessment was administered to fourth- and eighth-graders at the national and the state levels. At the national level, results are reported for both public and nonpublic school students. At the state or jurisdiction level, results are reported only for public school students. In order to obtain a representative sample of students for reporting national and state or jurisdiction results, approximately 188,000 fourth-graders from 7,500 schools and 155,000 eighth-graders from 6,100 schools were sampled and assessed. All 50 states and 3 jurisdictions participated and met the minimum guidelines for reporting their results in 2003. The national samples were larger in 2002 and 2003 than in previous assessment years because they were based on the combined sample of public school students assessed in each participating state, plus an additional sample from nonpublic schools. In 1992–2000 the national samples were drawn separately from the state samples and were smaller than the samples resulting from aggregating the state samples. Each selected school that participated in the assessment and each student assessed represents a portion of the population of interest. For information on sample sizes and participation rates for the nation and by state or jurisdiction, see tables A.6–A.9 in appendix A.

Results from the 2002 and 2003 Trial Urban District Assessment (TUDA) are reported for the participating districts for public school students at grades 4 and 8. The TUDA employed larger-than-usual samples within the districts, making reliable district-level data possible. The samples were also large enough to provide reliable estimates on subgroups

within the districts, such as female students or Hispanic students.

## Reporting the Assessment Results

Results from the NAEP reading assessment are presented in terms of scale scores and percentages of students attaining achievement levels. The scale score results, indicating how much students *know and can do* in reading, are presented as average scale scores and as scale scores at selected percentiles. The achievement-level results indicate the degree to which student performance meets the standards set for what they *should know and be able to do*. Results are reported only for groups or subgroups of students; individual student performance cannot be reported based on the NAEP assessment.

Average scale score results are based on the NAEP reading scale, which ranges from 0 to 500. In order to calculate students' average scores on the NAEP reading assessment, the analysis begins by determining the percentages of students responding correctly to each multiple-choice question and the percentages of students responding at each score level for each constructed-response question. The analysis entails summarizing the results on separate subscales for each reading context (reading for literary experience, reading for information, and reading to perform a task) and then combining the separate scales to form a single composite reading scale. The relative contribution of each reading purpose at each grade is displayed in table I.1. (See appendix A for more information on scaling procedures.)

Achievement-level results are presented in terms of reading achievement levels as authorized by the NAEP legislation and adopted by NAGB. For each

**Table 1.1** Percentage weighting of the “context for reading” subscales on the NAEP composite reading scale, grades 4 and 8

NAEP Reading Subscales	Reading for literary experience	Reading for information	Reading to perform a task
Grade 4	55	45	—
Grade 8	40	40	20

— Not available. Not assessed at grade 4.

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

grade assessed, NAGB has adopted three achievement levels: *Basic*, *Proficient*, and *Advanced*. For reporting purposes, achievement-level cut scores are placed on the reading scale, resulting in four ranges: below *Basic*, *Basic*, *Proficient*, and *Advanced*. The achievement-level results are then reported as percentages of students within each achievement-level range, as well as the percentage of students at or above *Basic* and at or above *Proficient*.

### The Setting of Achievement Levels

The 1988 NAEP legislation that created NAGB directed the Board to identify “appropriate achievement goals . . . for each subject area” that NAEP measures.<sup>2</sup> The NAEP 2001 reauthorization reaffirmed many of the Board’s statutory responsibilities, including developing “appropriate student achievement levels for each grade or age in each subject area to be tested. . . .”<sup>3</sup> In order to follow this directive and achieve the mandate of the 1988 statute “to improve the form and use of NAEP results,” NAGB undertook the development of student perfor-

mance standards (called “achievement levels”).<sup>4</sup> Since 1990, the Board has adopted achievement levels in mathematics, reading, U.S. history, world geography, science, writing, and civics.

The Board defined three levels for each grade: *Basic*, *Proficient*, and *Advanced*. The *Basic* level denotes partial mastery of the knowledge and skills that are fundamental for proficient work at a given grade. The *Proficient* level represents solid academic performance. Students reaching this level demonstrate competency over challenging subject matter. The *Advanced* level presumes mastery of both the *Basic* and *Proficient* levels and represents superior performance. Figure 1.3 presents the policy definitions of the achievement levels that apply across grades and subject areas. The policy definitions guided the development of the reading achievement levels, as well as the achievement levels established in all other subject areas assessed by NAEP. Adopting three levels of achievement for each grade signals the importance of looking at more than one standard of

<sup>2</sup> National Assessment of Educational Progress Improvement Act, Pub. L. No. 100–297, 20 U.S.C. § 1221 *et seq.* (1988).

<sup>3</sup> No Child Left Behind Act of 2001, Pub. L. No. 107–110, 115 Stat. 1425 (2002).

<sup>4</sup> National Assessment of Educational Progress Improvement Act, Pub. L. No. 100–297, 20 U.S.C. § 1221 *et seq.* (1988).

**Figure 1.3 Policy definitions of the three NAEP achievement levels**

Achievement Levels	
<b>Basic</b>	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
<b>Proficient</b>	This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
<b>Advanced</b>	This level signifies superior performance.

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

performance. In the Board's view, the overall achievement goal for students is performance that qualifies at the *Proficient* level or higher as measured by NAEP. The *Basic* level is not the desired goal, but represents partial mastery that is a step toward *Proficient*.

The achievement levels in this report were adopted by the Board based on a standard-setting process designed and conducted under a contract with ACT. To develop these levels, ACT convened a cross section of educators and interested citizens from across the nation and asked them to judge what students should know and be able to do relative to a body of content reflected in the reading framework. This achievement-level-setting process was reviewed by numerous individuals including policymakers, representatives of professional organizations, teachers, parents, and other members of the general public. Prior to adopting these levels of student achievement, NAGB engaged a large number of persons to comment on the recommended levels and to review the results.

The results of the achievement-level-setting process, after NAGB's approval, became a set of achievement-level descriptions and a set of achievement-level cut scores. The cut scores are the scores on the 0–500 NAEP reading scale that define the lower boundaries of *Basic*, *Proficient*, and *Advanced* performance levels at grades 4, 8, and 12.

### **Reading Achievement-Level Descriptions for Each Grade**

Specific definitions of the *Basic*, *Proficient*, and *Advanced* reading achievement levels for grades 4 and 8 are presented in figures 1.4 and 1.5. The achievement levels are cumulative; therefore, students performing at the *Proficient* level also display the competencies associated with the *Basic* level, and students at the *Advanced* level also demonstrate the competencies associated with both the *Basic* and the *Proficient* levels. For each achievement level listed in figures 1.4 and 1.5, the scale score that corresponds to the lowest score within that level on the NAEP reading scale is shown in parentheses. For example, in figure 1.4 the scale score of 238 corresponds to the lowest score in the range defining the grade 4 *Proficient* level of achievement in reading.

**Figure 1.4** Descriptions of NAEP reading achievement levels, grade 4

<b>Grade 4 Achievement Levels</b>	
<b>Basic</b> (208)	<p>Fourth-grade students performing at the <i>Basic</i> level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences, and extend the ideas in the text by making simple inferences.</p> <p>For example, when reading <b>literary</b> text, they should be able to tell what the story is generally about—providing details to support their understanding—and be able to connect aspects of the stories to their own experiences.</p> <p>When reading <b>informational</b> text, <i>Basic</i>-level fourth graders should be able to tell what the selection is generally about or identify the purpose for reading it, provide details to support their understanding, and connect ideas from the text to their background knowledge and experiences.</p>
<b>Proficient</b> (238)	<p>Fourth-grade students performing at the <i>Proficient</i> level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connections between the text and what the student infers should be clear.</p> <p>For example, when reading <b>literary</b> text, <i>Proficient</i>-level fourth graders should be able to summarize the story, draw conclusions about the characters or plot, and recognize relationships such as cause and effect.</p> <p>When reading <b>informational</b> text, <i>Proficient</i>-level students should be able to summarize the information and identify the author's intent or purpose. They should be able to draw reasonable conclusions from the text, recognize relationships such as cause and effect or similarities and differences, and identify the meaning of the selection's key concepts.</p>
<b>Advanced</b> (268)	<p>Fourth-grade students performing at the <i>Advanced</i> level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge texts critically and, in general, give thorough answers that indicate careful thought.</p> <p>For example, when reading <b>literary</b> text, <i>Advanced</i>-level students should be able to make generalizations about the point of the story and extend its meaning by integrating personal experiences and other readings with ideas suggested by the text. They should be able to identify literary devices such as figurative language.</p> <p>When reading <b>informational</b> text, <i>Advanced</i>-level fourth graders should be able to explain the author's intent by using supporting material from the text. They should be able to make critical judgments of the form and content of the text and explain their judgments clearly.</p>

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

**Figure 1.5 Descriptions of NAEP reading achievement levels, grade 8**

<b>Grade 8 Achievement Levels</b>	
<b>Basic</b> (243)	<p>Eighth-grade students performing at the <i>Basic</i> level should demonstrate a literal understanding of what they read and be able to make some interpretations. When reading text appropriate to eighth grade, they should be able to identify specific aspects of the text that reflect the overall meaning, extend the ideas in the text by making simple inferences, recognize and relate interpretations and connections among ideas in the text to personal experience, and draw conclusions based on the text.</p> <p>For example, when reading <b>literary</b> text, <i>Basic</i>-level eighth graders should be able to identify themes and make inferences and logical predictions about aspects such as plot and characters.</p> <p>When reading <b>informational</b> text, they should be able to identify the main idea and the author's purpose. They should make inferences and draw conclusions supported by information in the text. They should recognize the relationships among the facts, ideas, events, and concepts of the text (e.g., cause and effect, order).</p> <p>When reading <b>practical</b> text, they should be able to identify the main purpose and make predictions about the relatively obvious outcomes of procedures in the text.</p>
<b>Proficient</b> (281)	<p>Eighth-grade students performing at the <i>Proficient</i> level should be able to show an overall understanding of the text, including inferential as well as literal information. When reading text appropriate to eighth grade, they should be able to extend the ideas in the text by making clear inferences from it, by drawing conclusions, and by making connections to their own experiences—including other reading experiences. <i>Proficient</i> eighth graders should be able to identify some of the devices authors use in composing text.</p> <p>For example, when reading <b>literary</b> text, students at the <i>Proficient</i> level should be able to give details and examples to support themes that they identify. They should be able to use implied as well as explicit information in articulating themes; to interpret the actions, behaviors, and motives of characters; and to identify the use of literary devices such as personification and foreshadowing.</p> <p>When reading <b>informational</b> text, they should be able to summarize the text using explicit and implied information and support conclusions with inferences based on the text.</p> <p>When reading <b>practical</b> text, <i>Proficient</i>-level students should be able to describe its purpose and support their views with examples and details. They should be able to judge the importance of certain steps and procedures.</p>
<b>Advanced</b> (323)	<p>Eighth-grade students performing at the <i>Advanced</i> level should be able to describe the more abstract themes and ideas of the overall text. When reading text appropriate to eighth grade, they should be able to analyze both meaning and form and support their analyses explicitly with examples from the text, and they should be able to extend text information by relating it to their experiences and to world events. At this level, student responses should be thorough, thoughtful, and extensive.</p> <p>For example, when reading <b>literary</b> text, <i>Advanced</i>-level eighth graders should be able to make complex, abstract summaries and theme statements. They should be able to describe the interactions of various literary elements (i.e., setting, plot, characters, and theme) and explain how the use of literary devices affects both the meaning of the text and their response to the author's style. They should be able to critically analyze and evaluate the composition of the text.</p> <p>When reading <b>informational</b> text, they should be able to analyze the author's purpose and point of view. They should be able to use cultural and historical background information to develop perspectives on the text and be able to apply text information to broad issues and world situations.</p> <p>When reading <b>practical</b> text, <i>Advanced</i>-level students should be able to synthesize information that will guide their performance, apply text information to new situations, and critique the usefulness of the form and content.</p>

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

## Trial Status of Achievement Levels

The law requires that the achievement levels are to be used on a trial basis until the Commissioner of Education Statistics determines “that such levels are reasonable, valid, and informative to the public.”<sup>5</sup> Until that determination is made, the law requires the Commissioner and the Board to state clearly the trial status of the achievement levels in all NAEP reports. In 1993, the first of several congressionally mandated evaluations of the achievement-level-setting process concluded that the procedures used to set the achievement levels were flawed and that the percentage of students at or above any particular achievement-level cut point may be underestimated.<sup>6</sup> Others have critiqued these evaluations, asserting that the weight of the empirical evidence does not support such conclusions.<sup>7</sup>

In response to the evaluations and critiques, NAGB sponsored an additional study of the 1992 reading achievement levels before deciding to use them for reporting NAEP 1994 results.<sup>8</sup> When reviewing the findings of this study, the

National Academy of Education (NAE) panel expressed concern about what it saw as a “confirmatory bias” in the study and about the inability of this study to “address the panel’s perception that the levels had been set too high.”<sup>9</sup> In 1997, the NAE panel summarized its concerns with interpreting NAEP results based on the achievement levels as follows:

First, the potential instability of the levels may interfere with the accurate portrayal of trends. Second, the perception that few American students are attaining the higher standards we have set for them may deflect attention to the wrong aspects of education reform. The public has indicated its interest in benchmarking against international standards, yet it is noteworthy that when American students performed very well on a 1991 international reading assessment, these results were discounted because they were contradicted by poor performance against the possibly flawed NAEP reading achievement levels in the following year.<sup>10</sup>

<sup>5</sup> No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).

<sup>6</sup> United States General Accounting Office. (1993). *Education Achievement Standards: NAGB’s Approach Yields Misleading Interpretations*. U.S. General Accounting Office Report to Congressional Requestors. Washington, DC: Author.

National Academy of Education. (1993). *Setting Performance Standards for Achievement: A Report of the National Academy of Education Panel on the Evaluations of the NAEP Trial State Assessment: An Evaluation of the 1992 Achievement Levels*. Stanford, CA: Author.

<sup>7</sup> Cizek, G. (1993). *Reactions to National Academy of Education Report*. Washington, DC: National Assessment Governing Board.

Kane, M. (1993). *Comments on the NAE Evaluation of the NAGB Achievement Levels*. Washington, DC: National Assessment Governing Board.

<sup>8</sup> American College Testing. (1995). *NAEP Reading Revisited: An Evaluation of the 1992 Achievement Level Descriptions*. Washington, DC: National Assessment Governing Board.

<sup>9</sup> National Academy of Education. (1996). Reading Achievement Levels. In *Quality and Utility: The 1994 Trial State Assessment in Reading. The Fourth Report of the National Academy of Education Panel on the Evaluation of the NAEP Trial State Assessment*. Stanford, CA: Author.

<sup>10</sup> National Academy of Education. (1997). *Assessment in Transition: Monitoring the Nation’s Educational Progress*, p. 99. Mountain View, CA: Author.



NCES and NAGB have sought and continue to seek new and better ways to set performance standards for NAEP.<sup>11</sup> For example, NCES and NAGB jointly sponsored a national conference that explored many issues related to standard setting in large-scale assessments.<sup>12</sup> Although new directions were presented and discussed, a proven alternative to the current process has not yet been identified. NCES and NAGB continue to call on the research community to assist in finding ways to improve standard setting for reporting NAEP results.

The most recent congressionally mandated evaluation conducted by the National Academy of Sciences (NAS) relied on prior studies of achievement levels, rather than carrying out new evaluations, on the grounds that the process has not changed substantially since the initial problems were identified. Instead, the NAS panel studied the development of the 1996 science achievement levels. The NAS panel basically concurred with earlier congressionally mandated studies. The panel concluded that “NAEP’s current achievement-level-setting procedures remain fundamentally flawed. The judgment tasks are difficult

and confusing; raters’ judgments of different item types are internally inconsistent; appropriate validity evidence for the cut scores is lacking; and the process has produced unreasonable results.”<sup>13</sup>

The NAS panel accepted the continuing use of achievement levels in reporting NAEP results on a trial basis, until such time as better procedures can be developed. Specifically, the NAS panel concluded that “. . . tracking changes in the percentages of students performing at or above those cut scores (or in fact, any selected cut scores) can be of use in describing changes in student performance over time.”<sup>14</sup>

NAGB urges all who are concerned about student performance levels to recognize that the use of these achievement levels is a developing process and is subject to various interpretations. NAGB and NCES believe that the achievement levels are useful for reporting trends in the educational achievement of students in the United States.<sup>15</sup> In fact, achievement-level results have been used in reports by the President of the United States, the Secretary of Education, state governors, legislators, and members of Congress. Government leaders in the

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<sup>11</sup> Reckase, M. D. (2000). *The Evolution of the NAEP Achievement Levels Setting Process: A Summary of the Research and Development Efforts Conducted by ACT*. Iowa City, IA: ACT, Inc.

<sup>12</sup> National Assessment Governing Board and National Center for Education Statistics. (1995). *Proceedings of the Joint Conference on Standard Setting for Large-Scale Assessments of the National Assessment Governing Board (NAGB) and the National Center for Education Statistics (NCES)*. Washington, DC: Government Printing Office.

<sup>13</sup> Pellegrino, J. W., Jones, L. R., and Mitchell, K. J. (Eds.). (1998). *Grading the Nation’s Report Card: Evaluating NAEP and Transforming the Assessment of Educational Progress*. Committee on the Evaluation of National Assessments of Educational Progress, Board on Testing and Assessment, Commission on Behavioral and Social Sciences and Education, National Research Council. Washington, DC: National Academy Press.

<sup>14</sup> *Ibid.*, 176.

<sup>15</sup> Forsyth, R. A. (2000). A Description of the Standard-Setting Procedures Used by Three Standardized Test Publishers. In *Student Performance Standards on the National Assessment of Educational Progress: Affirmations and Improvements*. Washington, DC: National Assessment Governing Board.

Nellhaus, J. M. (2000). States with NAEP-Like Performance Standards. In *Student Performance Standards on the National Assessment of Educational Progress: Affirmations and Improvements*. Washington, DC: National Assessment Governing Board.

nation and in more than 40 states use these results in their annual reports. However, based on the congressionally mandated evaluations so far, NCES agrees with the NAS panel's recommendation that caution needs to be exercised in the use of the current achievement levels. NCES has concluded that these achievement levels should continue to be used on a trial basis and be interpreted with caution.

### **Interpreting NAEP Results**

The average scores and percentages presented in this report are estimates based on samples of students rather than on entire populations. Moreover, the collection of questions used at each grade level is but a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP reading framework. As such, the results are subject to a measure of uncertainty, reflected in the standard error of the estimates—a range of up to a few points above or below the score or percentage—which accounts for potential score or percentage fluctuation due to sampling and measurement error. The estimated standard errors for the estimated scale scores and percentages in this report are accessible through the NAEP Data Tool on the NAEP web site (<http://nces.ed.gov/nationsreportcard/naepdata/>). Examples of these estimated standard errors are also provided in appendix A of this report.

The differences between scale scores and between percentages discussed in the following chapters take into account the standard errors associated with the estimates. Comparisons are based on statistical tests that consider both the

magnitude of the difference between the group average scores or percentages and the standard errors of those statistics. Estimates based on smaller subgroups are likely to have relatively large standard errors. As a consequence, some seemingly large differences may not be statistically significant. That is, it cannot be determined whether these differences are due to the particular make-up of the samples of students who were selected, or to true differences in the population of interest. When this is the case, the term “apparent difference” or “no measurable difference” is used in this report. Differences between scores or between percentages are discussed in this report only when they are significant from a statistical perspective.

Beginning in 2002, the NAEP national sample was obtained by aggregating the samples from each state, rather than obtaining an independently selected national sample. Consequently, the national sample size increased and smaller differences between years or between subgroups of students were found to be statistically significant than would have been detected in previous assessment years. In keeping with past practice, all statistically significant differences are indicated in this report. All differences reported are significant at the .05 level with appropriate adjustments for multiple comparisons. The term “significant” is not intended to imply a judgment about the absolute magnitude or the educational relevance of the differences. It is intended to identify statistically dependable differences in average scores or percentages to help inform dialogue among policymakers, educators, and the public.



While the score ranges at each grade in reading are identical, the scale was derived independently at each grade. Therefore, average scale scores across grades cannot be compared. For example, equal scale scores on the grade 4 and grade 8 scales do not imply equal levels of reading achievement.

Comparisons of performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Percentages of students excluded from NAEP may vary considerably across states or districts, as well as across years. Comparisons of achievement results should be interpreted with caution if the exclusion rates vary widely. Percentages of students with disabilities and limited-English-proficient students identified, excluded, and assessed are presented in tables A.10–A.21 in appendix A.

The results presented are meant to describe some aspects of the condition of education. They are best viewed as suggesting various ideas to be further examined in light of other data, including state and local data, and in the context of the large research literature elaborating on the many factors contributing to educational achievement.

However, some readers are tempted to make unwarranted causal inferences from simple cross tabulations. At the risk of sounding dogmatic, it is almost never the case that a simple cross tabulation of any variable with a measure of educational achievement is conclusive proof that differences in that variable are a cause of differential educational achievement. The old adage that “correlation is not causation” is a wise precaution to be

kept in mind when viewing the results presented here. Experienced researchers routinely formulate multiple hypotheses to take these possibilities into account and readers of this volume are encouraged to do likewise.

Additional NAEP data are available in the NAEP data tool and in restricted-access research databases. Researchers and policy analysts are free to make use of the data (subject to various confidentiality restrictions) as they wish. However, as part of the Institute for Education Sciences, NCES has a responsibility to try to discourage misleading inferences from the data presented and to educate the public on the difficulty of making valid causal inferences in a field as complex as education.

### **Overview of the Remaining Report**

This report describes the reading performance of fourth- and eighth-graders in the nation, in participating states and other jurisdictions, in large central city school districts, and in selected urban school districts. Chapter 2 presents overall reading scale-score and achievement-level results across years for both the nation and participating states and other jurisdictions. Chapter 3 discusses national results for subgroups of students by gender, race/ethnicity, eligibility for free/reduced-price school lunch, parents’ highest level of education (for grade 8 only), type of school (public and nonpublic), and school’s type of location (central city, urban fringe/large town, rural/small town). State and jurisdiction results are reported by gender, race/ethnicity, and eligibility for free/reduced-price school lunch. Overall and subgroup results for selected urban districts are presented in chapter 4.

Chapter 5 presents sample assessment questions and student responses at each grade level, including samples of multiple-choice and constructed-response questions. A table showing the percentage of students who answered the question successfully accompanies each sample question. In addition, item maps for each grade level describe the skill or ability needed to answer particular reading questions and show the score points at which individual students had a high probability of successfully answering particular questions, thereby indicating the relative difficulty of each question.

The appendices of this report contain information to expand the results presented in chapters 2–5. Appendix A contains an overview of assessment development, sampling, administration, and analysis procedures. Appendix B presents the percentages of students in each of the subgroups reported for the nation, states and other jurisdictions, and districts. Appendix C includes additional state-level results by subgroup. Appendix D shows state-level and district-level contextual data from sources other than NAEP. Appendix E contains the reading passages corresponding with the sample questions discussed in chapter 5.

# 2

## Average Reading Scale Score and Achievement-Level Results for the Nation and States

### Overview

This chapter presents the NAEP 2003 reading results for public and nonpublic school students in the nation as a whole and by region of the country, and for public school students in participating states and other jurisdictions, at grades 4 and 8. Average scores on the NAEP reading composite scale range from 0 to 500; the reading achievement levels are *Basic*, *Proficient*, and *Advanced*.

In addition to the results from the 2003 reading assessment, national results are presented from 1992, 1994, 1998, and 2002 at both grades and for 2000 at grade 4 only. Results for participating states and other jurisdictions are included for four previous years at grade 4 (1992, 1994, 1998, and 2002) and for two previous years at grade 8 (1998 and 2002). At each grade, the national sample in 2003 comprised the combined sample of students assessed in each participating state plus an additional private school sample.

Results presented in the figures and tables throughout this report distinguish between two different reporting samples. The most recent results, based on administration procedures in which testing accommodations were permitted for special-needs students (national sample between 1998 and 2003 and state-level samples for 1998, 2002, and 2003), are denoted by solid lines or shading. Results from administrations where accommodations were not

permitted (national results between 1992 and 2000 at grade 4 and from 1992 to 1998 at grade 8; state-level results from 1992 to 1998 at grade 4 and in 1998 at grade 8) are highlighted by broken lines and unshaded areas. See chapter 1 for more information on the change in administration procedures.

Both types of administration procedures were used in 1998 at the national and state levels for both grades, and at the national level for grade 4 in 2000. Therefore there are two different sets of results in those years. Comparisons with data from 2003 are based on administrations where accommodations were per-

mitted. Comparisons between the two sets of results in the years when both procedures were used are discussed in detail in other NAEP reports.<sup>1</sup>

### **National Reading Scale Score Results**

Figure 2.1 displays the average reading score from 1992 to 2003 for fourth- and eighth-grade students. At grade 4, no measurable difference was detected between the average score in 2003 and the score in 1992. At grade 8, the average reading score decreased by 1 point between 2002 and 2003; however, the score in 2003 was higher than that in 1992.

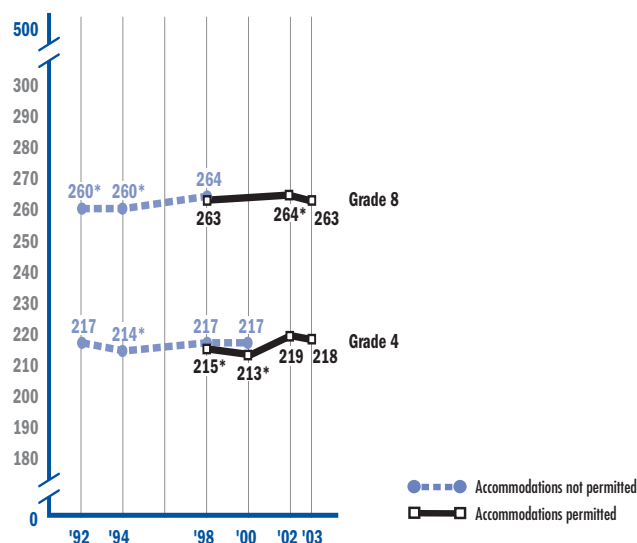
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<sup>1</sup> Donahue, P. L., Finnegan, R. J., Lutkus, A. D., Allen, N. L., and Campbell, J. R. (2001). *The Nation's Report Card: Fourth-Grade Reading 2000* (NCES 2002-499). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

Lutkus, A. D., and Mazzeo, J. (2003) *Including Special-Needs Students in the NAEP 1998 Reading Assessment: Part I, Comparison of Overall Results With and Without Accommodations* (NCES 2003-467). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.

**Figure 2.1 Average reading scale scores, grades 4 and 8: 1992–2003**

**Grades 4 and 8**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

**National Reading Scale Scores by Percentile**

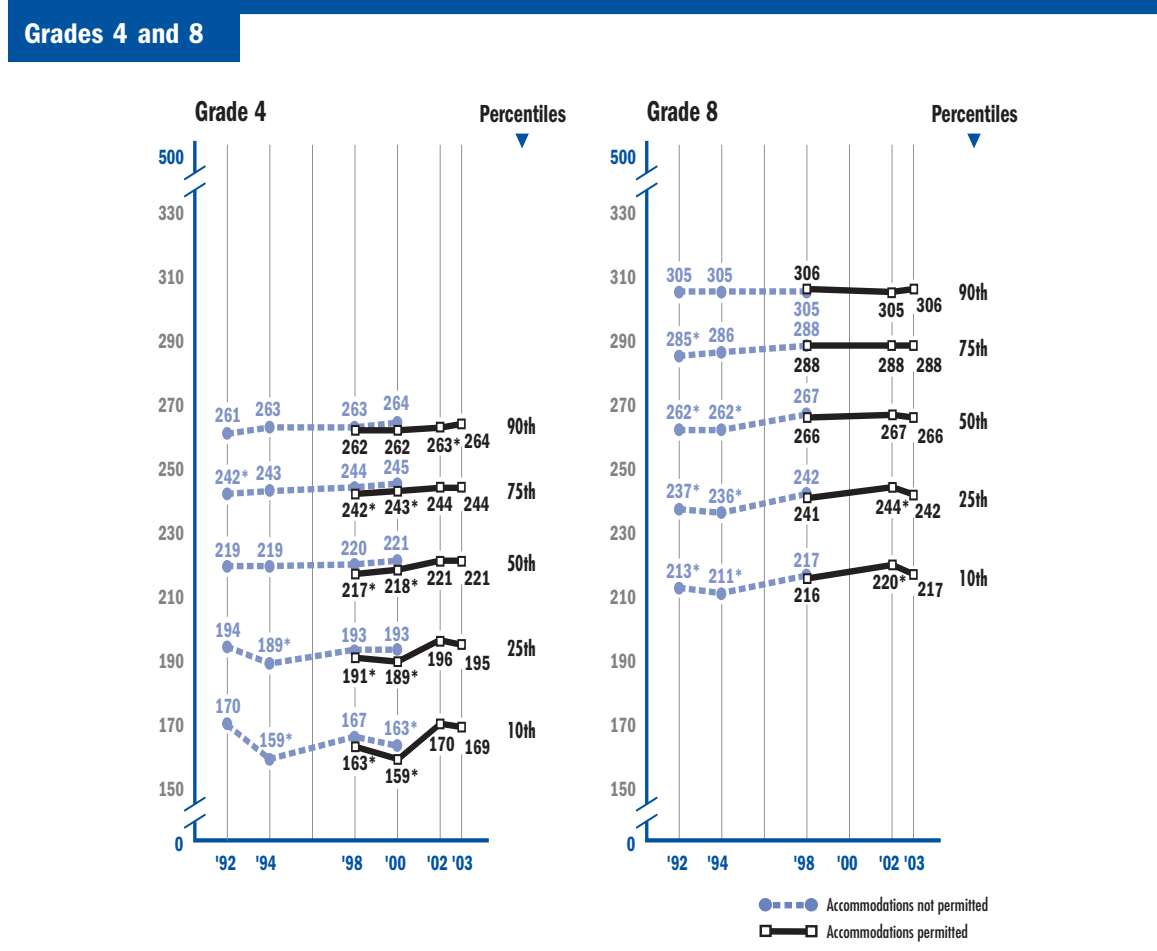
Another way to view students' performance is by looking at how scores have changed across the performance distribution. An examination of scores at different percentiles on the 0–500 reading scale at each grade indicates whether or not the changes seen in the overall national average score results are reflected in the performance of lower-, middle-, and higher-performing students. Figure 2.2 shows the reading scale score for students scoring at the 10th, 25th, 50th, 75th, and 90th percentiles at grades 4 and 8. The percentile indicates the percentage of students whose scores

fell below a particular point on the NAEP reading scale. For example, the 75th percentile score at grade 4 was 244 in 2003, indicating that 75 percent of fourth-graders scored below 244.

The fourth-grade score showed a one-point increase at the 90th percentile between 2002 and 2003, but there was no measurable difference detected between the score in 2003 and that in 1992. The score at the 75th percentile for fourth-graders was higher in 2003 than in 1992.

Scores for eighth-graders showed decreases at the 10th and 25th percentiles from 2002 to 2003. Scores at the 10th, 25th, 50th, and 75th percentiles were higher in 2003 than in 1992.

**Figure 2.2 Reading scale score percentiles, grades 4 and 8: 1992–2003**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

### National Reading Achievement-Level Results

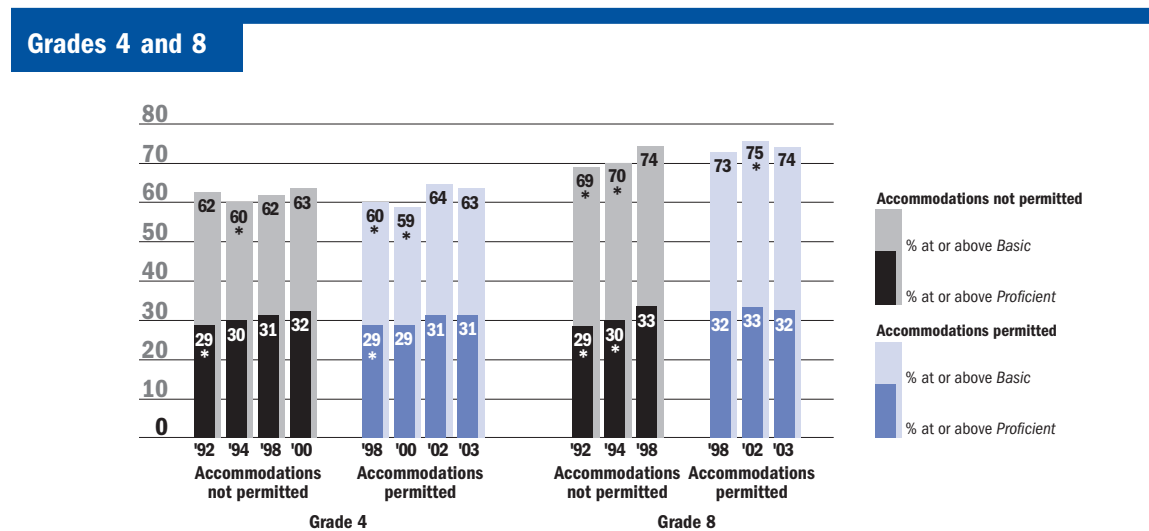
In addition to reporting average reading scale scores, NAEP reports reading performance by achievement levels. The reading achievement levels are *Basic*, *Proficient*, and *Advanced*. Discussion related to the setting of achievement levels is covered in chapter 1.

Figure 2.3 tracks the percentages of students performing at or above *Basic* and at or above *Proficient*—the level identified by the National Assessment Governing Board (NAGB) as the level at which all students should perform—across assessment years. Table 2.1 presents the achievement-level results in two ways for each grade: as the percentage of students performing within each achievement

level, and as the percentage of students at or above the *Basic* level and at or above the *Proficient* level. The percentages at or above specific achievement levels are cumulative. Included among the percentage of students performing at or above the *Basic* level are those who have achieved the *Proficient* and *Advanced* levels of performance. Included among stu-

dents at or above the *Proficient* level are those who have attained the *Advanced* level of performance. Although significant differences in the percentages of students performing within achievement levels are indicated in the table, only the differences at or above *Basic*, at or above *Proficient*, and at *Advanced* are discussed in this section.

**Figure 2.3 Percentages of students at or above *Basic* and *Proficient* in reading, grades 4 and 8: 1992–2003**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

At grade 4, the percentage of fourth-graders at or above *Proficient* was higher in 2003 than in 1992. As table 2.1 shows, there was a one-point increase in the percentage of fourth-graders at *Advanced* since 2002, but no measurable difference was detected between the percentage in 1992 and the corresponding percentage in 2003.

At grade 8, the percentage of students at or above *Basic* decreased by one point between 2002 and 2003 but was higher in 2003 than in 1992. The percentage of eighth-graders at or above *Proficient* was also higher in 2003 than in 1992.



**Table 2.1 Percentages of students, by reading achievement level, grades 4 and 8: 1992–2003**

						At or above	
		Below <b>Basic</b>	At <b>Basic</b>	At <b>Proficient</b>	At <b>Advanced</b>	<b>Basic</b>	<b>Proficient</b>
<b>Grade 4</b>							
Accommodations not permitted	1992	38	34	22	6	62	29 *
	1994	40 *	31	22	7	60 *	30
	1998	38	32	24	7	62	31
	2000	37	31	24	8	63	32
Accommodations permitted	1998	40 *	30	22	7	60 *	29 *
	2000	41 *	30	23	7	59 *	29
	2002	36	32	24	7 *	64	31
	2003	37	32	24	8	63	31
<b>Grade 8</b>							
Accommodations not permitted	1992	31 *	40	26 *	3	69 *	29 *
	1994	30 *	40 *	27 *	3	70 *	30 *
	1998	26	41	31	3	74	33
Accommodations permitted	1998	27	41	30	3	73	32
	2002	25 *	43 *	30	3	75 *	33
	2003	26	42	29	3	74	32

\* Significantly different from 2003.

NOTE: Detail may not sum to totals because of rounding. Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

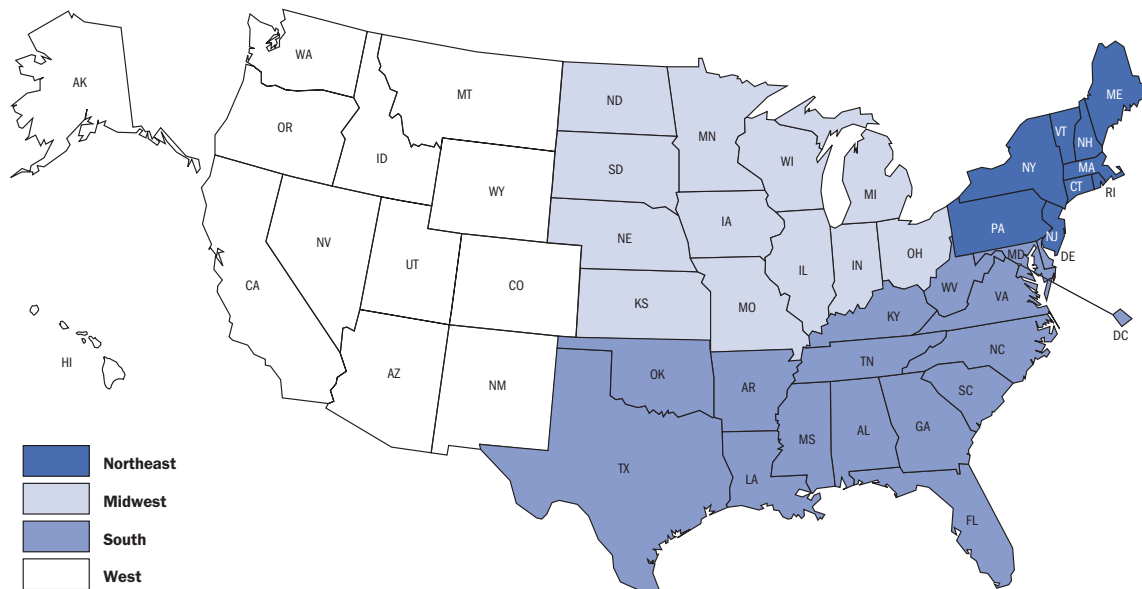
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

## Reading Results by Region of the Country

Prior to 2003, NAEP results were reported for four NAEP-defined regions of the nation: Northeast, Southeast, Central, and West. As of 2003, to align NAEP with other federal data collections, NAEP analysis and reports have used the U.S. Census Bureau’s definition of “region.” The four regions defined by the U.S. Census Bureau are Northeast,

South, Midwest, and West. Figure 2.4 shows how states are subdivided into these regions (the two Department of Defense Educational Activities jurisdictions are not assigned to any region). As a result of the change in the region variable, the following section presents the results by region of the country for the 2003 assessment only.

**Figure 2.4** Map of regions of the country according to U.S. Census



SOURCE: U.S. Department of Commerce Economics and Statistics Administration, U.S. Census Bureau.

Average reading scale scores by region are shown in table 2.2 for grades 4 and 8. At grade 4, average reading scores were higher for students in the Northeast than in the Midwest, South, and West. In the Midwest, average scores were higher than in the South and West, and average

scores for students in the South were higher than for students in the West.

At grade 8, average scores in the Northeast and Midwest were higher than in the South and West, and average scores in the South were higher than in the West.

**Table 2.2 Average reading scale scores, by region of the country, grades 4 and 8: 2003**

		2003
<b>Grade 4</b>	Northeast	224
	Midwest	222
	South	217
	West	212
<b>Grade 8</b>	Northeast	268
	Midwest	269
	South	261
	West	258

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

Table 2.3 displays achievement-level information by region for fourth- and eighth-graders both as the percentages of students performing within each achievement-level range and as the percentages of students performing at or above the *Basic* and *Proficient* levels.

At grade 4, the percentages of students performing at or above the *Basic* and *Proficient* levels were higher in the Northeast than in the Midwest, the South, and the West. Higher percentages of students performed at or above the

*Basic* and *Proficient* levels in the Midwest than in South and the West, and higher percentages of students performed at or above the *Basic* and *Proficient* levels in the South than in the West.

At grade 8, higher percentages of students performed at or above the *Basic* and *Proficient* levels in the Northeast and Midwest than in the South and West. In the South, higher percentages of students performed at or above the *Basic* level than in the West.

**Table 2.3 Percentages of students, by reading achievement level and region of the country, grades 4 and 8: 2003**

Grade	Region	Below Basic				At or above	
		Below <b>Basic</b>	At <b>Basic</b>	At <b>Proficient</b>	At <b>Advanced</b>	<b>Basic</b>	<b>Proficient</b>
<b>Grade 4</b>	Northeast	30	32	28	9	70	37
	Midwest	32	33	26	9	68	35
	South	38	32	23	7	62	30
	West	43	30	20	6	57	26
<b>Grade 8</b>	Northeast	21	41	34	4	79	38
	Midwest	21	42	33	4	79	37
	South	28	43	26	3	72	29
	West	32	40	25	3	68	28

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Reading Results for States and Other Jurisdictions

In addition to the national results, reading performance data were collected for fourth- and eighth-grade students attending public schools in 50 states and 3 other jurisdictions that participated in the 2003 assessment.<sup>2</sup> At both fourth and eighth grades, all jurisdictions met NCES participation rate standards. Variation in exclusion rates should be considered when interpreting state results, and is discussed in detail in the section on Students with Disabilities and Limited-English-Proficient Students in appendix A.

Statistically significant changes across years are indicated when examining only one jurisdiction at a time (\*), or when using a multiple comparison procedure based on all the jurisdictions that participated (\*\*). Differences discussed in this report are based on statistically significant findings detected using either comparison procedure. (See appendix A for a more detailed discussion of comparison procedures.)

### Reading Scale Score Results by State/Jurisdiction

Average reading scale scores by jurisdiction are shown in table 2.4 for grade 4 and in table 2.5 for grade 8. Whereas the national results presented in the previous sections of this chapter represent both public and nonpublic schools combined, the national average score shown in each of these tables represents the performance of public school students only.

Among the 46 jurisdictions that participated in both the 2002 and 2003 fourth-grade assessments, Florida showed an increase in average reading score and Massachusetts showed a decrease. Of the 42 jurisdictions that participated in both the 1992 and 2003 fourth-grade assessments, 13 showed increases and 5 showed declines in average scores.

At grade 8, of 44 jurisdictions that participated in both 2002 and 2003, Wyoming showed a gain and 6 jurisdictions showed declines in average scores. Of the 39 jurisdictions that participated in both 1998 (when accommodations were permitted) and 2003, 8 showed increases and 7 showed declines in average scores.

<sup>2</sup> Throughout this chapter the term “jurisdiction” is used to refer to the 50 states, the District of Columbia, and the two Department of Defense school systems that participated in the NAEP reading assessments.

**Table 2.4 Average reading scale scores, grade 4 public schools: By state, 1992–2003**

Grade 4	Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	215	212*	215	213*	217	216
Alabama	207	208	211	211	207	207
Alaska	—	—	—	—	—	212
Arizona	209	206	207	206	205	209
Arkansas	211	209***	209*	209*	213	214
California	202	197***	202	202	206	206
Colorado	217***	213***	222	220	—	224
Connecticut	222***	222***	232	230	229	228
Delaware	213***	206***	212***	207***	224	224
Florida	208***	205***	207***	206***	214*	218
Georgia	212	207***	210	209***	215	214
Hawaii	203*	201***	200***	200***	208	208
Idaho	219	—	—	—	220	218
Illinois	—	—	—	—	—	216
Indiana	221	220	—	—	222	220
Iowa	225	223	223	220	223	223
Kansas	—	—	222	221	222	220
Kentucky	213***	212***	218	218	219	219
Louisiana	204	197***	204	200*	207	205
Maine	227*	228***	225	225	225	224
Maryland	211***	210***	215	212***	217	219
Massachusetts	226	223***	225	223***	234***	228
Michigan	216	—	217	216	219	219
Minnesota	221	218***	222	219	225	223
Mississippi	199***	202	204	203	203	205
Missouri	220	217***	216***	216***	220	222
Montana	—	222	226	225	224	223
Nebraska	221	220	—	—	222	221
Nevada	—	—	208	206	209	207
New Hampshire	228	223***	226	226	—	228
New Jersey	223	219***	—	—	—	225
New Mexico	211***	205	206	205	208	203
New York	215***	212***	216***	215***	222	222
North Carolina	212***	214***	217*	213***	222	221
North Dakota	226***	225***	—	—	224	222
Ohio	217***	—	—	—	222	222
Oklahoma	220***	—	220***	219***	213	214
Oregon	—	—	214	212***	220	218
Pennsylvania	221	215	—	—	221	219
Rhode Island	217	220	218	218	220	216
South Carolina	210***	203***	210*	209***	214	215
South Dakota	—	—	—	—	—	222
Tennessee	212	213	212	212	214	212
Texas	213	212	217	214	217	215
Utah	220	217	215*	216	222	219
Vermont	—	—	—	—	227	226
Virginia	221	213***	218*	217***	225	223
Washington	—	213***	217*	218	224	221
West Virginia	216*	213***	216	216	219	219
Wisconsin	224*	224***	224*	222	—	221
Wyoming	223	221	219	218*	221	222
<b>Other jurisdictions</b>						
District of Columbia	188	179***	182***	179***	191	188
DDESS <sup>2</sup>	—	—	220*	219*	225	223
DoDDS <sup>3</sup>	—	218***	223	221***	224	225

— Not available. The jurisdiction did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table 2.5 Average reading scale scores, grade 8 public schools: By state, 1998–2003**

Grade 8	Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	261	261	263 *	261
Alabama	255	255	253	253
Alaska	—	—	—	256
Arizona	261 **	260 **	257	255
Arkansas	256	256	260	258
California	253	252	250	251
Colorado	264 *	264 *	—	268
Connecticut	272 **	270 *	267	267
Delaware	256 **	254 **	267 *	265
Florida	253	255	261	257
Georgia	257	257	258	258
Hawaii	250	249	252	251
Idaho	—	—	266	264
Illinois	—	—	—	266
Indiana	—	—	265	265
Iowa	—	—	—	268
Kansas	268	268	269	266
Kentucky	262 *	262 *	265	266
Louisiana	252	252	256	253
Maine	273 **	271 *	270	268
Maryland	262	261	263	262
Massachusetts	269 *	269 *	271	273
Michigan	—	—	265	264
Minnesota	267	265	—	268
Mississippi	251 *	251	255	255
Missouri	263 **	262 **	268	267
Montana	270	271	270	270
Nebraska	—	—	270 *	266
Nevada	257 **	258 **	251	252
New Hampshire	—	—	—	271
New Jersey	—	—	—	268
New Mexico	258 **	258 **	254	252
New York	266	265	264	265
North Carolina	264	262	265 *	262
North Dakota	—	—	268	270
Ohio	—	—	268	267
Oklahoma	265 *	265 *	262	262
Oregon	266	266	268 *	264
Pennsylvania	—	—	265	264
Rhode Island	262	264 **	262	261
South Carolina	255	255 *	258	258
South Dakota	—	—	—	270
Tennessee	259	258	260	258
Texas	262	261	262	259
Utah	265	263	263	264
Vermont	—	—	272	271
Virginia	266	266	269	268
Washington	265	264	268 *	264
West Virginia	262	262	264 *	260
Wisconsin	266	265	—	266
Wyoming	262 **	263 **	265 *	267
<b>Other jurisdictions</b>				
District of Columbia	236	236	240	239
DDESS <sup>2</sup>	269	268	272	269
DoDDS <sup>3</sup>	269 **	269 **	273	273

— Not available. The jurisdiction did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

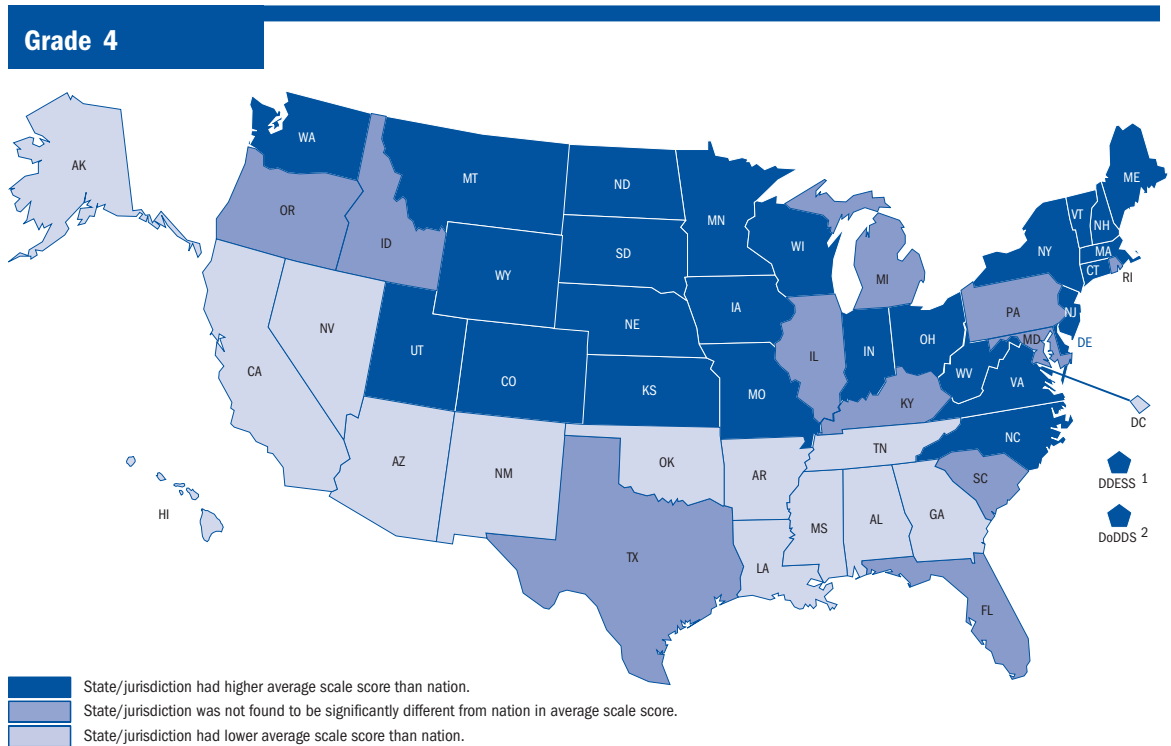
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

The maps in figures 2.5 and 2.6 compare jurisdictional and national average reading scores for public school students in 2003 at grades 4 and 8 respectively. In 2003, 28 of the 53 jurisdictions that participated at grade 4 had average scores that were higher than the national average, and 14 had average scores that

were lower than the average score for the nation.

Of the 53 jurisdictions that participated in 2003 at grade 8, 31 had average scores that were higher than the national average, and 16 had average scores that were lower than the national average score.

**Figure 2.5 Comparison of state and national public school average reading scale scores, grade 4: 2003**



<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

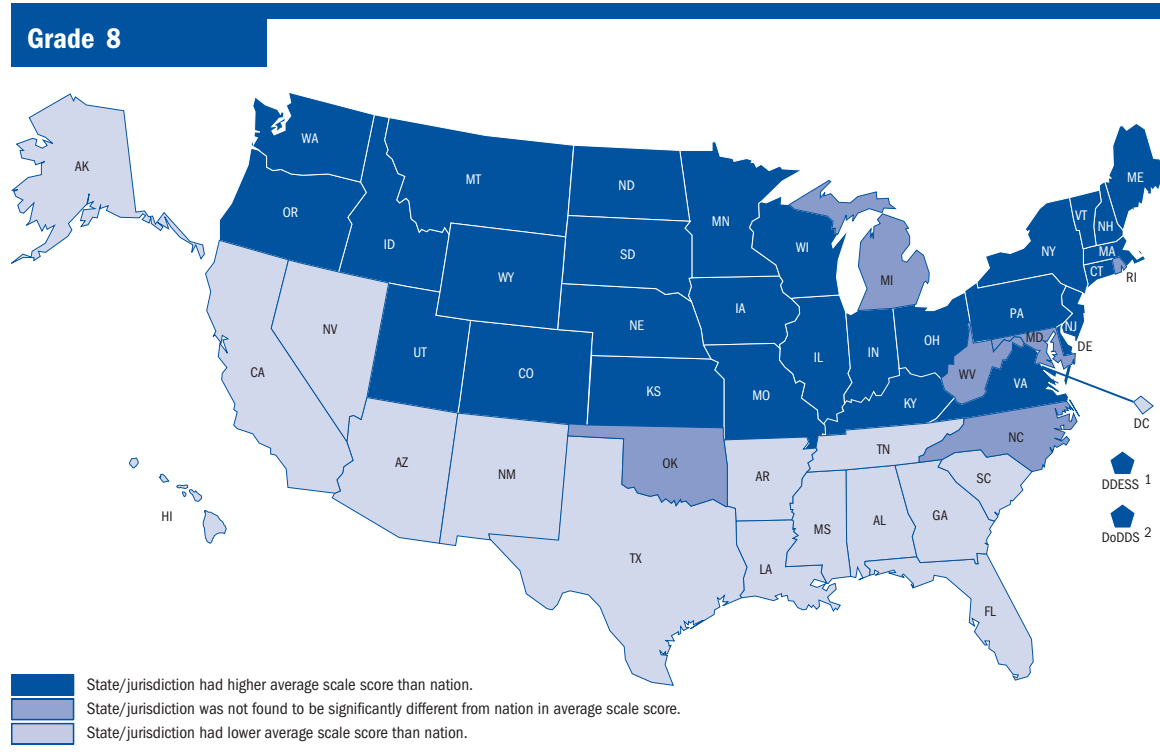
<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.



**Figure 2.6 Comparison of state and national public school average reading scale scores, grade 8: 2003**



<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Cross-State/Jurisdiction Reading Scale Score Comparisons

Figures 2.7 and 2.8 display the differences in the NAEP 2003 average reading scale scores between any two participating jurisdictions at grades 4 and 8 respectively. These figures are set up similarly to mileage charts on travel maps. On the line across the top of the figure, find the name of the target jurisdiction and follow the column below the target jurisdiction to the jurisdiction chosen for comparison. If the cell of the comparison jurisdiction is not shaded, no statistically significant difference between the scale scores of the two jurisdictions was detected. If the cell of the comparison jurisdiction is lightly shaded, the average scale score of that jurisdiction was higher than the scale score of the target jurisdiction named at

the top of the column. Darkly shaded cells indicate that the average scale score of the comparison jurisdiction was lower than that of the target jurisdiction selected at the top of the column.

At grade 4, Connecticut, New Hampshire, Massachusetts, Vermont, and New Jersey were among the highest performing states. Any apparent differences in average scores between the five top-performing states were not found to be statistically significant.




At grade 8, Massachusetts, Department of Defense Overseas schools, New Hampshire, and Vermont were among the highest performing states. Any apparent differences in average scores between the four top-performing jurisdictions were not found to be statistically significant.

**Figure 2.7 Cross-state comparison of average reading scale scores, grade 4 public schools: 2003**

**Grade 4**

**Instructions:** Read down the column directly under a jurisdiction name listed in the heading at the top of the figure. Match the shading intensity surrounding a jurisdiction's abbreviation to the key below to determine whether the average reading scale score of this jurisdiction was found to be higher than, not significantly different from, or lower than the jurisdiction in the column heading. For example, note the column under Maine: Maine's score was lower than Connecticut, New Hampshire, and Massachusetts; not significantly different from that in the jurisdictions from Vermont through Washington; and higher than in the remaining jurisdictions down the column.

CT	NH	MA	VT	NJ	DI	DE	ME	CO	DD	VA	IA	MT	MN	MO	NY	OH	ND	NC	WA	WI	IN	KS	UT	WV	KY	MI	PA	MD	ID	FL	OR	RI	IL	TX	SC	AR	GA	OK	TN	AK	AZ	HI	AL	NV	CA	MS	LA	NM	DC
CT	NH	MA	VT	NJ	DI	DE	ME	CO	DD	VA	IA	MT	MN	MO	NY	OH	ND	NC	WA	WI	IN	KS	UT	WV	KY	MI	PA	MD	ID	FL	OR	RI	IL	TX	SC	AR	GA	OK	TN	AK	AZ	HI	AL	NV	CA	MS	LA	NM	DC

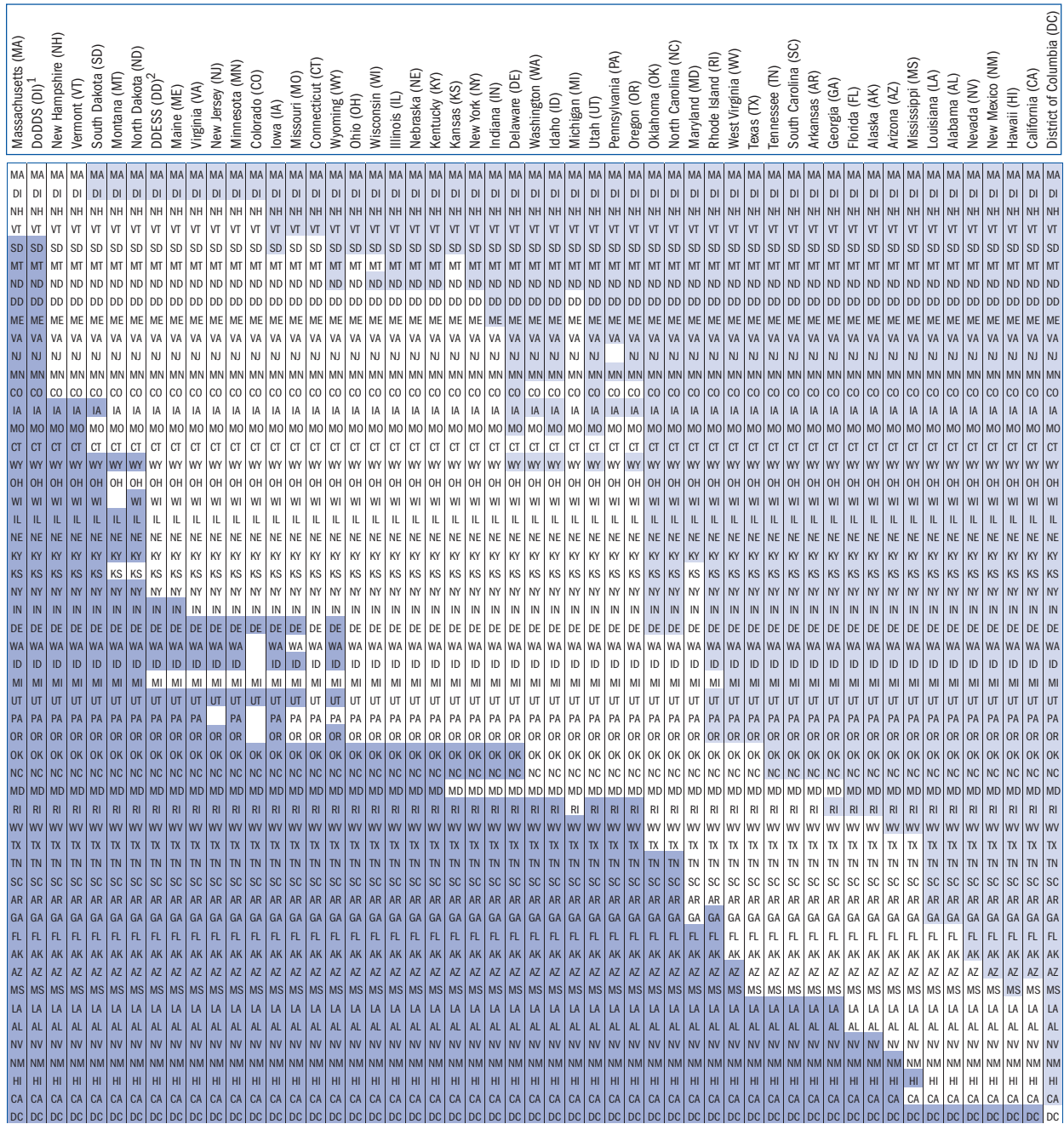
-  Jurisdiction had higher average scale score than the jurisdiction listed at the top of the figure.
-  No significant difference detected from the jurisdiction listed at the top of the figure.
-  Jurisdiction had lower average scale score than the jurisdiction listed at the top of the figure.




1 Department of Defense Dependents Schools (Overseas).  
 2 Department of Defense Domestic Dependent Elementary and Secondary Schools.  
 NOTE: The between-jurisdiction comparisons take into account sampling and measurement error and that each jurisdiction is being compared with every other jurisdiction. Significance is determined by an application of a multiple-comparison procedure. See appendix A for more details. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Figure 2.8 Cross-state comparison of average reading scale scores, grade 8 public schools: 2003**

**Grade 8**

**Instructions:** Read down the column directly under a jurisdiction name listed in the heading at the top of the figure. Match the shading intensity surrounding a jurisdiction's abbreviation to the key below to determine whether the average reading scale score of this jurisdiction was found to be higher than, not significantly different from, or lower than the jurisdiction in the column heading. For example, note the column under Connecticut: Connecticut's score was lower than Massachusetts, DoDDS, New Hampshire, and Vermont; not significantly different from that in the jurisdictions from South Dakota through Oregon; and higher than in the remaining jurisdictions down the column.



-  Jurisdiction had higher average scale score than the jurisdiction listed at the top of the figure.
-  No significant difference detected from the jurisdiction listed at the top of the figure.
-  Jurisdiction had lower average scale score than the jurisdiction listed at the top of the figure.

1 Department of Defense Dependents Schools (Overseas).  
 2 Department of Defense Domestic Dependent Elementary and Secondary Schools.  
 NOTE: The between-jurisdiction comparisons take into account sampling and measurement error and that each jurisdiction is being compared with every other jurisdiction. Significance is determined by an application of a multiple-comparison procedure. See appendix A for more details. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

## Reading Achievement-Level Results by State/Jurisdiction

Achievement-level results for jurisdictions are presented both as the percentage of students scoring within each reading achievement-level range and as the percentage of students performing at or above the *Proficient* level. The percentage of students within each reading achievement-level range for participating jurisdictions in 2003 is presented in figure 2.9 for grade 4 and in figure 2.10 for grade 8. The shaded bars represent the proportion of students in each of the three achievement levels (*Basic*, *Proficient*, and *Advanced*), as well as the proportion of students who performed below the *Basic* level. The central vertical line divides the proportion of students who fell below the *Proficient* level (i.e., at *Basic* or below *Basic*) from those who performed at or above the *Proficient* level (i.e., at *Proficient* or at *Advanced*). Scanning down the horizontal bars to the right of the vertical line allows comparison of jurisdictions' percentages of students at or above *Proficient*. Jurisdictions are listed in the figures in three clusters based on statistical comparison of

the percentage of students performing at or above *Proficient* in each jurisdiction with the national percentage of public school students performing at or above *Proficient*. The jurisdictions in the top cluster of each figure had a higher percentage of students who performed at or above the *Proficient* level compared to the nation. The percentages of students in jurisdictions clustered in the middle were not found to differ significantly from the national percentage. Jurisdictions in the bottom cluster had percentages lower than the national percentage. Within each cluster, jurisdictions are listed alphabetically.

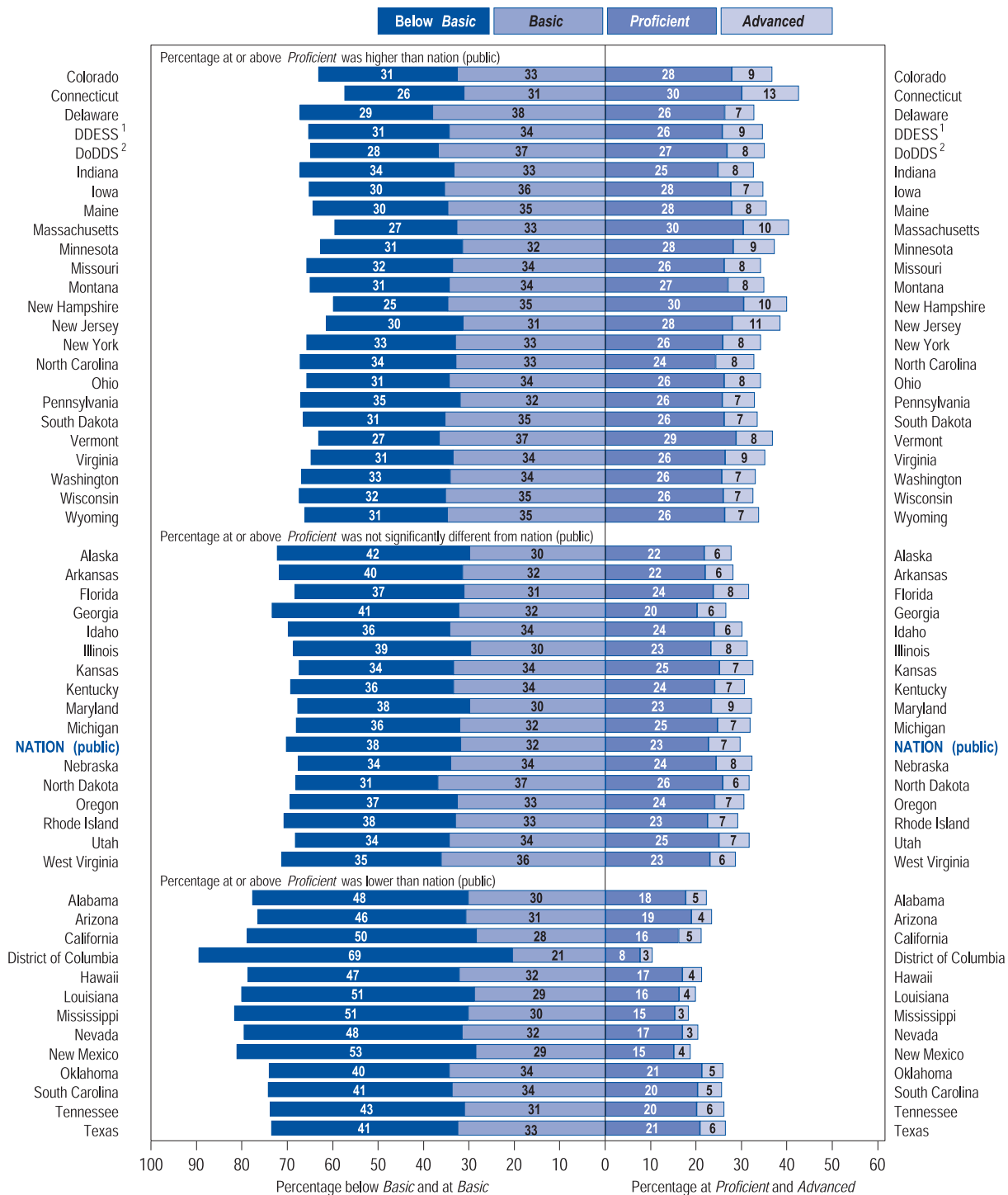
Figure 2.9 shows that, at grade 4, 24 jurisdictions had higher percentages of students at or above *Proficient* than the nation, and 13 had percentages that were lower than the nation.

In figure 2.10, the results for grade 8 show that 25 jurisdictions had higher percentages of students at or above *Proficient* than the nation, and 17 had percentages that were lower than the nation.

**Figure 2.9 Percentage of students within each reading achievement level, grade 4 public schools: By state, 2003**

**Grade 4**

The bars below contain percentages of students in each NAEP reading achievement-level range. Each population of students is aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above. Jurisdictions are listed alphabetically within three groups: the percentage at or above *Proficient* was higher than, not found to be significantly different from, or lower than the nation.



<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

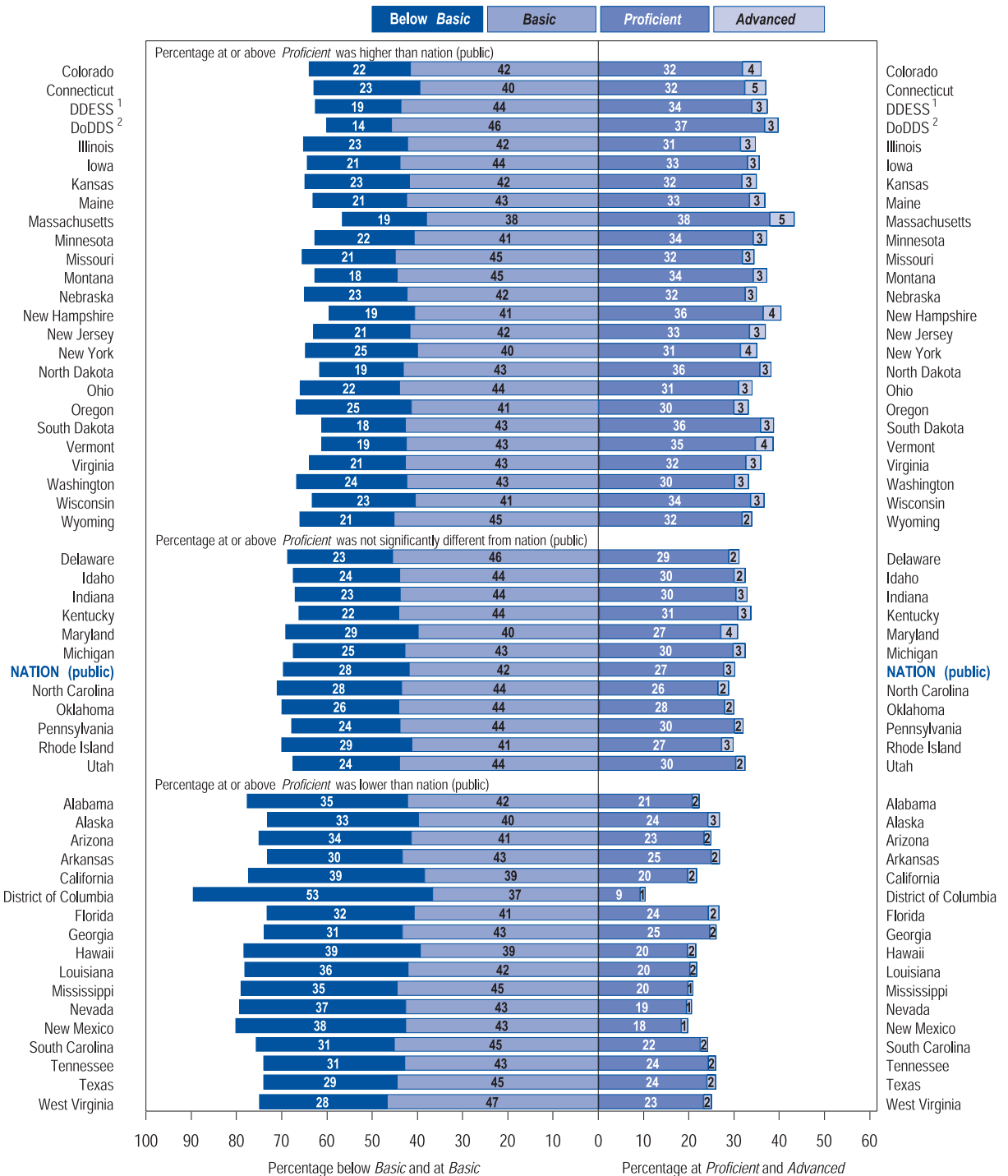
NOTE: Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Figure 2.10 Percentage of students within each reading achievement level, grade 8 public schools: By state, 2003**

**Grade 8**

The bars below contain percentages of students in each NAEP reading achievement-level range. Each population of students is aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above. Jurisdictions are listed alphabetically within three groups: the percentage at or above *Proficient* was higher than, not found to be significantly different from, or lower than the nation.



<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

The percentage of fourth-graders performing at or above the *Proficient* level for each jurisdiction that participated in the 1992, 1994, 1998, 2002, and 2003 assessments is presented in table 2.6. Of the 46 jurisdictions that participated in both the 2002 and 2003 fourth-grade reading assessments, Florida showed an increase and Massachusetts showed a decrease in the percentage of students at or above *Proficient*. The percentage of fourth-graders at or above *Proficient* increased in 17 of the 42 jurisdictions that participated in both the 1992 and 2003 assessments.

The percentages of eighth-graders performing at or above *Proficient* for jurisdictions that participated in 1998, 2002, and 2003 are presented in table 2.7. Of the 44 jurisdictions that participated in the 2002 and 2003 eighth-grade reading assessments, North Dakota showed an increase and Texas and West Virginia showed declines in the percentage of students at or above *Proficient*. Between 1998 (when accommodations were permitted) and 2003, the percentage of eighth-graders performing at or above *Proficient* increased in 5 of the 39 jurisdictions that participated in both years. New Mexico showed a decline.



**Table 2.6 Percentage of students at or above Proficient in reading, grade 4 public schools: By state, 1992–2003**

Grade 4	Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	27 *	28	29	28 *	30	30
Alabama	20	23	24	24	22	22
Alaska	—	—	—	—	—	28
Arizona	21	24	22	22	22	23
Arkansas	23 **	24 *	23 *	23 *	26	28
California	19	18 *	20	20	21	21
Colorado	25 **	28 **	34	33	—	37
Connecticut	34 **	38	46	43	43	43
Delaware	24 **	23 **	25 **	22 **	35	33
Florida	21 **	23 **	23 **	22 **	27 *	32
Georgia	25	26	24	24	28	27
Hawaii	17 *	19	17 *	17 *	21	21
Idaho	28	—	—	—	32	30
Illinois	—	—	—	—	—	31
Indiana	30	33	—	—	33	33
Iowa	36	35	35	33	35	35
Kansas	—	—	34	34	34	33
Kentucky	23 **	26 *	29	29	30	31
Louisiana	15 **	15 **	19	17	20	20
Maine	36	41 **	36	35	35	36
Maryland	24 **	26 **	29	27 *	30	32
Massachusetts	36	36	37	35 *	47 *	40
Michigan	26 *	—	28	28	30	32
Minnesota	31 **	33 **	36	35	37	37
Mississippi	14 **	18	18	17	16	18
Missouri	30 *	31	29 *	28 **	32	34
Montana	—	35	37	37	36	35
Nebraska	31	34	—	—	34	32
Nevada	—	—	21	20	21	20
New Hampshire	38	36	38	37	—	40
New Jersey	35	33 *	—	—	—	39
New Mexico	23	21	22	21	21	19
New York	27 **	27 **	29 *	29 *	35	34
North Carolina	25 **	30	28 *	27 *	32	33
North Dakota	35	38 **	—	—	34	32
Ohio	27 **	—	—	—	34	34
Oklahoma	29	—	30 *	30 *	26	26
Oregon	—	—	28	26	31	31
Pennsylvania	32	30	—	—	34	33
Rhode Island	28	32	32	31	32	29
South Carolina	22 *	20 **	22	22 *	26	26
South Dakota	—	—	—	—	—	33
Tennessee	23	27	25	25	25	26
Texas	24	26	29	28	28	27
Utah	30	30	28 *	28 *	33	32
Vermont	—	—	—	—	39	37
Virginia	31	26 **	30 *	30 *	37	35
Washington	—	27 **	29 *	30	35	33
West Virginia	25	26	29	28	28	29
Wisconsin	33	35	34	34	—	33
Wyoming	33	32	30	29 *	31	34
<b>Other jurisdictions</b>						
District of Columbia	10	8 **	10	10	10	10
DDESS <sup>2</sup>	—	—	32	32	34	35
DoDDS <sup>3</sup>	—	28 **	34	33	33	35

— Not available. The jurisdiction did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table 2.7 Percentage of students at or above Proficient in reading, grade 8 public schools: By state, 1998–2003**

Grade 8	Accommodations not permitted		Accommodations permitted		
	1998	1998	2002	2003	
<b>Nation (public)</b> <sup>1</sup>	31	30	31	30	
Alabama	21	22	21	22	
Alaska	—	—	—	27	
Arizona	28	27	23	25	
Arkansas	23 *	23	27	27	
California	22	21	20	22	
Colorado	30 *	30 *	—	36	
Connecticut	42 *	40	37	37	
Delaware	25 *	23 **, **	33	31	
Florida	23	23	29	27	
Georgia	25	25	26	26	
Hawaii	19	19	20	22	
Idaho	—	—	34	32	
Illinois	—	—	—	35	
Indiana	—	—	32	33	
Iowa	—	—	—	36	
Kansas	35	36	38	35	
Kentucky	29	30	32	34	
Louisiana	18 *	17 *	22	22	
Maine	42 *	41	38	37	
Maryland	31	31	32	31	
Massachusetts	36 *	38 *	39	43	
Michigan	—	—	32	32	
Minnesota	37	36	—	37	
Mississippi	19	19	20	21	
Missouri	29 *	28 *	33	34	
Montana	38	40	37	37	
Nebraska	—	—	36	35	
Nevada	24 *	23	19	21	
New Hampshire	—	—	—	40	
New Jersey	—	—	—	37	
New Mexico	24 *	23 *	20	20	
New York	34	32	32	35	
North Carolina	31	30	32	29	
North Dakota	—	—	35 *	38	
Ohio	—	—	35	34	
Oklahoma	29	30	28	30	
Oregon	33	35	37	33	
Pennsylvania	—	—	35	32	
Rhode Island	30	32	30	30	
South Carolina	22	22	24	24	
South Dakota	—	—	—	39	
Tennessee	26	27	28	26	
Texas	28	27	31 *	26	
Utah	31	31	32	32	
Vermont	—	—	40	39	
Virginia	33	33	37	36	
Washington	32	32	37	33	
West Virginia	27	28	29 *	25	
Wisconsin	33	34	—	37	
Wyoming	29 *	31	31	34	
<b>Other jurisdictions</b>					
District of Columbia	12	11	10	10	
DDESS <sup>2</sup>	37	39	37	37	
DoDDS <sup>3</sup>	36	37	40	40	

— Not available. The jurisdiction did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

### **Cross-State/Jurisdiction Reading Achievement-Level Comparisons**

Figures 2.11 and 2.12 display the same type of cross-state/jurisdiction comparison that was presented earlier for scale score results, but the performance measure being compared in these figures is the percentage of students performing at or above the *Proficient* level in 2003 for grades 4 and 8 respectively.

At grade 4, Connecticut, Massachusetts, New Hampshire, and New Jersey were among the jurisdictions with the highest percentages of students performing at or above *Proficient*. Any apparent differences in the percentages of students performing at or above *Proficient* in the top-performing states were not found to be statistically significant. The percentages of students at or above *Proficient* in

Minnesota, Vermont, Colorado, and Virginia were lower only in comparison with Connecticut.




At grade 8, Massachusetts, New Hampshire, and Department of Defense Overseas schools were among the jurisdictions with the highest percentages of students performing at or above *Proficient*. The percentages at or above *Proficient* in 12 jurisdictions (Colorado, Connecticut, Department of Defense domestic schools, Maine, Minnesota, Montana, New Jersey, North Dakota, South Dakota, Vermont, Virginia, and Wisconsin) were lower only in comparison with Massachusetts. Any apparent differences in the percentages of students performing at or above *Proficient* in the top-performing jurisdictions were not found to be statistically significant.

**Figure 2.11 Cross-state comparison of percentage of students at or above Proficient in reading, grade 4 public schools: 2003**

**Grade 4**

**Instructions:** Read down the column directly under a jurisdiction name listed in the heading at the top of the figure. Match the shading intensity surrounding a jurisdiction's abbreviation to the key below to determine whether the percentage of students at or above Proficient for this jurisdiction was found to be higher than, not significantly different from, or lower than the jurisdiction in the column heading. For example, note the column under Maine: The percentage of students at or above Proficient in Maine was lower than Connecticut, Massachusetts, and New Hampshire; not significantly different from that in the jurisdictions from New Jersey through Florida; and higher than in the remaining jurisdictions down the column.

		Connecticut (CT)		Massachusetts (MA)		New Hampshire (NH)		New Jersey (NJ)		Minnesota (MN)		Vermont (VT)		Maine (ME)		Virginia (VA)		DODS (DI) <sup>1</sup>		Montana (MT)		Iowa (IA)		DDESS (DD) <sup>2</sup>		Missouri (MO)		Ohio (OH)		New York (NY)		Wyoming (WY)		South Dakota (SD)		Washington (WA)		Pennsylvania (PA)		Delaware (DE)		Indiana (IN)		North Carolina (NC)		Wisconsin (WI)		Kansas (KS)		Nebraska (NE)		Maryland (MD)		Michigan (MI)		North Dakota (ND)		Utah (UT)		Florida (FL)		Illinois (IL)		Kentucky (KY)		Oregon (OR)		Idaho (ID)		Rhode Island (RI)		West Virginia (WV)		Arkansas (AR)		Alaska (AK)		Georgia (GA)		Texas (TX)		Tennessee (TN)		Oklahoma (OK)		South Carolina (SC)		Arizona (AZ)		Alabama (AL)		Hawaii (HI)		California (CA)		Nevada (NV)		Louisiana (LA)		New Mexico (NM)		Mississippi (MS)		District of Columbia (DC)	
CT	MA	NH	NJ	MN	VT	ME	VA	DI	MT	IA	DD	OH	NY	WY	SD	WA	PA	DE	IN	NC	WI	KS	NE	MD	MI	ND	UT	FL	IL	KY	OR	ID	RI	WV	AR	AK	GA	TX	TN	OK	SC	AZ	AL	HI	CA	NV	LA	NM	MS	DC	DC																																																						

-  Jurisdiction had higher percentage than the jurisdiction listed at the top of the figure.
-  No significant difference detected from the jurisdiction listed at the top of the figure.
-  Jurisdiction had lower percentage than the jurisdiction listed at the top of the figure.

<sup>1</sup> Department of Defense Dependents Schools (Overseas).  
<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

NOTE: The between-jurisdiction comparisons take into account sampling and measurement error and that each jurisdiction is being compared with every other jurisdiction. Significance is determined by an application of a multiple-comparison procedure. See appendix A for more details. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.



# 3

## **Subgroup Results for the Nation and States**

In addition to reporting on the performance of all students, NAEP also provides results for a variety of subgroups of students for each grade level assessed. The subgroup results show not only how these groups of students performed in comparison with one another, but also the progress each group has made over time. The information presented in this chapter is a valuable indicator of how well the nation is progressing toward the goal of improving the achievement of all students.

This chapter includes average reading scale scores and achievement-level results for subgroups of students in the nation and participating states and jurisdictions at grades 4 and 8. National results are reported by gender, race/ethnicity, students' eligibility for free/reduced-price school lunch, parents' highest level of education, type of school, and type of school location. Results for participating jurisdictions are presented by gender, race/ethnicity, and students' eligibility for free/reduced-price school lunch. The weighted percentage of students corresponding with each subgroup reported in this chapter can be found in appendix B. Tables with additional subgroup results by jurisdiction are presented in appendix C.

Differences in students' performance on the 2003 reading assessment between demographic subgroups and across years for a particular subgroup are discussed only if they have been determined to be

statistically significant. The reader should bear in mind that the estimated scale score for a subgroup of students does not reflect the entire range of performance within that group. Differences in subgroup performance cannot be ascribed solely to students' subgroup identification. Average student performance is affected by the interaction of a complex set of educational, cultural, and social factors not discussed in this report or addressed by NAEP assessments.

### **Performance of Selected Subgroups for the Nation**

#### **Gender**

Many comparative investigations of the reading performance of male and female students have been conducted over the past few years. One study showed differences in the way male and female students

respond to constructed-response reading items.<sup>1</sup> Other researchers have shown that female students scored significantly higher than male students in reading skills and other literacy related cognitive abilities, such as visual memory and directionality.<sup>2</sup> A search of educational archives reveals a substantial body of research suggesting that the phenomenon of female students outperforming male students in reading seems to hold true both in the United States and internationally.<sup>3</sup>

As shown in figure 3.1, there was no measurable change detected between the average reading scores for fourth-grade male and female students in 2003 and the corresponding scores in 1992. At grade 8, the average score for male students was lower in 2003 than in 2002 and higher in 2003 than in 1992.

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<sup>1</sup> Pomplun, M., and Sundbye, N. (1999). Gender Differences in Constructed Response Reading Items. *Applied Measurement in Education*, 12(1), 95–109.

<sup>2</sup> Chhikata, S., Hsui-Ching, C., Kuo, E., and Soderman, A. K. (1999). Gender Differences that Affect Emerging Literacy in First Grade Children: The U.S., India, and Taiwan. *International Journal of Early Childhood*, 31(2), 9–16.

<sup>3</sup> Alloway, N., and Gilbert, P. (1997). Boys and Literacy: Lessons from Australia. *Gender and Education*, 9(1), 49–58.

Gambell, T., and Hunter, D. (2000). Surveying Gender Differences in Canadian School Literacy. *Journal of Curriculum Studies*, 32(5), 689–719.

Grigg, W., Daane, M. C., Ying, J., and Campbell, J. R. (2003). *The Nation's Report Card: Reading 2002* (NCES 2003-521). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.

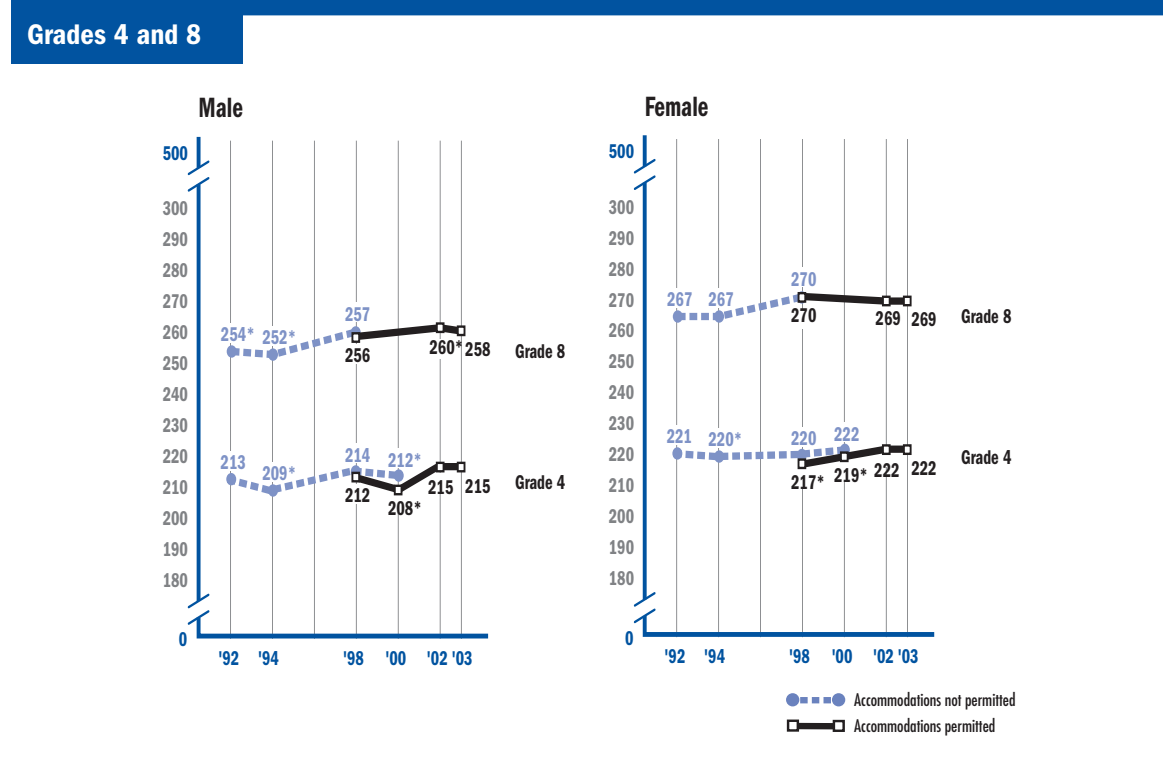
MacMillan, P. (2000). Simultaneous Measurement of Reading Growth, Gender, and Relative-Age Effects: Many-Faceted Rasch Applied to CBM Reading Scores. *Journal of Applied Measurement*, 1(4), 393–408.

Moss, G. (2000, November). Raising Boys' Attainment in Reading: Some Principles for Intervention. *Reading*, 34(3), 10–106.

Ogle, L. T., Sen, A., Pahlke, E., Jocelyn, L., Kastberg, D., Roey, S., and Williams, T. (2003). International Comparisons in *Fourth-Grade Reading Literacy: Finding from the Progress in International Reading Literacy Study (PIRLS) of 2001* (NCES 2003-073). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.



**Figure 3.1 Average reading scale scores, by gender, grades 4 and 8: 1992–2003**



\* Significantly different from 2003.

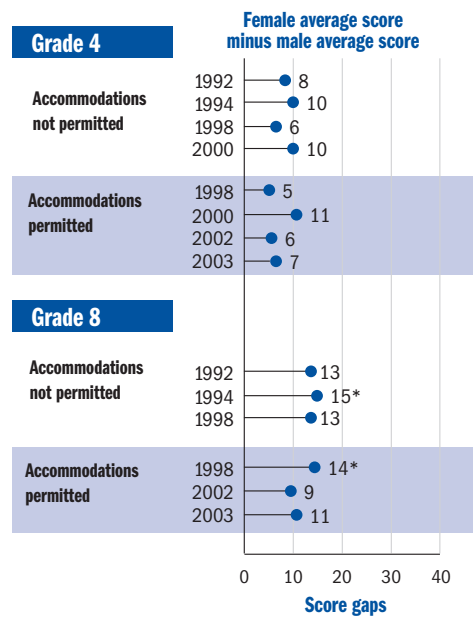
NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

Another way to view trends in student performance is to determine whether the score “gap” that exists between subgroups of students has narrowed or widened across assessment years. The scale score gaps between male and female students are presented in figure 3.2.

In 2003, female students outperformed male students by 7 points on average at grade 4 and 11 points on average at grade 8. No measurable change was detected in the fourth- and eighth-grade gender gaps from 1992 to 2003.

**Figure 3.2 Gaps in average reading scale scores, by gender, grades 4 and 8: 1992–2003**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Score gaps are calculated based on differences between unrounded average scale scores. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

Table 3.1 displays achievement-level information for the national sample of fourth- and eighth-graders both as the percentages of male and female students performing within each achievement-level range and as the percentages of male and female students performing at or above the *Basic* and *Proficient* levels.

Consideration of the differences in performance between male and female students in 2003 shows that higher percentages of female students than male students performed at or above *Basic* and *Proficient* at grades 4 and 8.

At grade 4, the percentages of male and female students performing at or above the *Basic* and *Proficient* levels showed no measurable change from 1992 to 2003.

At grade 8, the percentage of male students at or above *Proficient* was higher in 2003 than in 1992. The percentages of both male and female students at or above *Basic* declined from 2002 to 2003, but both percentages were higher in 2003 than in 1992.

**Table 3.1 Percentages of students, by reading achievement level and gender, grades 4 and 8: 1992–2003**

						At or above	At or above
<b>Grade 4</b>		Below <i>Basic</i>	At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	<i>Basic</i>	<i>Proficient</i>
<b>Male</b>							
Accommodations not permitted	1992	42	32	20	5	58	25
	1994	45 *	30	20 *	6	55 *	26
	1998	41	31	22	6	59	28
	2000	42	31	21	6	58	27
Accommodations permitted	1998	43 *	30	21	6	57 *	27
	2000	45 *	30	20	5	55 *	25 *
	2002	39	32	22	6	61	28
	2003	40	32	22	6	60	28
<b>Female</b>							
Accommodations not permitted	1992	33	35	24	8	67	32
	1994	34	32	25	9	66	34
	1998	35	32	25	8	65	33
	2000	33	31	26	10	67	36
Accommodations permitted	1998	38 *	31	23	8	62 *	32 *
	2000	36	30	25	9	64	34
	2002	33	33	26	8 *	67	35
	2003	33	32	26	9	67	35
<b>Grade 8</b>							
<b>Male</b>							
Accommodations not permitted	1992	36 *	40	22 *	2	64 *	23 *
	1994	38 *	40 *	21 *	2	62 *	23 *
	1998	32	41	25	2	68	27
Accommodations permitted	1998	33 *	41	24	2	67 *	26
	2002	29 *	43 *	26	2	71 *	28
	2003	31	42	25	2	69	27
<b>Female</b>							
Accommodations not permitted	1992	24 *	40	31	4	76 *	35
	1994	23	40	32	4	77	36
	1998	19	41	36 *	4	81	40
Accommodations permitted	1998	20 *	41	35	4	80 *	39
	2002	20 *	42 *	34	4	80 *	38
	2003	21	41	33	4	79	38

\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. Detail may not sum to totals because of rounding. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998-2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

## Race/Ethnicity

In recent years, many research efforts have been devoted to investigating possible relationships between students' racial/ethnic backgrounds and their reading behavior and performances. Efforts to narrow the long-standing performance gaps between these subgroups have met with some success.<sup>4</sup> However, significant performance differences can still be noted for a variety of reading and language skills.<sup>5</sup>

Based on information obtained from school records, students who participated in the NAEP reading assessment were identified as belonging to one of the following racial/ethnic subgroups: White, Black, Hispanic, Asian/Pacific Islander, American Indian (including Alaska Native), and Other. Students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multicultural" but

not Hispanic, or who did not self-report racial/ethnic information, were categorized as "Other." The results presented here differ from those presented in reading reports released in 1992 through 2000, in which results were reported for the same five racial/ethnic subgroups based on student self-identification.

Between 1992 and 2003, the percentage of Hispanic students increased from 7 percent to 17 percent at grade 4, and from 8 percent to 15 percent at grade 8. During the same period, the percentage of White students decreased from 73 percent to 60 percent at grade 4 and from 72 percent to 63 percent at grade 8. The percentage of Black students, which has changed less over the years, was approximately 17 percent in 2003 at grade 4 and 16 percent at grade 8. Students categorized as "Other" made up approximately 1 percent of the students at each grade. (See table B.3 in appendix B.)<sup>6</sup>

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<sup>4</sup> Gordon, E. W. (2000). Bridging the Minority Achievement Gap. *Principal*, 79(5), 20–23.

Haycock, K. (2001). Closing the Achievement Gap. *Educational Leadership*, 58(6), 6–11.

Kush, J. C. (1996). Field-Dependence, Cognitive Ability, and Academic Achievement in Anglo-American and Mexican-American Students. *Journal of Cross-Cultural Psychology*, 27(5), 561–575.

<sup>5</sup> Bankston, C. L., and Caldas, S. J. (1997). The American School Dilemma: Race and Scholastic Performance. *Sociological Quarterly*, 3, 423–429.

Jencks, C. and Phillips, M. (Eds.). (1998). *The Black-White Test Score Gap*. Washington, DC: Brookings Institution Press.

Ferguson, R. F. (1998). Can Schools Narrow the Black-White Test Score Gap? In C. Jencks and M. Phillips (Eds.), *The Black-White Test Score Gap* (pp. 318–374). Washington, DC: Brookings Institution.

<sup>6</sup> In addition to reflecting a shift in the racial/ethnic composition of the student population, a portion of the differences may be due to the composition of the accommodated and non-accommodated samples.

Figure 3.3 shows the average reading scale scores of students in each of the six categories at grades 4 and 8. Results were not reported in 1992 and 1998 for American Indian/Alaska Native students at grades 4 and 8 because the sample sizes were insufficient to permit reliable estimates. Sample sizes were also insufficient to report results for students whose race/ethnicity was categorized as “Other” in 1992–2000 at grade 4, and in 1994 and 1998 (where accommodations were permitted) at grade 8.

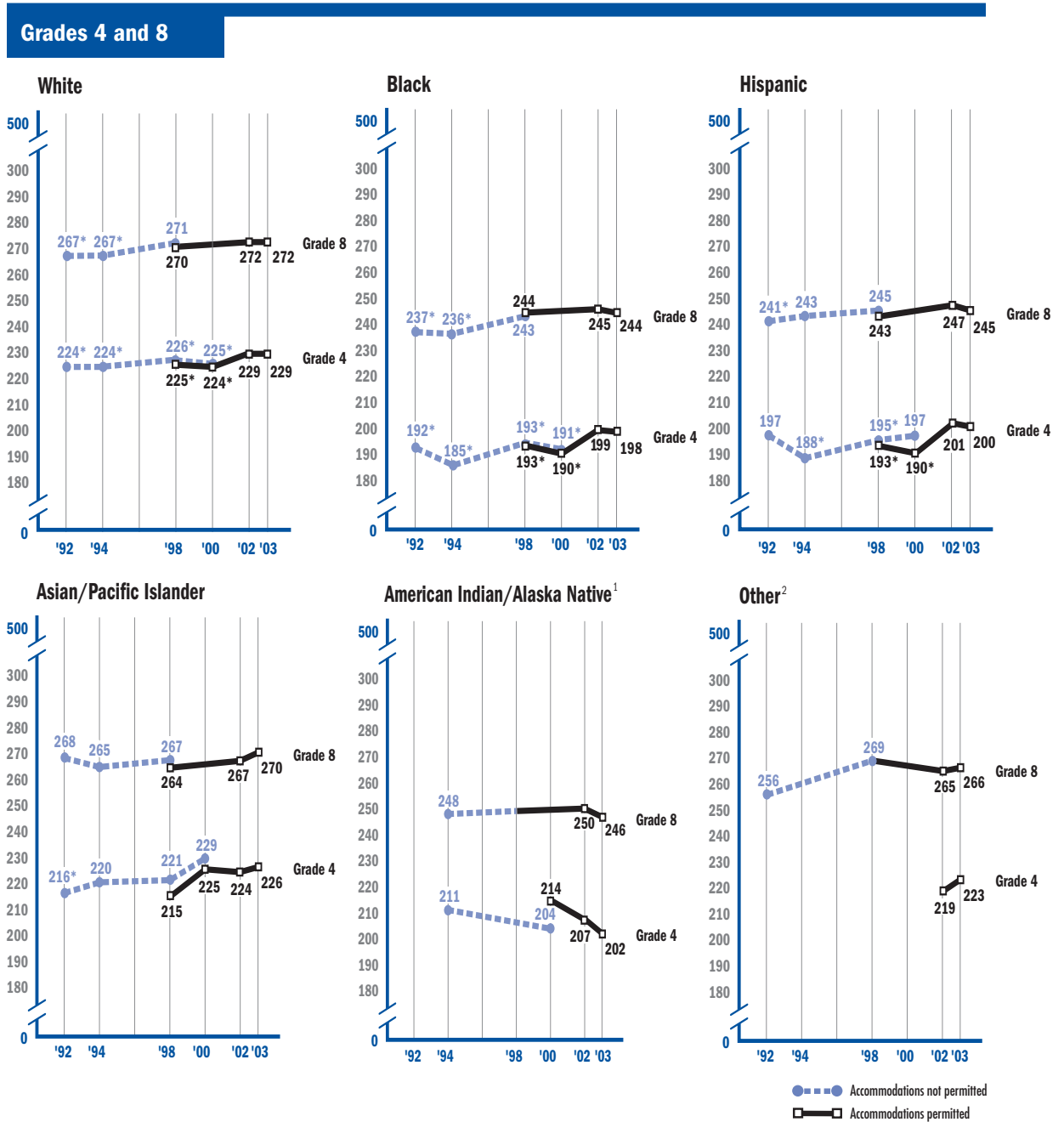
At grade 4, White students and Asian/Pacific Islander students scored higher on average than Black, Hispanic, and Ameri-

can Indian/Alaska Native students in 2003. White students also scored higher on average than Asian/Pacific Islander students, and Hispanic students scored higher on average than Black students.

At grade 8, White and Asian/Pacific Islander students had higher average scores than Black, Hispanic, and American Indian/Alaska Native students in 2003.

The average scores for White, Black, and Asian/Pacific Islander fourth-graders were higher in 2003 than in 1992. The average scores for White, Black, and Hispanic eighth-graders were higher in 2003 than in 1992.

**Figure 3.3 Average reading scale scores, by race/ethnicity, grades 4 and 8: 1992–2003**



\* Significantly different from 2003.

<sup>1</sup> Sample sizes were insufficient to permit reliable estimates for American Indian/Alaska Native students in 1992 and 1998 at grades 4 and 8.

<sup>2</sup> Sample size was insufficient to permit a reliable estimate for students classified as Other in 1992–2000 at grade 4, and in 1994 and 1998 (where accommodations were permitted) at grade 8. “Other” comprised students whose race based on school records was “other race” or, if school data were missing, who self-reported their race as “multiracial” but not “Hispanic,” or did not self-report racial/ethnic information.

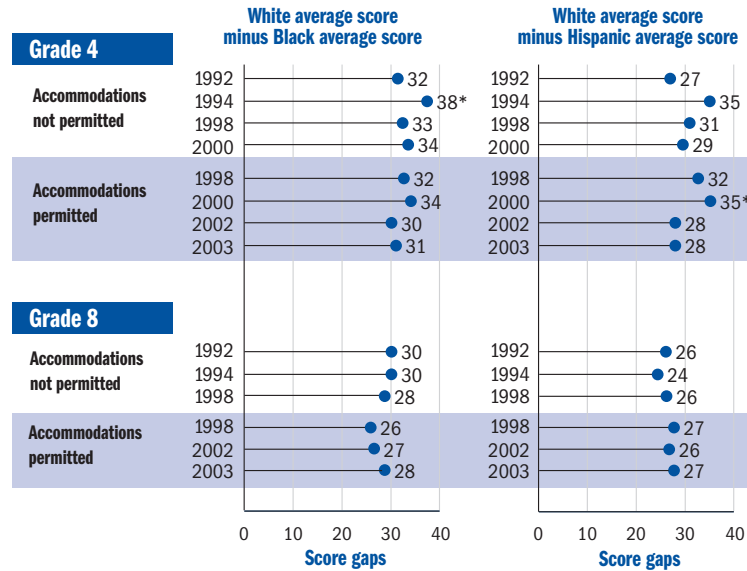
NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years’ results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

Average scale score gaps between White and Black students and between White and Hispanic students are presented in figure 3.4. At both grades 4 and 8, the average score gaps between White

students and Black students and between White students and Hispanic students showed no measurable change between 1992 and 2003.

**Figure 3.4 Gaps in average reading scale scores, by race/ethnicity, grades 4 and 8: 1992–2003**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Score gaps are calculated based on differences between unrounded average scale scores. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

Achievement-level results across assessment years for racial/ethnic subgroups are shown in table 3.2. At grade 4, higher percentages of White students and Asian/Pacific Islander students performed at or above *Basic* and *Proficient* and at *Advanced* than Black students, Hispanic students, and American Indian /Alaska Native students in 2003. Higher percentages of White students than Asian/Pacific Islander students performed at or above *Basic* in 2003, and higher percentages of Hispanic students than Black students performed at

or above *Basic* and *Proficient*. Similarly, at grade 8, higher percentages of White students and Asian/Pacific Islander students performed at or above *Basic* and *Proficient* and at *Advanced* than Black students, Hispanic students, and American Indian/Alaska Native students. Higher percentages of White students than Asian/Pacific Islander students performed at or above *Basic*, and higher percentages of Hispanic students than Black students performed at or above *Proficient*.



At grade 4, the percentages of White, Black, and Asian/Pacific Islander students at or above *Proficient* were higher in 2003 than in 1992. Also, the percentages of White and Black students at or above *Basic* were higher in 2003 than in 1992.

At grade 8, the percentages of White students and Black students performing at or above the *Basic* and *Proficient* levels were higher in 2003 than in 1992. A higher percentage of Hispanic students performed at or above *Basic* in 2003 than in 1992.

**Table 3.2 Percentages of students, by reading achievement level and race/ethnicity, grades 4 and 8:  
1992–2003**

Grade 4							At or above	At or above
			Below <b>Basic</b>	At <b>Basic</b>	At <b>Proficient</b>	At <b>Advanced</b>	<b>Basic</b>	<b>Proficient</b>
<b>White</b>								
Accommodations not permitted	1992	29*	36	27*	8*	71*	35*	
	1994	30*	34	27*	9	70*	36*	
	1998	28*	34	29	9	72*	38*	
	2000	28*	33	29	10	72*	39	
Accommodations permitted	1998	30*	33	28	9	70*	37*	
	2000	30*	32	28	9	70*	38	
	2002	25	35	31	10	75	41	
	2003	25	34	30	11	75	41	
<b>Black</b>								
Accommodations not permitted	1992	68*	24	8*	1*	32*	8*	
	1994	70*	21	7*	1	30*	8*	
	1998	65*	25	9	1	35*	10*	
	2000	65*	24	10	1	35*	11	
Accommodations permitted	1998	64*	25	9	1	36*	10	
	2000	65*	25	9	1	35*	10	
	2002	60	28	11	2	40	12	
	2003	60	27	11	2	40	13	
<b>Hispanic</b>								
Accommodations not permitted	1992	61	28	10	2	39	12	
	1994	66*	22	9	3	34*	12	
	1998	62	26	10	2	38	13	
	2000	59	26	12	2	41	15	
Accommodations permitted	1998	63	24	11	2	37	13	
	2000	63	25	11	1*	37	13	
	2002	56	29	13	2	44	15	
	2003	56	29	13	2	44	15	
<b>Asian/Pacific Islander</b>								
Accommodations not permitted	1992	40	35	20	5*	60	25*	
	1994	34	30	27	9	66	36	
	1998	37	29	23	11	63	34	
	2000	25	31	28	16	75	44	
Accommodations permitted	1998	42	28	20	10	58	30	
	2000	30	30	27	14	70	41	
	2002	30	33	27	10	70	37	
	2003	30	32	27	12	70	38	
<b>American Indian/Alaska Native</b>								
Accommodations not permitted	1992	‡	‡	‡	‡	‡	‡	
	1994	41	28	24	6	59	30	
	1998	‡	‡	‡	‡	‡	‡	
	2000	40	38	21	1	60	22	
Accommodations permitted	1998	‡	‡	‡	‡	‡	‡	
	2000	37	35	26	2	63	28	
	2002	49	29	17	5	51	22	
	2003	53	31	14	2	47	16	
<b>Other</b> <sup>1</sup>								
Accommodations not permitted	1992	‡	‡	‡	‡	‡	‡	
	1994	‡	‡	‡	‡	‡	‡	
	1998	‡	‡	‡	‡	‡	‡	
	2000	‡	‡	‡	‡	‡	‡	
Accommodations permitted	1998	‡	‡	‡	‡	‡	‡	
	2000	‡	‡	‡	‡	‡	‡	
	2002	37	33	23	7	63	30	
	2003	31	35	25	8	69	34	

See notes at end of table. ▶

**Table 3.2 Percentages of students, by reading achievement level and race/ethnicity, grades 4 and 8: 1992–2003**  
—Continued

Grade 8		Below <i>Basic</i>				At or above	At or above
			At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	<i>Basic</i>	<i>Proficient</i>
<b>White</b>							
Accommodations not permitted	1992	23 *	42	32 *	4	77 *	35 *
	1994	23 *	42	32 *	4	77 *	35 *
	1998	18	41	37	3	82	40
Accommodations permitted	1998	19	42	36	3	81	39
	2002	16	43	37	4	84	41
	2003	17	42	37	4	83	41
<b>Black</b>							
Accommodations not permitted	1992	55 *	36 *	9 *	#	45 *	9 *
	1994	57 *	34 *	9	#	43 *	10
	1998	48	39	12	#	52	13
Accommodations permitted	1998	47	40	12	#	53	13
	2002	45	42	13	1	55	13
	2003	46	41	12	1	54	13
<b>Hispanic</b>							
Accommodations not permitted	1992	51 *	36	12	1	49 *	13
	1994	49 *	36	14	1	51 *	15
	1998	46	39	15	1	54	15
Accommodations permitted	1998	47	39	14	1	53	14
	2002	43	42	15	1	57	15
	2003	44	41	15	1	56	15
<b>Asian/Pacific Islander</b>							
Accommodations not permitted	1992	24	39	30	7	76	37
	1994	28 *	38	29	5	72 *	34
	1998	23	42	31	3	77	35
Accommodations permitted	1998	25	42	30	3	75	33
	2002	24	41	32	4	76	36
	2003	21	39	35	5	79	40
<b>American Indian/Alaska Native</b>							
Accommodations not permitted	1992	‡	‡	‡	‡	‡	‡
	1994	42	39	17	2	58	19
	1998	‡	‡	‡	‡	‡	‡
Accommodations permitted	1998	‡	‡	‡	‡	‡	‡
	2002	39	44	17	1	61	17
	2003	43	40	16	1	57	17
<b>Other<sup>1</sup></b>							
Accommodations not permitted	1992	33	42	22	3	67	25
	1994	‡	‡	‡	‡	‡	‡
	1998	15	50	33	2	85	36
Accommodations permitted	1998	‡	‡	‡	‡	‡	‡
	2002	23	46	28	3	77	31
	2003	22	45	30	3	78	33

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003.

<sup>1</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Data were not collected at grade 8 in 2000. Detail may not sum to totals because of rounding. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

### **Student Eligibility for Free/Reduced-Price School Lunch**

NAEP collects data on students' eligibility for free/reduced-price lunch as an indicator of family economic status. Eligibility for free and reduced-price lunches is determined by students' family income in relation to the federally established poverty level. (See section on NAEP Reporting Groups in appendix A.)

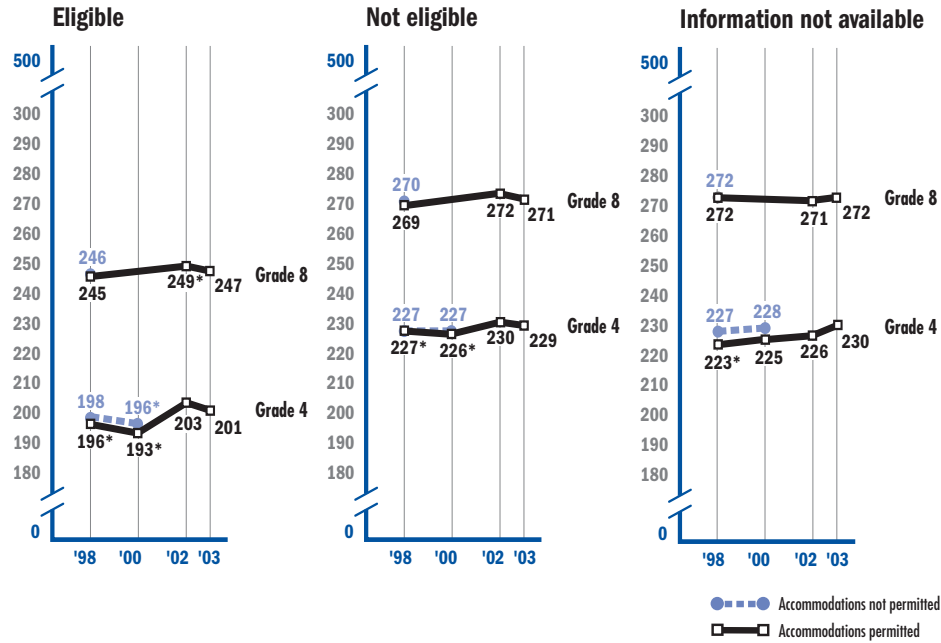
In 2003, 40 percent of fourth-graders and 33 percent of eighth-graders were eligible for free/reduced-price lunches. Information regarding eligibility was not available for 10 percent of fourth-graders and 11 percent of eighth-graders because their schools did not participate in the National School Lunch Program or for other reasons. (See table B.4 in appendix B.)

Average reading scores by students' eligibility for free/reduced-price school lunch are presented in figure 3.5. NAEP first began collecting information on student eligibility for this program in 1996; therefore, cross-year comparisons to 1992 cannot be made. In 2003, both fourth- and eighth-grade students who were eligible for free/reduced-price lunch had lower average scores than students who were not eligible. The average reading scores for fourth-graders were higher in 2003 than in 1998 both for students who were eligible and those who were not.

At grade 8, the average score for students who were eligible for free/reduced-price lunch showed a decrease between 2002 and 2003 but showed no measurable difference between 1998 and 2003.

**Figure 3.5 Average reading scale scores, by students' eligibility for free/reduced-price school lunch, grades 4 and 8: 1998–2003**

**Grades 4 and 8**



\* Significantly different from 2003.

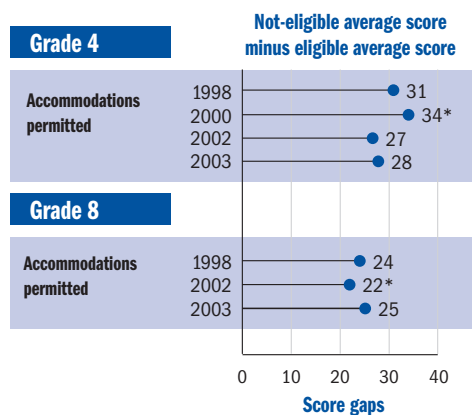
NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 differ slightly from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.

Figure 3.6 shows the scale score gaps between students who were eligible and students who were not eligible for free/reduced-price lunch. At grade 4, the average score gap between students who were eligible and those who were not

eligible showed no measurable change between 1998 and 2003. At grade 8, the gap in 2003 was larger than in 2002 but was not found to be measurably different from 1998.

**Figure 3.6 Gaps in average reading scale scores, by students' eligibility for free/reduced-price school lunch, grades 4 and 8: 1998–2003**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 differ slightly from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Score gaps are calculated based on differences between unrounded average scale scores. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.

Achievement-level results by students' eligibility for free/reduced-price lunch are presented in table 3.3. In 2003, lower percentages of students who were eligible for free/reduced-price lunch than those who were not eligible performed at or above *Basic* and *Proficient*, and at *Advanced*, at both grades 4 and 8. The percentages of fourth-graders at or above *Basic* were higher in 2003 than 1998 for students who

were eligible and for students who were not eligible for free/reduced-price lunch. For those students who were eligible, the percentage at or above *Proficient* was higher in 2003 than in 1998.

At grade 8, the percentages of students at or above *Basic* decreased between 2002 and 2003 for students who were eligible, but showed no measurable difference between 1998 and 2003.

**Table 3.3 Percentages of students, by reading achievement level and eligibility for free/reduced-price school lunch, grades 4 and 8: 1998–2003**

		Grade 4					
		Below <i>Basic</i>	At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>
<b>Eligible</b>							
Accommodations not permitted	1998	58	29	11	2	42	13
	2000	60*	26*	12	2	40*	14
Accommodations permitted	1998	61*	26	11	2	39*	13*
	2000	62*	25	11	2	38*	13
	2002	54	30	14	3	46	16
	2003	55	29	13	2	45	15
<b>Not eligible</b>							
Accommodations not permitted	1998	27	33	30	10	73	40
	2000	26	34	30	11	74	41
Accommodations permitted	1998	27*	33	30	10	73*	40
	2000	27*	33	30	10	73*	39
	2002	23	35	32	10*	77	42
	2003	24	34	31	11	76	42
<b>Information not available</b>							
Accommodations not permitted	1998	27	33	29	11	73	40
	2000	26	32	30	12	74	42
Accommodations permitted	1998	31	33	27	10	69	37
	2000	29	32	29	11	71	40
	2002	29	32	29	10*	71	39
	2003	24	32	31	13	76	43
<b>Grade 8</b>							
<b>Eligible</b>							
Accommodations not permitted	1998	44	41	14	#	56	15
	2000	44	42	14	#*	56	14
Accommodations permitted	2002	40*	43	16	1	60*	17
	2003	43	41	15	1	57	16
<b>Not eligible</b>							
Accommodations not permitted	1998	19	42	36	3	81	39
	2000	20	42	35	3	80	38
Accommodations permitted	2002	16	44	37	3	84	40
	2003	18	42	36	4	82	40
<b>Information not available</b>							
Accommodations not permitted	1998	18	38	39	4	82	44
	2000	20	38	38	4	80	43
Accommodations permitted	2002	19	41	36	5	81	41
	2003	19	39	37	6	81	42

# The estimate rounds to zero.

\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. Detail may not sum to totals because of rounding. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 differ slightly from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.



The previous results presented for students within different racial/ethnic subgroups and by eligibility for free/reduced-price lunch are explored in more detail in table 3.4. Average scores for students within the five different racial/ethnic categories are presented for students who were either eligible or not eligible for free/reduced-price lunch, as well as for students for whom eligibility information was not available. By presenting the data in this manner, it is possible to examine the performance of students in different racial/ethnic subgroups, while controlling for one indicator of socioeconomic status—eligibility for free/reduced-price lunch.

The percentages of students who were eligible for free/reduced-price school lunch in 2003 were higher among Black, Hispanic, and American Indian/Alaska Native students than among White and

Asian/Pacific Islander students at grades 4 and 8 (see table B.5 in appendix B). With a few exceptions, comparisons between the performances of different racial/ethnic subgroups were similar among students who were eligible and those who were not eligible for free/reduced-price school lunch.

At both grades White students outperformed Black, Hispanic, and American Indian/Alaska Native students regardless of whether or not the students were eligible for free/reduced-price lunch. At grade 4, the average score for Hispanic students was higher than that for Black students among those students who were eligible for free/reduced-price lunch. At grade 8, the average score for Hispanic students who were not eligible was higher than that for Black students who were not eligible.

**Table 3.4 Average reading scale scores, by student eligibility for free/reduced-price school lunch and race/ethnicity, grades 4 and 8: 2003**

	Eligible	Not eligible	Information not available
<b>Grade 4</b>			
White	213	233	237
Black	193	211	206
Hispanic	196	213	211
Asian/Pacific Islander	210	235	234
American Indian/Alaska Native	196	215	200
<b>Grade 8</b>			
White	258	275	279
Black	239	254	250
Hispanic	240	257	251
Asian/Pacific Islander	256	277	278
American Indian/Alaska Native	237	258	251

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Parents' Highest Level of Education

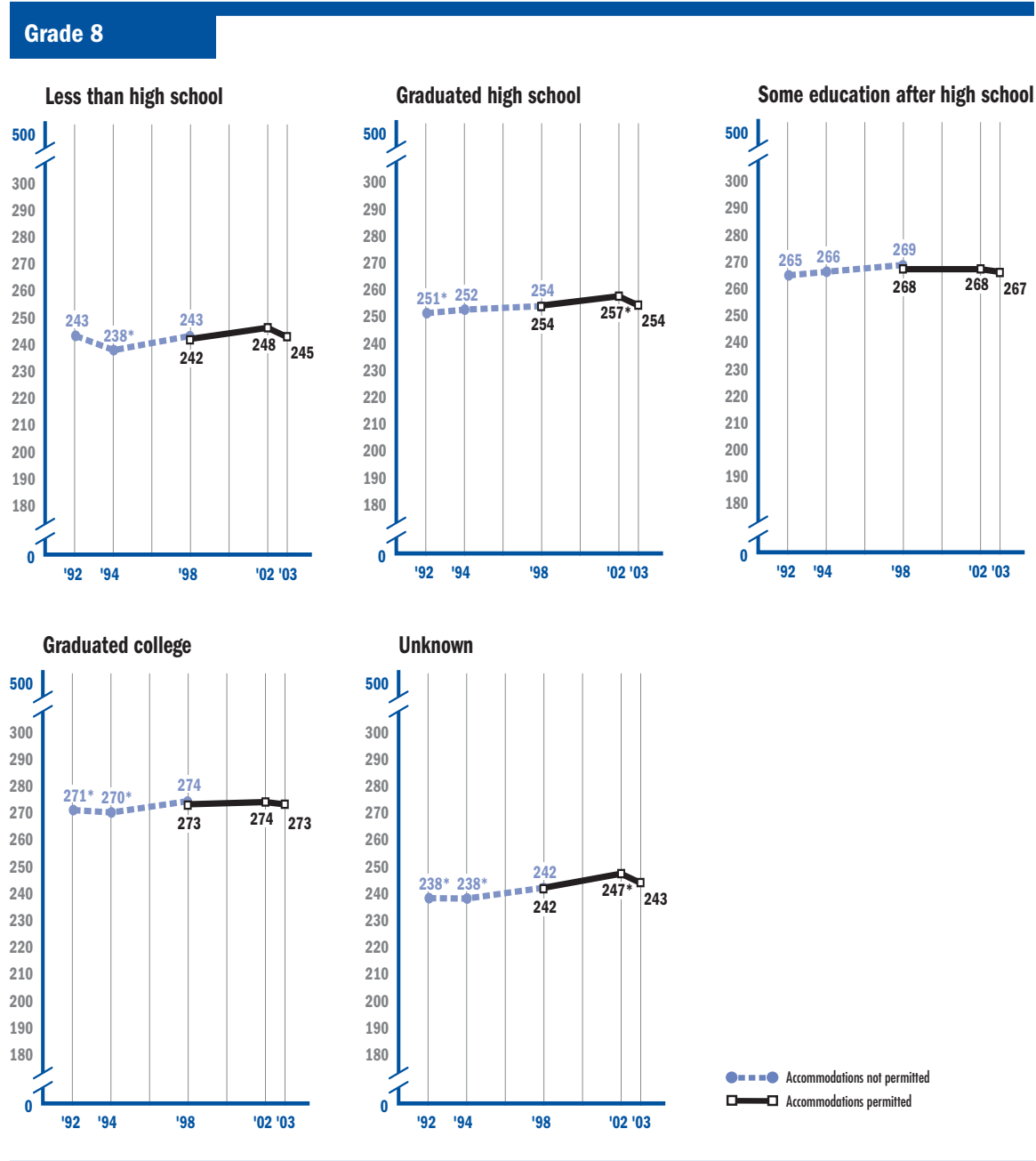
Eighth-grade students who participated in the NAEP 2003 reading assessment were asked to indicate the highest level of education they thought their parents had completed. Five response options—did not finish high school, graduated from high school, some education after high school, graduated from college, or “I don’t know”—were offered. The highest level of education reported for either parent was used in the analysis of this question. Fourth-graders’ responses to this question are not reported because their responses in previous NAEP assessments were highly variable, and a large percentage of the students chose the “I don’t know” option.

Almost half (48 percent) of the eighth-graders who participated in the 2003 reading assessment reported that at least one of their parents had graduated from college, and only 7 percent indicated that neither parent had graduated from high

school. Ten percent of the students indicated they did not know their parents’ level of education (see table B.6 in appendix B).

Average scores for eighth-grade students by reported parental education levels are shown in figure 3.7. Overall, in 2003 there was a positive relationship between student-reported parental education and student achievement: the higher the parental education level, the higher the average reading score. Average scores for eighth-grade students were lower in 2003 than in 2002 for students who reported that at least one parent had graduated from high school but not gone further and for those who indicated they did not know their parents’ level of education. Average scores increased between 1992 and 2003 for students who reported that at least one parent graduated from high school, and for those who reported that at least one parent graduated from college.

**Figure 3.7 Average reading scale scores, by student-reported parents' highest level of education, grade 8: 1992-2003**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

Achievement-level results by level of parental education are presented in table 3.5. The percentage of eighth-graders performing at or above *Basic* decreased between 2002 and 2003 for students who reported that at least one parent graduated from high school, for those who reported that at least one parent had some education after high school, for those who reported that at least one parent graduated from college, and for those who

reported that they did not know their parents' highest level of education. The percentage of students performing at or above *Basic* was higher in 2003 than in 1992 for eighth-graders who reported that at least one parent had graduated from high school, for those who reported that at least one parent had graduated from college, and for students whose parental level of education was reported as unknown.

**Table 3.5 Percentages of students, by reading achievement level and student-reported parents' highest level of education, grade 8: 1992–2003**

Grade 8		Below <i>Basic</i>	At or above			At or above	
			At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	<i>Basic</i>	<i>Proficient</i>
<b>Less than high school</b>							
Accommodations not permitted	1992	49	38	12	1	51	13
	1994	54*	36	10	#	46*	10
	1998	48	41	11	#	52	11
Accommodations permitted	1998	48	41	11	#	52	11
	2002	42	44	13	#	58	14
	2003	45	42	13	1	55	13
<b>Graduated high school</b>							
Accommodations not permitted	1992	39*	42	18	1	61*	19
	1994	38	42	19	1	62	20
	1998	34	43	21	1	66	22
Accommodations permitted	1998	34	45	20	1	66	21
	2002	31*	48	21	1	69*	21
	2003	34	46	19	1	66	20
<b>Some education after high school</b>							
Accommodations not permitted	1992	24	44	30	3	76	32
	1994	23	44	30	3	77	33
	1998	19	44	34	2	81	36
Accommodations permitted	1998	20	44	33	2	80	36
	2002	19*	48	32	2	81*	34
	2003	21	46	31	2	79	33
<b>Graduated college</b>							
Accommodations not permitted	1992	20*	40	35	5	80*	40
	1994	21*	39	35	5	79*	40
	1998	16	39	41	5	84	45
Accommodations permitted	1998	17	39	40	4	83	44
	2002	16*	40	39	5	84*	44
	2003	17	39	38	5	83	43
<b>Unknown</b>							
Accommodations not permitted	1992	55*	33	12	#	45*	12
	1994	52	36	11	#	48	12
	1998	50	38	12	#	50	12
Accommodations permitted	1998	48	39	12	#	52	12
	2002	43*	43	14	#	57*	14
	2003	47	39	13	1	53	14

# The estimate rounds to zero.

\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. Detail may not sum to totals because of rounding. Significance tests were performed using unrounded numbers.

NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

### **Type of School**

The schools that participate in the NAEP assessment are classified as either public or nonpublic. A further distinction is then made between nonpublic schools that are Catholic schools and those that are some other type of nonpublic school. Results for additional categories of nonpublic schools are available on the NAEP web site (<http://nces.ed.gov/nationsreportcard/naepdata>). In 2003, the vast majority of students attended public schools (90 percent of fourth-graders, and 91 percent of eighth-graders). The remaining students were split almost evenly between Catholic schools and other nonpublic schools. (See table B.7 in appendix B.)

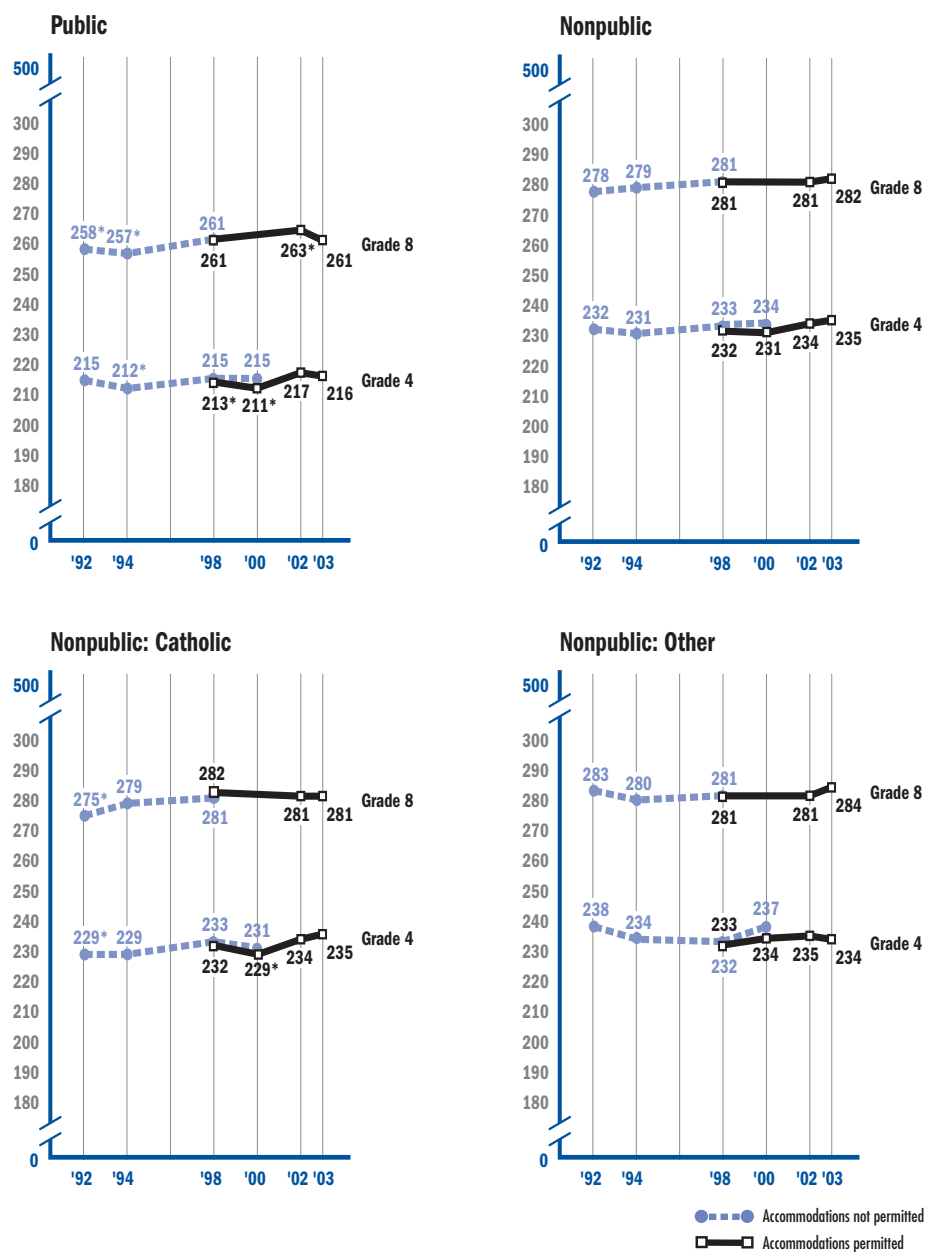
The average reading scores of fourth- and eighth-grade students by the type of school they attend are presented in figure 3.8. Performance results in 2003 show that, at both grades 4 and 8, students who attended nonpublic schools had higher average reading scores than students who attended public schools.

At grade 4, the only difference observed between the 1992 and 2003 average scores by type of school was that the average scores of Catholic school students increased.

At grade 8, scores for students in public schools declined between 2002 and 2003. Average scores increased for public and Catholic school students between 1992 and 2003.

**Figure 3.8 Average reading scale scores, by type of school, grades 4 and 8: 1992–2003**

**Grades 4 and 8**



\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.



Achievement-level results by type of school are presented for grades 4 and 8 in table 3.6. In 2003, the percentages of fourth-graders and eighth-graders performing at or above *Basic* and *Proficient* and at *Advanced* levels were higher for students attending nonpublic, Catholic, and other nonpublic schools than for students in public schools.

The only difference detected between 1992 and 2003 for fourth-graders was an increase in the percentage of Catholic

school students performing at or above *Proficient*.

Between 2002 and 2003, the percentage of public school eighth-graders performing at or above *Basic* decreased. The percentages of students performing at or above *Basic* increased for public, nonpublic, and Catholic school students between 1992 and 2003. An increase in the percentage of public school students performing at or above *Proficient* was noted between 1992 and 2003.

**Table 3.6 Percentages of students, by reading achievement level and type of school, grades 4 and 8: 1992-2003**

						At or above	
		Below <i>Basic</i>	At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	<i>Basic</i>	<i>Proficient</i>
<b>Grade 4</b>							
<b>Public</b>							
Accommodations not permitted	1992	40	33	21	6	60	27
	1994	41 *	30	21	7	59 *	28
	1998	39	31	23	6	61	29
	2000	40	31	22	7	60	30
Accommodations permitted	1998	42 *	30	21	6	58 *	28
	2000	43 *	30	21	6	57 *	28
	2002	38	32	23	6 *	62	30
	2003	38	32	23	7	62	30
<b>Nonpublic</b>							
Accommodations not permitted	1992	21	34	33	12	79	45
	1994	23	34	31	13	77	43
	1998	22	32	32	14	78	46
	2000	20	32	34	14	80	47
Accommodations permitted	1998	22	32	32	14	78	46
	2000	22	33	33	12	78	45
	2002	20	32	34	13	80	48
	2003	20	32	33	14	80	48
<b>Nonpublic: Catholic</b>							
Accommodations not permitted	1992	24	35	30	10	76	41 *
	1994	24	34	30	12	76	42
	1998	21	33	32	13	79	46
	2000	22	33	33	11	78	44
Accommodations permitted	1998	22	34	32	13	78	45
	2000	25	34	31	10 *	75	41
	2002	20	33	34	13	80	47
	2003	19	33	33	14	81	48
<b>Nonpublic: Other</b>							
Accommodations not permitted	1992	16	31	38	15	84	53
	1994	20	34	32	14	80	46
	1998	24	30	31	16	76	46
	2000	18	31	35	16	82	51
Accommodations permitted	1998	23	30	32	15	77	47
	2000	20	32	34	15	80	49
	2002	20	32	35	14	80	49
	2003	20	32	33	14	80	48

See notes at end of table. ►

**Table 3.6 Percentages of students, by reading achievement level and type of school, grades 4 and 8: 1992–2003**  
—Continued

Grade 8		Below <i>Basic</i>				At or above	At or above
			At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	<i>Basic</i>	<i>Proficient</i>
<b>Public</b>							
Accommodations not permitted	1992	33 *	41	25 *	2	67 *	27 *
	1994	33 *	40 *	25 *	2	67 *	27 *
	1998	28	41	28	2	72	31
Accommodations permitted	1998	29	42	27	2	71	30
	2002	26 *	43	28	2	74 *	31
	2003	28	42	27	3	72	30
<b>Nonpublic</b>							
Accommodations not permitted	1992	13 *	38	41	7	87 *	48
	1994	11	39	43	6 *	89	49
	1998	9	37	49	5 *	91	54
Accommodations permitted	1998	9	38	47	6 *	91	53
	2002	10	39	45	7 *	90	51
	2003	10	37	45	8	90	53
<b>Nonpublic: Catholic</b>							
Accommodations not permitted	1992	16 *	40	39	6	84 *	45
	1994	12	39	43	6	88	49
	1998	9	38	48	5	91	53
Accommodations permitted	1998	8	38	48	5	92	53
	2002	10	40	44	6	90	51
	2003	10	39	44	7	90	51
<b>Nonpublic: Other</b>							
Accommodations not permitted	1992	10	36	45	10	90	54
	1994	11	39	43	7	89	50
	1998	9	36	49	5 *	91	54
Accommodations permitted	1998	10	37	47	6	90	53
	2002	11	37	45	7	89	52
	2003	10	34	46	10	90	56

\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. Detail may not sum to totals because of rounding. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

The results for students in public and nonpublic schools and by highest level of parents' education are explored in more detail in table 3.7. Average scores of students in public and nonpublic schools are presented for each level of parental education. By presenting the data in this manner, it is possible to examine the performance of students in the types of schools, while controlling for parental education.

At grade 8, nearly three-quarters (72 percent) of the students attending nonpublic schools reported that at least

one parent had graduated from college, while less than one-half (46 percent) of the students attending public schools reported that at least one parent had graduated from college. In contrast, students reporting each of the other levels of parental education were more likely to attend public than nonpublic schools. (See table B.8 in appendix B.) Across all reported levels of parents' education, the average reading score for eighth-grade public school students was lower than the average score for nonpublic school eighth-graders.

**Table 3.7 Average reading scale scores, by student-reported parents' highest level of education and type of school, grade 8: 2003**

Grade 8		Less than high school	Graduated high school	Some education after high school	Graduated college	Unknown
Public		245	253	266	271	242
Nonpublic		263	268	277	287	264

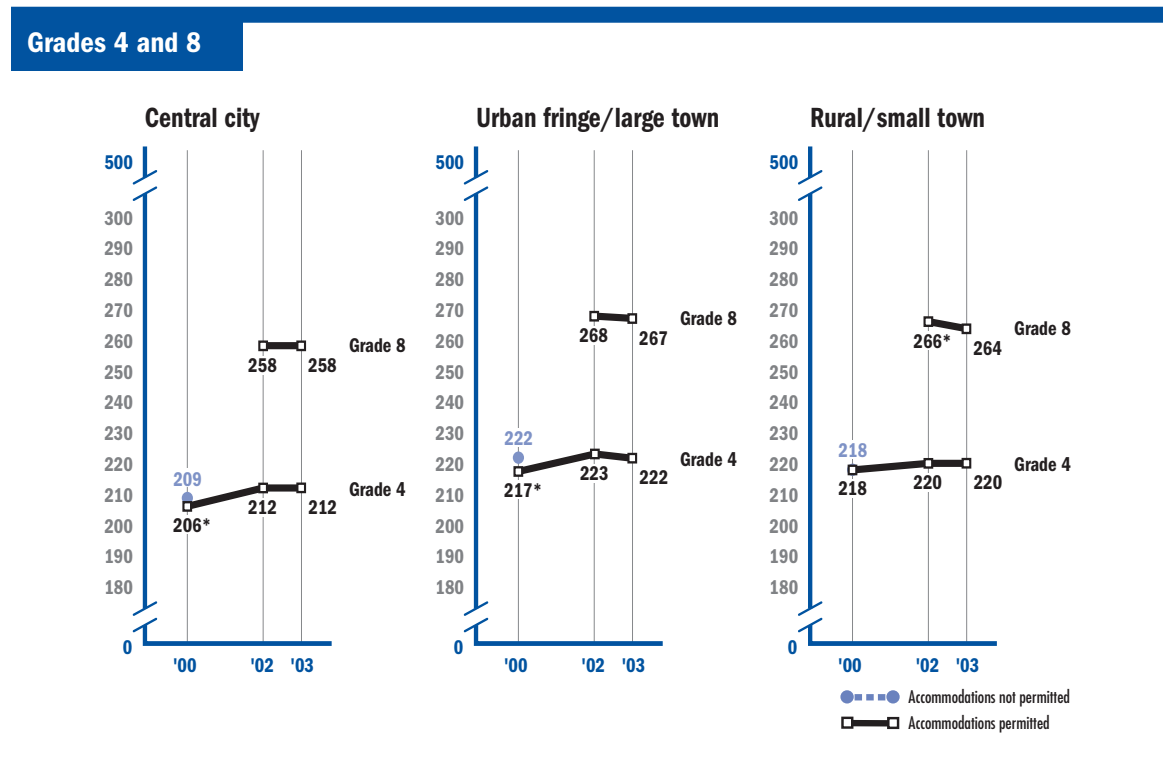
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Type of Location

The schools from which NAEP draws its samples of students are classified according to their type of location. Based on U.S. Census Bureau definitions of metropolitan statistical areas, including population size and density, the three mutually exclusive categories are central city, rural/small town, and urban fringe/large town. The methods used to identify the type of school location for the 2000 (at grade 4), 2002, and 2003 assessments were different from those used for prior assessments; therefore, only the data from the 2000, 2002, and 2003 assessments are reported. More information on the definitions of location type is given in appendix A.

The average reading scores for fourth- and eighth-grade students, by type of location, are presented in figure 3.9. In 2003, at both grades 4 and 8, students in urban fringe/large town and rural/small town locations had higher average scores than students in central city schools; and students in urban fringe/large town schools outperformed those in rural/small town schools. Average scores for fourth-graders in central city and urban fringe/large town locations were higher in 2003 than in 2000. The average score for eighth-graders in rural/small town schools declined between 2002 and 2003.

**Figure 3.9 Average reading scale scores, by type of location, grades 4 and 8: 2000–2003**



\* Significantly different from 2003.  
 NOTE: Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 differ slightly from previously reported results for 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000, 2002, and 2003 Reading Assessments.

Achievement-level results by type of location are presented in table 3.8. In 2003, at grade 4, higher percentages of students performed at or above *Basic*, at or above *Proficient*, and at *Advanced* in urban fringe/large town and rural/small town locations than in central city locations, and higher percentages of students performed at or above *Basic* and *Proficient* and at *Advanced* in urban fringe/large town than in rural/small town locations. At grade 8, higher percentages of students

performed at or above *Basic* and *Proficient* in urban fringe/large town and rural/small town locations than in central city locations, and higher percentages of students performed at or above *Basic* and *Proficient* in urban fringe/large town than in rural/small town locations.

The percentages of eighth-grade students performing at or above *Basic* declined in rural/small town schools since 2002.

**Table 3.8 Percentages of students, by reading achievement level and type of location, grades 4 and 8: 2000–2003**

			Below <i>Basic</i>	At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>
<b>Grade 4</b>								
<b>Central city</b>								
Accommodations not permitted	2000	47	27	20	6	53	26	
Accommodations permitted	2000	49	27	19	5	51	24	
	2002	45	30	20	6	55	25	
	2003	45	30	19	6	55	26	
<b>Urban fringe/large town</b>								
Accommodations not permitted	2000	32	32	26	10	68	36	
Accommodations permitted	2000	37	30	24	8	63	33	
	2002	31	33	27	9	69	36	
	2003	32	32	26	9	68	36	
<b>Rural/small town</b>								
Accommodations not permitted	2000	35	33	25	8	65	32	
Accommodations permitted	2000	35	33	25	7	65	32	
	2002	34	35	25	6	66	32	
	2003	34	34	25	7	66	32	
<b>Grade 8</b>								
<b>Central city</b>								
Accommodations permitted	2002	32	41	24	2	68	26	
	2003	33	40	24	3	67	27	
<b>Urban fringe/large town</b>								
Accommodations permitted	2002	21	42	33	3	79	37	
	2003	23	41	32	4	77	36	
<b>Rural/small town</b>								
Accommodations permitted	2002	22 *	45	31	2	78 *	33	
	2003	24	44	29	3	76	32	

\* Significantly different from 2003.

NOTE: Data were not collected at grade 8 in 2000. Detail may not sum to totals because of rounding. In addition to allowing for accommodations, the accommodations-permitted results at grade 4 differ slightly from previously reported results for 2000, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000, 2002, and 2003 Reading Assessments.

## Performance of Selected Subgroups by State

Results for public school students in participating states and jurisdictions are presented in this section by gender, race/ethnicity, and eligibility for free/reduced-price lunch. Additional data for participating jurisdictions by subgroup (including percentages at or above *Basic* and average scale score gaps by gender and race/ethnicity) are provided in appendix C. Since results for each jurisdiction are based on the performance of public school students only, the results for the nation that appear in the tables along with data for participating jurisdictions are based on public school students only (unlike the national results presented earlier in the chapter, which reflect the combined performance of both public and nonpublic school students).

In addition to results from the 2003 assessment, results from earlier assessment years in which data are available are presented by these subgroups for participating jurisdictions.

## Gender

Tables 3.9 and 3.10 present the average reading scores for male and female students in participating jurisdictions at grades 4 and 8 respectively. In 2003, female students scored higher on average than male students in all 53 of the jurisdictions that participated at grades 4 and 8.

For the 46 jurisdictions that participated in both the 2002 and 2003 fourth-grade reading assessments, average scores increased for male students in Arizona; Minnesota and Department of Defense domestic schools showed decreases for male students only; and Massachusetts showed a decrease for both male and female students. For the 42 jurisdictions that participated in both the 1992 and 2003 fourth-grade reading assessments, 10 showed increases in average scores for both male and female students, and New Mexico and Oklahoma had decreases in the average scores for both male and female students.

Of the 44 jurisdictions that participated in the eighth-grade reading assessment in both 2002 and 2003, 4 showed decreases in the average score for male students only. Of the 39 jurisdictions that participated at grade 8 in 1998 and 2003, Delaware and Missouri showed average score increases for both male and female students, and Arizona, Nevada, and New Mexico showed a decrease for both male and female students.

**Table 3.9 Average reading scale scores, by gender, grade 4 public schools: By state, 1992–2003**

Grade 4	Male						Female					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	211	207 *	212	210	214	213	219	218	218	215 *	220	220
Alabama	204	203	208	209	203	204	211	213	214	214	211	211
Alaska	–	–	–	–	–	205	–	–	–	–	–	218
Arizona	206	201	201	202	200 *	206	213	211	212	211	211	212
Arkansas	208	204	206	205	210	209	214	213 **	212 **	213 *	216	218
California	198	194 ***	198	198	204	202	207	200 ***	206	206	208	209
Colorado	214 **	209 **	218	217	–	220	219 **	218 **	225	224	–	227
Connecticut	219 **	218 **	229	225	226	224	224 **	226 **	234	235	233	232
Delaware	209 **	200 **	208 **	204 **	222	222	217 **	212 **	216 **	210 **	226	226
Florida	205 **	199 **	203 **	201 **	210	214	211 **	210 **	212 **	210 **	218	222
Georgia	210	201 **	206	205 *	211	210	215	212	213	212 **	219	218
Hawaii	198	194 **	194 *	193 **	203	202	209 **	208 **	205 **	206 **	213	215
Idaho	217	–	–	–	216	216	221	–	–	–	224	221
Illinois	–	–	–	–	–	214	–	–	–	–	–	219
Indiana	219	216	–	–	220	216	224	223	–	–	224	224
Iowa	222	219	218	216	220	220	229	227	228	225	226	227
Kansas	–	–	219	218	218	216	–	–	226	225	226	224
Kentucky	209 **	206 **	216	216	215	215	216 **	217 **	220	219	224	223
Louisiana	200	193 **	199	195	204	200	207	200 **	209	205	210	210
Maine	225	225	222	222	222	221	229	231 **	229	228	228	226
Maryland	207 **	205 **	209 *	206 **	214	215	215 **	214 **	221	217 *	220	222
Massachusetts	225	221 *	221	219 **	231 *	225	227	226 **	229	226 *	237 *	231
Michigan	214	–	212	211	216	216	218	–	221	221	222	222
Minnesota	217	214	218	215	221 *	216	225 **	223 **	226	223 **	230	229
Mississippi	196 **	196 **	201	199	200	202	202 **	207	208	207	206	209
Missouri	217	213 **	211 **	210 **	216	219	223	221	222	221 *	224	226
Montana	–	218	221	220	219	218	–	227	231	230	229	228
Nebraska	218	216	–	–	218	218	225	224	–	–	225	223
Nevada	–	–	204	203	206	202	–	–	211	209	212	211
New Hampshire	224	218 **	222	224	–	224	231	229	229	228	–	232
New Jersey	220	216 **	–	–	–	222	226	222 **	–	–	–	229
New Mexico	209 **	201	202	201	204	201	213 **	208	209	209	211	206
New York	212 **	207 **	214	214 *	217	218	218 **	216 **	218 **	217 **	227	226
North Carolina	209 **	209 **	213	208 **	218	216	214 **	220 **	220 **	218 **	225	227
North Dakota	224 **	221	–	–	221	218	227	230 **	–	–	227	225
Ohio	214	–	–	–	220	218	221 **	–	–	–	225	226
Oklahoma	218 **	–	219 **	218 **	210	210	223 **	–	220	220	217	217
Oregon	–	–	210	208	215	213	–	–	218	215 **	224	223
Pennsylvania	218	211	–	–	218	215	223	220	–	–	223	222
Rhode Island	215	215	217	218 *	217	213	218	225	220	217	222	220
South Carolina	206 *	199 **	207	206 *	209	211	213 **	208 **	214 *	212 **	218	219
South Dakota	–	–	–	–	–	220	–	–	–	–	–	225
Tennessee	209	208	209	208	211	208	215	217	216	215	217	217
Texas	209	210	213	208	215	212	216	214	221	220	219	218
Utah	217	213	212	213	218	215	224	222	219 *	219 *	225	224
Vermont	–	–	–	–	223	224	–	–	–	–	231	229
Virginia	217	208 **	214 *	213 **	223	219	225	219 **	223 *	222 **	227	228
Washington	–	209 **	212 *	213	220	216	–	217 **	222 *	223	227	226
West Virginia	211	208 **	213	212	217	215	220	218 **	219	219	221	223
Wisconsin	221 **	221 **	222 *	221	–	217	226	227	226	224	–	225
Wyoming	220	218	216	215	219	219	226	224	223	222	224	225
<b>Other jurisdictions</b>												
District of Columbia	185 *	174 **	177	175 **	185	182	191 **	183 **	186 **	183 **	196	195
DDESS <sup>2</sup>	–	–	217	214	222 *	218	–	–	223 *	223 **	228	229
DoDDS <sup>3</sup>	–	213 **	219	217 **	222	222	–	223 **	228	226	227	228

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table 3.10 Average reading scale scores, by gender, grade 8 public schools: By state, 1998–2003**

Grade 8	Male				Female			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	255	253 *	258 *	256	268	268	267	267
Alabama	251 *	250	247	246	259	261	258	261
Alaska	–	–	–	250	–	–	–	263
Arizona	256 *	255 *	252	251	266 *	265 *	262	260
Arkansas	250	251	255	254	262	262	266	263
California	249	249	247	247	257	255	255	255
Colorado	257	258	–	262	270	270	–	274
Connecticut	265	265	261	262	278 *	277	273	273
Delaware	249 **	248 ***	264 ***	260	262 ***	260 ***	271	270
Florida	247	248	255	251	260	261	266	263
Georgia	252	252	253	253	262	262	263	263
Hawaii	243	242	243	245	256	256	260	258
Idaho	–	–	259	258	–	–	273	271
Illinois	–	–	–	264	–	–	–	269
Indiana	–	–	260	259	–	–	270	270
Iowa	–	–	–	261	–	–	–	273
Kansas	263	262	265	260	273	273	274	272
Kentucky	255	256	261	261	269	269	270	272
Louisiana	245	245	252	248	258	258	260	258
Maine	265	264	265	262	280 *	279	275	275
Maryland	255	255	258	255	269	267	269	269
Massachusetts	263	264	266	268	274	274	275	278
Michigan	–	–	259	259	–	–	270	270
Minnesota	260	258	–	261	275	273	–	274
Mississippi	245	247	251	249	256	256 *	259	260
Missouri	258 *	257 *	265	263	269	268 *	271	271
Montana	263	264	267	264	277	277	274	276
Nebraska	–	–	267 ***	261	–	–	274	271
Nevada	252 *	253 ***	246	246	262 *	263 ***	257	258
New Hampshire	–	–	–	265	–	–	–	276
New Jersey	–	–	–	263	–	–	–	272
New Mexico	252 *	253 ***	250	246	263 ***	263 ***	258	257
New York	263	261	261	259	270	269	267	271
North Carolina	256	255	260	256	270	269	270	267
North Dakota	–	–	263	264	–	–	273	275
Ohio	–	–	265	263	–	–	272	270
Oklahoma	259	259	257	256	271	271	267	268
Oregon	259	258	264	259	273	275 *	273	270
Pennsylvania	–	–	263	259	–	–	268	270
Rhode Island	257	259	258	256	268	269	266	266
South Carolina	250	250	253	253	259	259	263	263
South Dakota	–	–	–	265	–	–	–	275
Tennessee	252	250	254	252	265	265	266	265
Texas	257	256	257	253	267	266	268	265
Utah	260	259	257	259	269	268	270	269
Vermont	–	–	267	265	–	–	277	276
Virginia	262	262	264	263	271	271	275	272
Washington	258	256	261	258	272	272	275	271
West Virginia	254	255	259 *	254	269	268	268	265
Wisconsin	259	258	–	259	273	273	–	274
Wyoming	255 ***	256 *	260	262	270	271	271	272
<b>Other jurisdictions</b>								
District of Columbia	230	229	235	231	242	241	245	245
DDESS <sup>2</sup>	268	266	269 *	261	270	271	275	278
DoDDS <sup>3</sup>	265	264 *	269	269	274	274	277	277

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.



Tables 3.11 and 3.12 present the percentages of male and female students who performed at or above the *Proficient* level for the participating jurisdictions at grades 4 and 8 respectively. In 2003, higher percentages of female than male students performed at or above *Proficient* in 48 of the 53 jurisdictions that participated at grade 4, and in all 53 of the jurisdictions that participated at grade 8.

At grade 4, the percentages of male students and female students performing at or above *Proficient* decreased in Massachusetts since 2002. Between 1992 and 2003, the percentages of both male and female students performing at or above *Proficient* increased in 11 jurisdictions, and

the percentages of female students performing at or above *Proficient* increased in 4 jurisdictions.

At grade 8, between 2002 and 2003, the percentage of students performing at or above *Proficient* increased for males in Hawaii and for females in New York. Between 1998 and 2003, percentages of male students and female students performing at or above *Proficient* increased in Colorado, Delaware, and Missouri, and the percentage of male students performing at this level increased in Massachusetts and Wyoming. The percentage of female students performing at or above *Proficient* decreased in New Mexico.

**Table 3.11 Percentage of students at or above *Proficient* in reading, by gender, grade 4 public schools: By state, 1992–2003**

Grade 4	Male						Female					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	24	24	27	25	26	26	30	32	31	30 *	33	33
Alabama	17	20	22	22	20	21	23	26	26	25	25	24
Alaska	—	—	—	—	—	23	—	—	—	—	—	33
Arizona	17	20	18	18	18	21	24	28	26	25	26	26
Arkansas	20 *	21	22	21	23	25	25 *	27	24 *	24 *	28	31
California	16	15	18	17	18	18	22	20	22	23	24	24
Colorado	22 **	25 *	30	29	—	32	29 **	31 **	37	36	—	41
Connecticut	30 **	34	41	38	39	38	37 **	43	49	49	47	47
Delaware	21 **	19 **	21 **	20 **	32	30	27 **	27 **	28 *	25 **	37	36
Florida	20 **	19 **	19 **	19 **	24	29	23 **	26 **	26 **	25 **	30	35
Georgia	23	23	22	21	25	24	27	28	27	27	31	30
Hawaii	14	16	15	14	18	17	20 *	22	20 *	20	25	26
Idaho	25	—	—	—	28	28	30	—	—	—	37	33
Illinois	—	—	—	—	—	28	—	—	—	—	—	33
Indiana	28	29	—	—	31	29	32	36	—	—	35	37
Iowa	32	30	29	27	32	31	40	40	40	39	38	38
Kansas	—	—	29	29	29	29	—	—	39	39	38	36
Kentucky	21 *	22	27	28	25	27	25 **	29	31	30	35	34
Louisiana	14	13 *	16	14	18	17	17 **	16 **	22	21	22	23
Maine	34	38	32	32	32	32	38	44	41	39	38	39
Maryland	20 **	23 *	24	22 *	27	29	28 **	30 *	34	32	32	36
Massachusetts	34	33	31 *	31 *	43 *	38	38	39	42	39	52 *	43
Michigan	24	—	23 *	23	26	30	28	—	33	32	34	34
Minnesota	27	28	32	30	31	31	36 **	37 *	40	39	42	44
Mississippi	12 **	14	16	15	14	17	15 *	21	19	19	18	20
Missouri	27	28	23 **	23 **	28	31	33	34	35	33	36	37
Montana	—	30	31	30	30	30	—	40	44	44	43	40
Nebraska	27	30	—	—	30	30	34	39	—	—	39	35
Nevada	—	—	18	18	19	16	—	—	24	22	23	24
New Hampshire	34	30	35	35	—	35	42	42	41	39	—	45
New Jersey	31	29	—	—	—	35	38	37	—	—	—	42
New Mexico	21	17	19	18	19	18	24	24	25	24	24	20
New York	24 *	24 *	27	27	31	30	29 **	31 **	31 *	31 *	40	38
North Carolina	23 *	26	24	23	28	27	26 **	34	31 *	31 *	35	38
North Dakota	33	33	—	—	30	28	37	42 *	—	—	38	36
Ohio	23 **	—	—	—	30	31	31 *	—	—	—	37	37
Oklahoma	26	—	29	29 *	23	23	32	—	31	32	29	29
Oregon	—	—	24	23	26	26	—	—	32	30	37	36
Pennsylvania	29	25	—	—	32	30	34	35	—	—	37	36
Rhode Island	26	27	31	31	30	26	30	37	33	32	34	33
South Carolina	19	17 *	20	20	22	22	24 *	23 **	24 *	24 *	29	30
South Dakota	—	—	—	—	—	31	—	—	—	—	—	36
Tennessee	21	23	23	22	23	22	26	30	28	28	28	30
Texas	20	24	25	23	27	24	27	28	32	33	29	29
Utah	27	26	24	24	28	28	33	34	32	31	37	36
Vermont	—	—	—	—	33	34	—	—	—	—	45	40
Virginia	28	21 **	26	25	35	32	35	32 *	33	34	39	39
Washington	—	24	25	26	31	27	—	29 **	33 *	35	38	39
West Virginia	21	22	26	24	25	25	30	30	31	31	31	32
Wisconsin	30	31	32	32	—	28	37	39	37	36	—	37
Wyoming	30	28	26	26	29	30	35	36	34	33	35	37
<b>Other jurisdictions</b>												
District of Columbia	9	7	8	8	8	8	10	9 *	12	12	11	13
DDESS <sup>2</sup>	—	—	28	28	30	28	—	—	35 *	35	37	42
DoDDS <sup>3</sup>	—	22 **	28	28	30	32	—	34	39	37	37	38

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table 3.12 Percentage of students at or above *Proficient* in reading, by gender, grade 8 public schools: By state, 1998–2003**

Grade 8	Male				Female			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	24	23	26	25	37	37	36	35
Alabama	18	17	17	17	25	26	26	28
Alaska	–	–	–	22	–	–	–	32
Arizona	22	21	18	21	33	32	29	29
Arkansas	18	19	22	23	28	28	33	31
California	17	17	17	20	26	25	24	25
Colorado	23 *	23 *	–	29	38	37 *	–	43
Connecticut	34	33	31	31	50 *	48	43	43
Delaware	19 *	18 **, **	28	26	31 *	29 *	38	37
Florida	18	17	24	21	28	28	34	32
Georgia	20	21	22	22	29	30	30	30
Hawaii	14	15	14 *	17	23	23	26	26
Idaho	–	–	25	26	–	–	41	39
Illinois	–	–	–	31	–	–	–	38
Indiana	–	–	26	26	–	–	38	39
Iowa	–	–	–	28	–	–	–	43
Kansas	29	29	32	28	42	43	44	42
Kentucky	22	23	27	27	37	38	37	40
Louisiana	13	13	19	18	22	22	25	26
Maine	33	32	32	29	51	50	44	45
Maryland	25	24	27	24	38	37	37	37
Massachusetts	29 *	30 *	33	37	44 *	45	45	49
Michigan	–	–	27	27	–	–	37	38
Minnesota	28	28	–	29	46	44	–	46
Mississippi	14	15	16	16	23	22	24	26
Missouri	24 *	23 *	28	30	35	33 *	38	39
Montana	30	32	33	30	46	48	41	45
Nebraska	–	–	32	29	–	–	41	41
Nevada	19	18	16	15	30	29	23	26
New Hampshire	–	–	–	34	–	–	–	47
New Jersey	–	–	–	32	–	–	–	42
New Mexico	18	17	17	16	29	29 *	23	24
New York	30	28	29	28	37	37	35 *	42
North Carolina	24	22	27	23	38	38	36	34
North Dakota	–	–	28	31	–	–	42	46
Ohio	–	–	31	30	–	–	39	38
Oklahoma	21	23	22	24	36	37	33	35
Oregon	25	25	32	27	42	45	41	39
Pennsylvania	–	–	32	26	–	–	38	38
Rhode Island	25	27	25	25	35	37	35	34
South Carolina	17	18	19	19	26	26	29	29
South Dakota	–	–	–	32	–	–	–	45
Tennessee	18	19	23	21	33	34	34	31
Texas	22	21	25	21	33	33	36	31
Utah	25	25	26	26	37	37	38	38
Vermont	–	–	34	32	–	–	46	45
Virginia	28	27	31	31	38	39	43	41
Washington	24	24	30	27	40	40	44	39
West Virginia	20	21	25	20	35	35	33	30
Wisconsin	24	25	–	29	42	44	–	45
Wyoming	22 *	22 *	25	29	37	40	37	40
<b>Other jurisdictions</b>								
District of Columbia	10	9	9	8	14	13	11	13
DDESS <sup>2</sup>	36	37	33	28	38	40	42	47
DoDDS <sup>3</sup>	31	31	34	34	43	42	45	46

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

### **Race/Ethnicity**

The average reading scores of the racial/ethnic subgroups in each participating jurisdiction are presented in table 3.13 for grade 4 and in table 3.14 for grade 8. At grade 4, the average scores increased between 2002 and 2003 for Asian/Pacific Islander students in Rhode Island, and decreased for Black, White, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students in 1 jurisdiction each. Average scores were higher in 2003 than in 1992 for White students in 19 jurisdictions, Black students in 8 jurisdictions, Hispanic students in 5 jurisdictions, and Asian/Pacific Islander students in 4 jurisdictions. During the same interval, average scores declined for Black students in Iowa and for American Indian/Alaska Native students in New Mexico.

Average score increases were observed since 1992 for three or more racial/ethnic subgroups in the following jurisdictions: California, Florida, Maryland, and New York.

At grade 8, between 2002 and 2003, average scores increased for White students in Nevada and North Dakota and for Asian/Pacific Islander students in Connecticut. An average score decrease was detected for White students in West Virginia since 2002. Average scores increased between 1998 and 2003 for White students in 6 jurisdictions, Black students in Delaware, and Asian/Pacific Islander students in Hawaii and Minnesota. Over the same time period, decreases in average scores were noted for White, Black, and Hispanic students in 1 jurisdiction each.

**Table 3.13 Average reading scale scores, by race/ethnicity, grade 4 public schools: By state, 1992–2003**

Grade 4	Nation (public) <sup>1</sup>	White						Black					
		Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
		1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
Alabama	217	219	221	222	218	219	187	185	192	191	188	188	
Alaska	–	–	–	–	–	226	–	–	–	–	–	209	
Arizona	220	219	221	219	220	223	198	188	193	191	199	196	
Arkansas	218 ***	217 ***	217 ***	216 ***	222	223	189	182 ***	184	184	188	190	
California	217 ***	212 ***	217	217	223	224	181 *	182	188	186	196	193	
Colorado	221 ***	220 ***	228	226 ***	–	232	200	192 ***	200	197	–	208	
Connecticut	230 ***	233 ***	239	237	237	238	195	189	204	203	206	201	
Delaware	221 ***	215 ***	219 ***	218 ***	233	233	195 ***	187 ***	197 ***	189 ***	209	211	
Florida	218 ***	217 ***	219 ***	217 ***	226	229	185 ***	181 ***	188 ***	186 ***	196	198	
Georgia	223	221	223	221 *	226	226	195	184 ***	192 *	191 ***	200	199	
Hawaii	212 ***	214 ***	214	214 *	219	221	205	197 ***	205	203	208	211	
Idaho	221	–	–	–	224	222	‡	–	–	–	‡	‡	
Illinois	–	–	–	–	–	228	–	–	–	–	–	194	
Indiana	224	224	–	–	225	224	200	192	–	–	202	197	
Iowa	226	224	225	222	225	226	208 ***	185	195	191	207	196	
Kansas	–	–	227	227	226	225	–	–	193	197	206	197	
Kentucky	214 ***	214 ***	220	220	222	221	196	190 ***	197	199	199	202	
Louisiana	215 ***	213 ***	222	218 *	221	223	189	178 ***	183	180 ***	192	189	
Maine	227	229 ***	226	225	225	224	‡	‡	‡	‡	‡	‡	
Maryland	220 ***	222 ***	228	224 ***	230	231	192 *	185 ***	192	190 ***	199	200	
Massachusetts	230 ***	230 ***	230	228 ***	239 *	234	204	196 ***	203	202	212	207	
Michigan	222 ***	–	224 *	223 ***	226	228	187	–	187	187	195	189	
Minnesota	223 ***	221 ***	226	224 ***	229	229	189	176	188	184	202	194	
Mississippi	217 *	218	216 *	215 ***	218	221	186 *	185 ***	191	189	189	192	
Missouri	225	221 ***	222 *	221 ***	226	227	195 *	191 ***	188 ***	188 ***	197	203	
Montana	–	225	228	227	226	227	–	‡	‡	‡	‡	‡	
Nebraska	224	223	–	–	226	225	196	190	–	–	209	203	
Nevada	–	–	214	213	218	217	–	–	188	183	196	193	
New Hampshire	228	224 ***	226	227	–	229	‡	‡	‡	‡	–	‡	
New Jersey	233	231 ***	–	–	–	235	198	191	–	–	–	200	
New Mexico	223	220	224	222	223	222	202	196	196	196	‡	202	
New York	226 ***	226 ***	228 ***	228 ***	235	235	199	190 ***	192 ***	191 ***	202	203	
North Carolina	220 ***	224 ***	226 ***	223 ***	232	232	194 ***	192 ***	198 *	193 ***	205	203	
North Dakota	226	227	–	–	226	224	‡	‡	–	–	‡	‡	
Ohio	220 ***	–	–	–	229	226	197	–	–	–	202	202	
Oklahoma	223	–	224 *	225	220	220	201	–	193	195	188	195	
Oregon	–	–	218	217 *	223	222	–	–	193	191	204	202	
Pennsylvania	227	224	–	–	228	227	190	178 ***	–	–	192	191	
Rhode Island	223	225	227	226	227	224	192	197	191	192	201	196	
South Carolina	221 ***	218 ***	222 *	221 ***	225	226	194 ***	182 ***	194 *	192 ***	199	199	
South Dakota	–	–	–	–	–	227	–	–	–	–	–	‡	
Tennessee	218	219	220	218	220	220	192	188	191	193	194	188	
Texas	223	226	232	230	232	227	199	190 *	193	191 ***	202	202	
Utah	222	219 ***	220	220	224	223	‡	‡	‡	‡	‡	‡	
Vermont	–	–	–	–	227	226	–	–	–	–	‡	‡	
Virginia	227	224 ***	226	225 *	233	231	201	192 ***	202	199 ***	205	206	
Washington	–	216 ***	220 ***	221 **	227	226	–	198 ***	202 *	204	213	212	
West Virginia	216 *	214 ***	217	216	220	220	‡	200	192	194	207	203	
Wisconsin	227	227	229 *	228	–	225	198	196	193	187 ***	–	200	
Wyoming	225	223	221	220 ***	224	224	‡	‡	‡	‡	‡	‡	
<b>Other jurisdictions</b>													
District of Columbia	246	248	248	247	248	254	185	174 ***	177 ***	174 ***	188 *	184	
DDESS <sup>2</sup>	–	–	229	227	231	232	–	–	209	208	215	213	
DoDDS <sup>3</sup>	–	223 ***	229	227	229	230	–	205 ***	211	209	215	215	

See notes at end of table. ▶

**Table 3.13 Average reading scale scores, by race/ethnicity, grade 4 public schools: By state, 1992–2003—Continued**

Grade 4	Nation (public) <sup>1</sup>	Hispanic						Asian/Pacific Islander					
		Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
		1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
		194	186*	194*	192	199	199	215*	217	218	211	223	225
	Alabama	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Alaska	—	—	—	—	—	209	—	—	—	—	—	207
	Arizona	197	188	183	188	188	195	‡	186	‡	‡	222	225
	Arkansas	‡	‡	‡	‡	204	204	‡	‡	‡	‡	‡	‡
	California	180*,**	171*,**	178	181	192	191	207*,**	207*,**	210	211	220	224
	Colorado	202	191*,**	201	201	—	205	217	205*,**	222	‡	—	225
	Connecticut	187*,**	183*,**	200	196	204	206	‡	225	‡	‡	243	231
	Delaware	‡	‡	202	176	212	209	‡	‡	‡	‡	242	238
	Florida	203*	192*,**	198*	198*	207	211	‡	‡	‡	‡	228	233
	Georgia	‡	‡	‡	‡	200	201	‡	‡	‡	‡	227	233
	Hawaii	193	189*	196	197	203	204	200	197*,**	195*,**	196*,**	204	205
	Idaho	198	—	—	—	197	199	‡	—	—	—	‡	‡
	Illinois	—	—	—	—	—	197	—	—	—	—	—	235
	Indiana	‡	‡	—	—	216	212	‡	‡	—	—	‡	‡
	Iowa	‡	‡	‡	‡	203	205	‡	‡	‡	‡	‡	‡
	Kansas	—	—	215	201	205	207	—	—	‡	‡	‡	‡
	Kentucky	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Louisiana	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Maine	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Maryland	197	‡	208	207	208	209	219*,**	232	232	231	234	237
	Massachusetts	196	182*,**	195	194*	207	202	217	208*,**	212	211*,**	233	229
	Michigan	‡	—	202	201	205	205	‡	—	‡	‡	‡	232
	Minnesota	‡	‡	‡	‡	202	195	205	209	207	193	221*,**	197
	Mississippi	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Missouri	‡	‡	‡	‡	‡	218	‡	‡	‡	‡	‡	‡
	Montana	—	‡	‡	‡	‡	‡	—	‡	‡	‡	‡	‡
	Nebraska	205	199	—	—	203	202	‡	‡	—	—	‡	‡
	Nevada	—	—	191	189	195	192	—	—	213	212	220	214
	New Hampshire	‡	‡	‡	‡	—	206	‡	‡	‡	‡	—	‡
	New Jersey	195*,**	193*,**	—	—	—	212	231	232	—	—	—	235
	New Mexico	199	197	198	195	202	197	‡	‡	‡	‡	‡	‡
	New York	184*,**	189*,**	189*,**	188*,**	204	208	219*	225	233	230	240	230
	North Carolina	‡	‡	202*	‡	213	212	‡	‡	‡	‡	‡	227
	North Dakota	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
	Ohio	‡	—	—	—	‡	207	‡	—	—	—	‡	‡
	Oklahoma	207	—	210	204	197	200	‡	—	‡	‡	‡	‡
	Oregon	—	—	186	178*,**	200	199	—	—	214	205	220	219
	Pennsylvania	191	‡	—	—	197	195	‡	‡	—	—	236	‡
	Rhode Island	183	193	176	177*,**	195	196	187*,**	199*,**	206	206	205*	221
	South Carolina	‡	‡	‡	‡	‡	205	‡	‡	‡	‡	‡	‡
	South Dakota	—	—	—	—	—	‡	—	—	—	—	—	‡
	Tennessee	‡	‡	‡	‡	192	206	‡	‡	‡	‡	‡	‡
	Texas	200	198*,**	206	200	208	205	‡	‡	213	‡	232	229
	Utah	200	192	186	190	201	194	‡	212	208	216	214	212
	Vermont	—	—	—	—	‡	‡	—	—	—	—	‡	‡
	Virginia	‡	211	200	207	224*	210	230	225	219	218*,**	229	235
	Washington	—	185*,**	195	200	204	201	—	212	212	213	220	218
	West Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Wisconsin	209	203	209	201	—	209	‡	204	‡	‡	—	213
	Wyoming	206	208	206	205	207	214	‡	‡	‡	‡	‡	‡
	<b>Other jurisdictions</b>												
	District of Columbia	189	183	180	173	193	187	‡	‡	‡	‡	‡	‡
	DDESS <sup>2</sup>	—	—	211	213	222	216	—	—	‡	‡	‡	‡
	DoDDS <sup>3</sup>	—	213*,**	215	212	222	220	—	217	226	225	225	223

See notes at end of table. ▶

**Table 3.13 Average reading scale scores, by race/ethnicity, grade 4 public schools: By state, 1992–2003—Continued**

Grade 4	American Indian/Alaska Native						Other <sup>4</sup>					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	‡	212	‡	‡	207	202	‡	‡	‡	‡	216	220
Alabama	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	—	—	184	—	—	—	—	—	‡
Arizona	179	173	190	174	180	182	‡	‡	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	230
Georgia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	222	215
Hawaii	‡	‡	‡	‡	‡	‡	208	200*	204	196***	210	209
Idaho	‡	—	—	—	187	‡	‡	—	—	—	‡	‡
Illinois	—	—	—	—	—	‡	—	—	—	—	—	‡
Indiana	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	221
Iowa	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Kansas	—	—	‡	‡	‡	‡	—	—	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	‡	—	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Minnesota	‡	‡	‡	‡	221	‡	‡	‡	‡	‡	‡	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Montana	—	203	205	199	209*	195	—	‡	‡	‡	‡	‡
Nebraska	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Nevada	—	—	‡	‡	‡	190	—	—	‡	‡	‡	‡
New Hampshire	‡	‡	‡	‡	—	‡	‡	‡	‡	‡	—	‡
New Jersey	‡	‡	—	—	—	‡	‡	‡	—	—	—	‡
New Mexico	200***	178	175	180	184	182	‡	‡	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	‡	‡	‡	‡	‡	200	‡	‡	‡	‡	‡	230
North Dakota	205	199	—	—	202	202	‡	‡	—	—	‡	‡
Ohio	‡	—	—	—	‡	‡	‡	—	—	—	‡	219
Oklahoma	215	—	216*	214	209	206	‡	—	‡	‡	228	‡
Oregon	—	—	‡	‡	‡	‡	—	—	‡	—	‡	‡
Pennsylvania	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	—	—	197	—	—	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	—	—	‡	‡	—	—	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Washington	—	‡	203	203	209	208	—	‡	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	‡	‡	—	211	‡	‡	‡	‡	—	‡
Wyoming	203	201	198	197	210	189	‡	‡	‡	‡	‡	‡
<b>Other jurisdictions</b>												
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	—	—	‡	‡	‡	‡	—	—	219	218	226	‡
DoDDS <sup>3</sup>	—	‡	‡	‡	‡	‡	—	223	225	218	222	227

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table 3.14 Average reading scale scores, by race/ethnicity, grade 8 public schools: By state, 1998–2003**

Grade 8	White				Black			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	269	268	271	270	241	242	244	244
Alabama	264	265	264	262	237	237	234	237
Alaska	–	–	–	268	–	–	–	249
Arizona	271	269	267	268	245	248	250	245
Arkansas	262	263	267	266	234	234	238	232
California	268	268	265	265	243	238	242	239
Colorado	270	270*	–	275	246	248	–	249
Connecticut	278	277	277	275	243	245	240	244
Delaware	263***	263***	275	273	238***	234***	252	248
Florida	264	264	269	268	232	236	244	239
Georgia	268	268	268	268	240	241	246	244
Hawaii	262	262	263	259	‡	‡	253	‡
Idaho	–	–	269	267	–	–	‡	‡
Illinois	–	–	–	276	–	–	–	247
Indiana	–	–	267	269	–	–	247	244
Iowa	–	–	–	269	–	–	–	245
Kansas	271	272	273	271	252	249	244	243
Kentucky	264*	264*	267	269	242	246	248	245
Louisiana	263	262	268	267	236	236	240	238
Maine	273*	272*	270	269	‡	‡	‡	‡
Maryland	272	272	274	271	241	240	246	245
Massachusetts	274	274	278	278	248	246	246	252
Michigan	–	–	270	272	–	–	242	242
Minnesota	270	269	–	273	236	231	–	243
Mississippi	263*	264	268	267	237*	238	240	243
Missouri	266***	265***	271	272	243	242	250	243
Montana	271	273	273	273	‡	‡	‡	‡
Nebraska	–	–	273	271	–	–	246	239
Nevada	263	264	259*	262	237	241	234	233
New Hampshire	–	–	–	272	–	–	–	‡
New Jersey	–	–	–	277	–	–	–	248
New Mexico	270	270	266	268	‡	‡	‡	246
New York	276	275	274	277	248	246	246	246
North Carolina	271	270	274	271	249	246	247	247
North Dakota	–	–	269*	272	–	–	‡	‡
Ohio	–	–	273	271	–	–	246	249
Oklahoma	269	268	268	267	252	253*	238	240
Oregon	268	269	270	267	240	239	‡	251
Pennsylvania	–	–	271	268	–	–	236	243
Rhode Island	265	268	268	267	251	246	243	241
South Carolina	265*	265*	268	269	239	240	243	244
South Dakota	–	–	–	273	–	–	–	‡
Tennessee	265	264	265	265	237	235	240	239
Texas	272	271	276	272	245	246	247	247
Utah	266	266	267	268	‡	‡	‡	‡
Vermont	–	–	272	271	–	–	‡	‡
Virginia	273	273	275	275	250	250	252	250
Washington	268	267	271	268	249	242	247	251
West Virginia	262	262	264*	260	246	248	242	248
Wisconsin	270	269	–	271	235	234	–	234
Wyoming	264***	265*	267	269	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	234	233	238	236
DDESS <sup>2</sup>	277	278	279	280	254	248	260	255
DoDDS <sup>3</sup>	276	275	278	277	259	256	263	260

See notes at end of table. ▶



**Table 3.14 Average reading scale scores, by race/ethnicity, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	Hispanic				Asian/Pacific Islander			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	243	241	245	244	265	261	265	268
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	–	–	–	246	–	–	–	253
Arizona	245	244	242	240	‡	‡	‡	‡
Arkansas	‡	‡	‡	257	‡	‡	‡	‡
California	238	238	238	237	257	259	257	266
Colorado	242	244	–	247	265	261	–	275
Connecticut	247	247	239	244	285	285	265*	282
Delaware	247	248	250	246	‡	‡	282	281
Florida	247	247	252	251	281	275	‡	‡
Georgia	‡	‡	242	245	‡	‡	265	265
Hawaii	‡	‡	246	249	246	246*	249	249
Idaho	–	–	247	242	–	–	‡	‡
Illinois	–	–	–	250	–	–	–	281
Indiana	–	–	‡	247	–	–	‡	‡
Iowa	–	–	–	244	–	–	–	‡
Kansas	248	241	253	245	‡	‡	‡	266
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	262	261	253	251	282	278	284	282
Massachusetts	244	242	246	246	261	269	270	281
Michigan	–	–	‡	257	–	–	‡	‡
Minnesota	‡	‡	–	240	245	236*	–	257
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	‡	‡	‡	‡	‡	‡	‡	‡
Nebraska	–	–	251	241	–	–	‡	‡
Nevada	242	242	237	237	259	260	258	260
New Hampshire	–	–	–	‡	–	–	–	‡
New Jersey	–	–	–	248	–	–	–	289
New Mexico	247	250***	247	243	‡	‡	‡	‡
New York	248	247	251	250	273	276	261	270
North Carolina	‡	‡	252	244	‡	‡	‡	267
North Dakota	–	–	‡	‡	–	–	‡	‡
Ohio	–	–	‡	268	–	–	‡	‡
Oklahoma	249	254	251	250	‡	‡	‡	‡
Oregon	245	237	249	249	269	265	275	265
Pennsylvania	–	–	241	257	–	–	253	‡
Rhode Island	238	239	240	238	267	260	251	252
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	–	–	–	‡	–	–	–	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	251	250	250	247	272	275	271	272
Utah	252	244	238	241	‡	‡	254	262
Vermont	–	–	‡	‡	–	–	‡	‡
Virginia	258	265	261	266	273	274	279	274
Washington	244	240	247	246	263	267	272	270
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	255	256	–	244	‡	‡	–	253
Wyoming	243*	250	249	255	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	243	246	240	240	‡	‡	‡	‡
DDESS <sup>2</sup>	270	276	273	268	‡	‡	‡	‡
DoDDS <sup>3</sup>	260	263	267	269	265	266	273	272

See notes at end of table. ▶

**Table 3.14 Average reading scale scores, by race/ethnicity, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	American Indian/Alaska Native				Other <sup>4</sup>			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	‡	‡	252	248	‡	‡	260	261
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	235	—	—	—	‡
Arizona	243	238	244	238	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	—	‡	‡	‡	—	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡
Georgia	‡	‡	‡	‡	‡	‡	‡	‡
Hawaii	‡	‡	‡	‡	249	245	254	250
Idaho	—	—	‡	‡	—	—	‡	‡
Illinois	—	—	—	‡	—	—	—	‡
Indiana	—	—	‡	‡	—	—	‡	‡
Iowa	—	—	—	‡	—	—	—	‡
Kansas	‡	‡	‡	‡	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	—	—	‡	‡	—	—	‡	‡
Minnesota	‡	‡	—	‡	‡	‡	—	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	255	251	253	247	‡	‡	‡	‡
Nebraska	—	—	‡	‡	—	—	‡	‡
Nevada	‡	‡	‡	‡	‡	‡	‡	‡
New Hampshire	—	—	—	‡	—	—	—	‡
New Jersey	—	—	—	‡	—	—	—	‡
New Mexico	246	243	239	242	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	257	257	‡	242	‡	‡	‡	‡
North Dakota	—	—	250	244	—	—	‡	‡
Ohio	—	—	‡	‡	—	—	‡	‡
Oklahoma	260	260	258	257	‡	‡	‡	268
Oregon	‡	‡	‡	‡	‡	‡	‡	‡
Pennsylvania	—	—	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	246	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	‡	‡	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Washington	250	254	‡	247	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	—	‡	‡	‡	—	‡
Wyoming	249	241	247	242	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	‡	‡	‡	‡	‡	‡	274	‡
DoDDS <sup>3</sup>	‡	‡	‡	‡	268*	269*	273	280

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

The percentages of students who performed at or above *Proficient* in the different racial/ethnic subgroups across jurisdictions are presented in tables 3.15 (grade 4) and 3.16 (grade 8). The percentage of fourth-graders performing at or above *Proficient* increased between 1992 and 2003 for White students in 17 jurisdictions, Black students in 6 jurisdictions, Hispanic students in 8 jurisdictions, and Asian/Pacific Islander students in 3 jurisdictions. Between 1992 and 2003, increases in the percentages of students performing at or above *Proficient* were

noted for 3 or more racial/ethnic subgroups in California, Florida, and Maryland.

At grade 8, the percentage of students performing at or above *Proficient* increased since 2002 for White students in North Dakota and decreased for White students in West Virginia. Between 1998 and 2003, the percentage of eighth-graders performing at or above *Proficient* increased for White students in 6 jurisdictions. The percentage of students performing at or above *Proficient* decreased for White students in Maine between 1998 and 2003.

**Table 3.15 Percentage of students at or above *Proficient* in reading, by race/ethnicity, grade 4 public schools:  
By state, 1992–2003**

Grade 4	Nation (public) <sup>1</sup>	White						Black					
		Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
		1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
Alabama	27	31	32	32	31	30	5	7	8	7	7	9	
Alaska	—	—	—	—	—	40	—	—	—	—	—	21	
Arizona	28***	32	31	30	32	35	14	11	11	11	17	13	
Arkansas	28***	29*	28*	28*	33	35	6*	6*	6	6*	8	10	
California	28*	25***	29	28	35	36	9	7	6	6	11	11	
Colorado	29***	33***	40	38*	—	45	11	12	15	11	—	18	
Connecticut	41***	47*	54	51	52	54	8	9	13	13	17	12	
Delaware	30***	29***	31***	30***	45	44	8***	10*	12	10*	18	16	
Florida	28***	31***	31***	29***	38	42	7***	7***	9	8*	11	13	
Georgia	34	35	36	35	39	38	10	9	9	9	13	12	
Hawaii	23	29	27	25	32	35	17	11	20	20	21	18	
Idaho	29	—	—	—	35	33	‡	—	—	—	‡	‡	
Illinois	—	—	—	—	—	42	—	—	—	—	—	10	
Indiana	33	36	—	—	37	36	10	8	—	—	14	11	
Iowa	37	36	37	35	37	37	17	7	12	8	20	8	
Kansas	—	—	37	37	38	37	—	—	13	15	17	14	
Kentucky	24***	27	31	31	32	33	8	11	11	11	13	16	
Louisiana	23***	24***	30	28*	31	34	6	3***	5*	5*	8	8	
Maine	36	41*	37	36	35	36	‡	‡	‡	‡	‡	‡	
Maryland	32***	36***	40	37	42	44	9***	8***	10	9	12	14	
Massachusetts	40***	41*	42	40*	54	48	10	12	10	12	19	15	
Michigan	30***	—	33*	33*	36	40	7	—	7	8	11	8	
Minnesota	33***	34***	39	38	40	43	5	11	11	12	15	14	
Mississippi	25	29	26	25	26	30	5	7	8	7	6	8	
Missouri	34*	34	33*	32*	37	39	8	11	8	8*	10	14	
Montana	—	37	40	39	39	38	—	‡	‡	‡	‡	‡	
Nebraska	33	36	—	—	38	36	8	10	—	—	19	17	
Nevada	—	—	26	25	28	28	—	—	7	6	10	9	
New Hampshire	38	36*	38	37	—	41	‡	‡	‡	‡	—	‡	
New Jersey	44	42*	—	—	—	49	9	11	—	—	—	14	
New Mexico	34	31	36	35	35	34	12	13	9	10	‡	18	
New York	35***	38***	39*	39***	49	48	10	9***	8*	8*	14	14	
North Carolina	32***	38*	36***	35***	44	44	9	11	11	10	13	12	
North Dakota	36	39*	—	—	36	34	‡	‡	—	—	‡	‡	
Ohio	30***	—	—	—	40	39	10	—	—	—	13	16	
Oklahoma	32	—	35	35	31	32	9	—	9	11	8	13	
Oregon	—	—	31	30	34	34	—	—	9	9	13	19	
Pennsylvania	36	36	—	—	41	40	8	7	—	—	10	9	
Rhode Island	32	36	38	37	39	36	8	12	10	10	12	12	
South Carolina	32	30*	32	32	36	36	7*	5***	9	8	12	11	
South Dakota	—	—	—	—	—	37	—	—	—	—	—	‡	
Tennessee	28	32	31	30	31	32	7	9	9	8	9	9	
Texas	35	38	43	43	44	39	8*	9	10	9	14	16	
Utah	31	31	30	30	35	35	‡	‡	‡	‡	‡	‡	
Vermont	—	—	—	—	40	37	—	—	—	—	‡	‡	
Virginia	38	35***	37	38	46	44	11	8***	13	12	15	16	
Washington	—	30***	32	33	38	38	—	11***	13	12	23	23	
West Virginia	26	27	30	28	29	29	‡	14	5	7	17	13	
Wisconsin	37	38	39	38	—	36	9	9	8	6	—	13	
Wyoming	35	33	32	31	34	36	‡	‡	‡	‡	‡	‡	
<b>Other jurisdictions</b>													
District of Columbia	61	63	64	62	66	70	7	5*	6	6	7	7	
DDESS <sup>2</sup>	—	—	41	40	42	44	—	—	20	20	21	21	
DoDDS <sup>3</sup>	—	34***	41	40	39	43	—	14*	20	19	21	22	

See notes at end of table. ▶

**Table 3.15 Percentage of students at or above Proficient in reading, by race/ethnicity, grade 4 public schools:  
By state, 1992–2003—Continued**

Grade 4	Nation (public) <sup>1</sup>	Hispanic						Asian/Pacific Islander					
		Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
		1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
		10*	11	12	12	14	14	23*	34	31	27	36	37
Alabama		‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Alaska		—	—	—	—	—	—	—	—	—	—	—	18
Arizona		10	13	7*	8	10	12	‡	16	‡	‡	30	38
Arkansas		‡	‡	‡	‡	16	18	‡	‡	‡	‡	‡	‡
California		5*	4***	8	8	10	9	22***	26	27	31	34	37
Colorado		12*	11	14	14	—	18	29	26	35	‡	—	33
Connecticut		6***	10	12	11	15	18	‡	40	‡	‡	58	44
Delaware		‡	‡	12	6*	18	20	‡	‡	‡	‡	58	48
Florida		14***	13***	18	19	20	24	‡	‡	‡	‡	41	44
Georgia		‡	‡	‡	‡	15	17	‡	‡	‡	‡	42	43
Hawaii		10	12	14	15	20	17	15	17	14	15	18	18
Idaho		7	—	—	—	10	12	‡	—	—	—	‡	‡
Illinois		—	—	—	—	—	15	—	—	—	—	—	46
Indiana		‡	‡	—	—	24	26	‡	‡	—	—	‡	‡
Iowa		‡	‡	‡	‡	14	17	‡	‡	‡	‡	‡	‡
Kansas		—	—	27	22	15	19	—	—	‡	‡	‡	‡
Kentucky		‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana		‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maine		‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maryland		11	‡	24	22	20	23	33*	49	42	44	45	52
Massachusetts		9	6*	10	11	15	15	28	22*	23	19*	46	40
Michigan		‡	—	17	16	16	16	‡	—	‡	‡	‡	51
Minnesota		‡	‡	‡	‡	14	16	14	25	30	20	33	15
Mississippi		‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Missouri		‡	‡	‡	‡	‡	30	‡	‡	‡	‡	‡	‡
Montana		—	‡	‡	‡	‡	‡	—	‡	‡	‡	‡	‡
Nebraska		19	15	—	—	18	14	‡	‡	—	—	‡	‡
Nevada		—	—	11	9	11	11	—	—	24	21	24	21
New Hampshire		‡	‡	‡	‡	—	19	‡	‡	‡	‡	—	‡
New Jersey		9***	12***	—	—	—	21	42	46	—	—	—	47
New Mexico		12	15	14	12	15	13	‡	‡	‡	‡	‡	‡
New York		8***	11*	7***	7***	16	18	29	42	48	47	57	42
North Carolina		‡	‡	14	‡	19	24	‡	‡	‡	‡	‡	36
North Dakota		‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Ohio		‡	—	—	—	‡	23	‡	—	—	—	‡	‡
Oklahoma		14	—	15	14	13	14	‡	—	‡	‡	‡	‡
Oregon		—	—	8	6	14	15	—	—	24	23	33	33
Pennsylvania		8	‡	—	—	14	10	‡	‡	—	—	49	‡
Rhode Island		4***	12	5	5	10	12	10*	17	20	22	22	28
South Carolina		‡	‡	‡	‡	‡	20	‡	‡	‡	‡	‡	‡
South Dakota		—	—	—	—	—	‡	—	—	—	—	—	‡
Tennessee		‡	‡	‡	‡	8	27	‡	‡	‡	‡	‡	‡
Texas		11*	12*	15	14	18	17	‡	‡	28	‡	42	39
Utah		13	14	7	7	14	11	‡	25	21	28	24	23
Vermont		—	—	—	—	‡	‡	—	—	—	—	‡	‡
Virginia		‡	25	14	16	34	20	44	41	29	25	40	50
Washington		—	6***	12	15	17	16	—	27	22	24	32	29
West Virginia		‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin		16	16	19	13	—	20	‡	23	‡	‡	—	27
Wyoming		15	19	17	16	15	23	‡	‡	‡	‡	‡	‡
<b>Other jurisdictions</b>													
District of Columbia		10	14	10	10	8	8	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>		—	—	24	26	28	26	—	—	‡	‡	‡	‡
DoDDS <sup>3</sup>		—	23	24	21	32	29	—	26	36	37	33	31

See notes at end of table. ▶

**Table 3.15 Percentage of students at or above *Proficient* in reading, by race/ethnicity, grade 4 public schools:  
By state, 1992–2003—Continued**

Grade 4	American Indian/Alaska Native						Other <sup>4</sup>					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	‡	31	‡	‡	22	16	‡	‡	‡	‡	26	31
Alabama	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	—	—	9	—	—	—	—	—	‡
Arizona	3	5	11	7	7	6	‡	‡	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	‡	‡	—	‡	‡	‡	‡	‡	—	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	42
Georgia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	32	24
Hawaii	‡	‡	‡	‡	‡	‡	21	19	16	16	22	22
Idaho	‡	—	—	—	13	‡	‡	—	—	—	‡	‡
Illinois	—	—	—	—	—	‡	—	—	—	—	—	‡
Indiana	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	30
Iowa	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Kansas	—	—	‡	‡	‡	‡	—	—	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	‡	—	‡	‡	‡	‡	‡	—	‡	‡	‡	‡
Minnesota	‡	‡	‡	‡	29	‡	‡	‡	‡	‡	‡	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Montana	—	19	18	15	17	15	—	‡	‡	‡	‡	‡
Nebraska	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Nevada	—	—	‡	‡	‡	12	—	—	‡	‡	‡	‡
New Hampshire	‡	‡	‡	‡	—	‡	‡	‡	‡	‡	‡	‡
New Jersey	‡	‡	—	—	—	‡	‡	‡	—	—	—	‡
New Mexico	8	6	5	6	6	6	‡	‡	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	‡	‡	‡	‡	‡	8	‡	‡	‡	‡	‡	44
North Dakota	14	17	—	—	11	13	‡	‡	—	—	‡	‡
Ohio	‡	—	—	—	‡	‡	‡	‡	—	—	‡	27
Oklahoma	25	—	24	24	23	18	‡	—	‡	‡	42	‡
Oregon	—	—	‡	‡	‡	‡	—	—	‡	‡	‡	‡
Pennsylvania	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	—	—	11	—	—	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	—	—	‡	‡	—	—	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Washington	—	‡	19	17	17	21	—	‡	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	‡	‡	—	25	‡	‡	‡	‡	—	‡
Wyoming	10	14	12	10	23	10	‡	‡	‡	‡	‡	‡
<b>Other jurisdictions</b>												
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	—	—	‡	‡	‡	‡	—	—	30	30	38	‡
DoDDS <sup>3</sup>	—	‡	‡	‡	‡	‡	—	35	32	29	31	38

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table 3.16 Percentage of students at or above *Proficient* in reading, by race/ethnicity, grade 8 public schools:  
By state, 1998–2003**

Grade 8	White				Black			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	38	37	39	39	11	11	13	12
Alabama	28	29	30	30	7	8	7	9
Alaska	–	–	–	36	–	–	–	13
Arizona	37	35	32	36	10	12	12	16
Arkansas	28	29	34	33	6	5	6	6
California	35	35	33	34	12	9	13	12
Colorado	37 *	36 *	–	43	9	10	–	16
Connecticut	49	47	48	45	10	11	9	12
Delaware	31 *	30 *	42	40	10	9	14	13
Florida	31	30 *	36	37	7	7	14	11
Georgia	34	35	35	36	9	10	14	12
Hawaii	31	30	30	31	‡	‡	18	‡
Idaho	–	–	35	35	–	–	‡	‡
Illinois	–	–	–	45	–	–	–	13
Indiana	–	–	34	36	–	–	12	13
Iowa	–	–	–	38	–	–	–	10
Kansas	39	40	42	40	17	20	12	10
Kentucky	31	32	33	36	9	11	14	14
Louisiana	26 *	25 *	32	33	6	6	9	9
Maine	42 *	42 *	38	37	‡	‡	‡	‡
Maryland	41	41	44	40	11	10	13	13
Massachusetts	41 *	43 *	47	49	13	12	12	18
Michigan	–	–	37	39	–	–	13	12
Minnesota	39	39	–	42	8	7	–	12
Mississippi	29	28	31	32	8	8	7	9
Missouri	32 *	31 *	37	39	8	9	13	10
Montana	40	42	40	40	‡	‡	‡	‡
Nebraska	–	–	40	39	–	–	11	10
Nevada	30	29	25	29	10	10	7	7
New Hampshire	–	–	–	41	–	–	–	‡
New Jersey	–	–	–	46	–	–	–	15
New Mexico	37	36	32	35	‡	‡	‡	14
New York	45	44	43	48	12	10	12	14
North Carolina	40	39	42	38	13	12	11	13
North Dakota	–	–	35 *	40	–	–	‡	‡
Ohio	–	–	40	39	–	–	13	13
Oklahoma	33	34	33	34	12	14	8	13
Oregon	36	37	39	36	10	10	‡	18
Pennsylvania	–	–	40	36	–	–	8	11
Rhode Island	33	35	36	36	15	12	12	15
South Carolina	30	30	35	35	8	9	9	10
South Dakota	–	–	–	41	–	–	–	‡
Tennessee	31	32	33	32	6	7	11	9
Texas	38	38	47	39	12	12	15	14
Utah	32	32	35	35	‡	‡	‡	‡
Vermont	–	–	40	39	–	–	‡	‡
Virginia	41	42	46	44	13	13	15	15
Washington	35	35	40	36	14	13	18	19
West Virginia	28	28	30 *	25	11	11	10	13
Wisconsin	37	37	–	41	8	10	–	8
Wyoming	31	32	33	36	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	9	9	8	8
DDESS <sup>2</sup>	45	48	48	50	21	20	19	19
DoDDS <sup>3</sup>	45	45	48	46	24	22	24	22

See notes at end of table. ▶

**Table 3.16 Percentage of students at or above Proficient in reading, by race/ethnicity, grade 8 public schools:  
By state, 1998–2003—Continued**

Grade 8	Hispanic				Asian/Pacific Islander			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998
<b>Nation (public)</b> <sup>1</sup>	14	13	14	14	32	30	34	38
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	–	–	–	17	–	–	–	23
Arizona	12	12	11	12	‡	‡	‡	‡
Arkansas	‡	‡	‡	25	‡	‡	‡	‡
California	8	8	10	11	24	25	25	37
Colorado	10	11	–	14	30	25	–	47
Connecticut	13	13	10	14	59	58	34	54
Delaware	18	17	14	13	‡	‡	54	52
Florida	15	17	20	19	54	47	‡	‡
Georgia	‡	‡	14	16	‡	‡	27	39
Hawaii	‡	‡	16	28	16*	16	17	19
Idaho	–	–	17	12	–	–	‡	‡
Illinois	–	–	–	16	–	–	–	53
Indiana	–	–	‡	16	–	–	‡	‡
Iowa	–	–	–	13	–	–	–	‡
Kansas	15	11	23	17	‡	‡	‡	35
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	27	23	24	20	53	55	56	55
Massachusetts	12	12	16	14	35	40	37	52
Michigan	–	–	‡	27	–	–	‡	‡
Minnesota	‡	‡	–	16	21	16	–	26
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	‡	‡	‡	‡	‡	‡	‡	‡
Nebraska	–	–	14	11	–	–	‡	‡
Nevada	10	9	8	8	21	24	24	25
New Hampshire	–	–	–	‡	–	–	–	‡
New Jersey	–	–	–	17	–	–	–	62
New Mexico	14	15	12	12	‡	‡	‡	‡
New York	12	10	15	18	43	49	36	42
North Carolina	‡	‡	18	15	‡	‡	‡	30
North Dakota	–	–	‡	‡	–	–	‡	‡
Ohio	–	–	‡	37	–	–	‡	‡
Oklahoma	10	16	14	17	‡	‡	‡	‡
Oregon	13	15	14	18	33	35	41	34
Pennsylvania	–	–	14	24	–	–	27	‡
Rhode Island	10	10	12	8	34	30	19	23
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	–	–	–	‡	–	–	–	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	14	14	17	14	45	43	39	37
Utah	23	20	9	13	‡	‡	22	28
Vermont	–	–	‡	‡	–	–	‡	‡
Virginia	24	28	23	31	43	38	50	40
Washington	12	11	20	16	32	34	39	39
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	18	19	–	17	‡	‡	–	24
Wyoming	15	19	13	20	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	15	22	11	11	‡	‡	‡	‡
DDESS <sup>2</sup>	37	43	37	38	‡	‡	‡	‡
DoDDS <sup>3</sup>	26	27	29	35	29	34	37	38

See notes at end of table. ▶



**Table 3.16 Percentage of students at or above Proficient in reading, by race/ethnicity, grade 8 public schools:  
By state, 1998–2003—Continued**

Grade 8	American Indian/Alaska Native				Other <sup>4</sup>			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	‡	‡	18	18	‡	‡	24	28
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	11	—	—	—	‡
Arizona	10	7	12	8	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	—	‡	‡	‡	—	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡
Georgia	‡	‡	‡	‡	‡	‡	‡	‡
Hawaii	‡	‡	‡	‡	17	17	24	21
Idaho	—	—	‡	‡	—	—	‡	‡
Illinois	—	—	—	‡	—	—	—	‡
Indiana	—	—	‡	‡	—	—	‡	‡
Iowa	—	—	—	‡	—	—	—	‡
Kansas	‡	‡	‡	‡	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	—	—	‡	‡	—	—	‡	‡
Minnesota	‡	‡	—	‡	‡	‡	—	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	20	20	17	13	‡	‡	‡	‡
Nebraska	—	—	‡	‡	—	—	‡	‡
Nevada	‡	‡	‡	‡	‡	‡	‡	‡
New Hampshire	—	—	—	‡	—	—	—	‡
New Jersey	—	—	—	‡	—	—	—	‡
New Mexico	10	11	9	11	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	21	21	‡	10	‡	‡	‡	‡
North Dakota	—	—	19	12	—	—	‡	‡
Ohio	—	—	‡	‡	—	—	‡	‡
Oklahoma	22	23	23	26	‡	‡	‡	31
Oregon	‡	‡	‡	‡	‡	‡	‡	‡
Pennsylvania	—	—	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	15	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	‡	‡	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Washington	15	17	‡	18	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	—	‡	‡	‡	—	‡
Wyoming	13	12	15	8	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	‡	‡	‡	‡	‡	‡	44	‡
DoDDS <sup>3</sup>	‡	‡	‡	‡	35	36	39	50

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

### **Student Eligibility for Free/Reduced-Price School Lunch**

NAEP collects data on students' eligibility for federally funded free/reduced-price school lunch as an indicator of family economic status at both the national and jurisdictional levels. In 2003, students in Department of Defense Overseas schools did not participate in the free/reduced-price lunch; therefore, no data are available for that jurisdiction. Tables 3.17 (grade 4) and 3.18 (grade 8) present the 2003 average reading score results for participating jurisdictions by students' eligibility for free/reduced-price school lunch. In 2003, students eligible for free/reduced-price lunch had lower average scores than students who were not eligible in the 52 jurisdictions for which data are available at both grades 4 and 8.

At grade 4, average scores since 2002 increased for students who were not eligible in Arizona. Average scores decreased since 2002 for fourth-grade students who were eligible for free/reduced-price lunch and for those who were not eligible for free/reduced-price lunch in 2 jurisdictions each. Between 1998 and 2003, average scores for fourth-graders

increased both for students who were eligible and for those who were not eligible in 11 jurisdictions, just for eligible students in 5 jurisdictions, and just for students who were not eligible in 5 jurisdictions. In the District of Columbia, scores increased for eligible students and decreased for students who were not eligible.

Since 2002, average scores at grade 8 for students who were not eligible increased in Wyoming. Over the same time period, average scores decreased for eligible students in Idaho, Nebraska, and North Carolina, and for students who were not eligible in Delaware and Texas. Between 1998 and 2003, eighth-grade average scores increased both for students who were eligible and for students who were not in Delaware and Missouri, for eligible students in Arkansas, Kentucky, Mississippi, and South Carolina, and for students who were not eligible in Colorado, Hawaii, and Wyoming. Over the same span of years, average scores decreased for eligible students in New Mexico and Oklahoma and for students who were not eligible in Nevada.

**Table 3.17 Average reading scale scores, by student eligibility for free/reduced-price school lunch, grade 4 public schools:  
By state, 1998–2003**

Grade 4	Eligible				Not eligible				Information not available			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998		2002	2003	1998
<b>Nation (public)</b> <sup>1</sup>	198 *	195 *	202	201	226 *	226 *	229	229	225	219	217	219
Alabama	196	196	195	193	226	226	221	224	204	211	221	†
Alaska	—	—	—	192	—	—	—	224	—	—	—	203
Arizona	188	189	191	194	222	221	219 *	225	212	208	213	211
Arkansas	196 **	196 ***	202	204	221 *	221 ***	227	227	213	208	210	198
California	182	182	190	191	218	218	225	222	212	219	208	203
Colorado	204	202 *	—	207	229	227 *	—	231	216	218	—	†
Connecticut	205	203	209	205	240	238	237	238	239	240	238	232
Delaware	199 **	189 ***	211	212	221 ***	219 ***	232	231	†	†	242	233
Florida	192 ***	190 ***	204	205	222 ***	220 ***	227	231	215	217	†	207
Georgia	193 *	192 ***	202	200	227	224	227	227	218	217	213	219
Hawaii	185 ***	185 ***	196	197	212 ***	212 ***	218	219	†	†	†	†
Idaho	—	—	210	207	—	—	229	226	—	—	222	225
Illinois	—	—	—	197	—	—	—	232	—	—	—	203
Indiana	—	—	207	205	—	—	230	229	—	—	233	†
Iowa	210	205	213	209	229	226	228	230	216	216	†	†
Kansas	207	206	211	206	229	229	230	230	236	231	†	†
Kentucky	204	206	209	209	229	227	229	229	†	†	211	225
Louisiana	193	189 *	197	195	224	221	227	224	209	206	199	195
Maine	216	215	213	213	230	230	231	230	226	221	225	†
Maryland	195	192 *	202	199	225	222 ***	227	230	210	195 *	224	216
Massachusetts	205	203 ***	215	210	233	230 ***	241 *	236	226	224	238	225
Michigan	200	200	204	201	226	225 ***	228	229	214	214	218	212
Minnesota	202	198	218 ***	203	230	228	230	231	225	218	222	†
Mississippi	195	194	195	197	220	219 *	221	226	†	†	205	209
Missouri	202	202	205	208	225 ***	224 ***	231	232	222	219	227	228
Montana	215	212	213	208	234	233	231	232	223	222	†	223
Nebraska	—	—	209	207	—	—	230	229	—	—	†	222
Nevada	189	189	198	192	217	214	217	218	217	221	206	212
New Hampshire	208	211	—	206	231	230	—	233	220	222	—	230
New Jersey	—	—	—	203	—	—	—	234	—	—	—	238
New Mexico	194	193	201 *	195	224	223	224	221	214	211	199	214
New York	197 ***	196 ***	207	208	232 ***	231 ***	236	238	226	223 *	230	238
North Carolina	202	198 ***	208	206	227 ***	224 ***	234	233	223	216 *	222	233
North Dakota	—	—	214	210	—	—	229	227	—	—	†	†
Ohio	—	—	207	206	—	—	231	231	—	—	225	228
Oklahoma	209 *	208	203	204	230	231	227	227	215	215	196	209
Oregon	196 ***	192 ***	207	205	225	223	229 *	224	223	216	218	†
Pennsylvania	—	—	200	198	—	—	232	231	—	—	221	224
Rhode Island	196	195	202	200	231	230	231	229	†	†	217	212
South Carolina	196 ***	194 ***	201	202	223 *	223 ***	228	228	†	†	225	†
South Dakota	—	—	—	210	—	—	—	230	—	—	—	†
Tennessee	198	198	202	198	225	224	224	222	203	195	214	218
Texas	203	199 ***	210	205	231	230	228	226	199	202	215	226
Utah	203	205	211	206	222 *	222 *	228	226	220	220	214	†
Vermont	—	—	213	214	—	—	233	231	—	—	230	†
Virginia	200	198 *	209	205	228	226 ***	233	232	217	226	241	232
Washington	200 ***	203	211	208	225 *	226	232	230	230	223	217	226
West Virginia	205 ***	205 ***	210	212	228	227	228	228	†	†	218	†
Wisconsin	206	203	—	205	231	230	—	228	220	213	—	220
Wyoming	208	207	212	212	225	224 *	227	228	224 *	221 ***	235 ***	203
<b>Other jurisdictions</b>												
District of Columbia	174 ***	172 ***	185	182	216 *	215 *	210	206	200 *	188	†	183
DDESS <sup>2</sup>	214	212	220	217	226	225	230	227	224	215	223	231
DoDDS <sup>3</sup>	221	217	221	—	228	224	227	—	222	221	224	—

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

† Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table 3.18 Average reading scale scores, by student eligibility for free/reduced-price school lunch, grade 8 public schools:  
By state, 1998–2003**

Grade 8	Eligible				Not eligible				Information not available			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998		2002	2003	1998
<b>Nation (public)</b> <sup>1</sup>	246	245	249 *	246	269	268	271	271	265	264	264	262
Alabama	241	241	240	241	265	265	264	265	‡	‡	255	‡
Alaska	—	—	—	239	—	—	—	263	—	—	—	257
Arizona	245	246	242	241	270	269	266	265	264	259	259	258
Arkansas	242 ***	243 *	250	250	264	264	268	267	263	262	‡	245
California <sup>2</sup>	237	235	240	237	267	267	262	264	253	255	252	249
Colorado	245	249	—	250	271	270 *	—	274	257	252	—	‡
Connecticut	249	249	247	245	277	276	275	275	275	273	274	272
Delaware	239 ***	238 ***	253	250	263 ***	262 ***	275 ***	271	258 ***	247 *	‡	274
Florida	240	241	249	245	262	265	269	267	258	259	274	269
Georgia	241	240	245	243	267	268	267	269	262	263	263	251
Hawaii	239	238	241	240	255 *	254 ***	259	259	260	261	‡	‡
Idaho	—	—	259 *	254	—	—	270	270	—	—	269	268
Illinois	—	—	—	249	—	—	—	276	—	—	—	262
Indiana	—	—	253	248	—	—	269	272	—	—	271	273
Iowa	—	—	—	252	—	—	—	273	—	—	—	275
Kansas	256	254	251	253	274	275	276	273	‡	‡	‡	‡
Kentucky	251 *	251 *	253	257	270	270	273	273	262	259	276	‡
Louisiana	242	243	246	245	263	262	268	266	244	245	260	252
Maine	261	259	260	258	277 *	276	273	273	274	277	271	‡
Maryland	242	239	248	242	269	270	269	268	‡	‡	‡	270
Massachusetts	248	247	253	251	276	276	278	280	269	265	259	278
Michigan	—	—	257	247	—	—	270	272	—	—	254	261
Minnesota	250	248	—	248	272	271	—	274	271	263	—	‡
Mississippi	240 *	241 *	246	246	263	264	268	266	249	254	260	260
Missouri	249 *	248 *	257	255	269 *	269 *	273	273	249	249 *	267	279
Montana	260	259	261	258	275	276	274	275	263	270	‡	269
Nebraska	—	—	260 ***	253	—	—	275	273	—	—	‡	262
Nevada	241	245	240	242	263 ***	263 ***	256	258	259	255	253	‡
New Hampshire	—	—	—	255	—	—	—	273	—	—	—	278
New Jersey	—	—	—	246	—	—	—	275	—	—	—	271
New Mexico	249 ***	250 ***	245	241	266	265	265	262	258	259	259	263
New York	252	250	250	249	276	275	275	278	271	270	252	277
North Carolina	249	247	253 *	247	271	271	273	270	261	258	266	271
North Dakota	—	—	261	259	—	—	270	273	—	—	‡	‡
Ohio	—	—	257	251	—	—	273	273	—	—	263	264
Oklahoma	258 *	257 *	253	251	271	270	270	271	262	262	269	‡
Oregon	251	252	257	254	271	271	272	268	270	267	271	270
Pennsylvania	—	—	246	247	—	—	274	271	—	—	‡	257
Rhode Island	245	246	249	245	269	272	270	270	‡	‡	251 ***	239
South Carolina	240 *	240 ***	245	247	265	266	268	268	256	259	261	‡
South Dakota	—	—	—	261	—	—	—	274	—	—	—	‡
Tennessee	242	240	246	245	267	267	268	265	254	254	268	272
Texas	248	246	248	246	271	270	275 *	269	‡	262	262	‡
Utah	254	248	249	251	269	268	269	269	261	267	261	269
Vermont	—	—	257	255	—	—	276	276	—	—	‡	‡
Virginia	247	248	256	252	272	272	274	274	271	268	283 *	266
Washington	247	245	254	248	270	269	274	271	270	271	268	269
West Virginia	254	254	255	252	268	268	269	267	249	255	‡	‡
Wisconsin	249	250	—	244	271	270	—	272	267	268	—	273
Wyoming	252	252	258	255	265 ***	267 ***	268 ***	272	‡	‡	270	‡
<b>Other jurisdictions</b>												
District of Columbia	228	229	235	232	257 *	253	251	248	234 ***	234 ***	‡	249
DDESS <sup>3</sup>	261	259	267	262	273	274	273	270	‡	‡	275	276
DoDDS <sup>4</sup>	257	257	272	—	267	267	276	—	271	270	272	—

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Results by students' eligibility for free/reduced-price lunch in California in 2002 do not include Los Angeles.

<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

The percentages of students performing at or above the *Proficient* level by students' eligibility for free/reduced-price school lunch are presented for participating jurisdictions in tables 3.19 (grade 4) and 3.20 (grade 8). In 2003, lower percentages of students who were eligible for free/reduced-price lunch performed at or above *Proficient* than those who were not eligible at both grades 4 and 8.

Since 2002, at grade 4, the percentage of students performing at or above *Proficient* decreased in Minnesota for eligible students. The percentage of fourth-graders performing at or above *Proficient* increased since 1998 both for students who were eligible and for those who were not in 4 jurisdictions, for eligible students in Arkansas, and for students who were not eligible in 5 jurisdictions. Over the

same period, the average score decreased for students who were not eligible in the District of Columbia.

Between 2002 and 2003, the percentage of eighth-graders performing at or above *Proficient* increased for eligible students in Kentucky. Between the same years, the percentage of students performing at or above *Proficient* decreased for eligible students in Michigan, and decreased for students who were not eligible in Texas. The percentage of eighth-graders performing at or above *Proficient* increased since 1998 for eligible students in 5 jurisdictions and for students who were not eligible in 3 jurisdictions. The percentage of eighth-graders performing at or above *Proficient* decreased for eligible students in New Mexico and for students who were not eligible in the District of Columbia.

**Table 3.19 Percentage of students at or above Proficient in reading, by student eligibility for free/reduced-price school lunch, grade 4 public schools: By state, 1998–2003**

Grade 4	Eligible												Not eligible				Information not available			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted										
		1998	1998	2002		2003	1998	1998		2002	2003	1998	1998	2002	2003					
		1998	1998	2002		2003	1998	1998		2002	2003	1998	1998	2002	2003					
<b>Nation (public)</b> <sup>1</sup>	13	12*	16	15	39	39	41	41	38	33	30	33								
Alabama	10	11	13	11	38	36	35	36	20	22	32	‡								
Alaska	–	–	–	13	–	–	–	36	–	–	–	25								
Arizona	9	10	11	11	33	32	32	36	25	22	29	27								
Arkansas	13***	13***	17	20	32	32	38	39	26	23	18	19								
California	7	7	9	10	30	30	37	34	31	33	21	18								
Colorado	17	16	–	19	40	39	–	45	31	28	–	‡								
Connecticut	15	14	21	18	55	52	51	53	55	54	53	50								
Delaware	13*	11***	19	18	31***	30***	44	41	‡	‡	61*	44								
Florida	12***	12***	18	18	33***	31***	39	45	29	30	‡	20								
Georgia	10	11	16	13	39	38	39	39	33	29	24	33								
Hawaii	9*	9	12	13	24*	24	29	29	‡	‡	‡	‡								
Idaho	–	–	21	20	–	–	42	38	–	–	38	37								
Illinois	–	–	–	14	–	–	–	45	–	–	–	17								
Indiana	–	–	17	18	–	–	41	40	–	–	47	‡								
Iowa	22	19	22	19	40	39	41	42	30	32	‡	‡								
Kansas	21	22	21	18	40	39	43	42	49	44	‡	‡								
Kentucky	15*	17	19	21	41	39	40	41	‡	‡	23	35								
Louisiana	10	9	12	12	33	31	37	36	27	27	13	15								
Maine	25	24	22	24	42	42	42	42	37	31	36	‡								
Maryland	12	12	15	13	37	35***	39	43	24	21	36	31								
Massachusetts	15	15	23	20	45	43*	56	51	37	35	54	35								
Michigan	14	15	16	16	36	35	39	41	23	25	30	24								
Minnesota	18	15	30*	19	43	43	41	44	37	29	34	‡								
Mississippi	10	9	10	11	31	30	29	36	‡	‡	16	22								
Missouri	16	16	17	19	36*	36***	43	44	38	34	38	38								
Montana	24	23	23	20	46	46	45	44	34	35	‡	35								
Nebraska	–	–	22	19	–	–	43	40	–	–	‡	31								
Nevada	9	9	13	10	27	26	27	28	27	27	18	24								
New Hampshire	20	19	–	18	44	42	–	45	30	28	–	40								
New Jersey	–	–	–	15	–	–	–	48	–	–	–	54								
New Mexico	13	12	15	13	36	35	35	32	27	24	17	26								
New York	12***	13*	19	18	44*	43*	50	51	34	32	40	53								
North Carolina	14	14	17	16	37***	37***	47	45	35	31	30	46								
North Dakota	–	–	23	19	–	–	39	38	–	–	‡	‡								
Ohio	–	–	18	19	–	–	42	43	–	–	35	39								
Oklahoma	19	19	17	17	42	42	38	38	26	25	17	19								
Oregon	13	13	18	18	37	34	42	37	32	30	27	‡								
Pennsylvania	–	–	16	14	–	–	45	44	–	–	31	43								
Rhode Island	13	13	14	14	43	41	44	41	‡	‡	29	25								
South Carolina	10*	10*	14	14	33*	33*	39	39	‡	‡	36	‡								
South Dakota	–	–	–	21	–	–	–	41	–	–	–	‡								
Tennessee	13	13	15	15	36	36	34	34	9*	8	27	32								
Texas	14	13	20	16	43	43	39	39	16	16	26	41								
Utah	17	18	22	20	32*	32*	39	38	33	33	25	‡								
Vermont	–	–	21	22	–	–	46	43	–	–	43	‡								
Virginia	13	13	18	16	38	37	46	44	27	37	59	47								
Washington	13*	15	22	20	37*	38	43	42	45	35	28	37								
West Virginia	17	17	19	21	40	39	37	38	‡	‡	29	‡								
Wisconsin	16	15	–	18	41	41	–	39	29	26	–	35								
Wyoming	20	19	21	23	35	35	38	40	33	31	48*	20								
<b>Other jurisdictions</b>																				
District of Columbia	5	5	5	6	33	35*	23	24	22	17	‡	8								
DDESS <sup>2</sup>	25	25	26	26	38	39	41	40	35	30	33	43								
DoDDS <sup>3</sup>	33	29	31	–	38	37	36	–	32	32	33	–								

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table 3.20 Percentage of students at or above Proficient in reading, by student eligibility for free/reduced-price school lunch, grade 8 public schools: By state, 1998–2003**

Grade 8	Information not available											
	Eligible				Not eligible				Information not available			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998		2002	2003	1998
<b>Nation (public)</b> <sup>1</sup>	15	14	17*	15	38	37	40	39	35	34	32	31
Alabama	10	10	11	11	29	30	31	33	‡	‡	25	‡
Alaska	–	–	–	12	–	–	–	32	–	–	–	28
Arizona	13	12	12	12	37	36	31	34	29	26	25	29
Arkansas	12*	12*	18	19	29	30	35	34	29	29	‡	19
California <sup>2</sup>	7*	7*	11	12	34	34	30	33	21	22	20	19
Colorado	12	15	–	17	37*	36*	–	43	24	21	–	‡
Connecticut	16	15	17	15	48	46	45	45	44	42	46	38
Delaware	12	11	16	16	31*	30*	41	38	25*	20***	‡	44
Florida	12	11*	17	15	31	31	37	35	24*	25*	41	41
Georgia	10	10	14	12	33	35	34	37	31	28	27	20
Hawaii	11	12	11	12	22*	22*	26	28	28	29	‡	‡
Idaho	–	–	26	22	–	–	37	38	–	–	39	36
Illinois	–	–	–	15	–	–	–	46	–	–	–	27
Indiana	–	–	19	16	–	–	36	40	–	–	37	38
Iowa	–	–	–	18	–	–	–	41	–	–	–	42
Kansas	22	21	19	22	42	43	45	42	‡	‡	‡	‡
Kentucky	18	20	17*	23	38	38	41	41	24	25	44	‡
Louisiana	10	10	13	14	27	26	33	33	12	14	28	21
Maine	26	26	27	25	47	46	42	42	45	47	40	‡
Maryland	11	11	16	13	39	39	39	36	‡	‡	‡	43
Massachusetts	14	14	18	19	43*	45	49	51	37	31	24*	49
Michigan	–	–	24*	15	–	–	37	40	–	–	22	30
Minnesota	21	20	–	17	41	41	–	43	38	31	–	‡
Mississippi	10	10	12	12	29	29	32	32	18	19	24	26
Missouri	14*	13*	19	21	35	35	39	40	16*	13*	33	48
Montana	25	27	25	25	44	45	42	42	31	38	‡	40
Nebraska	–	–	24	21	–	–	43	41	–	–	‡	34
Nevada	12	12	11	13	28	28	22	25	26	21	24	‡
New Hampshire	–	–	–	22	–	–	–	43	–	–	–	49
New Jersey	–	–	–	15	–	–	–	45	–	–	–	37
New Mexico	13	16*	11	10	33	30	31	28	26	26	25	33
New York	16	14	15	18	45	45	45	48	40	39	16	51
North Carolina	15	14	19	13	39	39	40	37	28	26	34	39
North Dakota	–	–	27	27	–	–	37	42	–	–	‡	‡
Ohio	–	–	24	18	–	–	40	40	–	–	30	30
Oklahoma	20	20	18	19	35	36	36	38	23	26	37	‡
Oregon	18	20	24	22	39	40	42	37	39	36	38	40
Pennsylvania	–	–	15	15	–	–	43	39	–	–	‡	22
Rhode Island	13	13	17	15	37	39	38	38	‡	‡	20	12
South Carolina	9*	9*	12	13	31	31	34	34	16	21	30	‡
South Dakota	–	–	–	30	–	–	–	43	–	–	–	‡
Tennessee	10	11	15	13	33	35	35	32	20	20	35	44
Texas	13	12	16	12	37	36	44*	37	‡	28	30	‡
Utah	21	19	21	19	35	35	36	37	26	31	31	33
Vermont	–	–	22	19	–	–	45	45	–	–	‡	‡
Virginia	13	13	20	17	39	40	43	43	40	36	56*	34
Washington	14	13	23	18	37	37	43	39	33	40	35	36
West Virginia	19	19	20	17	34	34	36	32	16	21	‡	‡
Wisconsin	16	20	–	17	38	38	–	42	31	34	–	39
Wyoming	20	19	23	21	32*	34	34	39	‡	‡	35	‡
<b>Other jurisdictions</b>												
District of Columbia	6	6	6	6	25	26*	18	17	10	9	‡	15
DDESS <sup>3</sup>	29	31	30	26	41	43	40	40	‡	‡	41	44
DoDDS <sup>4</sup>	23	23	37	–	34	33	44	–	38	39	39	–

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Percentages by students' eligibility for free/reduced-price lunch in California in 2002 do not include Los Angeles.

<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.



# 4

## Average Reading Scale Scores and Achievement-Level Results for Districts Participating in the Trial Urban District Assessment

This chapter presents the results of the NAEP 2003 Trial Urban District Assessment (TUDA) in reading at grades 4 and 8. TUDA, a special project in NAEP, was instituted in 2002. After discussion between the National Center for Education Statistics (NCES) and the National Assessment Governing Board (NAGB), and with the leadership of the Council of the Great City Schools, Congress appropriated funds for this district-level assessment in 2001. NAGB passed a resolution approving the selection of five urban districts (Atlanta City School District, City of Chicago School District 299, Houston Independent School District, Los Angeles Unified School District, and New York City Public Schools), all of which voluntarily participated in the NAEP 2002 assessments of reading and writing at grades 4 and 8.<sup>1</sup>

In the second year of the TUDA project, the same five districts plus four more voluntarily participated in the NAEP 2003 reading and mathematics assessments at grades 4 and 8. The additional districts were the Boston School District, Charlotte-Mecklenburg

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<sup>1</sup> Lutkus, A. D., Weiner, A. W., Daane, M. C., and Jin, Y. (2003). *The Nation's Report Card: Reading 2002, Trial Urban District Assessment* (NCES 2003-523). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.

Lutkus, A. D., Daane, M. C., Weiner, A. W., and Jin, Y. (2003). *The Nation's Report Card: Writing 2002, Trial Urban District Assessment* (NCES 2003-530). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.



Schools, Cleveland Municipal School District, and San Diego City Unified School District.<sup>2</sup> Results are also included for the District of Columbia, which has regularly participated in the state-level NAEP assessments and is also reported in the preceding chapters. The NAEP reading assessment was the same for the districts participating in the TUDA as for the states.

In both 2002 and 2003, the TUDA sampled only public school students. Where appropriate, this chapter displays results from the 2002 reading assessment for the districts that participated in both years.<sup>3</sup> In addition, tables in this chapter display results for public school students in the nation as a whole and for public school students in large central cities in the nation.

“Large central city” is a geographical term used by NCES for a central city with a population at or above 250,000.<sup>4</sup> It is not synonymous with “inner city.” The Charlotte and Los Angeles districts include schools in locations that do not fit the NCES definition of large central city (i.e., urban fringe and rural areas). In those two districts, one-quarter to one-third of the students sampled attended schools that were not in large central cities.

### **Scale Score Results for Urban Districts**

Average reading scores are reported on a 0–500 scale. The average scores for the districts that participated in the NAEP reading assessment in both 2002 and 2003, as well as for those districts that participated only in 2003, are displayed in figure 4.1 for grade 4 and in figure 4.2 for grade 8.

These figures also show the corresponding results for public school students in the nation and for public school students attending schools located in large central cities. Because the percentage of students excluded from the assessment may vary considerably across districts as well as across years, comparisons of achievement results should be interpreted with caution. (See tables A.20 and A.21 in appendix A for district exclusion rates.)

At grade 4, the average score for each district participating in 2003 was lower than the national public school score, except in Charlotte, where no measurable difference was detected. Average fourth-grade reading scores in Atlanta, Chicago, Cleveland, the District of Columbia, and Los Angeles were lower than the average score for large central cities. Average scores in Charlotte and New York were higher than the large central city score.

At grade 8, average reading scores in 9 of the 10 districts that participated in 2003 were lower than the national average score. Students in Atlanta, Cleveland, the District of Columbia, Houston, and Los Angeles scored lower on average than students in large central cities. Students in Boston and Charlotte had higher average scores than students in large central cities.

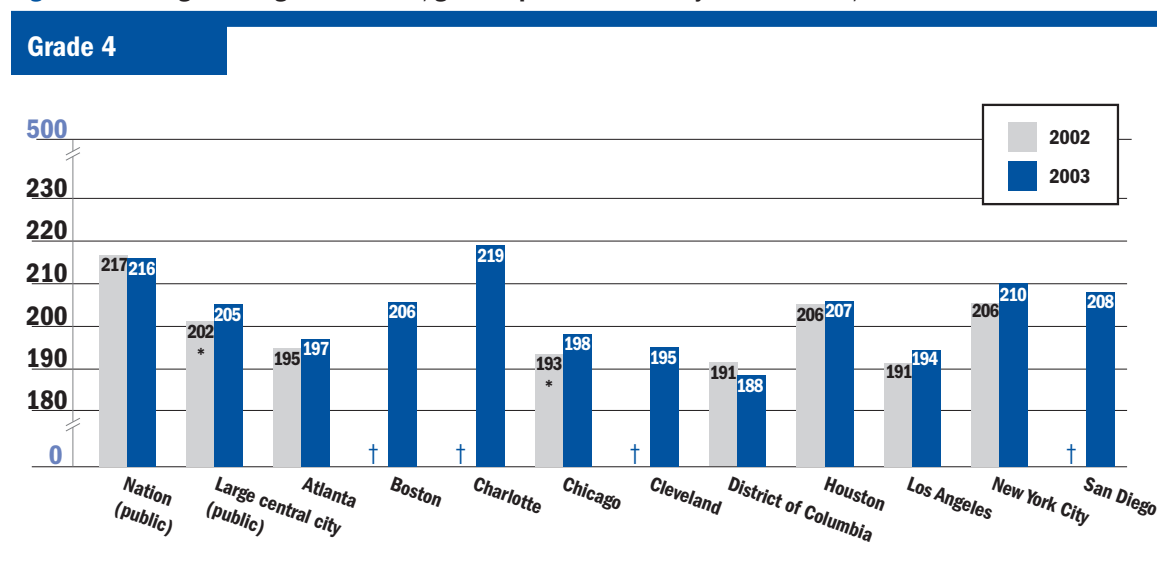
Average scores increased between 2002 and 2003 for fourth-graders in large central cities and for fourth-graders in Chicago. Average scores were lower in 2003 than in 2002 for eighth-grade public school students in the nation, and higher in 2003 for eighth-graders in Atlanta.

<sup>2</sup> In the remainder of this chapter, the districts participating in the TUDA are referred to as Atlanta, Boston, Charlotte, Chicago, Cleveland, Houston, Los Angeles, New York, and San Diego, and statements regarding “the districts” include the District of Columbia.

<sup>3</sup> New York City data for grade 8 in 2002 were not published because the district did not meet the 70 percent school participation rate.

<sup>4</sup> Although “central city” data were reported in the 2002 Trial Urban District Assessment reports, the “central city” category was defined differently from “large central city” here.

**Figure 4.1 Average reading scale scores, grade 4 public schools: By urban district, 2002 and 2003**



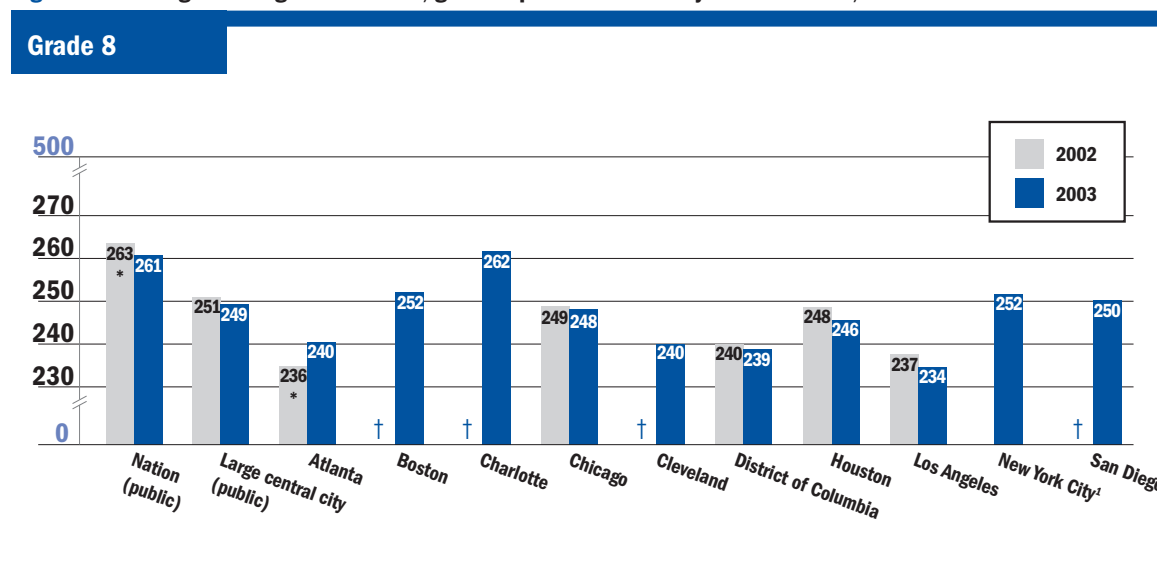
† Not applicable. District did not participate in 2002.

\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

**Figure 4.2 Average reading scale scores, grade 8 public schools: By urban district, 2002 and 2003**



† Not applicable. District did not participate in 2002.

\* Significantly different from 2003.

<sup>1</sup> Data for grade 8 for New York City were not published in 2002 because the district did not meet the required 70 percent school participation rate.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

## Scale Scores by Percentiles for Urban Districts

An examination of scores at different percentiles on the 0–500 reading scale indicates whether or not changes seen in average score results for districts that participated in both years are reflected in the performance of lower-, middle-, and higher-performing students. In the tables that follow, a triple asterisk (\*\*\*) marks results from the 2002 assessments that differ from the comparable results in 2003, a double asterisk (\*\*) marks district results in 2003 that were found to be significantly different from the comparable result for the nation, and a single asterisk (\*) marks district results in 2003 that were found to be significantly different from those of public school students in large central cities.

Table 4.1 shows the 2002 and 2003 percentile results for participating urban districts at grades 4 and 8. At grade 4, district-level scores at each of the percentiles analyzed were lower than the national scores in Atlanta, Chicago, Cleveland, the District of Columbia, Houston, and Los Angeles. When compared to public school students in large central cities, scores at the 10th percentile were higher in Boston, Charlotte, Houston, and New York; scores at the 25th percentile were higher in

Charlotte, Houston, and New York; scores at the 50th percentile were higher in Charlotte and New York; and scores at the 75th and 90th percentiles were higher in Charlotte.

Among the districts that participated in both assessment years at grade 4, scores decreased from 2002 to 2003 at the 10th and 25th percentiles in the District of Columbia, and increased at the 50th and 75th percentiles in Chicago.

At grade 8, at each of the percentiles analyzed, district-level scores were lower than the national scores in 9 of the 10 participating districts. In comparison to the scores for public school students in large central cities, scores at the 10th and 25th percentiles were higher in Charlotte, scores at the 50th percentile were higher in Charlotte and New York, and scores at the 75th and 90th percentiles were higher in Boston and Charlotte.

National eighth-grade scores at the 10th, 25th, and 50th percentiles were lower in 2003 than in 2002. Among the districts that participated in both 2002 and 2003, the score at the 10th percentile decreased in the District of Columbia and Los Angeles; the score at the 75th percentile decreased in Houston; and the score at the 90th percentile increased in Atlanta.

**Table 4.1 Reading scale score percentiles, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	10th percentile		25th percentile		50th percentile		75th percentile		90th percentile	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>										
Nation (public)	169	167	194	193	219	219	242	243	261	262
Large central city (public)	154	154 **	177	179 **	203	206 **	229	231 **	250	253 **
Atlanta	150	149 **	171	171 ***	194	195 ***	219	221 **	242	246 **
Boston	—	165 *	—	185 **	—	207 **	—	228 **	—	246 ***
Charlotte	—	171 *	—	196 *	—	221 *	—	244 *	—	263 *
Chicago	148	150 **	170	174 ***	194 ***	199 ***	217 ***	223 ***	239	244 ***
Cleveland	—	154 **	—	174 ***	—	196 ***	—	217 ***	—	237 ***
District of Columbia	144 ***	136 **	167 ***	162 ***	191	189 ***	215	214 **	237	239 ***
Houston	162	164 **	183	184 ***	206	207 **	229	229 **	250	250 **
Los Angeles	143	146 **	165	169 ***	190	195 ***	217	218 **	239	240 ***
New York City	160	165 *	182	186 ***	206	210 ***	230	234 **	253	254 **
San Diego	—	157 **	—	182 **	—	209 **	—	235	—	255
<b>Grade 8</b>										
Nation (public)	219 ***	215	242 ***	240	265 ***	264	286	286	303	304
Large central city (public)	205	202 **	228	226 **	252	251 **	276	274 **	295	294 **
Atlanta	194	196 **	214	217 ***	236	240 ***	259	263 **	277 ***	282 ***
Boston	—	205 **	—	229 **	—	253 **	—	278 **	—	299 ***
Charlotte	—	216 *	—	239 *	—	264 *	—	286 *	—	304 *
Chicago	208	207 **	231	228 **	251	249 **	270	270 **	288	288 ***
Cleveland	—	198 **	—	219 ***	—	242 ***	—	263 **	—	280 ***
District of Columbia	197 ***	193 **	219	216 ***	241	241 ***	262	262 **	281	282 ***
Houston	201	203 **	226	224 **	251	247 ***	273 ***	268 **	290	288 ***
Los Angeles	190 ***	183 **	213	210 ***	238	236 ***	261	261 **	281	282 ***
New York City	—	204 **	—	229 **	—	254 ***	—	277 **	—	297 **
San Diego	—	201 **	—	226 **	—	252 **	—	275 **	—	296 **

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

## Achievement-Level Results for Urban Districts

Table 4.2 shows the percentages of students in each participating urban district performing within each achievement level and the percentage of students below *Basic*, at or above *Basic* and at or above *Proficient*, for grades 4 and 8.

Except for Charlotte, the percentage of fourth-graders at or above *Proficient* in 2003 was lower for each of the districts when compared to the nation. In Charlotte, the percentage of students at or above *Proficient* was higher than the

percentage for large central cities. The percentage of students at or above *Proficient* increased between 2002 and 2003 in large central cities and in Chicago.

In 2003, the percentage of eighth-graders at or above *Proficient* was lower in 9 of the 10 districts as compared to the nation. The percentages at or above *Proficient* were higher in Boston and Charlotte than in large central cities. The percentage of eighth-graders at or above *Proficient* in Atlanta was higher in 2003 than in 2002.

**Table 4.2 Percentages of students, by reading achievement level, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	Below <i>Basic</i>		At <i>Basic</i>		At <i>Proficient</i>		At <i>Advanced</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>												
Nation (public)	38	38	32	32	23	23	6***	7	62	62	30	30
Large central city (public)	55***	52**	27	28**	14	15**	3***	5**	45***	48**	17***	20**
Atlanta	65	63***	23	23***	9	10***	3	4**	35	37***	12	14**
Boston	—	52**	—	33*	—	13**	—	2***	—	48**	—	16***
Charlotte	—	36*	—	33*	—	24*	—	8*	—	64*	—	31*
Chicago	66***	60***	23	26**	9***	11***	2	3***	34***	40***	11***	14***
Cleveland	—	65***	—	26**	—	9***	—	1***	—	35***	—	9***
District of Columbia	69	69***	22	21***	8	8***	2***	3***	31	31***	10	10***
Houston	52	52**	30	31	15	14**	3	3**	48	48**	18	18**
Los Angeles	67	65***	22	25***	9	9***	2	2***	33	35***	11	11***
New York City	53	47***	29	31	14	17**	5	4**	47	53***	19	22**
San Diego	—	49**	—	29	—	17**	—	5**	—	51**	—	22**
<b>Grade 8</b>												
Nation (public)	26***	28	43***	42	28	27	2	3	74***	72	31	30
Large central city (public)	40	41**	40	40**	19	17**	1	1**	60	59**	20	19**
Atlanta	58	53***	35	36***	7	11***	#	#	42	47***	8***	11***
Boston	—	39**	—	39	—	20**	—	2*	—	61**	—	22***
Charlotte	—	29*	—	41	—	28*	—	3*	—	71*	—	30*
Chicago	38	41**	47	44*	14	14***	1	1**	62	59**	15	15***
Cleveland	—	52***	—	38	—	9***	—	#***	—	48***	—	10***
District of Columbia	52	53***	38	37**	9	9***	#	1**	48	47***	10	10***
Houston	41	45**	42	41	16	13***	1	1**	59	55**	17	14***
Los Angeles	56	57***	34	32***	10	10***	#	1***	44	43***	10	11***
New York City	—	38**	—	40	—	20**	—	2	—	62**	—	22**
San Diego	—	40**	—	40	—	18**	—	2**	—	60**	—	20**

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

# The estimate rounds to zero.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Detail may not sum to totals because of rounding. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

## Performance of Selected Subgroups for Urban Districts

### Gender

Average reading scale scores for male and female fourth- and eighth-grade students in the two assessment years are displayed in table 4.3.

At grade 4, female students scored higher on average than male students in 2003 in every district (except Atlanta and Houston), in the nation, and in large central cities. With one exception, both male and

female fourth-graders in each of the districts scored lower on average than their counterparts among public school students in the nation. In Charlotte, the average score for female students was higher than that in the nation. Reading scores for male and female students in Charlotte were both higher on average than for male and female students in large central cities. Female students in New York also had higher average scores than female students in large central cities.

**Table 4.3 Average reading scale scores, by gender, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	Male		Female	
	2002	2003	2002	2003
<b>Grade 4</b>				
Nation (public)	214	213	220	220
Large central city (public)	199	201 **	206	209 **
Atlanta	191	193 *,**	200	200 ***
Boston	—	201 **	—	211 **
Charlotte	—	211 *	—	227 ***
Chicago	189	194 *,**	198	201 ***
Cleveland	—	191 *,**	—	200 ***
District of Columbia	185	182 *,**	196	195 ***
Houston	204	205 **	208	208 **
Los Angeles	188	189 *,**	194	198 ***
New York City	199	204 **	213	216 ***
San Diego	—	205 **	—	211 **
<b>Grade 8</b>				
Nation (public)	258 ***	256	267	267
Large central city (public)	245	244 **	256	254 **
Atlanta	231	234 *,**	240	245 ***
Boston	—	246 **	—	258 **
Charlotte	—	257 *	—	267 *
Chicago	245	245 **	254	251 **
Cleveland	—	235 *,**	—	246 ***
District of Columbia	235	231 *,**	245	245 ***
Houston	243	241 *,**	253	251 **
Los Angeles	233	229 *,**	241	240 ***
New York City	—	246 **	—	257 **
San Diego	—	244 **	—	256 **

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

Significance tests were performed using unrounded numbers.

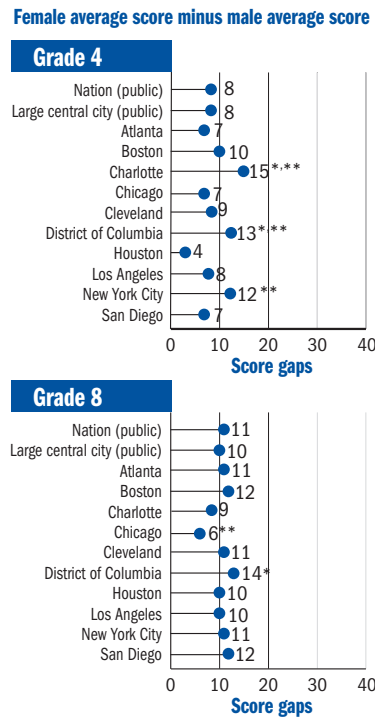
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

At grade 8, female students scored higher on average than male students in every district, in large central cities, and in the nation. With the exception of Charlotte, male and female students in all the districts that participated in 2003 had lower average scores than their counterparts in the nation. Average scores for both male and female students in Charlotte were higher than for their counterparts in large central cities.

The scale score gaps between male and female fourth- and eighth-graders in the participating urban districts are presented in figure 4.3. A gender gap marked with asterisks indicates a statistically significant

difference from the gap in large central cities and the nation. Note that the marked differences can represent either a narrower or wider gap than the comparison group. In 2003, female public-school students in the nation scored higher on average than male students by 8 points at grade 4, and by 11 points at grade 8. At grade 4, the score gap between female and male students in Charlotte and the District of Columbia was wider than the gap in the nation and large central cities. At grade 8, the score gap was wider in the District of Columbia than in public schools in large central cities and narrower in Chicago than in the nation.

**Figure 4.3 Gaps in average reading scores, by gender, grades 4 and 8 public schools: By urban district, 2003**



\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Score gaps are calculated based on differences between unrounded average scale scores. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

The percentages of male and female students performing below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced*, at grades 4 and 8, are presented in table 4.4. Compared to the nation, 9 of the 10 urban districts had lower percentages of female and male students at grade 4 who performed at or above *Proficient*. Charlotte had a higher percentage of female students performing at or above *Proficient* than the nation, and no statistically significant difference was found between the percentage of male students at or above *Proficient* in Charlotte and those at or above *Proficient* in the nation. Compared to students in public schools in large central cities, higher percentages of male and female fourth-graders in Charlotte performed at or above *Proficient*. In New York, the percentage of female

fourth-grade students performing at or above *Proficient* was also higher than the percentage in the large central cities.

At grade 8, the percentages of male and female students at or above *Proficient* were lower in 9 out of 10 urban districts that participated when compared to the nation. Higher percentages of male and female students in Charlotte performed at or above *Proficient* than their peers in public schools in large central cities.

At both grades 4 and 8, no measurable differences were detected in the percentages of male and female students performing at or above *Proficient* between 2002 and 2003 in the nation, in large central cities, and in any of the districts that participated in both assessments.



**Table 4.4 Percentages of students, by reading achievement level and gender, grades 4 and 8 public schools:  
By urban district, 2002 and 2003**

	<b>Male</b>							
	<b>Below <i>Basic</i></b>		<b>At or above <i>Basic</i></b>		<b>At or above <i>Proficient</i></b>		<b>At <i>Advanced</i></b>	
	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>
<b>Grade 4</b>								
Nation (public)	41	42	59	58	26	26	5	6
Large central city (public)	59	56 **	41	44 **	15	18 **	3	4 **
Atlanta	69	67 *,**	31	33 ***	11	13 **	2	3 **
Boston	—	58 **	—	42 **	—	12 ***,	—	1 *,**
Charlotte	—	45 *	—	55 *	—	23 *	—	5
Chicago	70	63 *,**	30	37 ***	9	12 ***	1	2 **
Cleveland	—	70 *,**	—	30 ***	—	7 ***	—	#
District of Columbia	74	74 *,**	26	26 ***	8	8 ***	1	2 *,**
Houston	55	54 **	45	46 **	16	17 **	3	3 **
Los Angeles	70	68 *,**	30	32 ***	10	9 ***	1	2 *,**
New York City	61	54 **	39	46 **	14	17 **	3	3 **
San Diego	—	52 **	—	48 **	—	19 **	—	4
<b>Grade 8</b>								
Nation (public)	30 ***	33	70 ***	67	26	25	2	2
Large central city (public)	46	47 **	54	53 **	16	15 **	1	1 **
Atlanta	63	60 *,**	37	40 ***	6	9 ***	#	#
Boston	—	46 **	—	54 **	—	17 **	—	1
Charlotte	—	34 *	—	66 *	—	26 *	—	2
Chicago	43	46 **	57	54 **	12	12 **	1	1
Cleveland	—	59 *,**	—	41 ***	—	6 ***	—	#
District of Columbia	58	62 *,**	42	38 ***	9	8 ***	#	1
Houston	47	51 **	53	49 **	13	11 ***	#	1 **
Los Angeles	61	62 *,**	39	38 ***	8	10 ***,	#	#
New York City	—	45 **	—	55 **	—	16 **	—	1
San Diego	—	48 **	—	52 **	—	17 **	—	1

See notes at end of table. ▶

**Table 4.4 Percentages of students, by reading achievement level and gender, grades 4 and 8 public schools: By urban district, 2002 and 2003—Continued**

	Female							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	35	35	65	65	33	33	8	8
Large central city (public)	51	48 **	49	52 **	20	22 **	4	5 **
Atlanta	60	59 **,*	40	41 **,*	13	15 **,*	4	4
Boston	—	45 **	—	55 **	—	19 **	—	3 **
Charlotte	—	28 **,*	—	72 **,*	—	39 **,*	—	10 *
Chicago	62	58 **,*	38	42 **,*	12	16 **,*	2	3 **,*
Cleveland	—	60 **,*	—	40 **,*	—	12 **,*	—	1 **,*
District of Columbia	64	64 **,*	36	36 **,*	11	13 **,*	2 **	4 **
Houston	50	50 **	50	50 **	19	19 **	3	4 **
Los Angeles	64	61 **,*	36	39 **,*	12	12 **,*	2	2 **,*
New York City	45	40 **,*	55	60 **,*	23	26 **,*	7	6 **
San Diego	—	45 **	—	55 **	—	25 **	—	6
<b>Grade 8</b>								
Nation (public)	21 **	23	79 **	77	36	35	3	4
Large central city (public)	34	36 **	66	64 **	24	22 **	2	2 **
Atlanta	53	47 **,*	47	53 **,*	9	13 **,*	#	#
Boston	—	33 **	—	67 **	—	26 **	—	3
Charlotte	—	24 *	—	76 *	—	35 *	—	4
Chicago	33	38 **	67	62 **	17	17 **,*	1	1 **
Cleveland	—	46 **,*	—	54 **,*	—	13 **,*	—	#
District of Columbia	46	45 **,*	54	55 **,*	11	13 **,*	1	1 **
Houston	35	39 **	65	61 **	21	17 **,*	1	1 **,*
Los Angeles	51	52 **,*	49	48 **,*	12	12 **,*	1	1 **,*
New York City	—	32 **	—	68 **	—	26 **,*	—	3
San Diego	—	34 **	—	66 **	—	22 **	—	2 **

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

# The estimate rounds to zero.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Detail may not sum to totals because of rounding. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

### Race/Ethnicity

Average scale scores by race for grades 4 and 8 in the urban districts are displayed in table 4.5. In most of the urban districts assessed, Black students and/or Hispanic students constituted the majority or the largest racial/ethnic subgroup. This distribution differed from that for the 2003 national public school sample, in which White students constituted a majority—59 percent of the fourth-grade sample and 61 percent of the eighth-grade sample (see table B.17 in appendix B).

In most instances in which the district sample sizes were sufficient to test the differences in average scores between racial/ethnic subgroups, White and Asian/Pacific Islander students scored higher on average than Black and Hispanic students. An exception to the general pattern was observed in Cleveland, where no measurable difference was detected between the average score for White fourth-graders and that for Hispanic students.

At grade 4, the average scores in 2003 for White students in Atlanta, Charlotte, the District of Columbia, and Houston; Black students in Charlotte and Houston; and Hispanic students in New York were higher than the corresponding scores in the nation and large central cities. The average scores for White students in Cleveland and Los Angeles; Black students in the District of Columbia; and Hispanic students in the District of Columbia and

Los Angeles were lower than the corresponding scores in the nation and large central cities.

In 2003, at grade 8, average reading scores for both White and Black students in Charlotte, and for Hispanic students in Chicago, were higher than comparable scores in the nation and large central cities. The average scores for White students in Cleveland; Black students in Atlanta, the District of Columbia, and Los

**Table 4.5 Average reading scale scores, by race/ethnicity, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	White		Black		Hispanic		Asian/ Pacific Islander	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	227	227	198	197	199	199	223	225
Large central city (public)	224	226	192	193 **	197	198	220	223
Atlanta	250	250 *,**	192	191 **	‡	‡	‡	‡
Boston	—	225	—	202 *	—	201	—	223
Charlotte	—	237 *,**	—	205 *,**	—	202	—	218
Chicago	221	224	185 ***	193 **	193	196	‡	‡
Cleveland	—	208 *,**	—	191 **	—	201	—	‡
District of Columbia	248	254 *,**	188 ***	184 *,**	193	187 ***	‡	‡
Houston	233	235 *,**	200	201 *,**	203	203 *	‡	‡
Los Angeles	223	217 *,**	186	187 **	185	189 ***	218	218
New York City	226	231	197	201 *	201	205 ***	235	227
San Diego	—	231	—	196	—	195 **	—	222
<b>Grade 8</b>								
Nation (public)	271	270	244	244	245	244	265	268
Large central city (public)	270	268 **	241	241 **	243	241	256	260 **
Atlanta	275	‡	233 ***	237 *,**	‡	‡	‡	‡
Boston	—	273	—	245 *	—	245	—	274 *
Charlotte	—	278 *,**	—	247 *,**	—	244	—	‡
Chicago	266	265	245	243	248	249 *,**	‡	268
Cleveland	—	250 *,**	—	238 **	—	‡	—	‡
District of Columbia	‡	‡	238	236 *,**	240	240	‡	‡
Houston	279	270	247	244	243	242	‡	‡
Los Angeles	264	266	236	233 *,**	230	228 *,**	259	255 **
New York City	—	270	—	245 *	—	247	—	264
San Diego	—	269	—	236 **	—	238 **	—	260 **

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

Significance tests were performed using unrounded numbers. American Indian/Alaska Native and "Other" data are not shown because of insufficient sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

Angeles; and Hispanic students in Los Angeles were lower than the scores in the nation and large central cities.

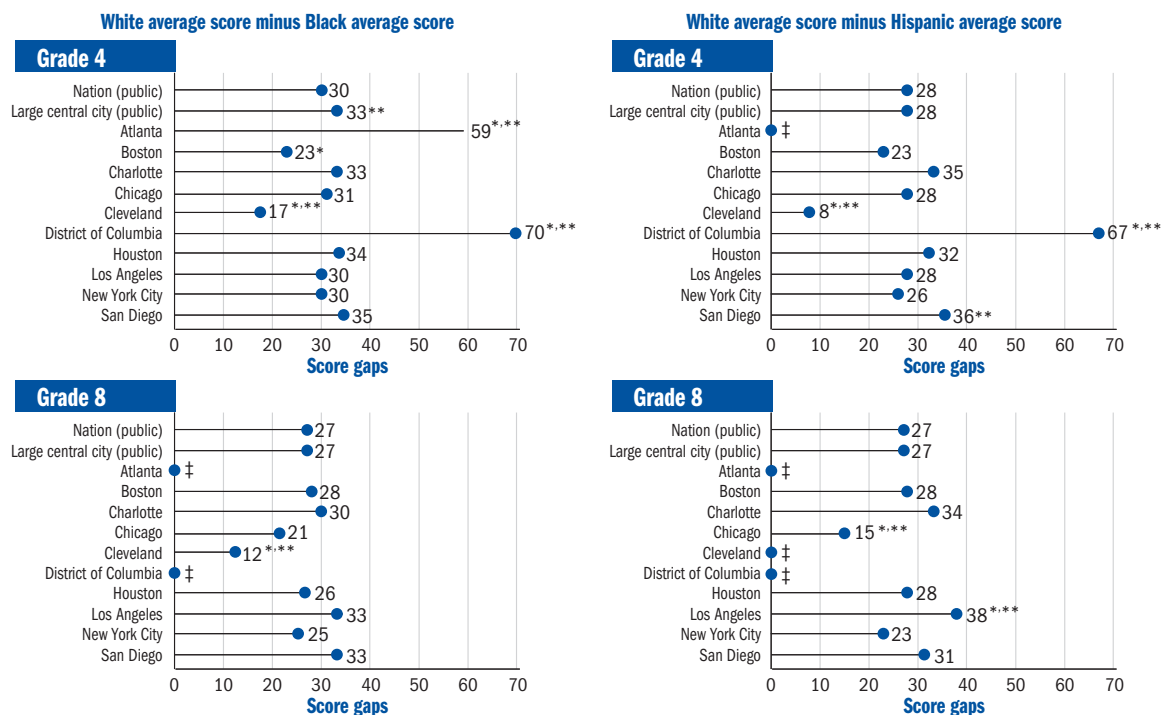
Among the districts that participated in both assessment years at grade 4, the average score for Black students in Chicago was higher in 2003 than in 2002, and the average score for Black students in the District of Columbia was lower in 2003. At grade 8, the average score for Black students in Atlanta was higher in 2003 than in 2002.

Average score gaps in 2003 between White students and Black students and between White students and Hispanic students are presented in figure 4.4. Numbers marked with asterisks indicate statistical differences between the gaps recorded in urban districts and those recorded in large central cities and the

nation. Note that these marked numbers can represent narrower or wider gaps than those recorded for the comparison groups.

At grade 4, the gap between the average scores of White and Black students in Boston and Cleveland was narrower than the corresponding gap in large central cities. The gap between the average scores for White and Black students in Atlanta and the District of Columbia was wider than the corresponding gap in large central cities and the nation. The gap between the average scores of White and Hispanic students in Cleveland was narrower than that in large central cities and the nation. The District of Columbia and San Diego had a wider gap between the average score for White students and the average score for Hispanic students than the gap found in the nation.

**Figure 4.4 Gaps in average reading scores, by race/ethnicity, grades 4 and 8 public schools: By urban district, 2003**



† Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Score gaps are calculated based on differences between unrounded average scale scores. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

At grade 8, the gaps between White and Black students' scores in Cleveland and between White and Hispanic students' scores in Chicago were narrower than the corresponding gaps in large central cities and the nation. Los Angeles had a wider gap between the average score for White students and the average score for Hispanic students than the comparable gap found in large central cities and the nation.

Reading achievement-level results for racial/ethnic subgroups are presented in table 4.6. At grade 4, the percentage of students performing at or above *Proficient* in 2003 was higher for White students in Atlanta, Charlotte, and the District of Columbia than for White students in the nation and large central cities. The percentage of students performing at or above *Proficient* was lower for White students in Cleveland and Los Angeles; Black students in Cleveland and the District of

**Table 4.6 Percentages of students, by reading achievement level and race/ethnicity, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	White							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	26	26	74	74	39	39	9	10
Large central city (public)	30	28	70	72	37	39	9	11 **
Atlanta	14	9 **	86	91 **	67	68 **	34	28 **
Boston	—	31	—	69	—	37	—	7
Charlotte	—	17 **	—	83 **	—	52 **	—	15 **
Chicago	36	30	64	70	35	37	9	10
Cleveland	—	49 **	—	51 **	—	17 **	—	1
District of Columbia	9	10 **	91	90 **	66	70 **	28	37 **
Houston	21	18 *	79	82 *	45	48	13	15
Los Angeles	30	40 **	70	60 **	38	28 **	9	8
New York City	29	23	71	77	35	45	10	14
San Diego	—	21 *	—	79 *	—	43	—	11
<b>Grade 8</b>								
Nation (public)	17	18	83	82	39	39	3	4
Large central city (public)	20	21 **	80	79 **	40	36	5	3
Atlanta	16	‡	84	‡	47	‡	5	‡
Boston	—	21	—	79	—	44	—	7
Charlotte	—	12 **	—	88 **	—	49 **	—	5
Chicago	25	21	75	79	31	30	5	2
Cleveland	—	38 **	—	62 **	—	14 **	—	#
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
Houston	13	20	87	80	47	40	5	3
Los Angeles	27	24	73	76	33	36	3	3
New York City	—	21	—	79	—	42	—	6
San Diego	—	21	—	79	—	37	—	4

See notes at end of table. ▶

Columbia; and Hispanic students in the District of Columbia and Los Angeles than in the nation and large central city schools. There were no measurable changes detected from 2002 to 2003 in the percentage of students at or above *Proficient* for any of the subgroups in the districts that participated in both years at grade 4.

At grade 8, White students in Charlotte showed a higher percentage at or above

*Proficient* when compared to the nation and large central cities. White students in Cleveland, Black students in the District of Columbia, and Hispanic students in Los Angeles all showed lower percentages at or above *Proficient* when compared to the nation and large central cities. Among the districts that participated in both assessment years, a higher percentage of Black students in Atlanta performed at or above *Proficient* in 2003 than in 2002.

**Table 4.6 Percentages of students, by reading achievement level and race/ethnicity, grades 4 and 8 public schools: By urban district, 2002 and 2003—Continued**

	<b>Black</b>							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	61	61	39	39	12	12	1	2
Large central city (public)	67	65 **	33	35 **	9	10 **	1	1
Atlanta	68	69 **	32	31 **	8	8 **	1	1
Boston	—	57 *	—	43 *	—	11	—	1
Charlotte	—	52 *,**	—	48 **	—	14 *	—	1
Chicago	75	67 **	25	33 **	5	10	#	1
Cleveland	—	70 *,**	—	30 *,**	—	7 **	—	# **
District of Columbia	72	73 *,**	28	27 **	7	7 **	1	1 **
Houston	60	57 *	40	43 *	12	12	1	1
Los Angeles	75	70 **	25	30 **	6	8	#	1
New York City	63	57 *	37	43 *	9	13 *	2	2
San Diego	—	62	—	38	—	9	—	1
<b>Grade 8</b>								
Nation (public)	46	47	54	53	13	12	#	#
Large central city (public)	51	51 **	49	49 **	11	10 **	#	#
Atlanta	61	56 *,**	39	44 **	5 **	8 **	#	#
Boston	—	47	—	53	—	14	—	1
Charlotte	—	45 *	—	55 *	—	14	—	#
Chicago	43	48	57	52	10	10	#	#
Cleveland	—	55 **	—	45 **	—	8 **	—	#
District of Columbia	54	55 *,**	46	45 **	8	8 **	#	#
Houston	40	47	60	53	15	12	#	#
Los Angeles	57	59 *,**	43	41 **	8	7 **	#	#
New York City	—	44 *	—	56 *	—	13	—	#
San Diego	—	54	—	46	—	7 **	—	#

See notes at end of table. ▶

**Table 4.6 Percentages of students, by reading achievement level and race/ethnicity, grades 4 and 8 public schools: By urban district, 2002 and 2003—Continued**

	Hispanic							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	57	57	43	43	14	14	2	2
Large central city (public)	61	59	39	41	12	13	2	2
Atlanta	‡	‡	‡	‡	‡	‡	‡	‡
Boston	—	58	—	42	—	12	—	1
Charlotte	—	54	—	46	—	15	—	3
Chicago	67	61	33	39	9	12	1	2
Cleveland	—	56	—	44	—	14	—	1
District of Columbia	66	71 **	34	29 ***	8	8***	1	2
Houston	55	56	45	44	14	15	2	2
Los Angeles	74	70 **	26	30 **	7	7***	1	1 **
New York City	58	53 *	42	47 *	15	16	3	2
San Diego	—	63 **	—	37 **	—	12	—	2
<b>Grade 8</b>								
Nation (public)	44	46	56	54	14	14	#	1
Large central city (public)	47	49	53	51	13	12	#	1
Atlanta	‡	‡	‡	‡	‡	‡	‡	‡
Boston	—	46	—	54	—	14	—	1
Charlotte	—	48	—	52	—	14	—	1
Chicago	39	39 **	61	61 ***	12	15	#	1
Cleveland	—	‡	—	‡	—	‡	—	‡
District of Columbia	47	49	53	51	11	11	#	#
Houston	48	49	52	51	13	10 **	#	#
Los Angeles	64	63 **	36	37 **	5	6***	#	#
New York City	—	43	—	57	—	17	—	1
San Diego	—	54 **	—	46 **	—	9**	—	#

See notes at end of table. ▶

**Table 4.6 Percentages of students, by reading achievement level and race/ethnicity, grades 4 and 8 public schools: By urban district, 2002 and 2003—Continued**

	Asian/Pacific Islander							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	31	31	69	69	36	37	9	11
Large central city (public)	36	33	64	67	32	35	8	11
Atlanta	‡	‡	‡	‡	‡	‡	‡	‡
Boston	—	29	—	71	—	29	—	6
Charlotte	—	39	—	61	—	31	—	7
Chicago	‡	‡	‡	‡	‡	‡	‡	‡
Cleveland	—	‡	—	‡	—	‡	—	‡
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
Houston	‡	‡	‡	‡	‡	‡	‡	‡
Los Angeles	30	39	70	61	26	28	3	7
New York City	22	28	78	72	50	39	20	9
San Diego	—	34	—	66	—	33	—	8
<b>Grade 8</b>								
Nation (public)	25	22	75	78	34	38	3	5
Large central city (public)	35	31 **	65	69 **	26	30 **	1	3 **
Atlanta	‡	‡	‡	‡	‡	‡	‡	‡
Boston	—	17 *	—	83 *	—	44 *	—	5
Charlotte	—	‡	—	‡	—	‡	—	‡
Chicago	‡	22	‡	78	‡	35	‡	7
Cleveland	—	‡	—	‡	—	‡	—	‡
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
Houston	‡	‡	‡	‡	‡	‡	‡	‡
Los Angeles	27	36 **	73	64 **	26	27 **	1	3
New York City	—	28	—	72	—	35	—	4
San Diego	—	29	—	71	—	27 **	—	2 **

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Detail may not sum to totals because of rounding. Significance tests were performed using unrounded numbers. American Indian/Alaska Native and "Other" data are not shown because of insufficient sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.



### **Student Eligibility for Free/Reduced-Price School Lunch**

In 2003, 44 percent of fourth-grade students and 36 percent of eighth-grade students attending public schools were eligible for free/reduced-price lunches. In nine of the participating urban districts, the percentage of eligible students ranged from 44 percent to 89 percent at grade 4 and from 37 to 88 percent at grade 8. The tenth, Cleveland, chose to define all of its students as eligible for the lunch program. (See table B.18 in appendix B.) Table 4.7 displays the average scale scores for public school students in the nation, large central cities, and the participating urban districts by free/reduced-price lunch eligibility status.

At grade 4, average scores in 2003 were higher for eligible students in New York and for students who were not eligible in Charlotte and New York compared to the corresponding scores in the nation and large central cities. Eligible students in

Atlanta, the District of Columbia, and Los Angeles, and students who were not eligible in the District of Columbia, scored lower on average than comparable groups of students in the nation and large central cities. Among the districts that participated in both assessment years, average reading scores increased for students who were not eligible in New York.

At grade 8, eligible students in Boston, Chicago, and New York and students who were not eligible in Charlotte and New York scored higher on average than their counterparts in large central cities. Eligible students in Atlanta, the District of Columbia, and Los Angeles and students who were not eligible in Atlanta, the District of Columbia, Houston, and Los Angeles scored lower on average than their counterparts in the nation and large central cities. The average score for eighth-graders who were not eligible decreased in large central cities and increased in Atlanta between 2002 and 2003.

**Table 4.7 Average reading scale scores, by eligibility for free/reduced-price school lunch, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	Eligible		Not eligible		Information not available	
	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>						
Nation (public)	202	201	229	229	217	219
Large central city (public)	195	197 **	222	223 **	211	215
Atlanta	189	189 **,*	214	230	211	‡
Boston	—	204 *	—	221 **	—	207 **
Charlotte	—	200	—	234 **,*	—	‡
Chicago	190	194 **	222	227	206	214
Cleveland	—	195 **	—	†	—	†
District of Columbia	185	182 **,*	210	206 **,*	‡	183 **,*
Houston	199	201 *	226	220 **	‡	‡
Los Angeles	186	189 **,*	199	213 **	215	215
New York City	201	206 **,*	219 ***	241 **,*	221	231
San Diego	—	197 **	—	224	—	219
<b>Grade 8</b>						
Nation (public)	249 ***	246	271	271	264	262
Large central city (public)	242	241 **	268 ***	263 **	251	248 **
Atlanta	233	235 **,*	244 ***	256 **,*	‡	252 **
Boston	—	247 *	—	265	—	266 *
Charlotte	—	244	—	273 *	—	‡
Chicago	246	246 *	267	267	268	259
Cleveland	—	240 **	—	†	—	†
District of Columbia	235	232 **,*	251	248 **,*	‡	249 **
Houston	243	241 **	261	256 **,*	‡	‡
Los Angeles	—	230 **,*	—	247 **,*	—	243 **
New York City	—	248 *	—	278 *	—	263 *
San Diego	—	240 **	—	262 **	—	252

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

† Not applicable. In Cleveland, all students were categorized as eligible for the school lunch program.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

Significance tests were performed using unrounded numbers.

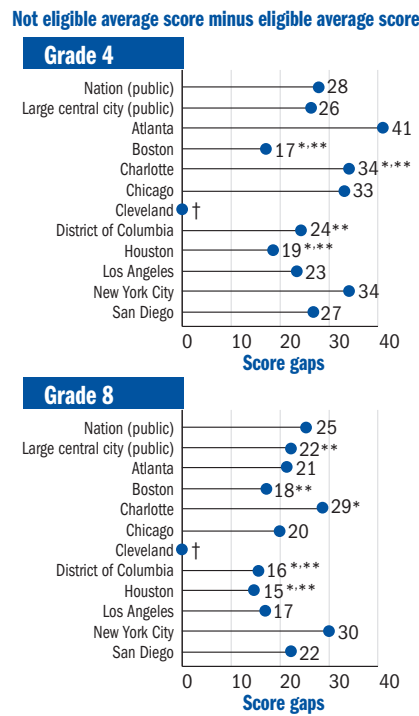
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

Figure 4.5 displays the gaps between the average scores of students in the urban districts who were eligible for free/reduced-price lunch and those who were not eligible. The differences marked in the figure can represent either a narrower or wider gap than the comparison group's.

In 2003, public school students who were not eligible for free/reduced-price lunch scored higher on average than eligible students by 28 points at grade 4,

and by 25 points at grade 8. At grade 4, the gaps in Boston and Houston were narrower than the gap in large central cities and the nation, while the gap in Charlotte was wider than those in both large central cities and the nation. At grade 8, the District of Columbia and Houston had narrower score gaps than large central cities and the nation, while Charlotte had a wider score gap than in large central cities.

**Figure 4.5 Gaps in average reading scores, by eligibility for free/reduced-price school lunch, grades 4 and 8 public schools: By urban district, 2003**



† Not applicable. In Cleveland, all students were categorized as eligible for the school lunch program.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Score gaps are calculated based on differences between unrounded average scale scores. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

Achievement-level results by eligibility for free/reduced-price lunch for grades 4 and 8 are shown in table 4.8. At grade 4, the percentage of eligible students performing at or above *Proficient* in 2003 was higher in New York than in the nation and large central cities. For students who were not eligible, the percentages performing at or above *Proficient* were higher in

Charlotte and New York than in large central cities. The percentages of fourth-graders performing at or above *Proficient* were lower for eligible students in Atlanta, Cleveland, the District of Columbia, and Los Angeles and for students who were not eligible in the District of Columbia compared to the nation and large central cities.

**Table 4.8 Percentages of students, by reading achievement level and eligibility for free/reduced-price school lunch, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	Eligible							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	54	56	46	44	16	15	2	2
Large central city (public)	64	61 **	36	39 **	11	12 **	2	2 **
Atlanta	71	71 *,**	29	29 *,**	7	7 *,**	1	1 *,**
Boston	—	54 *	—	46 *	—	13	—	2
Charlotte	—	57	—	43	—	12 **	—	1
Chicago	70	64 **	30	36 **	8	11 **	1	1
Cleveland	—	65 *,**	—	35 *,**	—	9 *,**	—	1 *,**
District of Columbia	75	75 *,**	25	25 *,**	5	6 *,**	#	1 *,**
Houston	60	58	40	42	11	12	1	1
Los Angeles	73	69 *,**	27	31 *,**	7	8 *,**	1	1 *,**
New York City	58	51 *,**	42	49 *,**	15	18 *,**	3	3 *
San Diego	—	61 **	—	39 **	—	12	—	2
<b>Grade 8</b>								
Nation (public)	40 ***	44	60 ***	56	17 ***	15	1	1
Large central city (public)	49	50 **	51	50 **	11	12 **	#	1
Atlanta	62	58 *,**	38	42 *,**	6	7 *,**	#	#
Boston	—	44 *	—	56 *	—	16 *	—	1
Charlotte	—	49	—	51	—	13	—	#
Chicago	41	44 *	59	56 *	11	13	#	1
Cleveland	—	52 **	—	48 **	—	10 **	—	# **
District of Columbia	57	61 *,**	43	39 *,**	6	6 *,**	#	#
Houston	48	51 **	52	49 **	13	10 **	#	#
Los Angeles	—	63 *,**	—	37 *,**	—	7 *,**	—	#
New York City	—	42 *	—	58 *	—	18 *	—	1
San Diego	—	52 **	—	48 **	—	11 **	—	1

See notes at end of table. ▶

At grade 8, the percentage of students performing at or above *Proficient* was higher for eligible students in Boston and New York and for students who were not eligible in Charlotte and New York than for the corresponding groups in large central cities. Percentages of students at or above *Proficient* were lower on average for eligible students in Atlanta, the District of Columbia, and Los Angeles and for

students who were not eligible in the District of Columbia, Houston, and Los Angeles when compared to the nation and large central cities. In the districts that participated in both assessment years, students in Atlanta who were not eligible for free/reduced-price lunch were the only group with a higher percentage of students performing at or above *Proficient* in 2003 than in 2002.

**Table 4.8 Percentages of students, by reading achievement level and eligibility for free/reduced-price school lunch, grades 4 and 8 public schools: By urban district, 2002 and 2003—Continued**

	Not eligible							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	24	25	76	75	41	41	10 ***	11
Large central city (public)	33	32 **	67	68 **	34	37 **	8	11
Atlanta	45	29	55	71	27	45	10	17
Boston	—	35 **	—	65 **	—	30 **	—	8
Charlotte	—	19 *,**	—	81 **,*	—	47 *	—	13
Chicago	35	29	65	71	33	38	11	12
Cleveland	—	†	—	†	—	†	—	†
District of Columbia	48	52 *,**	52	48 **,*	23	24 **,*	7	9
Houston	28	34 **	72	66 **	39	31 **	9	9
Los Angeles	58	43 **	42	57 **	14	23	1	6
New York City	38 ***	14 *,**	62 ***	86 **,*	30	54 *	8	19
San Diego	—	31	—	69	—	37	—	9
<b>Grade 8</b>								
Nation (public)	17 ***	18	83 ***	82	40	39	3	4
Large central city (public)	22	26 **	78	74 **	37	31 **	4	3 **
Atlanta	47 ***	32 **	53 ***	68 **	12 ***	26 **	1	1
Boston	—	26	—	74	—	34	—	4
Charlotte	—	17 *	—	83 *	—	41 *	—	4
Chicago	24	22	76	78	36	32	4	3
Cleveland	—	†	—	†	—	†	—	†
District of Columbia	39	44 *,**	61	56 **,*	18	17 **,*	1	3
Houston	25	33 *,**	75	67 **,*	26	23 **,*	2	2 **
Los Angeles	—	42 *,**	—	58 **,*	—	18 **,*	—	2
New York City	—	13 *	—	87 *	—	48 *	—	7
San Diego	—	26 **	—	74 **	—	30 **	—	3

See notes at end of table. ▶

**Table 4.8 Percentages of students, by reading achievement level and eligibility for free/reduced-price school lunch, grades 4 and 8 public schools: By urban district, 2002 and 2003—Continued**

	Information not available							
	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>								
Nation (public)	38	35	62	65	30	33	7	8
Large central city (public)	46	39	54	61	25	29	6	7
Atlanta	51	‡	49	‡	22	‡	7	‡
Boston	—	49 **	—	51 **	—	20 **	—	3
Charlotte	—	‡	—	‡	—	‡	—	‡
Chicago	52	40	48	60	19	27	4	6
Cleveland	—	†	—	†	—	†	—	†
District of Columbia	‡	71 **,*	‡	29 **,*	‡	8 **,*	‡	1
Houston	‡	‡	‡	‡	‡	‡	‡	‡
Los Angeles	40	40	60	60	28	28	6	8
New York City	38	23	62	77	28	48	11	13
San Diego	—	33	—	67	—	30	—	7
<b>Grade 8</b>								
Nation (public)	25	28	75	72	32	31	4	3
Large central city (public)	39	41 **	61	59 **	20	21 **	2	2
Atlanta	‡	36	‡	64	‡	25	‡	1
Boston	—	29 *	—	71 *	—	37 *	—	6
Charlotte	—	‡	—	‡	—	‡	—	‡
Chicago	21	29	79	71	34	25	7	2
Cleveland	—	†	—	†	—	†	—	†
District of Columbia	‡	38 **	‡	62 **	‡	15 **	‡	1
Houston	‡	‡	‡	‡	‡	‡	‡	‡
Los Angeles	—	46 **	—	54 **	—	17 **	—	1 **
New York City	—	31	—	69	—	36 *	—	5
San Diego	—	40	—	60	—	20	—	1

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

† Not applicable. In Cleveland, all students were categorized as eligible for the school lunch program.

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Detail may not sum to totals because of rounding. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

### Highest Level of Parents' Education

Eighth-grade students who participated in the NAEP 2002 and 2003 reading assessments, including those in the Trial Urban District Assessment, were asked to indicate, from among five options, the highest level of education completed by each parent. Table 4.9 displays the average scores for eighth-graders who chose each category as the highest level of education for either parent.

In 2003, the average score for students who indicated that a parent had graduated from college was lower in Atlanta, Chicago, Cleveland, the District of Columbia, and Los Angeles than the average score for students in the same parental education category in public schools in the

nation and large central cities. The average score for students who reported that a parent graduated from college was higher in Charlotte than for comparable students in large central cities.

Among eighth-graders in public schools nationally, the average score was lower in 2003 than in 2002 for students who indicated that their parents either did not graduate from high school, or did graduate from high school or college, and for students who indicated that they did not know their parents' highest level of education. Among the participating urban districts, however, there was no measurable change detected in the average score between 2003 and 2002 at any level of parental education.

**Table 4.9 Average reading scale scores, by student-reported parents' highest level of education, grade 8 public schools: By urban district, 2002 and 2003**

	Less than high school		Graduated high school		Some education after high school		Graduated college		Unknown	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 8</b>										
Nation (public)	247***	245	256***	253	267	266	273***	271	246***	242
Large central city (public)	242	241**	247	243**	258	256**	262	258**	239	236**
Atlanta	233	236	233	232***	241	246***	243	245***	229	234**
Boston	—	244	—	252*	—	259**	—	260**	—	243*
Charlotte	—	247	—	246**	—	264*	—	271*	—	242
Chicago	246	251***	246	244**	260	254**	255	251***	242	243*
Cleveland	—	236	—	238**	—	252**	—	237***	—	240
District of Columbia	240	233***	235	233***	247	248***	247	245***	231	233**
Houston	251	242	242	244**	260	254**	262	255**	235	236**
Los Angeles	234	232***	233	234***	249	245***	251	249***	228	222***
New York City	—	242	—	247**	—	262*	—	259**	—	240
San Diego	—	241	—	248	—	256**	—	262**	—	233**

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

Achievement-level results by level of parental education for the urban districts are presented in table 4.10. Among students who reported that at least one parent had graduated from college, the percentage of students performing at or above *Proficient* was lower than the nation

in all the districts except Charlotte. The percentage of students at or above *Proficient* was lower in Atlanta, Chicago, Cleveland, the District of Columbia, and Houston than in large central city schools for students who reported that at least one parent had graduated from college.

**Table 4.10 Percentages of students, by reading achievement level and student-reported parents' highest level of education, grade 8 public schools: By urban district, 2002 and 2003**

Grade 8	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Less than high school</b>								
Nation (public)	42	45	58	55	14	13	#	#
Large central city (public)	49	50 **	51	50 **	11	11	#	#
Atlanta	66	57	34	43	8	7	#	#
Boston	—	46	—	54	—	14	—	#
Charlotte	—	46	—	54	—	10	—	#
Chicago	43	37 *	57	63 *	10	15	#	1
Cleveland	—	57 **	—	43 **	—	7	—	#
District of Columbia	46	61 **	54	39 **	6	5 **	#	#
Houston	38	50	62	50	17	11	1	1
Los Angeles	61	60 *,**	39	40 *,**	7	6 ***	#	#
New York City	—	51	—	49	—	13	—	1
San Diego	—	51	—	49	—	10	—	#
<b>Graduated high school</b>								
Nation (public)	31 ***	35	69 ***	65	21	19	1	1
Large central city (public)	44	48 **	56	52 **	13	12 **	#	1
Atlanta	63	61 *,**	37	39 *,**	4	5 ***	#	#
Boston	—	39	—	61	—	19	—	2
Charlotte	—	47 **	—	53 **	—	15	—	#
Chicago	40	46 **	60	54 **	9	10 **	#	1
Cleveland	—	55 **	—	45 **	—	7 **	—	#
District of Columbia	57	62 *,**	43	38 *,**	5	4 ***	#	#
Houston	48	46 **	52	54 **	9	9 **	#	#
Los Angeles	61	57 *,**	39	43 *,**	5	7 ***	#	#
New York City	—	40	—	60	—	16	—	1
San Diego	—	41	—	59	—	16	—	1
<b>Some education after high school</b>								
Nation (public)	19	21	81	79	33	32	2	2
Large central city (public)	30	32 **	70	68 **	24	22 **	1	1 **
Atlanta	50	44 *,**	50	56 *,**	8	11 ***	#	#
Boston	—	31 **	—	69 **	—	23 **	—	2
Charlotte	—	23 *	—	77 *	—	28	—	1
Chicago	24	34 **	76	66 **	20	18 **	1	1
Cleveland	—	37 **	—	63 **	—	16 **	—	1
District of Columbia	43	41 *,**	57	59 *,**	12	14 ***	#	1
Houston	25	32 **	75	68 **	24	19 **	1	1
Los Angeles	40	45 *,**	60	55 *,**	17	14 ***	1	1
New York City	—	26	—	74	—	31 *	—	1
San Diego	—	32 **	—	68 **	—	21 **	—	1

See notes at end of table. ▶



**Table 4.10 Percentages of students, by reading achievement level and student-reported parents' highest level of education, grade 8 public schools: By urban district, 2002 and 2003—Continued**

Grade 8	Below <i>Basic</i>		At or above <i>Basic</i>		At or above <i>Proficient</i>		At <i>Advanced</i>	
	2002	2003	2002	2003	2002	2003	2002	2003
<b>Graduated college</b>								
Nation (public)	17***	19	83***	81	42	41	4	4
Large central city (public)	29	33**	71	67**	31	27**	3	3**
Atlanta	49	48***	51	52***	13	16***	1	1
Boston	—	33**	—	67**	—	31**	—	5
Charlotte	—	20*	—	80*	—	41*	—	4
Chicago	33	40***	67	60***	20	18***	3	1**
Cleveland	—	56***	—	44***	—	9***	—	#
District of Columbia	45	47***	55	53***	15	16***	1	3
Houston	26	35**	74	65**	29	22***	2	2**
Los Angeles	40	42***	60	58***	21	23**	1	2
New York City	—	32**	—	68**	—	28**	—	4
San Diego	—	27***	—	73***	—	31**	—	3
<b>Unknown</b>								
Nation (public)	44***	48	56***	52	14	13	#	#
Large central city (public)	53	55**	47	45**	10	9**	#	#
Atlanta	67	59**	33	41**	4	7	#	#
Boston	—	48	—	52	—	14	—	1
Charlotte	—	50	—	50	—	11	—	1
Chicago	48	47*	52	53*	11	10	#	#
Cleveland	—	53	—	47	—	10	—	#
District of Columbia	65	58**	35	42**	5	5**	#	#
Houston	57	60**	43	40**	7	7**	#	#
Los Angeles	67	71***	33	29***	4	4***	#	#
New York City	—	51	—	49	—	11	—	#
San Diego	—	60**	—	40**	—	8	—	1

— Not available. The district did not participate or did not meet minimum participation guidelines for reporting.

# The estimate rounds to zero.

\* Significantly different from large central city public schools.

\*\* Significantly different from nation (public schools).

\*\*\* Significantly different from 2003.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

Detail may not sum to totals because of rounding. Significance tests were performed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

# 5

## Sample Assessment Questions and Student Responses

This chapter presents sample questions and examples of student responses from the NAEP 2003 reading assessment. The complete reading passages to which the sample questions refer are provided in appendix E. Four representative questions, including both multiple-choice and constructed-response questions, are provided for each grade. For each question, the framework-guided reading context and aspect are both given. In the case of multiple-choice questions, the oval corresponding to the correct answer is filled in. Answers to constructed-response questions are accompanied by both a summary of the scoring criteria used to determine their rating and their actual assigned ratings. The student responses presented in this section were selected to illustrate how questions were scored. Additional passages and questions, as well as student performance data, detailed scoring guides, and sample student responses from previous NAEP assessments are available on the NAEP web site (<http://nces.ed.gov/nationsreportcard/itmrls>).

To indicate how students performed on the sample questions, each question included in this chapter is accompanied by a table presenting two types of performance data: (a) the overall percentage of students who answered successfully, and (b) the percentage of students within specific score ranges on the NAEP reading scale who answered successfully. The score ranges correspond to the three achievement levels—*Basic*, *Proficient*, and *Advanced*—as well as the range below *Basic*.

The sample questions are also marked on the item maps at the end of the chapter. The item map location of each multiple-choice question identifies the scale score at which at least 74 percent of the students answered the question correctly. The item map location of each constructed-response question indicates the scale score at which at least 65 percent of the students reached a particular rating level.

### Grade 4 Sample Assessment Questions and Results

Sample questions from the fourth-grade reading assessment include two multiple-choice, one short constructed-response,

and one extended constructed-response question. Information about the context for and aspect of reading, as described in the NAEP reading framework, appears beneath each question.

The fourth-grade reading comprehension questions presented here were based on “Watch Out for Wombats,” by Caroline Arnold. This highly detailed article describes the appearance, eating and sleeping habits, and temperament of the wombat; compares it to another Australian mammal, the koala; and explains the meaning of “marsupial” by relating how baby wombats are nurtured.

<b>Grade 4</b>	<b>Sample Question 1 (multiple-choice)</b>
<p>In sample question 1, students were asked to retrieve information explicitly stated in the article. This question was very easy for students, with 94 percent of fourth-graders choosing the correct answer. This question appears on the item map at scale score 145.</p>	
<p>Where do wombats live?</p> <p>Ⓐ North America</p> <p>Ⓑ Greenland</p> <p>● Australia</p> <p>Ⓓ Africa</p>	
<b>Reading Context:</b>	<b>Reading Aspect:</b>
Reading for Information	Developing Interpretation

**Table 5.1** Percentage scored correct for multiple-choice sample question 1, by achievement-level range, grade 4: 2003

Grade 4	Percentage correct			
Overall percentage correct	Below <i>Basic</i> 207 or below <sup>1</sup>	At <i>Basic</i> 208–237 <sup>1</sup>	At <i>Proficient</i> 238–267 <sup>1</sup>	At <i>Advanced</i> 268 or above <sup>1</sup>
94	85	98	99	100

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Grade 4****Sample Question 2 (multiple-choice)**

In sample question 2, students were asked to use what they learned about the wombat’s temperament to infer how a wombat might respond to humans. Seventy-six percent of fourth-graders answered this question correctly. This question appears on the item map at scale score 210.

What would a wombat probably do if it met a person?

- Ⓐ Try to attack the person
- Ⓑ Run away from the person
- Ⓒ Growl at the person
- Ⓓ Beg for food from the person

**Reading Context:**  
Reading for Information

**Reading Aspect:**  
Developing Interpretation

**Table 5.2** Percentage scored correct for multiple-choice sample question 2, by achievement-level range, grade 4: 2003

Grade 4	Percentage correct				
	Overall percentage correct	Below <i>Basic</i> 207 or below <sup>1</sup>	At <i>Basic</i> 208–237 <sup>1</sup>	At <i>Proficient</i> 238–267 <sup>1</sup>	At <i>Advanced</i> 268 or above <sup>1</sup>
	76	55	81	92	97

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

## Sample Question 3 (short constructed-response)

This sample question required students to use information from the article to compare and contrast wombats and koalas. Responses to this item were scored with a two-level rating as “Acceptable” or “Unacceptable.” Slightly more than half of fourth-grade students received a rating of “Acceptable” by providing both a similarity and a difference. This question appears on the item map at scale score 232.

Describe one way in which wombats and koalas are similar and one way in which they are different.

SimilarDifferent**Reading Context:**

Reading for Information

**Reading Aspect:**

Developing Interpretation

**Table 5.3** Percentage scored as “Acceptable” for short constructed-response sample question 3, by achievement-level range, grade 4: 2003

Grade 4	Percentage “Acceptable”				
	Overall percentage “Acceptable”	Below <i>Basic</i> 207 or below <sup>1</sup>	At <i>Basic</i> 208–237 <sup>1</sup>	At <i>Proficient</i> 238–267 <sup>1</sup>	At <i>Advanced</i> 268 or above <sup>1</sup>
	53	21	58	80	92

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Sample “Acceptable” Response**Similar

The wombats and koalas both have strong forelimbs.

Different

Wombats dig large underground burrows and koalas use their claws to cling to high tree branches.

**Grade 4****Sample Question 4 (extended constructed-response)**

This sample question measured students' ability to support their reasoning by using information from the article. Answers to this question were scored with a four-level rating: "Extensive," "Essential," "Partial," or "Unsatisfactory." Forty-two percent of fourth-graders assessed provided responses rated as "Essential" or better; Twelve percent of fourth-graders provided responses rated as "Extensive." An "Extensive" response to this question appears on the item map at scale score 352.

Give two reasons why people should not have wombats as pets.  
Use what you learned in the passage to support your answer.

**Reading Context:**  
Reading for Information

**Reading Aspect:**  
Developing Interpretation

**Table 5.4a** Percentage scored as "Essential" or better for extended constructed-response sample question 4, by achievement-level range, grade 4: 2003

Grade 4	Percentage "Essential" or better				
	Overall percentage "Essential" or better	Below <i>Basic</i> 207 or below <sup>1</sup>	At <i>Basic</i> 208–237 <sup>1</sup>	At <i>Proficient</i> 238–267 <sup>1</sup>	At <i>Advanced</i> 268 or above <sup>1</sup>
	42	18	43	61	77

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Sample "Essential" Response

Responses to this question that were scored "Essential" demonstrated understanding of why people should not have wombats as pets, by citing at least two wombat traits described in the article or two negative outcomes that reflect an understanding of wombat traits that would make them unsuitable as pets, or by connecting one wombat trait to a negative outcome. This sample answer was rated "Essential" because it provides two wombat traits.

1. Because they are wild animals.

2. They need a place to dig burrows.

**Table 5.4b** Percentage scored as “Extensive” for extended constructed-response sample question 4, by achievement-level range, grade 4: 2003

Grade 4	Percentage “Extensive”				
	Overall percentage “Extensive”	Below <i>Basic</i> 207 or below <sup>1</sup>	At <i>Basic</i> 208–237 <sup>1</sup>	At <i>Proficient</i> 238–267 <sup>1</sup>	At <i>Advanced</i> 268 or above <sup>1</sup>
	12	3	10	20	35

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Sample “Extensive” Response

The following sample response was rated “Extensive” because it not only provides at least two wombat traits, but it also links one of the traits to a negative outcome that could ensue from having a wombat as a pet.

Wombats would not make a good pet because they are wild. For this reason wombats are afraid of people and if it got scared it could tear parts of your body up by using its sharp claws. Wombats sleep in burrows up to fifteen feet deep. It could not sleep in a cage, plus wombats are only active at night the only thing it would do is sleep. For these reasons wombats would not make good pets.

## Grade 8 Sample Assessment Questions and Results

Sample questions from the eighth-grade reading assessment include two multiple-choice questions, one short constructed-response question, and one extended constructed-response question.

The eighth-grade reading comprehension questions were based on the short story, “Thank You, M’am,” by Langston Hughes. The story begins with Roger

attempting to steal Mrs. Luella Bates Washington Jones’ purse, but the woman quickly catches him. Rather than turning him over to the police, Mrs. Jones takes Roger home and teaches him a lesson about trust, compassion, and forgiveness. At the end of the story, the boy is left standing on the front stoop unable to thank Mrs. Jones, as he is dumfounded by her kindness and generosity.

### Grade 8

#### Sample Question 5 (multiple-choice)

This sample question asked students to choose the answer that best describes a character’s motivation at a particular point in the story. With an overall percentage correct of 84, this question was quite easy for the eighth-grade students taking the assessment. This question appears on the item map at scale score 223.

Why did the boy sit on the far side of the room while Mrs. Jones was making their dinner?

- Ⓐ He wanted to sit close to Mrs. Jones.
- Ⓑ He wanted to show Mrs. Jones he could be trusted.
- Ⓒ He wanted to help Mrs. Jones prepare the food.
- Ⓓ He wanted to keep an eye on Mrs. Jones.

**Reading Context:**  
Reading for Literary Experience

**Reading Aspect:**  
Developing Interpretation

**Table 5.5** Percentage scored correct for multiple-choice sample question 5, by achievement-level range, grade 8: 2003

Grade 8	Percentage correct				
	Overall percentage correct	Below <i>Basic</i> 242 or below <sup>1</sup>	At <i>Basic</i> 243–280 <sup>1</sup>	At <i>Proficient</i> 281–322 <sup>1</sup>	At <i>Advanced</i> 323 or above <sup>1</sup>
	84	69	85	93	99

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.



**Grade 8**

**Sample Question 6 (multiple-choice)**

This sample question asked students to use their understanding of a moment in the story to recognize the purpose of a stylistic device. Seventy percent of eighth-grade students chose the correct answer. This question appears on the item map at scale score 264.

The author puts the phrase “*and went to the sink*” in italics mainly to

- A emphasize the boy’s decision
- B describe the boy’s location
- C indicate the boy’s motivation
- D explain the boy’s viewpoint

**Reading Context:**  
Reading for Literary Experience

**Reading Aspect:**  
Examining Content and Structure

**Table 5.6** Percentage scored correct for multiple-choice sample question 6, by achievement-level range, grade 8: 2003

Grade 8	Percentage correct				
	Overall percentage correct	Below <i>Basic</i> 242 or below <sup>1</sup>	At <i>Basic</i> 243–280 <sup>1</sup>	At <i>Proficient</i> 281–322 <sup>1</sup>	At <i>Advanced</i> 323 or above <sup>1</sup>
	70	36	73	92	98

<sup>1</sup> NAEP reading composite scale range.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Grade 8****Sample Question 7 (short constructed-response)**

Sample question 7 required students to make an inference about Mrs. Jones' character based either on her actions or what she says in the story. Responses to this question were scored with a three-level rating of "Full Comprehension," "Partial or Surface Comprehension," or "Little or No Comprehension." This question was moderately easy for eighth-graders as 69 percent of assessed students received a rating of "Full Comprehension." A "Full Comprehension" response to this item maps at the scale score of 247.

Choose one thing Mrs. Luella Bates Washington Jones said or did in the story and explain what it tells about her.

**Reading Context:**

Reading for Literary Experience

**Reading Aspect:**

Developing an Interpretation

**Table 5.7** Percentage scored as "Full Comprehension" for short constructed-response sample question 7, by achievement-level range, grade 8: 2003

Grade 8	Percentage "Full Comprehension"				
	Overall percentage "Full Comprehension"	Below <i>Basic</i> 242 or below <sup>1</sup>	At <i>Basic</i> 243–280 <sup>1</sup>	At <i>Proficient</i> 281–322 <sup>1</sup>	At <i>Advanced</i> 323 or above <sup>1</sup>
	69	40	73	87	94

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Sample "Full Comprehension" Response**

One thing she did was bring him into her house, and allowed him to wash his face in the sink and eat supper with her. This showed that even though Mrs. Luella Bates Washington Jones was strict, she did have a good heart though.

**Grade 8****Sample Question 8 (extended constructed-response)**

This sample question measured students' ability to integrate events across the text to interpret the story's theme. Answers to this question were scored according to four levels: "Extensive," "Essential," "Partial," or "Unsatisfactory." An "Extensive" response to this question appears on the item map at scale score 337.

What do you think is the theme of the story? Support your answer with details from the story.

**Reading Context:**

Reading for Literary Experience

**Reading Aspect:**

Examining Content and Structure

**Table 5.8a** Percentage scored as "Essential" or better for extended constructed-response sample question 8, by achievement-level range, grade 8: 2003

Grade 8	Percentage "Essential" or better				
	Overall percentage "Essential" or better	Below <i>Basic</i> 242 or below <sup>1</sup>	At <i>Basic</i> 243–280 <sup>1</sup>	At <i>Proficient</i> 281–322 <sup>1</sup>	At <i>Advanced</i> 323 or above <sup>1</sup>
	48	26	47	66	86

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Sample "Essential" Response**

This sample answer is rated "Essential" because it provided a theme that demonstrated a thoughtful understanding of the story, but did not support the interpretation with specific reference to story events that reflect the theme.

You can find kindness in a person even if you do something wrong to them. The person who does something to you might have a good reason for doing it. So give them a chance, you find good people in unexpected places.

**Table 5.8b** Percentage scored as “Extensive” for extended constructed-response sample question 8, by achievement-level range, grade 8: 2003

Grade 8		Percentage “Extensive”			
Overall percentage “Extensive”	Below <i>Basic</i> 242 or below <sup>1</sup>	At <i>Basic</i> 243–280 <sup>1</sup>	At <i>Proficient</i> 281–322 <sup>1</sup>	At <i>Advanced</i> 323 or above <sup>1</sup>	
26	6	21	45	72	

<sup>1</sup> NAEP reading composite scale range.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### Sample “Extensive” Response

This sample answer is rated “Extensive” because it provided a theme that represented a thoughtful understanding of the story and supported the interpretation with specific reference to story events that reflect the theme.

I think the theme of the story is that everyone can be trusted if you just give them a chance. When he tried to steal her purse he couldn't be trusted, but when she gave him a little piece of her mind, he started to shape up. Then when they went back to her house he could've run when she let go of him when they went inside. Then he was sitting by her purse and he could've stolen it, but he didn't. So if you give someone a chance they could be trusted.

## Maps of Selected Item Descriptions on the NAEP Reading Scale—Grades 4 and 8

Item maps provide an illustration of the reading performance of fourth- and eighth-graders by showing the description of particular items at the position along the NAEP reading composite scale where they are likely to be successfully answered by students who attained that score or higher.<sup>1</sup> Descriptions of questions on the item map focus on the reading skills or abilities needed to answer the questions. For multiple-choice questions, the description indicates the comprehension demonstrated when students select the correct option. For constructed-response questions, the description indicates the degree of comprehension specified at different levels of the scoring criteria for that question. An examination of the descriptions may provide insight into the range of comprehension processes demonstrated by fourth- and eighth-grade students.

For each question indicated on the map, students whose average scale scores fell at or above the scale point had a higher probability of successfully answering the question, while students whose average scale scores fell below that scale point had a lower probability of successfully answering that question. For the purpose of mapping each question, the probability level was set at 65 percent for constructed-response questions and 74 percent for multiple-choice questions.<sup>2</sup>

For example, if a multiple-choice question maps at 210 on the scale, fourth-grade students with an average score of 210 or more have at least a 74 percent chance of answering this question correctly (for an example, see table 5.2, question 2). In other words, out of every 100 students who scored at or above 210, at least 74 answered this question correctly. Although students scoring above the scale point have a higher probability of successfully answering the question, it does not mean that every student at or above 210 always answered this question correctly, nor does it mean that students below 210 always answered the question incorrectly. The item maps are useful indicators of higher or lower probability of successfully answering the question depending on students' overall ability as measured by the NAEP scale.

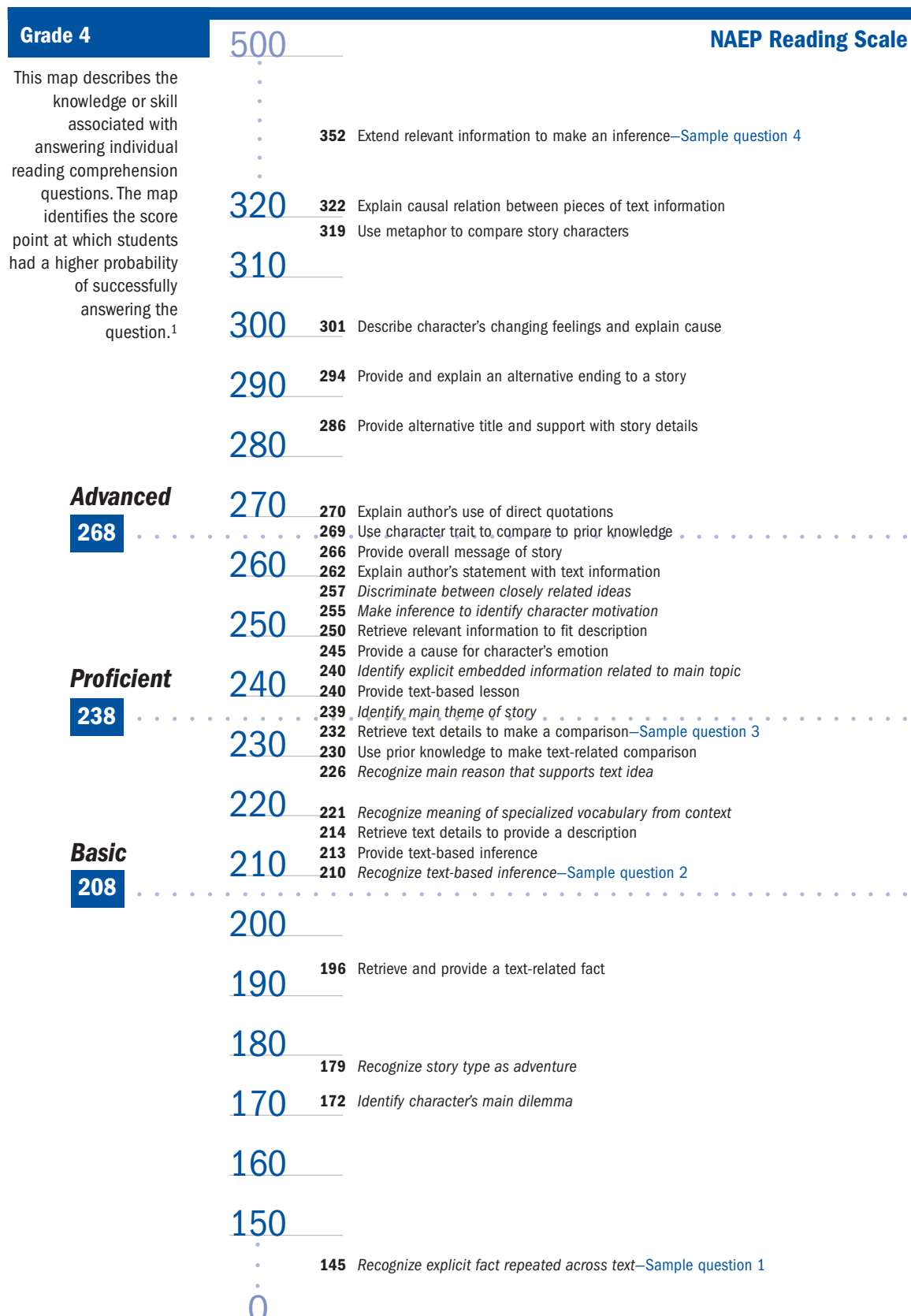
When considering information provided by item maps, it is important to be aware that the descriptions are based on comprehension questions that relate to specific reading passages. It is possible that questions intended to assess the same aspect of comprehension, when referring to different passages, would map at different points on the scale. In fact, one NAEP study found that even identically worded questions may be easier or harder when associated with different passages, suggesting that the difficulty of a question is related to its interaction with a particular passage.<sup>3</sup>

<sup>1</sup> For details on the procedures used to develop item maps, see Allen, N. R., Donoghue, J. R., and Schoeps, T. L. (1998). *The NAEP Technical Report*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

<sup>2</sup> The probability convention is set higher (at 74 percent) for multiple-choice questions to correct for the possibility of answering correctly by guessing.

<sup>3</sup> Campell, J. R., and Donahue, P. L. (1997). *Students Selecting Stories: The Effects of Choice in Reading Assessment*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

**Figure 5.1 Map of selected item descriptions on the NAEP reading scale, grade 4: 2003**

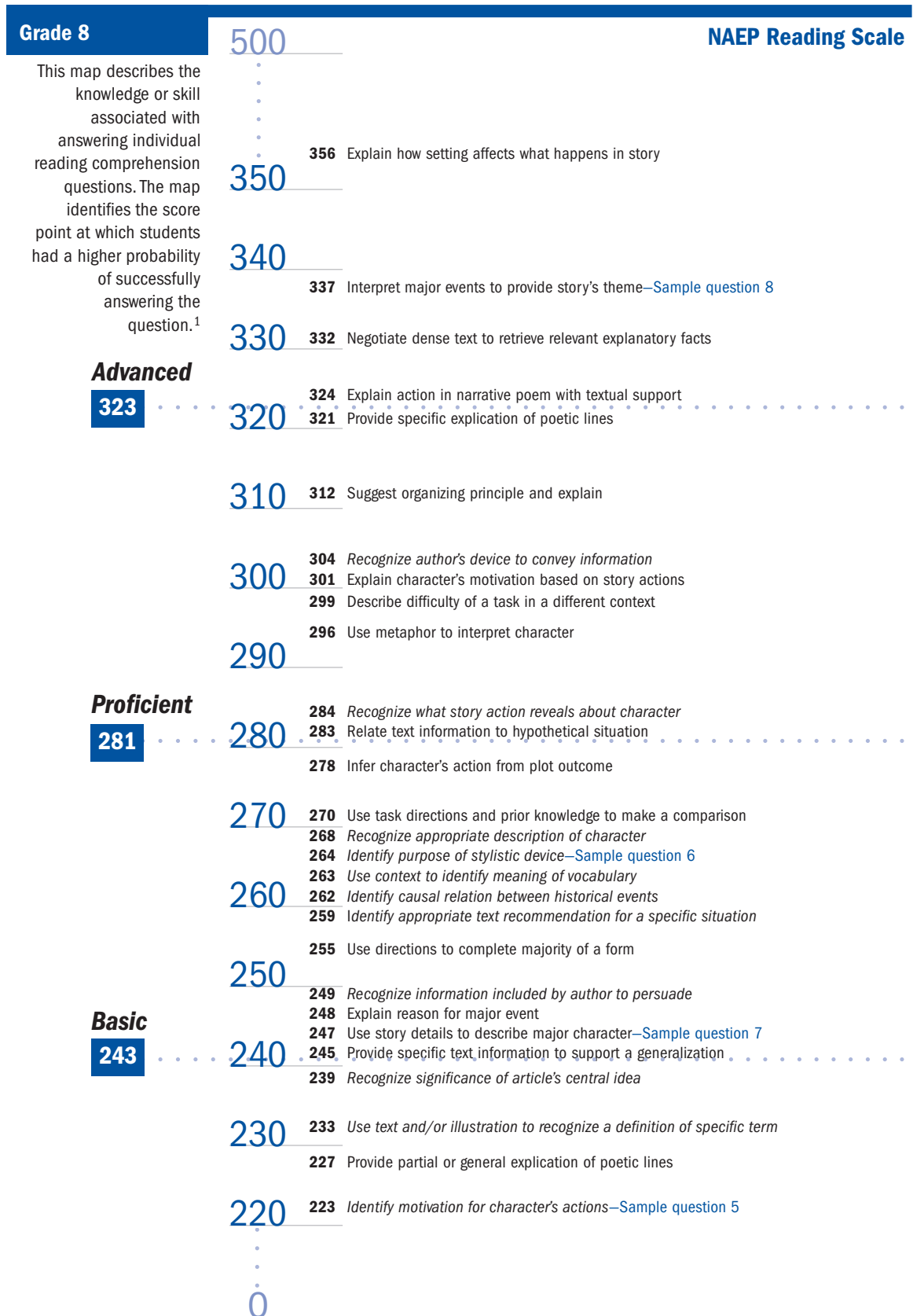


<sup>1</sup> Each grade 4 reading question in the 2003 reading assessment was mapped onto the NAEP 0–500 reading scale. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of successfully answering a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question. Only selected questions are presented. Scale score ranges for reading achievement levels are referenced on the map. For constructed-response questions, the question description represents students' performance at the scoring criteria level being mapped.

NOTE: Regular type denotes a constructed-response question. Italic type denotes a multiple-choice question.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Figure 5.2 Map of selected item descriptions on the NAEP reading scale, grade 8: 2003**



<sup>1</sup> Each grade 8 reading question in the 2003 reading assessment was mapped onto the NAEP 0–500 reading scale. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of successfully answering a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question. Only selected questions are presented. Scale score ranges for reading achievement levels are referenced on the map. For constructed-response questions, the question description represents students' performance at the scoring criteria level being mapped.

NOTE: Regular type denotes a constructed-response question. Italic type denotes a multiple-choice question.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

# A

## **Appendix A** **Overview of Procedures Used for the** **NAEP 2003 Reading Assessment**

This appendix provides an overview of the NAEP 2003 reading assessment's primary components—framework, development, administration, scoring, and analysis. A more extensive review of the procedures and methods used in the reading assessment will be included in the assessment procedures sections of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

### **The NAEP 2003 Reading Assessment**

The National Assessment Governing Board (NAGB), created by Congress in 1988, is responsible for formulating policy for NAEP. NAGB is specifically charged with developing assessment objectives and test specifications. The design of the NAEP 2003 reading assessment follows the guidelines first provided in the framework developed for the 1992 assessment.<sup>1</sup> The framework underlying the 1992, 1994, 1998, 2000 (fourth grade only), 2002, and 2003 reading assessments reflects the expert opinions of educators and researchers about reading. The development of this framework and the specifications that guided the development of the assessment involved the critical input of hundreds of individuals across the country, including representatives of national education organizations, teachers, parents, policymakers, business leaders, and the interested general public.

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<sup>1</sup> National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.



The framework development process was managed by the Council of Chief State School Officers (CCSSO) for NAGB.

The framework sets forth a broad definition of “reading literacy” that includes developing a general understanding of written text, thinking about it, and using various texts for different purposes. In addition, the framework views reading as an interactive and dynamic process involving the reader, the text, and the context of the reading experience. For example, readers may read stories to enjoy and appreciate the human experience, study science texts to form new hypotheses about knowledge, or follow directions to fill out a form. NAEP reflects current definitions of literacy by differentiating among three contexts for reading and four aspects of reading. The contexts for reading and aspects of reading make up the foundation of the NAEP reading assessment.

The “contexts for reading” dimension of the NAEP reading framework provides guidance for the types of texts to be included in the assessment. Although many commonalities exist among the different types of reading contexts, different contexts do lead to real differences in what readers do. For example, when *reading for literary experience*, readers make plot summaries and abstract major themes. They describe the interactions of various literary elements (e.g., setting, plot, characters, and theme). When *reading for information*, readers critically judge the organization and content of the text and explain their judgments. They also look for specific pieces of informa-

tion. When *reading to perform a task*, readers search quickly for specific pieces of information.

The “aspects of reading” dimension of the NAEP reading framework provides guidance for the types of comprehension questions to be included in the assessment. The four aspects are 1) *forming a general understanding*, 2) *developing interpretation*, 3) *making reader/text connections*, and 4) *examining content and structure*. These four aspects represent different ways in which readers develop understanding of a text. In *forming a general understanding*, readers must consider the text as a whole and provide a global understanding of it. As readers engage in *developing interpretation*, they must extend initial impressions in order to develop a more complete understanding of what was read. This involves linking information across parts of a text or focusing on specific information. When *making reader/text connections*, the reader must connect information in the text with knowledge and experience. This might include applying ideas in the text to the real world. Finally, *examining content and structure* requires critically evaluating, comparing and contrasting, and understanding the effect of different text features and authorial devices.

Figure A.1 demonstrates the relationship between these reading contexts and aspects of reading in the NAEP reading assessment. Included in the figure are sample questions that illustrate how each aspect of reading is assessed within each reading context. (Note that reading to perform a task is not assessed at grade 4.)

**Figure A.1** Sample NAEP questions, by aspects of reading and contexts for reading specified in the reading framework

Context for Reading	Aspect of Reading			
	Forming a general understanding	Developing interpretation	Making reader/text connections	Examining content and structure
Reading for literary experience	<i>What is the story/plot about?</i>	<i>How did this character change from the beginning to the end of the story?</i>	<i>What other character that you have read about had a similar problem?</i>	<i>What is the mood of this story and how does the author use language to achieve it?</i>
Reading for information	<i>What point is the author making about this topic?</i>	<i>What caused this change?</i>	<i>What other event in history or recent news is similar to this one?</i>	<i>Is this author biased? Support your answer with information about this article.</i>
Reading to perform a task	<i>What time can you get a nonstop flight to X?</i>	<i>What must you do before step 3?</i>	<i>Describe a situation in which you would omit step 5.</i>	<i>Is the information in this brochure easy to use?</i>

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

The assessment framework specifies not only the particular dimensions of reading literacy to be measured, but also the percentage of assessment questions that should be devoted to each. The target percentage distribution for contexts of reading and aspects of reading as specified in the framework, along with the actual percentage distribution in the assessment, are presented in tables A.1 and A.2.

The actual content of the assessment has varied from the targeted distribution. For example, at grade 8 reading for

literary experience falls below the target proportions and reading for information falls above the target proportions specified in the framework. The reading instrument development panel responsible for overseeing the development of the assessment recognized this variance but felt strongly that assessment questions must be sensitive to the unique elements of the authentic reading materials being used. Thus, the distribution of question classifications will vary across reading passages and reading contexts.

**Table A.1 Target and actual percentage distribution of questions, by context for reading, grades 4 and 8: 2003**

		Context for Reading		
		Reading for literary experience	Reading for information	Reading to perform a task
<b>Grade 4</b>	Target	55	45	†
	Actual	50	50	†
<b>Grade 8</b>	Target	40	40	20
	Actual	28	41	30

† Not applicable. Reading to perform a task was not assessed at grade 4.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table A.2 Target and actual percentage distribution of student time, by aspect of reading, grades 4 and 8: 2003**

		Aspect of Reading		
		Forming a general understanding/ Developing interpretation	Making reader/text connections	Examining content and structure
<b>Grade 4</b>	Target	60	15	25
	Actual	61	17	22
<b>Grade 8</b>	Target	55	15	30
	Actual	56	18	26

NOTE: Actual percentages are based on the classifications agreed upon by NAEP's Instrument Development Panel. It is recognized that making discrete classifications for these categories is difficult and that independent efforts to classify NAEP questions have led to different results. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

## The Assessment Design

Each student who participated in the 2003 reading assessment received a booklet containing three or four sections: a set of general background questions, a set of subject-specific background questions, and one or two sets of questions assessing students' comprehension of a text or texts. The sets of questions assessing students' comprehension are referred to as "blocks." Each block contains one or more reading passages and a set of comprehension questions. At grade 8, students were given either two 25-minute blocks or one 50-minute block. At grade 4, however, only 25-minute blocks were used.

The blocks contain a combination of multiple-choice and constructed-response questions. Multiple-choice questions require students to select the best answer from a set of four options. Constructed-response questions require students to provide their own written response to an open-ended question. Short constructed-response questions may require a response of only a sentence or two for the answer to be considered complete. Extended constructed-response questions, however, may require a response of a paragraph or more for the answer to receive full credit. Each constructed-response question has its own unique scoring guide that is used by trained scorers to rate students' responses. (See the "Data Collection and Scoring" section of this appendix.)

The grade 4 assessment consisted of ten 25-minute blocks: five blocks of literary texts and questions and five blocks of informative texts and questions. Each block contained one passage corresponding to one of the contexts for reading and 9–12 multiple-choice and constructed-response questions. In most blocks, one of the constructed-response questions required an extended response. As a whole,

the 2003 fourth-grade assessment consisted of 49 multiple-choice questions, 45 short constructed-response questions, and 8 extended constructed-response questions.

The grade 8 assessment consisted of twelve 25-minute blocks (four literary, four informative, and four to perform a task) and one 50-minute block (informative). Each block contained at least one passage corresponding to one of the contexts for reading and 9–13 multiple-choice and constructed-response questions. Most blocks contained at least one extended constructed-response question. As a whole, the eighth-grade assessment consisted of 58 multiple-choice questions, 68 short constructed-response questions, and 15 extended constructed-response questions.

The assessment design allowed maximum coverage of a range of reading abilities at each grade, while minimizing the time burden for any one student. This was accomplished through the use of matrix sampling of items in which representative samples of students took various portions of the entire pool of assessment questions. Individual students are required to take only a small portion, but the aggregate results across the entire assessment allow for broad reporting of reading abilities for the targeted population.

In addition to matrix sampling, the assessment design utilized a procedure for distributing blocks across booklets that controlled for position and context effects. Students received different blocks of passages and comprehension questions in their booklets according to a procedure that assigned blocks of questions, balancing the positioning of blocks across booklets and balancing the pairing of blocks within booklets according to the context

for reading. Blocks were balanced within each context for reading and were partially balanced across contexts for reading. The procedure also cycles the booklets for administration so that, typically, only a few students in any assessment session receive the same booklet.

In addition to the student assessment booklets, three other instruments provided data relating to the assessment: a teacher questionnaire, a school questionnaire, and a questionnaire for students with disabilities (SD) and limited-English-proficient students (LEP). The teacher questionnaire was administered to teachers of fourth- and eighth-grade students participating in the assessment and included questions about each teacher's background and classroom organization. The fourth-grade teacher questionnaire also included questions on reading instruction. The school questionnaire was given to the principal or other administrator in each participating school and included questions related to school characteristics, policies, programs, and the composition and background of the student body.

The SD/LEP questionnaire was completed by a school staff member knowledgeable about those students selected to

participate in the assessment who were identified as having an Individualized Education Program (IEP) or equivalent plan (for reasons other than being gifted or talented), or being limited-English-proficient. An SD/LEP questionnaire was completed for each identified student regardless of whether the student participated in the assessment. Each SD/LEP questionnaire took about three minutes to complete and asked about the student and the special-education programs in which he or she participated.

## **NAEP Samples**

### **National Sample**

The national results presented in this report are based on nationally representative probability samples of fourth- and eighth-grade students. The national sample consisted of the combined sample of public school students assessed in each state and an additional nonpublic school sample. The method of creating the national sample as an aggregate of the state samples has been used since 2002. Before 2002, the national and state samples were independent. The combined sample was chosen using a stratified two-stage design that involved sampling students from selected schools (public and nonpublic).

Each selected school that participated in the assessment and each student assessed represents a portion of the population of interest. Sampling weights are needed to make valid inferences between the student samples and the respective populations from which they were drawn. Sampling weights account for disproportionate representation of students from different states and for students who attend nonpublic schools. Sampling weights also account for lower sampling rates for very small schools and are used to adjust for school and student nonresponse.<sup>2</sup>

As in 2002, the 2003 national assessment has only samples of students where accommodations were permitted. (See page 178 for information on the types of accommodations permitted.) NAEP inclusion rules were applied, and accommodations were offered when a student had an IEP indicating the need for accommodations because of a disability, was protected under Section 504 of the Rehabilitation Act of 1973 because of disability, or was identified as being a limited-English-proficient student (LEP) and/or was normally offered accommodations in other assessment situations.<sup>3</sup> All other students were asked to participate in the assessment under standard conditions. Unlike the 2002 and 2003 assessments, the 1998 and 2000 national assessments featured the collection of data from

samples of students where assessment accommodations for special-needs students were not permitted and from samples of students where accommodations for special-needs students were permitted. Prior to 1998, testing accommodations (e.g., extended time, small group testing) were not permitted for special-needs students selected to participate in the NAEP reading assessments.

Table A.3 shows the number of students included in the national samples for the NAEP reading assessments at grades 4 and 8. The 2002 and 2003 reading assessments had only one sample of students, for whom accommodations were permitted. For the 1998 and 2000 assessments, the table shows both the number of students in the sample in which accommodations were not permitted and the number of students in the sample in which accommodations were permitted. Both samples included the same non-SD/non-LEP students; only the SD and/or LEP students differed between the two samples. The 1992 and 1994 design differed from more recent assessment years in that the SD and/or LEP students were assessed in standard conditions and accommodations were not permitted. The sample sizes and target populations for the 2003 reading assessment are listed for the nation and states in table A.4 and for the participating districts in table A.5.

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<sup>2</sup> Additional details regarding the design and structure of the national and state samples will be included in the technical documentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

<sup>3</sup> Section 504 of the Rehabilitation Act of 1973 is a civil rights law designed to prohibit discrimination on the basis of disability in programs and activities, including education, that receive federal financial assistance.

**Table A.3** Number of students assessed, by sample type, special needs status, and accommodation option, grades 4 and 8 public and nonpublic schools: 1992–2003

	1992	1994	1998		2000		2002	2003
	Accommodations not permitted sample	Accommodations not permitted sample	Accommodations not permitted sample	Accommodations permitted sample	Accommodations not permitted sample	Accommodations permitted sample	Accommodations permitted sample	Accommodations permitted sample
<b>Grade 4</b>								
Total students assessed	6,314	7,382	7,672	7,812	7,914	8,074	140,487	187,581
Non-SD/LEP <sup>1</sup> students assessed	6,051	6,783	7,232		7,484		122,721	159,766
SD/LEP <sup>1</sup> students assessed without accommodations	263	599	440	413	430	476	11,913	16,574
SD/LEP <sup>1</sup> students assessed with accommodations	†	†	†	167	†	114	5,853	11,241
<b>Grade 8</b>								
Total students assessed	9,464	10,135	11,051	11,193	–	–	115,176	155,183
Non-SD/LEP <sup>1</sup> students assessed	9,091	9,503	10,309		–	–	102,174	135,815
SD/LEP <sup>1</sup> students assessed without accommodations	373	632	742	678	–	–	8,598	10,915
SD/LEP <sup>1</sup> students assessed with accommodations	†	†	†	206	–	–	4,404	8,453

– Not available. Data were not collected at grade 8 in 2000.

† Not applicable. Accommodations were not permitted in this sample.

<sup>1</sup> Students with disabilities/limited-English-proficient students.

NOTE: The sample sizes are larger in 2002 and 2003 than in previous years because the 2002 and 2003 national samples were based on the combined sample of students assessed in each participating state, plus an additional sample from nonparticipating states as well as a sample of nonpublic schools.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.



**Table A.4 National and state sample sizes and target populations, grades 4 and 8: 2003**

	Grade 4		Grade 8	
	Sample size	Target population	Sample size	Target population
<b>Combined national</b>	200,104	3,985,000	163,855	3,936,000
<b>Public</b>	191,444	3,609,000	154,988	3,579,000
<b>Nonpublic</b>	7,534	373,000	8,349	354,000
Alabama	3,571	59,000	2,667	56,000
Alaska	2,784	9,000	2,549	9,000
Arizona	4,097	72,000	2,832	71,000
Arkansas	3,365	35,000	2,724	36,000
California	8,821	490,000	5,746	441,000
Colorado	3,590	57,000	2,809	55,000
Connecticut	3,372	45,000	2,840	42,000
Delaware	3,356	8,000	2,754	9,000
Florida	3,687	189,000	2,607	172,000
Georgia	5,544	117,000	4,371	110,000
Hawaii	3,647	14,000	2,915	13,000
Idaho	3,395	17,000	2,750	19,000
Illinois	5,321	153,000	4,316	147,000
Indiana	3,779	81,000	2,749	75,000
Iowa	3,226	34,000	2,965	38,000
Kansas	3,122	32,000	3,040	36,000
Kentucky	3,547	46,000	3,028	50,000
Louisiana	3,059	56,000	2,452	50,000
Maine	2,946	15,000	3,039	17,000
Maryland	3,718	65,000	2,548	64,000
Massachusetts	4,676	72,000	4,017	74,000
Michigan	3,956	130,000	2,820	131,000
Minnesota	3,539	58,000	2,707	64,000
Mississippi	3,494	39,000	2,834	37,000
Missouri	3,655	69,000	2,903	67,000
Montana	2,967	11,000	2,717	12,000
Nebraska	2,847	21,000	2,621	21,000
Nevada	3,451	28,000	2,765	26,000
New Hampshire	3,326	16,000	2,968	17,000
New Jersey	3,692	102,000	2,958	105,000
New Mexico	3,026	24,000	3,369	24,000
New York	4,698	220,000	3,690	221,000
North Carolina	5,186	102,000	4,346	106,000
North Dakota	3,042	7,000	2,747	8,000
Ohio	5,088	145,000	3,807	142,000
Oklahoma	3,337	45,000	2,974	46,000
Oregon	3,497	41,000	2,728	41,000
Pennsylvania	3,629	135,000	2,860	139,000
Rhode Island	3,321	12,000	2,771	12,000
South Carolina	3,705	50,000	2,699	54,000
South Dakota	3,401	9,000	2,875	9,000
Tennessee	3,702	71,000	2,731	68,000
Texas	6,101	304,000	4,842	334,000
Utah	3,851	34,000	2,821	35,000
Vermont	2,928	7,000	2,818	8,000
Virginia	3,716	93,000	3,027	94,000
Washington	3,855	74,000	2,741	76,000
West Virginia	2,903	20,000	2,478	19,000
Wisconsin	3,250	61,000	2,720	66,000
Wyoming	2,775	6,000	2,828	7,000
<b>Other jurisdictions</b>				
District of Columbia	2,883	6,000	2,105	5,000
DDESS <sup>1</sup>	1,341	3,000	709	2,000
DoDDS <sup>2</sup>	2,814	6,000	2,324	5,000

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.<sup>2</sup> Department of Defense Dependents Schools (Overseas).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.



**Table A.5 District sample sizes and target populations, grades 4 and 8: 2003**

	Grade 4		Grade 8	
	Sample size	Target population	Sample size	Target population
Atlanta	1,680	5,000	1,537	4,000
Boston	1,597	5,000	1,408	5,000
Charlotte	1,778	8,000	1,447	8,000
Chicago	2,392	32,000	2,056	28,000
Cleveland	1,918	6,000	1,283	5,000
District of Columbia	2,883	6,000	2,105	5,000
Houston	2,565	17,000	1,862	12,000
Los Angeles	2,991	57,000	2,050	48,000
New York City	2,571	82,000	1,821	75,000
San Diego	1,839	12,000	1,286	10,000

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trail Urban District Reading Assessment.

Table A.6 provides a summary of the 2003 national school and student participation rates for the reading assessment sample. Participation rates are presented for public and nonpublic schools, both individually and combined. Four different rates are presented. The first rate is a student-centered, weighted percentage of schools participating in the assessment, before substitution of demographically

similar schools.<sup>4</sup> This rate is based only on the schools that were initially selected for the assessment. The numerator of this rate is the estimated number of students represented by the initially selected schools that participated in the assessment. The denominator is the estimated number of students represented by the initially selected schools that had eligible students enrolled.

<sup>4</sup> The initial base sampling weights were used in weighting the percentages of participating schools and students. An attempt was made to preselect one substitute school for each sampled public school, one for each sampled Catholic school, and one for each sampled nonpublic school (other than Catholic). To minimize bias, a substitute school resembled the original selection as much as possible in affiliation, type of location, estimated number of grade-eligible students, and minority composition.

The second school participation rate is a student-centered weighted participation rate after substitution. The numerator of this rate is the estimated number of students represented by the participating schools, whether originally selected or selected as a substitute for a school that chose not to participate. The denominator is the estimated number of students represented by the initially selected schools that had eligible students enrolled (this is the same as that for the weighted participation rate for the sample of schools before substitution). Because of the common denominators, the weighted participation rate after substitution is at least as great as the weighted participation rate before substitution.

The third school participation rate is a school-centered, weighted percentage of schools participating in the assessment before substitution of demographically similar schools. This rate is based only on the schools that were initially selected for the assessment. The numerator of this rate is the estimated number of schools represented by the initially selected schools that participated in the assessment. The denominator is the estimated number of schools represented by the initially selected schools that had eligible students enrolled.

The fourth school participation rate is a school-centered, weighted participation rate after substitution. The numerator is the estimated number of schools represented by the participating schools, whether originally selected or selected as a substitute for a school that did not participate. The denominator is the estimated number of schools, represented by the initially selected schools that had eligible students enrolled.

The student-centered and school-centered school participation rates differ if school participation is associated with the size of the school. If the student-centered rate is higher than the school-centered rate, this indicates that larger schools participated at a higher rate than smaller schools. The converse applies also.

Also presented in table A.6 are weighted student participation rates. The numerator of this rate is the estimated number of students who are represented by the students assessed (in either an initial session or a makeup session). The denominator of this rate is the estimated number of students represented by the eligible sampled students in participating schools.

**Table A.6 National school and student participation rates, by type of school, grades 4 and 8: 2003**

	School participation					Student participation	
	Student-centered weighted		School-centered weighted		Number of schools participating	Student weighted percentage	Number of students assessed
	Percentage before substitution	Percentage after substitution	Percentage before substitution	Percentage after substitution			
<b>Grade 4</b>							
Combined national	98	98	92	93	7,485	94	187,581
Public	100	100	100	100	6,908	94	179,013
Nonpublic	79	80	74	76	542	95	7,488
<b>Grade 8</b>							
Combined national	97	98	90	91	6,109	92	155,183
Public	100	100	100	100	5,531	91	146,351
Nonpublic	74	76	75	78	568	94	8,324

NOTE: The number of schools and students in the combined national total includes students in the Department of Defense domestic schools located within the U.S. and Bureau of Indian Affairs schools that are not included as part of either the public or nonpublic totals.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

### State Samples

The results provided in this report of the 2003 state assessment in reading are based on state-level samples of fourth- and eighth-grade public school students. The samples were selected using a two-stage sample design that first selected schools within each state or other jurisdiction and then selected students within schools. The samples were weighted to allow valid inferences about the populations of interest. Participation rates for the states and other jurisdictions were calculated the same way that rates were computed for the nation. Tables A.7 and A.8 contain the unweighted number of participating schools and students, as well as weighted school and student participation rates for the state samples at grades 4 and 8, respectively.

### District Samples

Results from the 2003 reading assessments are reported (on a trial basis) for district-level samples of fourth- and eighth-grade students in the large urban school districts that participated in the Trial Urban District Assessment (TUDA)—Atlanta, Boston, Charlotte, Chicago, Cleveland, District of Columbia, Houston, Los Angeles, New York City, and San Diego. The sample of students in the urban school districts represents an augmentation to the sample of students who would usually be selected as part of state samples. These samples allow reliable subgroup reporting in these districts. Furthermore, all students at lower geographic sampling levels are assumed to be part of higher-level samples. For example, Houston is one of the urban districts included in the TUDA. Data from students tested in the Houston sample were used to report results for Houston, but also contributed to the Texas and national estimates. Participation rates for the urban district samples are presented in table A.9.

**Table A.7 School and student participation rates, grade 4 public schools: By state, 2003**

Grade 4	School participation					Student participation	
	Student-centered weighted		School-centered weighted		Number of schools participating	Student weighted percentage	Number of students assessed
	Percentage before substitution	Percentage after substitution	Percentage before substitution	Percentage after substitution			
<b>Nation (public)</b>	100	100	100	100	6,908	94	179,013
Alabama	100	100	100	100	112	95	3,495
Alaska	99	99	97	97	151	94	2,712
Arizona	100	100	99	99	119	91	3,776
Arkansas	100	100	100	100	119	96	3,162
California	99	99	99	99	254	94	8,297
Colorado	100	100	100	100	124	95	3,466
Connecticut	99	99	99	99	111	95	3,207
Delaware	99	99	99	99	88	94	2,959
Florida	100	100	100	100	106	93	3,502
Georgia	100	100	100	100	156	95	5,353
Hawaii	100	100	100	100	107	96	3,493
Idaho	100	100	100	100	124	95	3,262
Illinois	100	100	100	100	174	94	4,864
Indiana	100	100	100	100	111	94	3,624
Iowa	100	100	98	98	135	96	2,997
Kansas	100	100	100	100	138	95	3,020
Kentucky	100	100	100	100	121	96	3,239
Louisiana	100	100	100	100	110	96	2,864
Maine	100	100	100	100	150	93	2,735
Maryland	100	100	100	100	108	94	3,431
Massachusetts	100	100	100	100	165	94	4,396
Michigan	100	100	100	100	135	95	3,675
Minnesota	100	100	98	98	113	94	3,407
Mississippi	100	100	100	100	111	94	3,269
Missouri	100	100	100	100	126	95	3,347
Montana	100	100	97	97	181	94	2,823
Nebraska	99	99	97	97	156	95	2,694
Nevada	100	100	100	100	111	93	3,108
New Hampshire	100	100	98	98	123	94	3,182
New Jersey	99	99	100	100	110	95	3,497
New Mexico	99	99	99	99	117	95	2,787
New York	100	100	100	100	149	91	4,325
North Carolina	100	100	100	100	153	96	4,810
North Dakota	100	100	100	100	207	97	2,922
Ohio	100	100	100	100	168	92	4,631
Oklahoma	100	100	100	100	136	96	3,143
Oregon	100	100	98	98	124	94	3,176
Pennsylvania	100	100	100	100	114	96	3,497
Rhode Island	100	100	100	100	114	94	3,162
South Carolina	100	100	100	100	106	95	3,403
South Dakota	100	100	98	98	188	95	3,256
Tennessee	100	100	100	100	116	94	3,533
Texas	100	100	100	100	197	95	5,067
Utah	100	100	98	98	113	95	3,668
Vermont	99	99	99	99	176	94	2,734
Virginia	100	100	100	100	116	95	3,308
Washington	100	100	100	100	109	95	3,635
West Virginia	100	100	100	100	137	94	2,623
Wisconsin	100	100	100	100	127	95	3,048
Wyoming	100	100	99	99	167	94	2,716
<b>Other jurisdictions</b>							
District of Columbia	100	100	100	100	118	94	2,713
DDESS <sup>1</sup>	99	99	98	98	39	95	1,286
DoDDS <sup>2</sup>	99	99	98	98	87	96	2,749

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table A.8 School and student participation rates, grade 8 public schools: By state, 2003**

Grade 8	School participation					Student participation	
	Student-centered weighted		School-centered weighted		Number of schools participating	Student weighted percentage	Number of students assessed
	Percentage before substitution	Percentage after substitution	Percentage before substitution	Percentage after substitution			
<b>Nation (public)</b>	100	100	100	100	5,531	91	146,351
Alabama	100	100	100	100	104	92	2,585
Alaska	99	99	94	94	100	90	2,498
Arizona	100	100	100	100	117	89	2,625
Arkansas	100	100	100	100	109	93	2,575
California	99	99	99	99	188	91	5,510
Colorado	100	100	100	100	114	91	2,710
Connecticut	100	100	100	100	104	91	2,725
Delaware	100	100	100	100	37	90	2,496
Florida	99	99	98	98	97	91	2,443
Georgia	100	100	100	100	117	93	4,219
Hawaii	100	100	99	99	66	92	2,768
Idaho	100	100	100	100	91	93	2,642
Illinois	100	100	100	100	170	93	4,039
Indiana	100	100	100	100	99	93	2,642
Iowa	99	99	97	97	116	94	2,823
Kansas	100	100	100	100	126	93	2,916
Kentucky	100	100	100	100	113	93	2,800
Louisiana	100	100	100	100	96	92	2,308
Maine	100	100	100	100	110	92	2,882
Maryland	92	92	93	93	96	89	2,449
Massachusetts	99	99	99	99	131	91	3,770
Michigan	100	100	100	100	110	91	2,625
Minnesota	100	100	100	100	107	90	2,605
Mississippi	100	100	100	100	108	93	2,694
Missouri	100	100	100	100	117	94	2,651
Montana	98	98	96	96	128	93	2,581
Nebraska	100	100	98	98	125	94	2,476
Nevada	100	100	100	100	67	88	2,651
New Hampshire	100	100	100	100	84	92	2,868
New Jersey	99	99	99	99	107	91	2,866
New Mexico	100	100	100	100	97	93	3,061
New York	100	100	100	100	148	86	3,424
North Carolina	100	100	100	100	133	93	4,057
North Dakota	100	100	100	100	145	95	2,612
Ohio	100	100	100	100	129	91	3,414
Oklahoma	100	100	100	100	129	93	2,839
Oregon	100	100	100	100	110	90	2,561
Pennsylvania	100	100	100	100	103	92	2,792
Rhode Island	100	100	100	100	55	88	2,643
South Carolina	100	100	100	100	98	92	2,446
South Dakota	100	100	100	100	137	95	2,770
Tennessee	100	100	100	100	108	93	2,655
Texas	100	100	100	100	146	93	4,378
Utah	100	100	96	96	95	92	2,732
Vermont	98	98	98	98	104	90	2,682
Virginia	100	100	100	100	107	92	2,733
Washington	100	100	100	100	103	92	2,625
West Virginia	100	100	100	100	95	92	2,234
Wisconsin	100	100	100	100	105	92	2,566
Wyoming	100	100	100	100	89	92	2,763
<b>Other jurisdictions</b>							
District of Columbia	100	100	100	100	37	89	1,922
DDESS <sup>1</sup>	99	99	93	93	14	96	687
DoDDS <sup>2</sup>	99	99	96	96	54	96	2,298

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table A.9 Weighted school and student participation rates, grades 4 and 8 public schools: By urban district, 2003**

	School participation		Student participation	
	Student-centered weighted percentage before substitution	Number of schools participating	Student weighted percentage <sup>1</sup>	Number of students assessed
<b>Grade 4</b>				
Atlanta	100	50	94	1,645
Boston	100	59	95	1,445
Charlotte	100	51	95	1,676
Chicago	100	83	92	2,162
Cleveland	100	56	91	1,660
District of Columbia	100	118	94	2,713
Houston	100	80	93	1,889
Los Angeles	100	83	96	2,806
New York City	100	79	92	2,403
San Diego	100	55	92	1,732
<b>Grade 8</b>				
Atlanta	100	16	93	1,470
Boston	100	34	93	1,268
Charlotte	100	29	92	1,385
Chicago	100	83	93	1,900
Cleveland	100	35	76	1,038
District of Columbia	100	38	89	1,922
Houston	100	38	90	1,660
Los Angeles	100	67	90	1,963
New York City	100	77	81	1,707
San Diego	100	28	89	1,236

<sup>1</sup> The student weighted participation rate is calculated as follows: The numerator of this rate is the estimated number of students who are represented by the students assessed. The denominator of this rate is the estimated number of students represented by the eligible sampled students in participating schools.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

### Standards for State Sample Participation and Reporting of Results

In carrying out the 2003 state assessment program, the National Center for Education Statistics (NCES) established participation rate standards that states and other jurisdictions were required to meet in order for their results to be reported. Participation rates before substitution needed to be at least 80 percent for schools and at least 85 percent for students. In the 2003 reading assessment at both fourth and eighth grades, all jurisdictions met NAEP participation rate standards.

The nonresponsive bias for private schools showed significant differences between responding and nonresponding schools in terms of reporting group, census region, and racial/ethnic composition of the schools. Nonresponse weighting adjustments have completely accounted for differences in reporting group, and largely accounted for differences in census region. These adjustments are unlikely to have fully accounted for differences in race/ethnicity.

## **Students with Disabilities (SD) and/or Limited-English-Proficient (LEP) Students**

It is NAEP's intent to assess all selected students from the target population. Therefore, every effort is made to ensure that all selected students who are capable of participating in the assessment are assessed. Some students sampled for participation in NAEP can be excluded from the sample according to carefully defined criteria. These criteria were revised in 1996 to communicate more clearly a presumption of inclusion except under special circumstances. According to these criteria, students who had an Individualized Education Program (IEP) or were protected under Section 504 of the Rehabilitation Act of 1973 were to be included in the NAEP assessment except in the following cases:

- the school's IEP team determined that the student could not participate;
- the student's cognitive functioning was so severely impaired that she or he could not participate;
- the student's IEP required that the student had to be tested with an accommodation or adaptation that NAEP does not allow and the student could not demonstrate his or her knowledge without that accommodation.

All LEP students who received academic instruction in English for three years or more were to be included in the assessment. Those LEP students who received instruction in English for fewer than three years were to be included unless school staff judged them to be incapable of participating in the assessment in English.

### **Participation of SD and/or LEP Students in the NAEP Samples**

Testing all sampled students is the best way for NAEP to ensure that the statistics generated by the assessment are as representative as possible of the performance of the entire national population and the populations of participating jurisdictions. However, all groups of students include certain proportions that cannot be tested in large-scale assessments (such as students who have profound mental disabilities) or who can only be tested through the use of testing accommodations such as extra time, one-on-one administration, or use of magnifying equipment. Some students with disabilities and some LEP students cannot show on a test what they know and can do unless they are provided with accommodations. When such accommodations are not allowed, students requiring such adjustments are often excluded from large-scale assessments such as NAEP. This



phenomenon has become more common in the last decade and gained momentum with the passage of the 1997 Individuals with Disabilities Education Act (IDEA), which led schools and states to identify increasing proportions of students as needing accommodations on assessments in order to best show what they know and can do.<sup>5</sup> Furthermore, section 504 of the Rehabilitation Act of 1973 requires that, when students with disabilities are tested, schools must provide them with appropriate accommodations so that the test results accurately reflect students' achievement. In addition, as the proportion of LEP students in the population has increased, some states have started offering accommodations such as translations of assessments or the use of bilingual dictionaries as part of assessments.

Before 1996, NAEP did not allow any testing under nonstandard conditions (i.e., accommodations were not permitted). At that time, NAEP samples were able to include almost all sampled students in standard assessment sessions. However, as the influence of IDEA grew more widespread, the failure to provide accommodations led to increasing levels of exclusion in the assessment. Such increases posed two threats to the program: 1) they threatened the stability of trend lines (because excluding more students in one assessment year than in another might lead to apparent rather than real differences) and 2) they made

NAEP samples less than optimally representative of target populations.

NAEP reacted to this challenge by adopting a multipart strategy. The program had to move toward allowing the same assessment accommodations that were afforded students in state and district testing programs in order for NAEP samples to be as inclusive as possible. However, allowing accommodations represents a change in testing conditions that may affect measurement of changes over time. Therefore, beginning with the 1996 national assessments and the 1998 state assessments and up to 2000, NAEP assessed a series of parallel samples of students. In one set of samples, testing accommodations were not permitted; this allowed NAEP to maintain the measurement of achievement trends. In addition to the samples where accommodations were not permitted, parallel samples in which accommodations were permitted were also assessed. By having two overlapping samples and two sets of related data points, NAEP could meet two core program goals.<sup>6</sup> First, data trends could be maintained. Second, parallel trend lines could be set in ways that ensure that in future years the program would be able to use the most inclusive practices possible and mirror the procedures used by most state and district assessments. As of 2002, NAEP has used only the more inclusive samples in which assessment accommodations are permitted.

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<sup>5</sup> Office of Special Education Programs. (1997). *To Assure the Free Appropriate Public Education of all Children with Disabilities. Nineteenth Annual Report to Congress on the Implementation of the Individuals With Disabilities Education Act*. Archived at the U.S. Department of Education web site: <http://www.ed.gov/offices/OSERS/OSEP/Research/OSEP97AnlRpt/index.html>

<sup>6</sup> The two samples are described as “overlapping” because, in 1998 and 2000, the same group of non-SD and/or LEP students were included in both samples.



In reading, national and state data from 1992, 1994, and 1998 are reported for the sample in which accommodations were not permitted. National and state data for the sample in which accommodations were permitted are reported for 1998, 2002, and 2003. National-only data at grade 4 for both accommodated and unaccommodated samples are reported for 2000.

In order to make it possible to evaluate both the impact of increasing exclusion rates in some jurisdictions and differences between jurisdictions, complete data on exclusion in all years are included in this appendix. Since the exclusion rates may affect trend measurement within a jurisdiction, readers should consider the magnitude of exclusion rate changes when interpreting score changes in jurisdictions. In addition, different rates of exclusion may influence the meaning of state comparisons. Thus, exclusion data should be reviewed in this context as well.

Percentages of SD and/or LEP students for the national sample of public and nonpublic schools in which accommodations were not permitted are presented in table A.10. The data in this table include the percentages of students *identified* as SD and/or LEP, the percentage of students *excluded*, and the percentage of SD and/or LEP students *assessed*. Tables A.11 and A.12 show similar information by jurisdiction.

Percentages of these students in the national sample where accommodations were permitted are presented in table A.13. The state and jurisdiction results where accommodations were permitted are shown in tables A.14 through A.19. The data in these tables include the percentages of students *identified* as SD and/or LEP, the percentage of students *excluded*, the percentage of SD and/or LEP students *assessed*, the percentage *assessed without accommodations*, and the percentage *assessed with accommodations*. Similar information for districts that participated in the Trial Urban District Assessment is presented in table A.20 for grade 4 and table A.21 for grade 8.

In the 2003 national sample, 6 percent of students at grade 4 and 5 percent of students at grade 8 were excluded from the assessment (see table A.13). Across the various jurisdictions that participated in the 2003 state assessment, the percentage of students excluded ranged from 2 to 11 percent at grade 4 (see table A.14) and from 1 to 9 percent at grade 8 (see table A.17). At the district level, between 2 and 24 percent of students were excluded at grade 4 (see table A.20) and between 3 and 15 percent were excluded at grade 8 (see table A.21).

**Table A.10 Students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were not permitted, grades 4 and 8 public and nonpublic schools: 1992–2000**

	1992		1994		1998		2000	
	Number of students	Weighted percentage of students sampled	Number of students	Weighted percentage of students sampled	Number of students	Weighted percentage of students sampled	Number of students	Weighted percentage of students sampled
<b>Grade 4</b>								
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>								
Identified	2,013	10	1,624	13	985	16	823	15
Excluded	1,750	6	1,025	5	545	9	393	7
Assessed	263	4	599	8	440	7	430	8
<b>SD<sup>1</sup> students only</b>								
Identified	1,149	7	1,039	10	490	11	524	11
Excluded	990	4	685	4	247	6	295	6
Assessed	159	3	354	6	243	5	229	5
<b>LEP<sup>2</sup> students only</b>								
Identified	945	3	623	4	527	6	356	5
Excluded	835	2	368	1	323	3	141	2
Assessed	110	1	255	2	204	2	215	3
<b>Grade 8</b>								
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>								
Identified	2,403	10	1,910	13	1,365	12	—	—
Excluded	2,030	7	1,278	7	623	6	—	—
Assessed	373	4	632	6	742	7	—	—
<b>SD<sup>1</sup> students only</b>								
Identified	1,584	8	1,444	11	975	10	—	—
Excluded	1,323	5	979	6	524	5	—	—
Assessed	261	3	465	5	451	5	—	—
<b>LEP<sup>2</sup> students only</b>								
Identified	868	3	501	3	449	3	—	—
Excluded	750	2	323	1	134	1	—	—
Assessed	118	1	178	1	315	2	—	—

— Not available. Data were not collected at grade 8 in 2000.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

NOTE: Detail may not sum to totals because of rounding. Within each grade level, the combined SD/LEP portion of the table is not a sum of the separate SD and LEP portions because some students were identified as both SD and LEP. Such students would be counted separately in the bottom portions but counted only once in the top portion.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, and 2000 Reading Assessments.

**Table A.11 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were not permitted, grade 4 public schools: By state, 1992–1998**

Grade 4	SD <sup>1</sup> and/or LEP <sup>2</sup> students								
	1992			1994			1998		
	Identified	Excluded	Assessed	Identified	Excluded	Assessed	Identified	Excluded	Assessed
<b>Nation (public)</b>	11	6	4	14	6	8	17	10	7
Alabama	10	6	4	11	5	5	13	8	5
Arizona	16	7	9	21	7	14	22	10	12
Arkansas	11	5	6	12	6	6	11	5	6
California	28	14	13	31	12	18	31	15	15
Colorado	11	6	4	15	7	8	15	7	8
Connecticut	15	7	8	17	8	8	18	13	6
Delaware	12	6	6	15	6	9	16	7	9
Florida	17	9	8	22	10	11	18	9	9
Georgia	9	5	4	11	5	5	11	7	4
Hawaii	13	6	8	12	5	7	15	5	10
Idaho	9	4	5	12	5	7	—	—	—
Illinois	—	—	—	—	—	—	14	10	5
Indiana	8	4	3	11	5	6	—	—	—
Iowa	9	4	6	11	5	6	15	8	7
Kansas	—	—	—	—	—	—	12	6	7
Kentucky	8	4	4	8	4	4	13	9	4
Louisiana	8	4	4	11	6	5	15	12	3
Maine	12	5	6	17	10	7	15	8	7
Maryland	14	7	7	15	7	8	13	10	3
Massachusetts	17	7	10	18	8	10	19	8	11
Michigan	7	5	2	10	6	4	10	7	3
Minnesota	10	4	6	12	4	8	15	4	11
Mississippi	7	5	2	9	6	4	7	4	3
Missouri	11	5	6	12	5	7	14	7	7
Montana	—	—	—	11	4	8	10	4	6
Nebraska	13	4	9	16	4	12	—	—	—
Nevada	—	—	—	—	—	—	20	12	7
New Hampshire	12	4	7	15	6	9	14	5	9
New Jersey	10	6	5	12	6	6	—	—	—
New Mexico	13	8	6	18	8	10	28	11	16
New York	13	6	7	15	8	7	14	9	5
North Carolina	12	4	7	14	5	9	15	10	5
North Dakota	10	2	8	10	2	8	—	—	—
Ohio	10	6	4	—	—	—	—	—	—
Oklahoma	13	8	4	—	—	—	15	9	6
Oregon	—	—	—	—	—	—	20	7	12
Pennsylvania	9	4	5	11	6	5	—	—	—
Rhode Island	16	7	9	15	5	10	20	7	12
South Carolina	11	6	5	13	7	6	16	11	5
Tennessee	11	5	7	13	6	6	13	4	9
Texas	17	8	9	24	11	13	26	14	13
Utah	10	4	6	12	5	7	14	5	9
Virginia	12	6	6	13	7	6	15	8	7
Washington	—	—	—	15	5	9	15	5	10
West Virginia	8	5	3	12	7	5	12	9	3
Wisconsin	11	7	4	13	7	6	16	10	6
Wyoming	11	4	7	11	4	7	14	4	9
<b>Other jurisdictions</b>									
District of Columbia	12	10	3	12	9	3	16	11	6
DDESS <sup>3</sup>	—	—	—	—	—	—	8	5	4
DoDDS <sup>4</sup>	—	—	—	9	5	5	7	4	3

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1998 Reading Assessments.

**Table A.12 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were not permitted, grade 8 public schools: By state, 1998**

Grade 8	SD <sup>1</sup> and/or LEP <sup>2</sup> students		
	1998		
	Identified	Excluded	Assessed
<b>Nation (public)</b>	14	6	7
Alabama	12	6	6
Arizona	17	7	11
Arkansas	12	7	5
California	23	8	15
Colorado	14	5	9
Connecticut	15	8	7
Delaware	14	6	8
Florida	17	5	12
Georgia	12	5	7
Hawaii	15	6	9
Illinois	12	6	6
Kansas	12	5	7
Kentucky	10	5	5
Louisiana	14	10	4
Maine	14	7	7
Maryland	12	7	5
Massachusetts	17	7	10
Minnesota	13	4	9
Mississippi	11	7	3
Missouri	13	6	6
Montana	11	3	8
Nevada	15	8	8
New Mexico	22	7	15
New York	16	10	6
North Carolina	14	9	5
Oklahoma	13	9	5
Oregon	14	4	11
Rhode Island	16	5	12
South Carolina	12	6	5
Tennessee	14	4	9
Texas	19	7	12
Utah	11	5	7
Virginia	13	7	6
Washington	13	4	8
West Virginia	14	8	6
Wisconsin	14	8	6
Wyoming	10	2	8
<b>Other jurisdictions</b>			
District of Columbia	14	9	5
DDESS <sup>3</sup>	10	5	5
DoDDS <sup>4</sup>	8	4	4

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Reading Assessment.

**Table A.13 Students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grades 4 and 8 public and nonpublic schools: 1998–2003**

	1998		2000		2002		2003	
	Number of students	Weighted percentage of students sampled	Number of students	Weighted percentage of students sampled	Number of students	Weighted percentage of students sampled	Number of students	Weighted percentage of students sampled
<b>Grade 4</b>								
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>								
Identified	973	16	906	18	28,073	19	40,338	20
Excluded	393	6	316	6	10,307	6	12,523	6
Assessed	580	10	590	12	17,766	13	27,815	14
Without accommodations	413	7	476	10	11,913	9	16,574	9
With accommodations	167	3	114	2	5,853	4	11,241	5
<b>SD<sup>1</sup> students</b>								
Identified	558	10	510	11	19,936	12	27,658	13
Excluded	246	4	193	4	8,042	5	9,549	4
Assessed	312	6	317	7	11,894	7	18,109	8
Without accommodations	179	3	209	5	6,631	4	8,296	4
With accommodations	133	3	108	2	5,263	3	9,813	4
<b>LEP<sup>2</sup> students</b>								
Identified	446	6	446	8	10,334	8	16,328	10
Excluded	167	2	159	3	3,410	2	4,494	2
Assessed	279	4	287	5	6,924	6	11,834	7
Without accommodations	238	3	273	5	6,020	6	9,497	6
With accommodations	41	1	14	#	904	1	2,337	1
<b>Grade 8</b>								
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>								
Identified	1,252	12	–	–	20,137	17	28,040	17
Excluded	368	4	–	–	7,135	5	8,672	5
Assessed	884	9	–	–	13,002	11	19,368	12
Without accommodations	678	6	–	–	8,598	8	10,915	7
With accommodations	206	2	–	–	4,404	4	8,453	5
<b>SD<sup>1</sup> students</b>								
Identified	865	10	–	–	16,159	12	22,360	13
Excluded	283	3	–	–	5,939	4	7,216	4
Assessed	582	7	–	–	10,220	8	15,144	9
Without accommodations	404	5	–	–	6,074	5	7,248	4
With accommodations	178	2	–	–	4,146	3	7,896	5
<b>LEP<sup>2</sup> students</b>								
Identified	447	3	–	–	5,516	6	8,053	6
Excluded	109	1	–	–	1,907	2	2,416	1
Assessed	338	2	–	–	3,609	4	5,637	4
Without accommodations	307	2	–	–	3,113	4	4,442	4
With accommodations	31	#	–	–	496	#	1,195	1

– Not available. Data were not collected at grade 8 in 2000.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

NOTE: Detail may not sum to totals because of rounding. Within each grade level, the combined SD/LEP portion of the table is not a sum of the separate SD and LEP portions because some students were identified as both SD and LEP. Such students would be counted separately in the bottom portions but counted only once in the top portion. The numbers of students are larger in 2002 and 2003 than in previous years because the 2002 and 2003 national samples were based on the combined sample of students in each participating state, plus an additional sample from nonparticipating states as well as a sample from nonpublic schools.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.

**Table A.14 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003**

Grade 4	1998					
	SD <sup>1</sup> and/or LEP <sup>2</sup> students					
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations	All students assessed without accommodations
<b>Nation (public)</b>	18	7	11	7	3	90
Alabama	13	8	4	3	1	90
Alaska	—	—	—	—	—	—
Arizona	22	10	12	10	1	88
Arkansas	11	5	6	4	2	93
California	31	14	16	15	1	84
Colorado	15	6	9	6	3	91
Connecticut	18	10	8	5	3	87
Delaware	16	1	15	11	4	95
Florida	18	6	12	8	5	89
Georgia	11	5	6	3	3	93
Hawaii	15	5	10	9	1	94
Idaho	—	—	—	—	—	—
Illinois	14	6	8	6	2	92
Indiana	—	—	—	—	—	—
Iowa	15	5	10	7	3	92
Kansas	12	4	8	5	4	93
Kentucky	13	7	5	3	2	90
Louisiana	15	7	8	3	5	88
Maine	15	7	7	4	3	90
Maryland	13	6	8	4	4	90
Massachusetts	19	5	14	9	5	90
Michigan	10	6	4	3	1	93
Minnesota	15	3	12	9	3	94
Mississippi	7	4	3	2	#	95
Missouri	14	6	8	3	4	89
Montana	10	2	7	5	2	96
Nebraska	—	—	—	—	—	—
Nevada	20	11	9	8	1	88
New Hampshire	14	3	11	6	5	92
New Jersey	—	—	—	—	—	—
New Mexico	28	9	18	16	2	88
New York	14	7	7	2	4	88
North Carolina	15	7	9	3	6	88
North Dakota	—	—	—	—	—	—
Ohio	—	—	—	—	—	—
Oklahoma	15	9	6	5	1	90
Oregon	20	6	14	10	4	90
Pennsylvania	—	—	—	—	—	—
Rhode Island	20	7	13	9	4	89
South Carolina	16	8	9	6	3	90
South Dakota	—	—	—	—	—	—
Tennessee	13	4	9	8	2	95
Texas	26	13	14	11	3	85
Utah	14	6	8	6	2	92
Vermont	—	—	—	—	—	—
Virginia	15	6	9	4	5	89
Washington	15	5	10	7	3	92
West Virginia	12	8	4	2	1	90
Wisconsin	16	8	8	5	3	89
Wyoming	14	3	10	6	4	93
<b>Other jurisdictions</b>						
District of Columbia	16	9	8	5	3	89
DDESS <sup>3</sup>	8	4	4	2	2	94
DoDDS <sup>4</sup>	7	3	4	3	1	96

See notes at end of table. ►

**Table A.14 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003—Continued**

Grade 4	2002					
	SD <sup>1</sup> and/or LEP <sup>2</sup> students					
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations	All students assessed without accommodations
<b>Nation (public)</b>	21	7	14	10	4	89
Alabama	14	3	12	9	2	95
Alaska	—	—	—	—	—	—
Arizona	28	8	21	18	3	90
Arkansas	14	5	10	8	2	93
California	34	5	29	28	1	94
Colorado	—	—	—	—	—	—
Connecticut	16	5	11	5	6	89
Delaware	17	8	9	4	5	87
Florida	25	7	18	10	8	85
Georgia	13	4	9	6	3	93
Hawaii	18	6	12	7	5	89
Idaho	17	4	13	11	2	93
Illinois	20	7	14	8	6	87
Indiana	13	5	9	7	2	93
Iowa	16	8	8	3	5	87
Kansas	19	5	14	7	7	88
Kentucky	12	8	4	3	1	91
Louisiana	19	10	9	3	6	84
Maine	17	6	11	5	6	88
Maryland	14	7	7	5	2	92
Massachusetts	19	6	13	4	9	85
Michigan	14	7	6	5	1	92
Minnesota	19	5	13	10	4	91
Mississippi	7	4	3	2	1	95
Missouri	16	9	8	4	3	88
Montana	15	6	8	4	4	89
Nebraska	21	5	15	9	6	88
Nevada	27	10	17	14	3	87
New Hampshire	—	—	—	—	—	—
New Jersey	—	—	—	—	—	—
New Mexico	37	10	27	23	4	85
New York	18	8	9	3	6	86
North Carolina	19	12	7	3	4	84
North Dakota	18	5	13	9	3	91
Ohio	14	8	5	4	2	90
Oklahoma	21	5	15	10	5	89
Oregon	25	8	17	13	4	88
Pennsylvania	14	5	10	4	5	90
Rhode Island	25	6	19	8	11	84
South Carolina	16	5	12	9	3	92
South Dakota	—	—	—	—	—	—
Tennessee	14	3	10	9	1	95
Texas	27	11	16	14	2	87
Utah	19	6	13	9	4	91
Vermont	15	5	10	4	6	89
Virginia	18	10	8	5	3	87
Washington	15	5	11	7	4	92
West Virginia	16	10	5	3	2	87
Wisconsin	19	8	10	5	5	87
Wyoming	17	3	15	7	7	90
<b>Other jurisdictions</b>						
District of Columbia	19	8	11	5	5	86
DDESS <sup>3</sup>	14	4	10	6	4	92
DoDDS <sup>4</sup>	16	3	13	9	4	93

See notes at end of table. ►

**Table A.14 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003—Continued**

Grade 4	2003					
	SD <sup>1</sup> and/or LEP <sup>2</sup> students					
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations	All students assessed without accommodations
<b>Nation (public)</b>	22	6	16	10	5	88
Alabama	12	2	10	7	3	95
Alaska	29	3	27	20	7	90
Arizona	28	7	21	18	2	90
Arkansas	16	6	10	7	3	91
California	38	5	32	30	2	92
Colorado	18	3	15	7	8	88
Connecticut	15	5	10	4	6	89
Delaware	18	11	7	4	3	86
Florida	25	5	20	9	11	84
Georgia	16	4	12	6	5	91
Hawaii	17	4	13	6	7	89
Idaho	18	4	14	12	3	94
Illinois	22	8	14	7	7	85
Indiana	15	4	11	6	5	91
Iowa	17	7	11	4	6	87
Kansas	15	3	12	4	9	88
Kentucky	15	9	6	5	1	90
Louisiana	21	6	15	3	12	82
Maine	19	7	12	5	7	86
Maryland	16	7	9	6	3	90
Massachusetts	22	4	17	4	13	82
Michigan	15	7	8	5	3	90
Minnesota	19	3	16	10	6	91
Mississippi	10	6	4	3	1	93
Missouri	18	8	10	5	5	87
Montana	16	5	12	6	6	89
Nebraska	20	5	15	9	6	89
Nevada	26	8	17	13	5	87
New Hampshire	19	4	15	5	10	86
New Jersey	17	5	12	2	10	85
New Mexico	41	8	33	23	10	82
New York	19	8	11	3	8	84
North Carolina	20	7	13	5	8	84
North Dakota	17	4	13	9	4	92
Ohio	13	6	7	2	5	89
Oklahoma	22	6	16	11	5	90
Oregon	26	9	17	12	5	86
Pennsylvania	15	4	12	3	9	88
Rhode Island	26	5	21	8	13	82
South Carolina	18	8	10	8	2	90
South Dakota	18	4	14	8	5	91
Tennessee	15	4	11	8	2	94
Texas	26	11	15	14	1	88
Utah	22	5	17	11	6	89
Vermont	18	6	12	4	7	86
Virginia	19	10	9	5	4	86
Washington	20	5	15	10	5	90
West Virginia	15	9	6	4	2	88
Wisconsin	19	6	13	4	9	85
Wyoming	18	2	16	7	10	88
<b>Other jurisdictions</b>						
District of Columbia	18	6	12	3	9	86
DDESS <sup>3</sup>	15	4	11	5	7	89
DoDDS <sup>4</sup>	15	2	13	8	5	93

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.



**Table A.15 Percentage of students with disabilities identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003**

Grade 4	1998 SD <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	11	5	7	4	3
Alabama	13	8	4	3	1
Alaska	—	—	—	—	—
Arizona	10	5	5	4	1
Arkansas	10	4	6	4	2
California	6	3	2	2	1
Colorado	10	3	8	4	3
Connecticut	14	7	7	4	3
Delaware	14	1	12	9	4
Florida	14	5	9	5	4
Georgia	9	4	6	3	3
Hawaii	10	4	7	5	1
Idaho	—	—	—	—	—
Illinois	10	3	6	4	2
Indiana	—	—	—	—	—
Iowa	14	5	9	6	3
Kansas	9	3	6	3	3
Kentucky	12	7	5	3	2
Louisiana	14	7	7	2	5
Maine	15	7	7	4	3
Maryland	11	5	6	2	4
Massachusetts	16	4	12	7	5
Michigan	9	5	3	2	1
Minnesota	12	3	9	6	3
Mississippi	7	4	3	2	#
Missouri	14	6	7	3	4
Montana	10	2	7	5	2
Nebraska	—	—	—	—	—
Nevada	10	6	4	4	1
New Hampshire	13	3	10	5	5
New Jersey	—	—	—	—	—
New Mexico	14	7	7	5	2
New York	9	4	5	1	4
North Carolina	14	6	8	2	6
North Dakota	—	—	—	—	—
Ohio	—	—	—	—	—
Oklahoma	13	9	5	3	1
Oregon	14	4	10	6	4
Pennsylvania	—	—	—	—	—
Rhode Island	14	5	10	6	3
South Carolina	15	7	8	5	3
South Dakota	—	—	—	—	—
Tennessee	12	3	9	7	2
Texas	14	7	8	5	2
Utah	10	4	6	4	1
Vermont	—	—	—	—	—
Virginia	14	6	8	4	4
Washington	11	4	8	5	3
West Virginia	12	8	4	2	1
Wisconsin	13	7	6	4	2
Wyoming	13	3	10	6	4
<b>Other jurisdictions</b>					
District of Columbia	10	6	4	2	2
DDESS <sup>2</sup>	7	3	4	2	2
DoDDS <sup>3</sup>	6	2	4	3	1

See notes at end of table. ►

**Table A.15 Percentage of students with disabilities identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003—Continued**

Grade 4	2002 SD <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	13	5	8	4	4
Alabama	13	2	11	8	2
Alaska	—	—	—	—	—
Arizona	11	5	7	5	2
Arkansas	12	4	7	5	2
California	7	3	4	3	1
Colorado	—	—	—	—	—
Connecticut	13	4	9	4	6
Delaware	15	7	8	3	5
Florida	17	5	13	6	7
Georgia	10	3	7	4	3
Hawaii	12	4	8	3	4
Idaho	13	4	9	7	2
Illinois	13	4	9	4	5
Indiana	12	4	8	6	2
Iowa	15	7	8	3	5
Kansas	14	4	10	4	5
Kentucky	11	8	4	2	1
Louisiana	19	10	8	3	5
Maine	16	6	10	5	6
Maryland	12	6	6	4	2
Massachusetts	16	4	12	3	9
Michigan	11	7	4	3	1
Minnesota	13	4	10	6	3
Mississippi	7	4	3	2	1
Missouri	15	8	7	4	3
Montana	13	5	8	4	4
Nebraska	18	4	13	7	6
Nevada	12	5	7	5	2
New Hampshire	—	—	—	—	—
New Jersey	—	—	—	—	—
New Mexico	15	7	9	6	3
New York	14	6	8	2	5
North Carolina	17	10	6	3	4
North Dakota	16	5	11	8	3
Ohio	13	8	5	3	2
Oklahoma	17	5	13	8	5
Oregon	16	5	10	7	3
Pennsylvania	13	4	9	4	5
Rhode Island	19	3	15	6	10
South Carolina	16	4	11	8	3
South Dakota	—	—	—	—	—
Tennessee	11	3	8	6	1
Texas	14	8	6	5	2
Utah	12	4	7	5	3
Vermont	13	5	9	3	6
Virginia	14	8	6	3	3
Washington	13	4	9	6	4
West Virginia	15	10	5	3	2
Wisconsin	13	6	8	3	4
Wyoming	14	2	12	5	7
<b>Other jurisdictions</b>					
District of Columbia	14	7	7	3	4
DDESS <sup>2</sup>	10	3	7	3	4
DoDDS <sup>3</sup>	9	2	7	4	3

See notes at end of table. ►

**Table A.15 Percentage of students with disabilities identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003—Continued**

Grade 4	2003				
	SD <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	14	5	9	4	5
Alabama	12	2	10	7	3
Alaska	16	2	14	7	7
Arizona	11	5	6	4	2
Arkansas	13	5	8	5	3
California	10	3	8	6	2
Colorado	11	2	9	3	6
Connecticut	12	4	9	3	6
Delaware	17	10	6	3	3
Florida	16	3	13	4	9
Georgia	13	3	10	5	5
Hawaii	11	3	9	3	5
Idaho	12	3	10	7	3
Illinois	16	5	10	4	7
Indiana	13	4	10	5	4
Iowa	15	7	8	2	5
Kansas	13	2	11	3	8
Kentucky	14	8	6	4	1
Louisiana	20	6	14	3	12
Maine	18	7	11	4	7
Maryland	13	6	7	4	3
Massachusetts	17	3	15	2	12
Michigan	11	6	5	2	3
Minnesota	13	3	11	6	5
Mississippi	10	6	4	3	1
Missouri	16	7	9	4	5
Montana	14	5	9	4	5
Nebraska	17	4	13	7	6
Nevada	13	5	8	5	4
New Hampshire	17	3	14	4	10
New Jersey	13	3	10	1	8
New Mexico	18	4	14	7	7
New York	14	5	9	1	7
North Carolina	17	6	10	3	7
North Dakota	15	4	11	7	4
Ohio	12	6	7	2	5
Oklahoma	17	5	11	7	5
Oregon	17	7	10	6	4
Pennsylvania	14	3	11	2	8
Rhode Island	19	3	16	5	11
South Carolina	16	7	9	7	2
South Dakota	14	4	10	6	4
Tennessee	14	4	10	8	2
Texas	14	7	7	6	1
Utah	13	3	10	5	5
Vermont	17	6	11	3	7
Virginia	14	8	6	3	3
Washington	14	4	9	5	4
West Virginia	15	9	6	3	2
Wisconsin	14	4	9	2	7
Wyoming	15	2	13	4	10
<b>Other jurisdictions</b>					
District of Columbia	13	5	8	2	6
DDESS <sup>2</sup>	12	4	8	2	6
DoDDS <sup>3</sup>	8	1	7	3	4

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table A.16 Percentage of limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003**

Grade 4	1998				
	LEP <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	7	3	4	4	1
Alabama	#	#	#	#	#
Alaska	—	—	—	—	—
Arizona	14	6	7	6	1
Arkansas	1	1	1	1	#
California	26	12	14	13	1
Colorado	5	3	2	2	#
Connecticut	5	4	1	1	#
Delaware	3	#	2	2	#
Florida	5	1	3	3	#
Georgia	2	1	#	#	#
Hawaii	6	2	4	4	#
Idaho	—	—	—	—	—
Illinois	5	3	2	2	#
Indiana	—	—	—	—	—
Iowa	1	1	1	1	#
Kansas	3	1	2	2	#
Kentucky	1	#	#	#	#
Louisiana	1	1	1	1	#
Maine	#	#	#	#	#
Maryland	2	1	2	1	#
Massachusetts	4	2	2	2	1
Michigan	2	1	1	1	#
Minnesota	4	1	3	3	1
Mississippi	#	#	#	#	#
Missouri	1	#	#	#	#
Montana	#	#	#	#	#
Nebraska	—	—	—	—	—
Nevada	10	6	4	4	#
New Hampshire	1	#	1	1	#
New Jersey	—	—	—	—	—
New Mexico	16	4	12	11	1
New York	5	4	1	1	#
North Carolina	2	1	1	1	#
North Dakota	—	—	—	—	—
Ohio	—	—	—	—	—
Oklahoma	2	#	1	1	#
Oregon	7	2	5	4	1
Pennsylvania	—	—	—	—	—
Rhode Island	6	3	4	3	1
South Carolina	1	#	1	1	#
South Dakota	—	—	—	—	—
Tennessee	1	1	#	#	#
Texas	13	7	6	6	#
Utah	5	2	3	2	#
Vermont	—	—	—	—	—
Virginia	2	1	1	1	1
Washington	4	2	3	2	#
West Virginia	#	#	#	#	#
Wisconsin	3	1	2	1	#
Wyoming	1	1	#	#	#
<b>Other jurisdictions</b>					
District of Columbia	7	3	4	2	1
DDESS <sup>2</sup>	1	1	#	#	#
DoDDS <sup>3</sup>	2	1	1	1	#

See notes at end of table. ►

**Table A.16 Percentage of limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003—Continued**

Grade 4	2002				
	LEP <sup>1</sup> students				
Nation (public)	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
Alabama	9	2	7	6	1
Alaska	1	#	1	1	#
Arizona	—	—	—	—	—
Arkansas	21	5	16	15	1
California	3	1	3	3	#
Colorado	29	3	26	26	#
Connecticut	—	—	—	—	—
Delaware	4	2	2	2	#
Florida	3	2	1	1	#
Georgia	10	3	7	5	2
Hawaii	4	1	2	2	#
Idaho	8	2	6	4	1
Illinois	7	1	6	5	#
Indiana	9	4	5	4	1
Iowa	2	1	1	1	#
Kansas	2	1	1	1	#
Kentucky	7	2	6	4	2
Louisiana	1	#	#	#	#
Maine	1	1	1	#	#
Maryland	1	#	#	#	#
Massachusetts	3	2	1	1	#
Michigan	4	2	2	1	1
Minnesota	3	1	2	2	#
Mississippi	7	2	5	4	1
Missouri	#	#	#	#	#
Montana	2	1	1	1	#
Nebraska	2	1	1	1	#
Nevada	4	2	3	2	#
New Hampshire	18	7	11	10	1
New Jersey	—	—	—	—	—
New Mexico	—	—	—	—	—
New York	27	6	21	19	2
North Carolina	6	3	3	1	1
North Dakota	5	3	1	1	1
Ohio	2	1	2	1	#
Oklahoma	1	1	1	1	#
Oregon	5	1	4	3	1
Pennsylvania	12	4	8	6	2
Rhode Island	2	1	1	1	#
South Carolina	9	3	5	4	2
South Dakota	2	1	1	1	#
Tennessee	—	—	—	—	—
Texas	3	1	3	3	#
Utah	16	5	11	10	1
Vermont	9	3	7	5	1
Virginia	2	#	1	1	#
Washington	6	3	3	2	1
West Virginia	3	1	2	2	#
Wisconsin	#	#	#	#	#
Wyoming	6	3	3	2	1
Other jurisdictions	5	1	4	3	1
District of Columbia	7	3	4	3	2
DDESS <sup>2</sup>	6	2	4	3	1
DoDDS <sup>3</sup>	8	1	7	6	1

See notes at end of table. ►

**Table A.16 Percentage of limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By state, 1998–2003—Continued**

Grade 4	2003				
	LEP <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	10	2	8	7	1
Alabama	1	#	1	1	#
Alaska	17	1	16	15	2
Arizona	21	4	16	15	1
Arkansas	4	1	3	3	#
California	32	4	28	27	1
Colorado	9	2	7	4	3
Connecticut	3	1	2	1	1
Delaware	3	1	2	1	#
Florida	12	3	9	6	3
Georgia	4	1	3	2	1
Hawaii	7	2	5	3	2
Idaho	7	1	6	5	#
Illinois	9	4	5	4	1
Indiana	2	#	2	1	1
Iowa	4	1	3	2	1
Kansas	3	1	2	1	1
Kentucky	1	1	#	#	#
Louisiana	2	1	1	#	1
Maine	1	1	1	1	#
Maryland	4	2	2	2	#
Massachusetts	6	2	4	2	1
Michigan	5	2	3	3	#
Minnesota	7	1	6	5	1
Mississippi	1	1	#	#	#
Missouri	2	1	1	1	#
Montana	4	1	4	2	1
Nebraska	4	2	3	2	1
Nevada	16	5	11	9	2
New Hampshire	3	1	2	1	1
New Jersey	4	2	2	1	1
New Mexico	30	5	24	19	6
New York	7	3	3	1	2
North Carolina	6	2	4	2	2
North Dakota	4	1	3	3	#
Ohio	2	1	1	1	#
Oklahoma	6	1	5	5	#
Oregon	13	4	9	7	2
Pennsylvania	3	1	2	1	1
Rhode Island	9	2	7	4	3
South Carolina	2	1	1	1	#
South Dakota	5	1	4	2	2
Tennessee	2	1	1	1	#
Texas	15	5	10	10	#
Utah	12	3	9	7	2
Vermont	2	1	1	1	#
Virginia	7	3	4	3	1
Washington	8	2	6	5	1
West Virginia	1	#	1	#	#
Wisconsin	6	2	4	2	2
Wyoming	5	#	4	3	1
<b>Other jurisdictions</b>					
District of Columbia	7	1	6	2	4
DDESS <sup>2</sup>	5	1	4	3	1
DoDDS <sup>3</sup>	8	1	6	5	2

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Limited-English-proficient students.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table A.17 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003**

Grade 8	1998					
	SD <sup>1</sup> and/or LEP <sup>2</sup> students					
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations	All students assessed without accommodations
<b>Nation (public)</b>	14	4	10	7	3	93
Alabama	12	6	6	5	#	93
Alaska	–	–	–	–	–	–
Arizona	17	5	12	10	1	93
Arkansas	12	5	6	5	1	94
California	23	4	19	17	2	94
Colorado	14	4	10	7	3	93
Connecticut	15	6	9	7	3	91
Delaware	14	2	13	10	2	96
Florida	17	5	12	9	3	92
Georgia	12	4	8	5	3	93
Hawaii	15	5	10	7	3	92
Idaho	–	–	–	–	–	–
Illinois	12	4	8	6	3	93
Indiana	–	–	–	–	–	–
Iowa	–	–	–	–	–	–
Kansas	12	4	8	6	2	95
Kentucky	10	3	6	4	3	94
Louisiana	14	5	9	4	5	90
Maine	14	5	9	6	3	92
Maryland	12	3	9	3	5	92
Massachusetts	17	4	12	8	5	91
Michigan	–	–	–	–	–	–
Minnesota	13	1	12	9	3	96
Mississippi	11	6	5	4	1	94
Missouri	13	4	9	6	3	93
Montana	11	4	8	6	1	95
Nebraska	–	–	–	–	–	–
Nevada	15	6	9	8	2	92
New Hampshire	–	–	–	–	–	–
New Jersey	–	–	–	–	–	–
New Mexico	22	8	14	10	4	88
New York	16	8	8	3	5	88
North Carolina	14	6	8	3	5	89
North Dakota	–	–	–	–	–	–
Ohio	–	–	–	–	–	–
Oklahoma	13	9	4	4	1	90
Oregon	14	4	10	6	4	92
Pennsylvania	–	–	–	–	–	–
Rhode Island	16	6	10	9	1	92
South Carolina	12	5	7	5	1	93
South Dakota	–	–	–	–	–	–
Tennessee	14	6	8	7	1	93
Texas	19	5	13	11	3	92
Utah	11	4	7	6	2	95
Vermont	–	–	–	–	–	–
Virginia	13	5	8	4	3	91
Washington	13	4	9	6	3	94
West Virginia	14	7	7	4	2	90
Wisconsin	14	5	9	5	4	91
Wyoming	10	2	8	7	1	96
<b>Other jurisdictions</b>						
District of Columbia	14	5	9	6	3	92
DDESS <sup>3</sup>	10	2	9	5	4	95
DoDDS <sup>4</sup>	8	1	7	5	2	97

See notes at end of table. ►

**Table A.17 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	2002					
	SD <sup>1</sup> and/or LEP <sup>2</sup> students					
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations	All students assessed without accommodations
<b>Nation (public)</b>	18	6	12	8	4	90
Alabama	14	2	12	11	1	97
Alaska	—	—	—	—	—	—
Arizona	21	5	16	14	2	93
Arkansas	15	5	10	9	2	93
California	26	4	23	21	2	94
Colorado	—	—	—	—	—	—
Connecticut	17	4	12	6	6	90
Delaware	15	6	9	2	6	88
Florida	21	6	15	8	8	86
Georgia	13	4	8	5	3	93
Hawaii	20	5	15	10	5	90
Idaho	14	4	10	8	2	94
Illinois	16	4	13	7	6	90
Indiana	14	4	11	7	3	93
Iowa	—	—	—	—	—	—
Kansas	16	5	11	6	5	90
Kentucky	12	7	5	4	1	92
Louisiana	16	10	6	3	3	87
Maine	17	4	13	8	6	90
Maryland	15	4	10	8	2	93
Massachusetts	20	6	14	6	8	86
Michigan	13	7	6	4	2	91
Minnesota	15	3	12	9	3	94
Mississippi	10	5	5	3	1	93
Missouri	15	8	8	4	4	88
Montana	13	4	9	7	2	94
Nebraska	17	7	10	7	2	91
Nevada	20	6	14	12	2	92
New Hampshire	—	—	—	—	—	—
New Jersey	—	—	—	—	—	—
New Mexico	31	8	23	17	5	86
New York	20	9	11	4	7	83
North Carolina	18	9	9	3	6	85
North Dakota	15	4	11	8	2	93
Ohio	12	7	5	4	1	91
Oklahoma	17	4	13	10	4	92
Oregon	18	5	13	10	3	92
Pennsylvania	15	3	12	4	8	89
Rhode Island	20	5	15	8	7	88
South Carolina	14	5	9	6	3	92
South Dakota	—	—	—	—	—	—
Tennessee	13	3	9	9	1	96
Texas	20	8	12	11	1	91
Utah	15	4	11	9	2	94
Vermont	18	5	13	8	6	89
Virginia	17	8	9	5	4	88
Washington	14	4	10	6	5	92
West Virginia	16	10	7	4	2	88
Wisconsin	16	7	9	4	5	88
Wyoming	14	3	11	6	6	91
<b>Other jurisdictions</b>						
District of Columbia	21	7	13	5	8	84
DDESS <sup>3</sup>	13	3	10	5	5	92
DoDDS <sup>4</sup>	10	2	8	6	3	96

See notes at end of table. ►



**Table A.17 Percentage of students with disabilities and/or limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	2003					
	Identified	Excluded	Assessed	SD <sup>1</sup> and/or LEP <sup>2</sup> students		All students assessed without accommodations
Assessed without accommodations				Assessed with accommodations		
<b>Nation (public)</b>	19	5	13	8	5	90
Alabama	14	3	11	9	2	95
Alaska	25	2	23	15	7	91
Arizona	25	6	19	15	3	90
Arkansas	16	5	11	7	4	91
California	29	4	25	22	3	94
Colorado	15	3	11	6	6	91
Connecticut	16	4	12	5	7	90
Delaware	17	9	8	3	5	86
Florida	23	6	17	6	12	83
Georgia	12	3	9	5	5	93
Hawaii	21	5	16	9	7	88
Idaho	17	4	13	12	1	95
Illinois	17	5	11	5	7	88
Indiana	16	4	12	7	5	91
Iowa	17	5	12	5	7	89
Kansas	16	4	12	3	9	87
Kentucky	14	7	7	5	1	91
Louisiana	15	6	9	3	6	88
Maine	17	5	12	6	6	89
Maryland	15	3	12	7	5	92
Massachusetts	18	4	14	5	9	86
Michigan	13	6	7	4	3	91
Minnesota	17	3	14	8	5	91
Mississippi	9	5	4	3	1	94
Missouri	17	8	8	3	5	87
Montana	16	5	11	6	5	90
Nebraska	18	5	13	8	4	90
Nevada	18	4	14	9	5	91
New Hampshire	19	3	16	6	9	87
New Jersey	18	3	15	3	12	85
New Mexico	31	8	23	14	9	83
New York	19	7	12	3	9	84
North Carolina	18	7	11	3	8	85
North Dakota	16	4	11	8	4	92
Ohio	13	6	7	3	4	90
Oklahoma	18	4	14	9	5	91
Oregon	20	6	14	11	4	91
Pennsylvania	16	2	14	4	10	88
Rhode Island	24	4	19	8	12	84
South Carolina	15	8	7	4	3	89
South Dakota	13	3	9	6	4	93
Tennessee	15	3	12	11	1	96
Texas	20	8	12	11	1	91
Utah	16	3	12	8	4	93
Vermont	18	4	13	7	6	89
Virginia	17	9	8	4	4	87
Washington	16	4	13	9	4	93
West Virginia	18	9	9	4	4	87
Wisconsin	16	5	11	3	8	86
Wyoming	16	2	13	6	8	90
<b>Other jurisdictions</b>						
District of Columbia	20	8	12	4	8	84
DDESS <sup>3</sup>	17	3	14	5	9	88
DoDDS <sup>4</sup>	9	1	8	3	5	94

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table A.18 Percentage of students with disabilities identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003**

Grade 8	1998				
	SD <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	11	3	7	5	2
Alabama	12	6	6	5	#
Alaska	—	—	—	—	—
Arizona	9	3	6	4	1
Arkansas	10	4	6	5	1
California	8	2	6	5	1
Colorado	10	3	7	5	2
Connecticut	13	5	9	6	3
Delaware	14	2	12	10	2
Florida	13	4	9	6	2
Georgia	10	4	6	4	2
Hawaii	11	4	7	6	2
Idaho	—	—	—	—	—
Illinois	9	3	7	4	3
Indiana	—	—	—	—	—
Iowa	—	—	—	—	—
Kansas	9	3	7	5	2
Kentucky	9	3	6	4	3
Louisiana	13	5	9	4	5
Maine	13	5	8	6	3
Maryland	10	3	8	3	5
Massachusetts	15	3	11	7	5
Michigan	—	—	—	—	—
Minnesota	10	1	9	7	2
Mississippi	10	5	5	4	1
Missouri	12	3	9	6	3
Montana	11	4	7	6	1
Nebraska	—	—	—	—	—
Nevada	10	4	6	5	1
New Hampshire	—	—	—	—	—
New Jersey	—	—	—	—	—
New Mexico	15	5	10	6	3
New York	10	4	6	2	5
North Carolina	13	5	8	3	5
North Dakota	—	—	—	—	—
Ohio	—	—	—	—	—
Oklahoma	11	8	3	2	1
Oregon	12	3	9	5	4
Pennsylvania	—	—	—	—	—
Rhode Island	13	5	9	7	1
South Carolina	11	5	6	5	1
South Dakota	—	—	—	—	—
Tennessee	13	5	8	7	1
Texas	13	4	9	6	2
Utah	10	3	6	5	1
Vermont	—	—	—	—	—
Virginia	12	5	7	4	3
Washington	10	3	7	4	3
West Virginia	14	7	6	4	2
Wisconsin	13	5	9	4	4
Wyoming	10	2	8	7	1
<b>Other jurisdictions</b>					
District of Columbia	13	4	8	6	3
DDESS <sup>2</sup>	9	1	8	5	3
DoDDS <sup>3</sup>	7	1	6	4	2

See notes at end of table. ►

**Table A.18 Percentage of students with disabilities identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	2002 SD <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	13	5	8	5	4
Alabama	14	2	12	11	1
Alaska	—	—	—	—	—
Arizona	11	4	7	6	2
Arkansas	13	4	9	7	2
California	10	2	7	6	2
Colorado	—	—	—	—	—
Connecticut	15	3	11	5	6
Delaware	14	6	8	2	6
Florida	16	4	12	6	6
Georgia	10	3	7	4	3
Hawaii	15	4	12	7	5
Idaho	11	3	8	6	2
Illinois	12	3	10	4	6
Indiana	14	4	10	7	3
Iowa	—	—	—	—	—
Kansas	13	4	9	5	4
Kentucky	12	6	5	4	1
Louisiana	16	10	6	3	3
Maine	16	4	12	7	6
Maryland	13	4	9	7	2
Massachusetts	17	4	13	5	8
Michigan	11	6	5	3	2
Minnesota	11	2	9	7	3
Mississippi	10	5	5	3	1
Missouri	15	7	7	3	4
Montana	11	4	8	6	2
Nebraska	14	5	9	7	2
Nevada	13	4	9	7	2
New Hampshire	—	—	—	—	—
New Jersey	—	—	—	—	—
New Mexico	18	7	12	7	5
New York	15	8	8	2	6
North Carolina	16	8	8	2	6
North Dakota	14	4	10	7	2
Ohio	12	7	5	4	1
Oklahoma	15	4	11	8	4
Oregon	13	4	9	7	2
Pennsylvania	14	2	11	4	8
Rhode Island	16	4	12	5	7
South Carolina	14	5	9	6	3
South Dakota	—	—	—	—	—
Tennessee	12	3	9	8	1
Texas	14	6	8	7	1
Utah	10	3	7	5	2
Vermont	17	4	13	7	6
Virginia	14	7	7	4	4
Washington	11	3	8	4	4
West Virginia	16	10	7	4	2
Wisconsin	14	5	8	3	5
Wyoming	13	3	10	4	6
<b>Other jurisdictions</b>					
District of Columbia	16	6	11	4	7
DDESS <sup>2</sup>	8	2	7	3	4
DoDDS <sup>3</sup>	7	1	6	3	2

See notes at end of table. ►

**Table A.18 Percentage of students with disabilities identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	2003				
	SD <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	14	4	10	5	5
Alabama	13	2	10	8	2
Alaska	15	2	13	6	7
Arizona	12	5	8	5	3
Arkansas	14	4	10	6	4
California	11	3	9	7	2
Colorado	10	2	8	3	5
Connecticut	14	3	11	5	6
Delaware	16	8	8	3	5
Florida	17	4	13	3	10
Georgia	10	2	8	4	4
Hawaii	16	3	12	6	6
Idaho	12	3	9	8	1
Illinois	14	4	10	4	7
Indiana	14	3	11	5	5
Iowa	15	4	11	4	6
Kansas	13	3	11	3	8
Kentucky	13	7	6	5	1
Louisiana	14	5	9	2	6
Maine	16	5	12	5	6
Maryland	13	3	11	6	4
Massachusetts	16	3	13	4	9
Michigan	12	6	6	3	3
Minnesota	13	3	10	6	4
Mississippi	8	5	3	2	1
Missouri	16	8	8	3	5
Montana	15	5	10	5	5
Nebraska	16	4	12	7	4
Nevada	12	2	10	5	5
New Hampshire	18	3	15	6	9
New Jersey	15	2	13	2	11
New Mexico	19	5	15	7	8
New York	15	5	10	2	8
North Carolina	16	6	10	2	7
North Dakota	15	4	10	7	4
Ohio	12	5	7	3	4
Oklahoma	15	4	11	7	4
Oregon	14	4	10	7	3
Pennsylvania	15	2	13	3	10
Rhode Island	19	3	16	5	11
South Carolina	15	8	7	4	3
South Dakota	11	3	7	4	3
Tennessee	13	2	11	10	1
Texas	15	7	8	8	1
Utah	11	2	8	5	4
Vermont	17	4	13	7	6
Virginia	14	8	7	3	3
Washington	13	3	10	7	3
West Virginia	18	9	9	4	4
Wisconsin	14	5	10	2	8
Wyoming	14	2	12	4	8
<b>Other jurisdictions</b>					
District of Columbia	16	6	10	3	7
DDESS <sup>2</sup>	12	2	10	2	8
DoDDS <sup>3</sup>	7	1	6	1	5

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table A.19 Percentage of limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003**

Grade 8	1998				
	LEP <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	3	1	2	2	#
Alabama	#	#	#	#	#
Alaska	—	—	—	—	—
Arizona	9	3	7	6	#
Arkansas	1	1	1	#	#
California	18	3	14	14	1
Colorado	5	1	3	3	1
Connecticut	2	1	1	1	#
Delaware	1	#	1	1	#
Florida	4	2	3	3	#
Georgia	2	#	1	1	#
Hawaii	4	1	3	2	1
Idaho	—	—	—	—	—
Illinois	3	1	2	2	#
Indiana	—	—	—	—	—
Iowa	—	—	—	—	—
Kansas	2	1	2	1	#
Kentucky	1	#	#	#	#
Louisiana	#	#	#	#	#
Maine	1	#	#	#	#
Maryland	1	#	1	1	#
Massachusetts	3	2	1	1	#
Michigan	—	—	—	—	—
Minnesota	3	#	3	2	1
Mississippi	1	#	#	#	#
Missouri	#	#	#	#	#
Montana	1	#	#	#	#
Nebraska	—	—	—	—	—
Nevada	6	2	4	3	#
New Hampshire	—	—	—	—	—
New Jersey	—	—	—	—	—
New Mexico	9	4	5	4	1
New York	6	4	2	1	#
North Carolina	1	1	#	#	#
North Dakota	—	—	—	—	—
Ohio	—	—	—	—	—
Oklahoma	3	2	1	1	#
Oregon	3	1	2	1	1
Pennsylvania	—	—	—	—	—
Rhode Island	4	2	1	1	#
South Carolina	#	#	#	#	#
South Dakota	—	—	—	—	—
Tennessee	1	1	#	#	#
Texas	7	2	5	5	#
Utah	2	1	2	1	#
Vermont	—	—	—	—	—
Virginia	1	1	#	#	#
Washington	3	1	2	2	#
West Virginia	#	#	#	#	#
Wisconsin	1	1	#	#	#
Wyoming	#	#	#	#	#
<b>Other jurisdictions</b>					
District of Columbia	1	1	1	#	#
DDESS <sup>2</sup>	1	#	#	#	#
DoDDS <sup>3</sup>	1	1	1	1	#

See notes at end of table. ►

**Table A.19 Percentage of limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	2002 LEP <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	6	2	4	4	1
Alabama	1	#	#	#	#
Alaska	—	—	—	—	—
Arizona	13	3	10	10	#
Arkansas	2	1	1	1	#
California	20	2	18	17	1
Colorado	—	—	—	—	—
Connecticut	3	2	1	1	#
Delaware	2	1	1	#	#
Florida	7	2	4	2	2
Georgia	3	1	2	1	#
Hawaii	7	2	5	4	1
Idaho	4	1	3	3	#
Illinois	5	1	4	3	#
Indiana	1	#	1	1	#
Iowa	—	—	—	—	—
Kansas	4	2	2	1	1
Kentucky	1	1	#	#	#
Louisiana	1	#	#	#	#
Maine	2	#	1	1	#
Maryland	3	1	2	1	#
Massachusetts	5	3	2	1	1
Michigan	2	1	1	1	#
Minnesota	5	1	3	3	#
Mississippi	#	#	#	#	#
Missouri	1	1	1	1	#
Montana	3	1	2	2	#
Nebraska	4	3	1	1	#
Nevada	9	3	6	6	#
New Hampshire	—	—	—	—	—
New Jersey	—	—	—	—	—
New Mexico	20	5	15	13	2
New York	6	3	4	2	2
North Carolina	3	2	1	1	#
North Dakota	2	#	2	2	#
Ohio	1	1	#	#	#
Oklahoma	4	1	3	3	#
Oregon	7	2	5	4	1
Pennsylvania	1	1	1	1	#
Rhode Island	5	2	3	3	1
South Carolina	1	#	#	#	#
South Dakota	—	—	—	—	—
Tennessee	1	#	1	1	#
Texas	9	3	6	6	#
Utah	7	2	5	5	1
Vermont	1	#	1	1	#
Virginia	3	2	2	1	#
Washington	5	1	3	2	2
West Virginia	1	#	#	#	#
Wisconsin	3	2	1	1	#
Wyoming	2	#	2	2	#
<b>Other jurisdictions</b>					
District of Columbia	5	2	3	1	2
DDESS <sup>2</sup>	5	2	4	2	1
DoDDS <sup>3</sup>	4	1	3	3	#

See notes at end of table. ►

**Table A.19 Percentage of limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	2003				
	LEP <sup>1</sup> students				
	Identified	Excluded	Assessed	Assessed without accommodations	Assessed with accommodations
<b>Nation (public)</b>	6	2	5	4	1
Alabama	1	1	1	1	#
Alaska	13	#	12	11	1
Arizona	17	4	13	12	1
Arkansas	2	1	1	1	#
California	21	2	19	18	1
Colorado	5	2	3	3	1
Connecticut	3	1	2	1	1
Delaware	3	1	1	1	1
Florida	8	2	5	3	2
Georgia	3	1	2	1	#
Hawaii	7	2	5	4	2
Idaho	6	1	5	4	#
Illinois	4	2	2	1	1
Indiana	2	1	2	2	#
Iowa	2	1	2	1	1
Kansas	3	1	2	1	1
Kentucky	1	#	1	1	#
Louisiana	1	#	1	#	#
Maine	1	#	1	#	#
Maryland	3	1	2	2	#
Massachusetts	4	2	2	1	1
Michigan	2	1	1	1	#
Minnesota	5	1	4	3	1
Mississippi	1	#	1	1	#
Missouri	1	1	#	#	#
Montana	2	#	2	1	#
Nebraska	3	2	1	1	#
Nevada	7	2	5	4	1
New Hampshire	2	#	1	1	1
New Jersey	2	1	2	#	1
New Mexico	19	5	14	10	4
New York	5	2	3	1	2
North Carolina	4	2	2	1	1
North Dakota	2	#	1	1	#
Ohio	1	#	1	#	#
Oklahoma	5	1	4	3	1
Oregon	7	3	5	4	1
Pennsylvania	2	#	2	1	1
Rhode Island	6	2	4	2	1
South Carolina	1	#	#	#	#
South Dakota	3	#	2	2	1
Tennessee	2	#	2	2	#
Texas	8	3	5	5	#
Utah	7	1	6	4	2
Vermont	1	#	1	1	#
Virginia	3	2	2	1	1
Washington	5	1	3	3	#
West Virginia	1	#	#	#	#
Wisconsin	3	1	2	1	1
Wyoming	3	#	3	2	#
<b>Other jurisdictions</b>					
District of Columbia	5	2	3	2	1
DDESS <sup>2</sup>	6	2	5	3	2
DoDDS <sup>3</sup>	4	1	3	2	1

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Limited-English-proficient students.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table A.20 Percentage of students with disabilities and limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 4 public schools: By urban district, 2002 and 2003**

<b>Grade 4</b>										
	<b>Identified</b>		<b>Excluded</b>		<b>Assessed</b>		<b>Assessed with accommodations</b>		<b>Assessed without accommodations</b>	
	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>										
Nation (public)	21	22	7	6	14	16	4	5	10	10
Large central city (public)	28	30	8	8	20	21	4	5	16	16
Atlanta	8	9	2	2	6	7	1	3	5	5
Boston	—	33	—	9	—	24	—	11	—	12
Charlotte	—	21	—	5	—	16	—	11	—	6
Chicago	30	31	9	9	21	22	5	6	16	16
Cleveland	—	18	—	12	—	6	—	3	—	2
District of Columbia	19	18	8	6	11	12	5	9	5	3
Houston	43	42	17	24	26	19	1	1	25	18
Los Angeles	51	59	8	6	43	53	2	5	41	49
New York City	22	21	8	6	14	15	8	12	6	3
San Diego	—	42	—	5	—	37	—	4	—	33
<b>SD<sup>1</sup> students only</b>										
Nation (public)	13	14	5	5	8	9	4	5	4	4
Large central city (public)	12	13	5	5	7	8	3	5	4	4
Atlanta	5	8	1	2	4	6	1	3	3	4
Boston	—	19	—	4	—	15	—	10	—	5
Charlotte	—	16	—	4	—	13	—	8	—	4
Chicago	16	15	4	6	12	9	4	5	8	4
Cleveland	—	15	—	11	—	4	—	3	—	2
District of Columbia	14	13	7	5	7	8	4	6	3	2
Houston	12	18	4	9	8	9	1	1	7	8
Los Angeles	11	12	3	3	8	9	2	4	5	5
New York City	14	13	5	2	9	11	6	10	3	1
San Diego	—	13	—	3	—	10	—	2	—	8
<b>LEP<sup>2</sup> students only</b>										
Nation (public)	9	10	2	2	7	8	1	1	6	7
Large central city (public)	19	20	5	5	14	15	1	2	13	13
Atlanta	4	2	1	1	3	2	#	1	3	1
Boston	—	18	—	6	—	12	—	3	—	9
Charlotte	—	10	—	3	—	7	—	4	—	2
Chicago	19	21	7	6	12	15	2	1	9	13
Cleveland	—	3	—	2	—	2	—	1	—	1
District of Columbia	7	7	3	1	4	6	2	4	3	2
Houston	36	33	16	20	20	14	#	#	20	14
Los Angeles	46	56	6	5	40	50	1	3	38	47
New York City	11	11	6	5	6	6	3	3	3	2
San Diego	—	35	—	4	—	31	—	2	—	29

— Not available. The district did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

NOTE: The combined SD/LEP portion of the table is not a sum of the separate SD and LEP portions because some students were identified as both SD and LEP. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.



**Table A.21 Percentage of students with disabilities and limited-English-proficient students identified, excluded, and assessed, when accommodations were permitted, grade 8 public schools: By urban district, 2002 and 2003**

Grade 8	Identified		Excluded		Assessed		Assessed with accommodations		Assessed without accommodations	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>										
Nation (public)	18	19	6	5	12	13	4	5	8	8
Large central city (public)	23	24	6	6	17	17	4	5	13	12
Atlanta	6	12	2	4	4	8	1	4	3	5
Boston	—	31	—	9	—	21	—	11	—	11
Charlotte	—	16	—	4	—	12	—	7	—	4
Chicago	21	21	6	7	15	13	7	6	9	8
Cleveland	—	24	—	15	—	9	—	7	—	2
District of Columbia	21	20	7	8	13	12	8	8	5	4
Houston	27	27	7	10	19	17	#	#	19	16
Los Angeles	35	37	5	4	29	33	2	5	27	28
New York City	24	22	9	5	15	17	8	12	7	4
San Diego	—	29	—	3	—	26	—	3	—	22
<b>SD<sup>1</sup> students only</b>										
Nation (public)	13	14	5	4	8	10	4	5	5	5
Large central city (public)	13	14	4	4	9	10	3	5	6	5
Atlanta	5	11	1	3	4	8	1	3	3	4
Boston	—	20	—	5	—	16	—	9	—	6
Charlotte	—	13	—	3	—	9	—	7	—	3
Chicago	15	16	3	5	12	11	6	6	6	5
Cleveland	—	20	—	12	—	8	—	6	—	2
District of Columbia	16	16	6	6	11	10	7	7	4	3
Houston	15	18	5	7	10	11	#	#	10	11
Los Angeles	12	13	3	3	10	10	2	5	7	5
New York City	14	14	6	2	8	12	5	10	3	2
San Diego	—	11	—	1	—	9	—	3	—	7
<b>LEP<sup>2</sup> students only</b>										
Nation (public)	6	6	2	2	4	5	1	1	4	4
Large central city (public)	13	13	3	3	10	9	1	2	9	8
Atlanta	1	2	#	1	1	1	#	#	1	1
Boston	—	15	—	7	—	8	—	3	—	5
Charlotte	—	6	—	1	—	5	—	2	—	3
Chicago	8	7	4	3	4	4	1	1	3	3
Cleveland	—	6	—	5	—	1	—	1	—	#
District of Columbia	5	5	2	2	3	3	2	1	1	2
Houston	16	16	4	6	12	10	#	#	12	10
Los Angeles	30	33	5	3	25	30	1	3	24	26
New York City	13	11	5	4	8	7	4	4	4	3
San Diego	—	21	—	2	—	19	—	1	—	18

— Not available. The district did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

NOTE: The combined SD/LEP portion of the table is not a sum of the separate SD and LEP portions because some students were identified as both SD and LEP. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

### Investigating the Potential Effects of Exclusion Rates on Assessment Results

Variation in the rates of exclusion of students with disabilities and limited-English-proficient students introduces validity concerns for comparisons over time or between jurisdictions. The essential problem is the differential representativeness of samples, which could impact the comparability of cross-state comparisons within a given year and state trends across years. Since students with disabilities or limited-English-proficient students tend to score below average on assessments, excluding students with special needs may increase a jurisdiction's scores. Conversely, including more of these students might depress score gains. In 2003, exclusion rates varied among jurisdictions. In addition, cases of both increases and decreases in exclusion rates occurred between 2002 and 2003, making comparisons over time within jurisdictions complex to interpret. Tables A.14 and A.17 on the preceding pages display the rates of exclusion in each jurisdiction for grade 4 and grade 8, respectively.

As shown in table A.14, of the 53 jurisdictions that assessed reading at grade 4 in 2003, 12 jurisdictions had exclusion rates of 8 percent or greater, and 3 of these had exclusion rates of 10 percent or greater, while the majority had exclusion rates of less than 8 percent. Table A.17 displays the corresponding data for grade 8. Of the 53 jurisdictions that assessed reading at grade 8 in 2003, eight jurisdictions had exclusion rates of 8 percent or above, and none had a rate above 9 percent. The other jurisdictions at grade 8 all had exclusion rates of less than 8 percent.

One factor that contributed to the variability in exclusion rates across states is that the percentage of students who are *identified* as having disabilities or limited English proficiency varies across jurisdictions. Reasons for the variation include 1) lack of standardized criteria for defining students as having specific disabilities or as being limited in their English proficiency; 2) changes or differences in policy and practices regarding implementation of the Individuals with Disabilities Education Act (IDEA); and 3) differences in the percentage of students classified as limited English proficient and, to a lesser extent, as students with disabilities.

With regard to cross-state comparisons, the correlations between rates of exclusion and average 2003 reading scores were not found to be significant at either grade 4 (.03) or grade 8 (.07). In other words, higher exclusion rates were not associated with higher average scores in 2003. With regard to state trends, the correlations between changes in the rate of exclusion of students with special needs and average reading score gains from 2002 to 2003 were not found to be significant either (.26 at grade 4 and .22 at grade 8).

Because the representativeness of samples is ultimately a validity issue, NCES has commissioned studies of the impact of assessment accommodations on overall scores. NCES has also investigated scenarios for estimating what the average scores might have been had the excluded students been assessed. Two alternative statistical scenarios have been proposed, based on different hypotheses about how excluded students might have performed.

Combined with the actual performance of students who were assessed, these scenarios produce results for the full population (that is, including estimates for excluded students) in each jurisdiction and each assessment year. These techniques provide some indication as to which statements about trend gains or losses *might* be changed if exclusion rates were zero in both assessment years and if the hypotheses about the performance of missing students are correct.

One scenario was developed by Donald McLaughlin of American Institutes for Research, and predicts what the performance of excluded SD and/or LEP students might have been had these students been tested. The basic assumption underlying this approach is that these students would have performed as well as included SD and/or LEP students with similar disabilities, level of English proficiency, and background characteristics.<sup>7</sup>

The other scenario was developed by Al Beaton of Boston College and similarly makes an assumption about what the performance of excluded SD/LEP students might have been had they been tested. The idea of Beaton's scenario is to calculate median rather than average scores. A "median" is the score reached or exceeded by fifty percent of the student population. This statistic is not influenced by extreme values. Beaton's assumption is

that all SD/LEP students would score below *Basic* or below the median of the group being analyzed. This assumption lowers the median score for every group.

The methods used to construct the scenarios are still under development. NCES is continuing research into different procedures for reducing the percentages of students excluded from NAEP. In addition, NCES will continue to evaluate the potential impact of changes in exclusion rates on score gains.

#### **Types of Accommodations Permitted**

Table A.22 displays the percentages of SD and/or LEP students assessed with the variety of available accommodations. It should be noted that students assessed with accommodations typically received some combination of accommodations. The percentages presented in the table reflect only the primary accommodation provided. For example, students assessed in small groups (as compared with standard NAEP sessions of about 30 students) usually received extended time. In one-on-one administrations, students often received assistance in recording answers (e.g., use of a scribe or computer) and were afforded extra time. Extended time was considered the primary accommodation only when it was the sole accommodation provided. The assessment did not allow some accommodations that were permitted in certain states in past

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<sup>7</sup> Because students with very severe levels of disability and students with little or no proficiency in English are not assessed in NAEP, ability estimates for students with those characteristics may be overestimated.

assessments. Some states have allowed questions and, in some cases, reading passages to be read aloud to the students. In designing the reading assessment, reading aloud as an accommodation was viewed as changing the nature of the construct being measured and, hence, was

not permitted. Because NAEP considers the domain of its reading assessment to be reading in English, no attempt was made to provide an alternate language version of the assessment, and the use of bilingual dictionaries was not permitted.

**Table A.22 Students with disabilities and/or limited-English-proficient students assessed with accommodations, by type of primary accommodation, grades 4 and 8 public and nonpublic schools: 1998–2003**

	Weighted percentage of assessed students						
	Grade 4				Grade 8		
	1998	2000	2002	2003	1998	2002	2003
<b>SD<sup>1</sup> and/or LEP<sup>2</sup> students</b>							
Large-print book	#	0.05	0.04	0.05	0.14	0.01	0.02
Extended time	1.11	0.85	1.65	1.26	1.07	2.08	1.69
Small group	1.89	1.33	2.18	3.76	1.26	1.64	3.36
One-on-one	0.21	0.21	0.09	0.15	0.07	0.05	0.06
Scribe/computer	0.05	0.02	0.06	0.12	#	0.03	0.06
Other	0.09	0.02	0.04	0.07	#	0.04	0.05
<b>SD<sup>1</sup> students only</b>							
Large-print book	#	0.05	0.04	0.04	0.14	0.01	0.02
Extended time	0.78	0.85	1.32	0.93	0.86	1.85	1.51
Small group	1.60	1.20	2.04	3.40	1.25	1.57	3.19
One-on-one	0.21	0.21	0.08	0.15	0.07	0.05	0.06
Scribe/computer	0.05	0.02	0.06	0.12	#	0.03	0.06
Other	0.09	0.02	0.03	0.07	#	0.04	0.05
<b>LEP<sup>2</sup> students only</b>							
Large-print book	#	#	#	0.01	#	#	#
Extended time	0.36	0.02	0.44	0.44	0.23	0.38	0.33
Small group	0.40	0.22	0.25	0.65	0.01	0.14	0.41
One-on-one	#	0.01	0.01	0.02	#	#	#
Scribe/computer	#	#	#	0.01	#	#	#
Other	#	0.02	0.01	0.01	#	#	#

# The estimate rounds to less than 0.01.

<sup>1</sup> Students with disabilities.

<sup>2</sup> Limited-English-proficient students.

NOTE: The combined SD/LEP portion of the table is not a sum of the separate SD and LEP portions because some students were identified as both SD and LEP. Such students would be counted separately in the bottom portions but counted only once in the top portion.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.

## Data Collection and Scoring

The 2003 NAEP reading assessment was conducted from January to March 2003 by contractors to the U.S. Department of Education. Trained field staff from Westat conducted the data collection. Materials from the 2003 assessment were shipped to Pearson, where trained staff evaluated the responses to the constructed-response questions using scoring guides prepared by Educational Testing Service (ETS). Each constructed-response question had a unique scoring guide that defined the criteria used to evaluate students' responses. Short constructed-response questions were scored as either acceptable or unacceptable, or were rated according to three-level guides that permitted partial credit. Extended constructed-response questions were evaluated with four-level guides.

For the 2003 reading assessment, 3,913,147 constructed responses were scored. This number includes rescoring to monitor interrater reliability. The within-year average percentage of exact agreement for the 2003 national reliability sample was 90 percent at both the fourth and eighth grades.

## Data Analysis and IRT Scaling

After the professional scoring, all information was transcribed into the NAEP database at ETS. Each processing activity was conducted with rigorous quality control. After the assessment information was compiled in the database, the data were weighted according to the population structure. The weighting for the national and state samples reflected the probability of selection for each student as a result of

the sampling design, adjusted for nonresponse.<sup>8</sup>

Analyses were then conducted to determine the percentages of students who gave various responses to each cognitive and background question. In determining these percentages for the cognitive questions, a distinction was made between missing responses at the end of a block (i.e., missing responses after the last question the student answered) and missing responses before the last observed response. Missing responses before the last observed response were considered intentional omissions. In analysis, omitted responses to multiple-choice items were scored as fractionally correct.<sup>9</sup> Omitted responses for constructed-response items were placed into the lowest score category. Missing responses after the last observed response were considered "not reached" and treated as if the questions had not been presented to the student. In calculating response percentages for each question, only students classified as having been presented the question were included in the denominator of the statistic.

It is standard NAEP practice to treat all nonrespondents to the last question in a block as if they had not reached the question. For multiple-choice and short constructed-response questions, this practice produces a reasonable pattern of results in that the proportion reaching the last question is not dramatically smaller than the proportion reaching the next-to-last question. However, for reading blocks that ended with extended constructed-response questions, there may be extremely large drops in the proportion of

<sup>8</sup> Weighting procedures are described more fully in the "Weighting and Variance Estimation" section later in this document. Additional information about the use of weighting procedures will be included in the technical documentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

<sup>9</sup> Lord, F. M. (1980). *Applications of Item Response Theory to Practical Testing Problems*, p. 229. Hillsdale, NJ: Lawrence Erlbaum Associates.

students attempting some of the final questions. Therefore, for blocks ending with an extended constructed-response question, students who answered the next-to-last question, but did not respond to the extended constructed-response question, were classified as having intentionally omitted the last question.

Item Response Theory (IRT) was used to estimate average reading scale scores for the nation and for various subgroups of interest within the nation. IRT models the probability of answering a question in a certain way as a mathematical function of proficiency or skill. The main purpose of IRT analysis is to provide a common scale on which performance can be compared among groups, such as those defined by characteristics, including gender and race/ethnicity, even when students receive different blocks of items. One desirable feature of IRT is that it locates items and students on this common scale. In contrast to classical test theory, IRT does not rely solely on the total number of correct item responses, but uses the particular patterns of student responses to items in determining the student location on the scale. As a result, adding items that function at a particular point on the scale to the assessment does not change the location of the students on the scale, even though students may respond correctly to more items. It does increase the relative precision with which students are measured, particularly those students whose scale locations are close to the additional items.

The results for 1992, 1994, 1998, 2000, 2002, and 2003 are presented on the NAEP composite reading scale developed in 1992. For the NAEP 1992 reading assessment, a scale ranging from 0 to 500

was created to report performance for each reading context: literary and informative at grade 4; and literary, informative, and task-oriented at grade 8. The scales summarize student performance across all three types of questions in the assessment (multiple-choice, short constructed-response, and extended constructed-response). Results from subsequent reading assessments (1994, 1998, 2000, 2002, and 2003) are reported on these scales.

Each reading scale was initially based on the distribution of student performance across all three grades in the 1992 national assessment (grades 4, 8, and 12) and had an average of 250 and a standard deviation of 50. The composite scale was created as an overall measure of students' reading performance. This composite scale is a weighted average of the three separate scales for the reading contexts (two at grade 4). The weight for each reading context is proportional to the relative importance assigned to the reading context by the specifications developed through the consensus planning process and given in the framework.

In producing the reading scales, three distinct IRT models were used. Multiple-choice questions were scaled using the three-parameter logistic (3PL) model; short constructed-response questions rated as acceptable or unacceptable were scaled using the two-parameter logistic (2PL) model; and short constructed-response questions rated according to a three-level guide, as well as extended constructed-response questions rated on a four-level guide, were scaled using a Generalized Partial-Credit (GPC) model.<sup>10</sup> Developed by ETS and first used in 1992, the GPC model permits the scaling of

<sup>10</sup> Muraki, E. (1992). A Generalized Partial Credit Model: Application of an EM Algorithm. *Applied Psychological Measurement*, 16(2), 159–176.



questions scored according to multipoint rating schemes. The model takes full advantage of the information available from each of the student response categories used for these more complex constructed-response questions.<sup>11</sup>

The reading scale is composed of three types of questions: multiple-choice, short constructed-response (scored either dichotomously or allowing for partial credit), and extended constructed-response (scored according to a partial-credit model). Unfortunately, the question of how much information different types of questions contribute to the reading scale has no simple answer. The information provided by a given question is determined by the IRT model used to scale the question. It is a function of the item parameters and varies by level of reading proficiency.<sup>12</sup> Thus, the answer to the query “How much information do the different types of questions provide?” will differ for each level of reading performance. When considering the composite reading scale, the answer is even more complicated. The reading data are scaled separately by the two contexts for reading (reading for literary experience and reading for information) for grade 4, and the three contexts for reading (reading for literary experience, reading for information, and reading to perform a task) for grade 8, resulting in two or three separate subscales at each grade. The

composite scale is a weighted combination of these subscales. IRT information functions are only strictly comparable when the item parameters are estimated together. Because the composite scale is based on three separate estimation runs, there is no direct way to compare the information provided by the questions on the composite scale.

Because of the relatively brief time available for testing, each student receives only a portion of the questions in the assessment, not the coverage of the content that would be required for reliable information about individual performance. Traditional test scores for individual students, even those based on IRT, would result in misleading estimates of population characteristics, such as subgroup means and percentages of students at or above a certain scale-score level. However, it is NAEP’s goal to estimate these population characteristics. NAEP’s objectives can be achieved with methodologies that produce estimates of the population-level parameters directly, without the intermediary computation of estimates of individuals. This is accomplished using marginal estimation scaling model techniques for latent variables.<sup>13</sup> Under the assumptions of the scaling models, these population estimates will be consistent in the sense that the estimates approach the model-based population values as the sample size increases. This

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<sup>11</sup> More detailed information regarding the IRT analyses used in NAEP will be included in the technical documentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

<sup>12</sup> Donoghue, J. R. (1994). An Empirical Examination of the IRT Information of Polytomously Scored Reading Items Under the Generalized Partial Credit Model. *Journal of Educational Measurement*, 31(4), 295–311.

<sup>13</sup> Mislevy, R. J., and Sheehan, K. M. (1987). Marginal Estimation Procedures. In A. E. Beaton (Ed.), *Implementing the New Design: The NAEP 1983–1984 Technical Report* (Technical Rep. No. 15-TR-20), pp. 293–260. Princeton, NJ: Educational Testing Service.

would not be the case for population estimates obtained by aggregating optimal estimates of individual performance.<sup>14</sup>

### Item Mapping Procedures

The reading performance of fourth- and eighth-graders can be illustrated by “item maps,” which position question or “item” descriptions along the NAEP reading scale at each grade. Each question shown is placed at the point on the scale where questions are likely to be answered successfully by students. The descriptions used on these item maps focus on the reading knowledge or skill needed to answer the question. For multiple-choice questions, the description indicates the knowledge or skill demonstrated by selection of the correct option; for constructed-response questions, the description takes into account the knowledge or skill specified by the different levels of scoring criteria for that question.

To map questions to particular points on the NAEP reading scale, a response probability convention was adopted that would divide those who had a higher probability of success from those who had a lower probability. Establishing a response probability convention has an impact on the mapping of the test questions onto the reading scale. A lower boundary convention maps the reading questions at lower points along the scale, and a higher boundary convention maps the same questions at higher points on the scale. The underlying distribution of reading skills in the population does not change, but the choice of a response probability convention does have an impact on the proportion of the student

population that is reported as “able to do” the questions on the reading scales.

There is no obvious choice of a point along the probability scale that is clearly superior to any other point. If the convention were set with a boundary at 50 percent, those above the boundary would be more likely to get a question right than get it wrong, while those below the boundary would be more likely to get the question wrong than right. Although this convention has some intuitive appeal, it was rejected on the grounds that having a 50:50 chance of getting the question right shows an insufficient degree of mastery. If the convention were set with a boundary at 80 percent, students above the criterion would have a high probability of success with a question. However, many students below this criterion show some level of reading ability that would be ignored by such a stringent criterion. In particular, those in the range between 50 and 80 percent correct would be more likely to get the question right, yet would not be in the group described as “able to do” the question.

In a compromise between the 50 percent and the 80 percent conventions, NAEP has adopted two related response probability conventions for all its subjects: 65 percent for constructed-response questions (where guessing is not a factor) and 74 percent for multiple-choice questions (to adjust for the possibility of answering correctly by guessing). These probability conventions were established, in part, based on an intuitive judgment that they would provide the best picture of students’ reading skills.

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<sup>14</sup> For theoretical and empirical justification of the procedures employed, see Mislevy, R. J. (1988). Randomization-Based Inferences About Latent Variables From Complex Samples. *Psychometrika*, 56(2), 177–196.



Some additional support for the dual conventions adopted by NAEP was provided by Huynh.<sup>15</sup> He examined the IRT information provided by items, according to the IRT model used in scaling NAEP questions. Following Bock, Huynh decomposed the item information into that provided by a correct response [ $P(\theta) I(\theta)$ ] and that provided by an incorrect response [ $(1 - P(\theta)) I(\theta)$ ].<sup>16</sup> Huynh showed that the item information provided by a correct response to a constructed-response item is maximized at the point along the reading scale at which the probability of a correct response is .65 (for multiple-choice items, the information provided by a correct response is maximized at the point at which the probability of getting the item correct is .74). It should be noted, however, that maximizing the item information  $I(\theta)$ , rather than the information provided by a correct response [ $P(\theta) I(\theta)$ ], would imply an item mapping criterion closer to 50 percent.

The results in this report are presented in terms of the composite reading scale. However, the reading assessment was scaled separately for the two contexts for reading at grade 4 and the three contexts for reading at grade 8. The composite scale is a weighted combination of the two or three subscales for the two or three contexts for reading. To obtain item map information, a procedure was used that

models the relationship between the item response function for the subscale and the subscale structure to derive the relationship between the item score and the composite scale (i.e., an item response function for the composite scale).<sup>17</sup> This item response function is then used to derive the probability used in the mapping.

### **Weighting and Variance Estimation**

A complex sampling design was used to select the students who were assessed. The properties of a sample selected through such a design could be very different from those of a simple random sample in which every student in the target population has an equal chance of selection and in which the observations from different sampled students can be considered to be statistically independent of one another. Therefore, the properties of the sample for the data collection design were taken into account during the analysis of the assessment data.

One way that the properties of the sample design were addressed was by using sampling weights to account for the fact that the probabilities of selection were not identical for all students. All population and subpopulation characteristics based on the assessment data were estimated using sampling weights. These weights included adjustments for school and student nonresponse.

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<sup>15</sup> Huynh, H. (1994, October). *Some Technical Aspects of Standard Setting*. Paper presented at the Joint Conference on Standard Setting for Large-Scale Assessment, Washington, DC.

<sup>16</sup> Bock, R. D. (1972). Estimating Item Parameters and Latent Ability When Responses are Scored in Two or More Latent Categories. *Psychometrika*, 37, 29–51.

<sup>17</sup> Donoghue, J. R. (1997, March). *Item Mapping to a Weighted Composite Scale*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Prior to 2002, the national samples used weights that had been poststratified to the census or Current Population Survey (CPS) totals for the populations being assessed. Due to concerns about the availability of appropriate targets for poststratification as a result of changes in the reporting of race in the 2000 Census, nonpoststratified weights have been used in the analysis of national samples since 2002. Due to this change in weights during NAEP's linking procedures, there was a slight change to the 1998 and 2000 national reading results that had been reported previously. The state NAEP samples have always been analyzed using nonpoststratified weights, since there were no targets available from CPS to use in poststratification.

Not only must appropriate estimates of population characteristics be derived, but appropriate measures of the degree of uncertainty must be obtained for those statistics. Two components of uncertainty are accounted for in the variability of statistics based on student ability: 1) the uncertainty due to sampling only a relatively small number of students, and 2) the uncertainty due to sampling only a portion of the cognitive domain of interest. The first component accounts for the variability associated with the estimated percentages of students who had certain background characteristics or who answered a certain cognitive question correctly.

Because NAEP uses complex sampling procedures, conventional formulas for estimating sampling variability that assume simple random sampling are inappropriate.

NAEP uses a jackknife replication procedure to estimate standard errors. The jackknife standard error provides a reasonable measure of uncertainty for any student information that can be observed without error. However, because each student typically responds to only a few questions within any theme of reading, the scale score for any single student would be imprecise. In this case, NAEP's marginal estimation methodology can be used to describe the performance of groups and subgroups of students. The estimate of the variance of the students' posterior scale score distributions (which reflect the imprecision due to lack of measurement accuracy) is computed. This component of variability is then included in the standard errors of NAEP scale scores.<sup>18</sup>

Typically, when the standard error is based on a small number of students or when the group of students is enrolled in a small number of schools, the amount of uncertainty associated with the estimation of standard errors may be quite large. Estimates of standard errors subject to a large degree of uncertainty are followed on the tables in the NAEP data tool by the "!" symbol to indicate that the nature of the sample does not allow accurate determination of the variability of the statistic. In such cases, the standard errors—and any confidence intervals or significance tests involving these standard errors—should be interpreted cautiously. Additional details concerning procedures for identifying such standard errors will be discussed in the technical documentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

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<sup>18</sup> For further details, see Johnson, E. G., and Rust, K. F. (1992). Population Inferences and Variance Estimation for NAEP Data. *Journal of Educational Statistics*, 17(2), 175–190.

The reader is reminded that, as with findings from all surveys, NAEP results are subject to other kinds of error, including the effects of imperfect adjustment for student and school nonresponse and unknowable effects associated with the particular instrumentation and data collection methods. Nonsampling errors can be attributed to a number of sources—inability to obtain complete information about all selected schools in the sample (some students or schools refused to participate, or students participated but answered only certain questions); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct background information; mistakes in recording, coding, or scoring data; and other errors in collecting, processing, sampling, and estimating missing data. The extent of nonsampling errors is difficult to estimate and, because of their nature, the impact of such errors cannot be reflected in the data-based estimates of uncertainty provided in NAEP reports.

### **Drawing Inferences from the Results**

The reported statistics are estimates and are therefore subject to a measure of uncertainty. There are two sources of such uncertainty. First, NAEP uses a sample of students rather than testing all students. Second, all assessments have some amount of uncertainty related to the fact that they cannot ask all questions that might be asked in a content area. The magnitude of this uncertainty is reflected in the standard error of each of the estimates. When the percentages or average scale scores of certain groups are compared, the estimated standard error should be taken into account. Therefore, the comparisons are

based on statistical tests that consider the estimated standard errors of those statistics and the magnitude of the difference among the averages or percentages.

For the data from this report, all the estimates have corresponding estimated standard errors of the estimates. For example, table A.23 shows the average national scale score for the NAEP 1992–2003 national assessments and table A.24 shows the percentage of students within each achievement-level range and at or above achievement levels. In both tables, estimated standard errors appear in parentheses next to each estimated scale score or percentage. Additional examples of estimated standard errors corresponding with results included in this report are presented in tables A.25, A.26, and A.27. For the estimated standard errors corresponding to other data in this report, the reader can go to the Data Tool on the NCES web site (<http://nces.ed.gov/nationsreportcard/naepdata>).

Using confidence intervals based on the standard errors provides a way to take into account the uncertainty associated with sample estimates and to make inferences about the population averages and percentages in a manner that reflects that uncertainty. An estimated sample average scale score plus or minus 1.96 standard errors approximates a 95 percent confidence interval for the corresponding population quantity. This statement means that one can conclude with an approximately 95 percent level of confidence that the average performance of the entire population of interest (e.g., all fourth-grade students in public and nonpublic schools) is within plus or minus 1.96 standard errors of the sample average.

For example, suppose that the average reading scale score of the students in a particular group was 256 with an estimated standard error of 1.2. An approximately 95 percent confidence interval for the population quantity would be as follows:

$$\begin{aligned} &\text{Average} \pm 1.96 \text{ standard errors} \\ &256 \pm 1.96 \times 1.2 \\ &256 \pm 2.4 \\ &(253.6, 258.4) \end{aligned}$$

Thus, one can conclude with a 95 percent level of confidence that the average scale score for the entire population of students in that group is between 253.6 and 258.4. It should be noted that this example and the examples in the following sections are illustrative. More precise estimates carried out to one or

more decimal places are used in the actual analyses.

Similar confidence intervals can be constructed for percentages, if the percentages are not extremely large or extremely small. Extreme percentages should be interpreted with caution. Adding or subtracting the standard errors associated with extreme percentages could cause the confidence interval to exceed 100 percent or fall below 0 percent, resulting in numbers that are not meaningful. A more complete discussion of extreme percentages will appear in the technical documentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

**Table A.23 Average reading scale scores and standard errors, grades 4 and 8: 1992–2003**

	Accommodations not permitted				Accommodations permitted			
	1992	1994	1998	2000	1998	2000	2002	2003
<b>Grade 4</b>	217 (0.9)	214 (1.0)*	217 (0.8)	217 (0.8)	215 (1.1)*	213 (1.3)*	219 (0.4)	218 (0.3)
<b>Grade 8</b>	260 (0.9)*	260 (0.8)*	264 (0.8)	—	263 (0.8)	—	264 (0.4)*	263 (0.3)

— Not available. Data were not collected at grade 8 in 2000.

\* Significantly different from 2003.

NOTE: Standard errors of the estimated scale scores appear in parentheses. In addition to allowing for accommodations, the accommodation-permitted results at grade 4 (1998–2000) differ slightly from previous years, and from previous reported results for 1998 and 2000, due to changes in sample weighting procedures. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

**Table A.24 Percentage of students and standard errors, by reading achievement level, grades 4 and 8: 1992–2003**

			Below <b>Basic</b>	At <b>Basic</b>	At <b>Proficient</b>	At <b>Advanced</b>	At or above <b>Basic</b>	At or above <b>Proficient</b>
<b>Grade 4</b>								
Accommodations not permitted	1992	38 (1.1)	34 (0.9)	22 (0.9)	6 (0.6)	62 (1.1)	29 (1.2) *	
	1994	40 (1.0) *	31 (0.7)	22 (0.8)	7 (0.7)	60 (1.0) *	30 (1.1)	
	1998	38 (0.9)	32 (0.7)	24 (0.7)	7 (0.5)	62 (0.9)	31 (0.9)	
	2000	37 (0.8)	31 (0.9)	24 (0.8)	8 (0.5)	63 (0.8)	32 (0.9)	
Accommodations permitted	1998	40 (1.2) *	30 (0.8)	22 (0.8)	7 (0.5)	60 (1.2) *	29 (0.9) *	
	2000	41 (1.4) *	30 (1.1)	23 (1.0)	7 (0.6)	59 (1.4) *	29 (1.1)	
	2002	36 (0.5)	32 (0.3)	24 (0.3)	7 (0.2) *	64 (0.5)	31 (0.4)	
	2003	37 (0.3)	32 (0.2)	24 (0.3)	8 (0.1)	63 (0.3)	31 (0.3)	
<b>Grade 8</b>								
Accommodations not permitted	1992	31 (1.0) *	40 (0.7)	26 (1.0) *	3 (0.3)	69 (1.0) *	29 (1.1) *	
	1994	30 (0.9) *	40 (0.7) *	27 (0.8) *	3 (0.3)	70 (0.9) *	30 (0.9) *	
	1998	26 (0.9)	41 (0.8)	31 (0.9)	3 (0.4)	74 (0.9)	33 (0.9)	
Accommodations permitted	1998	27 (0.8)	41 (0.9)	30 (0.9)	3 (0.3)	73 (0.8)	32 (1.1)	
	2002	25 (0.5) *	43 (0.4) *	30 (0.5)	3 (0.2)	75 (0.5) *	33 (0.5)	
	2003	26 (0.3)	42 (0.2)	29 (0.2)	3 (0.1)	74 (0.3)	32 (0.3)	

\* Significantly different from 2003.

NOTE: Standard errors of the estimated percentages appear in parentheses. Detail may not sum to totals because of rounding. Data were not collected at grade 8 in 2000. In addition to allowing for accommodations, the accommodation-permitted results at grade 4 (1998–2000) differ slightly from previous years, and from previously reported results for 1998 and 2000, due to changes in sample weighting procedures. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

**Table A.25 Average reading scale scores and standard errors, by race/ethnicity and eligibility for free/reduced-price school lunch, grades 4 and 8: 2003**

		Eligible	Not eligible	Information not available
<b>Grade 4</b>				
	White	213 (0.4)	233 (0.3)	237 (0.7)
	Black	193 (0.4)	211 (0.6)	206 (2.0)
	Hispanic	196 (0.7)	213 (1.1)	211 (2.6)
	Asian/Pacific Islander	210 (1.9)	235 (1.6)	234 (2.6)
	American Indian/Alaska Native	196 (1.5)	215 (2.0)	200 (5.8) !
<b>Grade 8</b>				
	White	258 (0.5)	275 (0.3)	279 (0.9)
	Black	239 (0.6)	254 (0.7)	250 (1.5)
	Hispanic	240 (0.9)	257 (0.8)	251 (2.4)
	Asian/Pacific Islander	256 (1.2)	277 (1.4)	278 (3.0)
	American Indian/Alaska Native	237 (4.4)	258 (2.5)	251 (7.3) !

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.

NOTE: Standard errors of the estimated percentages appear in parentheses.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table A.26 Average reading scale scores and standard errors, grade 8 public schools: By state, 1998–2003**

Grade 8	Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	261 (0.8)	261 (0.8)	263 (0.5) *	261 (0.2)
Alabama	255 (1.3)	255 (1.4)	253 (1.3)	253 (1.5)
Alaska	—	—	—	256 (1.1)
Arizona	261 (1.2) **,**	260 (1.1) **,**	257 (1.3)	255 (1.4)
Arkansas	256 (1.3)	256 (1.3)	260 (1.1)	258 (1.3)
California	253 (1.7)	252 (1.6)	250 (1.8)	251 (1.3)
Colorado	264 (1.1) *	264 (1.0) *	—	268 (1.2)
Connecticut	272 (1.1) **,**	270 (1.0) *	267 (1.2)	267 (1.1)
Delaware	256 (1.3) **,**	254 (1.3) **,**	267 (0.5) *	265 (0.7)
Florida	253 (1.7)	255 (1.4)	261 (1.6)	257 (1.3)
Georgia	257 (1.4)	257 (1.4)	258 (1.0)	258 (1.1)
Hawaii	250 (1.3)	249 (1.0)	252 (0.9)	251 (0.9)
Idaho	—	—	266 (1.1)	264 (0.9)
Illinois	—	—	—	266 (1.0)
Indiana	—	—	265 (1.3)	265 (1.0)
Iowa	—	—	—	268 (0.8)
Kansas	268 (1.2)	268 (1.4)	269 (1.3)	266 (1.5)
Kentucky	262 (1.3) *	262 (1.4) *	265 (1.0)	266 (1.3)
Louisiana	252 (1.5)	252 (1.4)	256 (1.5)	253 (1.6)
Maine	273 (1.2) **,**	271 (1.2) *	270 (0.9)	268 (1.0)
Maryland	262 (1.8)	261 (1.8)	263 (1.7)	262 (1.4)
Massachusetts	269 (1.6) *	269 (1.4) *	271 (1.3)	273 (1.0)
Michigan	—	—	265 (1.6)	264 (1.8)
Minnesota	267 (1.3)	265 (1.4)	—	268 (1.1)
Mississippi	251 (1.4) *	251 (1.2)	255 (0.9)	255 (1.4)
Missouri	263 (1.3) **,**	262 (1.3) **,**	268 (1.0)	267 (1.0)
Montana	270 (1.1)	271 (1.3)	270 (1.0)	270 (1.0)
Nebraska	—	—	270 (0.9) *	266 (0.9)
Nevada	257 (1.1) **,**	258 (1.0) **,**	251 (0.8)	252 (0.8)
New Hampshire	—	—	—	271 (0.9)
New Jersey	—	—	—	268 (1.2)
New Mexico	258 (1.2) **,**	258 (1.2) **,**	254 (1.0)	252 (0.9)
New York	266 (1.6)	265 (1.5)	264 (1.5)	265 (1.3)
North Carolina	264 (1.1)	262 (1.1)	265 (1.1) *	262 (1.0)
North Dakota	—	—	268 (0.8)	270 (0.8)
Ohio	—	—	268 (1.6)	267 (1.3)
Oklahoma	265 (1.3) *	265 (1.2) *	262 (0.8)	262 (0.9)
Oregon	266 (1.4)	266 (1.5)	268 (1.3) *	264 (1.2)
Pennsylvania	—	—	265 (1.0)	264 (1.2)
Rhode Island	262 (1.0)	264 (0.9) **,**	262 (0.8)	261 (0.7)
South Carolina	255 (1.3)	255 (1.1) *	258 (1.1)	258 (1.3)
South Dakota	—	—	—	270 (0.8)
Tennessee	259 (1.3)	258 (1.2)	260 (1.4)	258 (1.2)
Texas	262 (1.5)	261 (1.4)	262 (1.4)	259 (1.1)
Utah	265 (1.1)	263 (1.0)	263 (1.1)	264 (0.8)
Vermont	—	—	272 (0.9)	271 (0.8)
Virginia	266 (1.1)	266 (1.1)	269 (1.0)	268 (1.1)
Washington	265 (1.3)	264 (1.2)	268 (1.2) *	264 (0.9)
West Virginia	262 (1.2)	262 (1.0)	264 (1.0) *	260 (1.0)
Wisconsin	266 (1.6)	265 (1.8)	—	266 (1.3)
Wyoming	262 (1.3) **,**	263 (1.3) **,**	265 (0.7) *	267 (0.5)
<b>Other jurisdictions</b>				
District of Columbia	236 (2.0)	236 (2.1)	240 (0.9)	239 (0.8)
DDESS <sup>2</sup>	269 (3.3)	268 (4.5)	272 (1.0)	269 (1.4)
DoDDS <sup>3</sup>	269 (1.0) **,**	269 (1.0) **,**	273 (0.6)	273 (0.7)

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Standard errors of the estimated scale scores appear in parentheses. State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.



**Table A.27 Percentage of students at or above *Proficient* and standard errors, by race/ethnicity, grade 8 public schools:  
By state, 1998–2003**

Grade 8	White				Black			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998
<b>Nation (public)</b> <sup>1</sup>	38 (1.2)	37 (1.3)	39 (0.7)	39 (0.3)	11 (1.3)	11 (1.6)	13 (0.7)	12 (0.4)
Alabama	28 (1.8)	29 (2.6)	30 (1.8)	30 (1.9)	7 (1.4)	8 (1.3)	7 (0.9)	9 (1.6)
Alaska	–	–	–	36 (2.0)	–	–	–	13 (5.0)
Arizona	37 (1.8)	35 (1.8)	32 (2.4)	36 (2.4)	10 (4.0)	12 (4.3)	12 (4.3)	16 (3.6)
Arkansas	28 (1.5)	29 (1.7)	34 (1.8)	33 (1.7)	6 (1.8)	5 (1.8)	6 (1.8)	6 (1.2)
California	35 (3.0)	35 (3.0)	33 (3.1)	34 (2.4)	12 (3.2)	9 (2.5)	13 (4.3)	12 (2.8)
Colorado	37 (1.8) *	36 (1.4) *	–	43 (1.9)	9 (3.7) †	10 (3.7)	–	16 (3.7)
Connecticut	49 (1.5)	47 (1.7)	48 (1.7)	45 (1.6)	10 (2.9)	11 (2.9)	9 (1.9)	12 (2.0)
Delaware	31 (2.0) *	30 (2.0) *	42 (1.1)	40 (1.9)	10 (1.9)	9 (1.3)	14 (1.2)	13 (1.5)
Florida	31 (2.1)	30 (2.1) *	36 (2.4)	37 (1.7)	7 (1.3)	7 (1.3)	14 (1.7)	11 (2.0)
Georgia	34 (2.5)	35 (2.0)	35 (1.8)	36 (1.9)	9 (1.5)	10 (1.3)	14 (1.5)	12 (1.9)
Hawaii	31 (2.8)	30 (2.6)	30 (2.6)	31 (2.2)	‡	‡	18 (7.9)	‡
Idaho	–	–	35 (2.2)	35 (1.5)	–	–	‡	‡
Illinois	–	–	–	45 (2.0)	–	–	–	13 (1.7)
Indiana	–	–	34 (1.6)	36 (1.5)	–	–	12 (2.6)	13 (1.7)
Iowa	–	–	–	38 (1.6)	–	–	–	10 (2.7)
Kansas	39 (1.9)	40 (2.0)	42 (1.9)	40 (1.9)	17 (9.3)	20 (8.4)	12 (3.2)	10 (3.4)
Kentucky	31 (1.8)	32 (1.7)	33 (1.6)	36 (2.0)	9 (2.9)	11 (3.1)	14 (3.0)	14 (3.4)
Louisiana	26 (1.9) *	25 (2.2) *	32 (2.0)	33 (2.2)	6 (1.3)	6 (1.2)	9 (1.2)	9 (1.3)
Maine	42 (1.8) *	42 (1.8) *	38 (1.1)	37 (1.4)	‡	‡	‡	‡
Maryland	41 (2.6)	41 (2.9)	44 (2.7)	40 (2.6)	11 (1.5)	10 (1.7)	13 (1.6)	13 (1.6)
Massachusetts	41 (2.4) *	43 (1.9) *	47 (1.8)	49 (1.4)	13 (3.8)	12 (3.8)	12 (2.8)	18 (3.8)
Michigan	–	–	37 (1.5)	39 (1.9)	–	–	13 (3.1)	12 (2.8)
Minnesota	39 (1.9)	39 (1.9)	–	42 (1.4)	8 (4.5)	7 (3.4) †	–	12 (3.1)
Mississippi	29 (1.9)	28 (2.2)	31 (2.4)	32 (2.1)	8 (1.1)	8 (1.1)	7 (1.0)	9 (1.2)
Missouri	32 (1.6) *	31 (1.8) *	37 (1.7)	39 (1.5)	8 (2.6)	9 (1.7)	13 (2.6)	10 (1.6)
Montana	40 (1.6)	42 (1.7)	40 (1.9)	40 (1.5)	‡	‡	‡	‡
Nebraska	–	–	40 (1.3)	39 (1.4)	–	–	11 (3.5)	10 (3.6)
Nevada	30 (1.5)	29 (1.7)	25 (1.6)	29 (1.6)	10 (3.0)	10 (3.4)	7 (1.9)	7 (1.9)
New Hampshire	–	–	–	41 (1.5)	–	–	–	‡
New Jersey	–	–	–	46 (1.4)	–	–	–	15 (2.3)
New Mexico	37 (2.3)	36 (1.9)	32 (2.6)	35 (1.9)	‡	‡	‡	14 (4.1)
New York	45 (3.0)	44 (2.2)	43 (2.7)	48 (2.0)	12 (2.2)	10 (1.7)	12 (3.0)	14 (1.6)
North Carolina	40 (1.8)	39 (1.7)	42 (2.1)	38 (1.5)	13 (2.1)	12 (1.7)	11 (1.3)	13 (1.3)
North Dakota	–	–	35 (1.3) *	40 (1.4)	–	–	‡	‡
Ohio	–	–	40 (2.2)	39 (1.9)	–	–	13 (3.5) †	13 (1.8)
Oklahoma	33 (2.0)	34 (2.2)	33 (1.7)	34 (1.7)	12 (3.5)	14 (2.5)	8 (2.5)	13 (3.3)
Oregon	36 (2.1)	37 (2.2)	39 (1.9)	36 (1.6)	10 (6.4) †	10 (5.6) †	‡	18 (5.2)
Pennsylvania	–	–	40 (1.7)	36 (2.1)	–	–	8 (1.2)	11 (1.8)
Rhode Island	33 (1.5)	35 (1.5)	36 (1.3)	36 (1.3)	15 (5.5)	12 (4.5)	12 (4.8)	15 (3.0)
South Carolina	30 (1.6)	30 (1.4)	35 (2.1)	35 (2.0)	8 (1.1)	9 (1.0)	9 (1.3)	10 (1.2)
South Dakota	–	–	–	41 (1.4)	–	–	–	‡
Tennessee	31 (2.0)	32 (1.9)	33 (1.7)	32 (2.0)	6 (1.4)	7 (1.7)	11 (1.7)	9 (1.8)
Texas	38 (2.4)	38 (2.6)	47 (2.8)	39 (2.5)	12 (3.7)	12 (2.5)	15 (2.3)	14 (1.8)
Utah	32 (1.2)	32 (1.5)	35 (1.3)	35 (1.5)	‡	‡	‡	‡
Vermont	–	–	40 (1.5)	39 (1.2)	–	–	‡	‡
Virginia	41 (1.8)	42 (1.6)	46 (1.8)	44 (2.0)	13 (2.1)	13 (2.2)	15 (1.7)	15 (1.8)
Washington	35 (2.0)	35 (1.9)	40 (2.0)	36 (1.5)	14 (4.9) †	13 (4.7)	18 (4.2)	19 (3.5)
West Virginia	28 (1.2)	28 (1.1)	30 (1.6) *	25 (1.2)	11 (6.1)	11 (4.1)	10 (4.8)	13 (3.9)
Wisconsin	37 (2.2)	37 (1.8)	–	41 (1.9)	8 (3.0)	10 (4.4)	–	8 (2.4)
Wyoming	31 (1.7)	32 (1.6)	33 (1.2)	36 (1.3)	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	9 (1.2)	9 (1.1)	8 (0.9)	8 (0.8)
DDESS <sup>2</sup>	45 (3.8)	48 (5.5)	48 (4.1)	50 (3.7)	21 (6.0)	20 (7.6)	19 (3.9)	19 (3.6)
DoDDS <sup>3</sup>	45 (3.8)	45 (2.3)	48 (2.1)	46 (1.9)	24 (2.2)	22 (5.4)	24 (2.7)	22 (2.2)

See notes at end of table. ▶

**Table A.27 Percentage of students at or above *Proficient* and standard errors, by race/ethnicity, grade 8 public schools:  
By state, 1998–2003—Continued**

Grade 8	Hispanic				Asian/Pacific Islander			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998
<b>Nation (public)</b> <sup>1</sup>	14 (1.5)	13 (1.0)	14 (0.8)	14 (0.6)	32 (6.0)	30 (6.1)	34 (2.0)	38 (1.7)
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	–	–	–	17 (3.6)	–	–	–	23 (4.0)
Arizona	12 (1.8)	12 (2.0)	11 (1.6)	12 (2.0)	‡	‡	‡	‡
Arkansas	‡	‡	‡	25 (6.7)	‡	‡	‡	‡
California	8 (1.3)	8 (1.4)	10 (1.4)	11 (1.3)	24 (4.7)	25 (3.7)	25 (4.6)	37 (3.7)
Colorado	10 (1.9)	11 (2.2)	–	14 (2.4)	30 (6.6)	25 (7.2)	–	47 (7.0)
Connecticut	13 (3.1)	13 (4.5)	10 (2.2)	14 (3.2)	59 (7.6)	58 (8.4)	34 (5.0)	54 (7.7)
Delaware	18 (6.3)!	17 (5.9)	14 (2.7)	13 (2.9)	‡	‡	54 (5.4)	52 (6.8)
Florida	15 (3.0)	17 (3.3)	20 (3.5)	19 (1.9)	54 (7.0)	47 (7.6)	‡	‡
Georgia	‡	‡	14 (4.9)	16 (4.9)	‡	‡	27 (5.5)	39 (8.1)
Hawaii	‡	‡	16 (5.3)	28 (7.1)	16 (1.2)*	16 (1.3)	17 (1.3)	19 (0.9)
Idaho	–	–	17 (3.1)	12 (2.9)	–	–	‡	‡
Illinois	–	–	–	16 (2.2)	–	–	–	53 (5.2)
Indiana	–	–	‡	16 (4.6)	–	–	‡	‡
Iowa	–	–	–	13 (4.1)	–	–	–	‡
Kansas	15 (4.3)	11 (2.4)	23 (4.5)	17 (3.8)	‡	‡	‡	35 (4.9)
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	27 (6.6)	23 (6.3)	24 (5.0)!	20 (3.9)	53 (7.1)	55 (7.5)!	56 (6.8)	55 (4.9)
Massachusetts	12 (3.3)	12 (3.0)	16 (2.9)	14 (2.5)	35 (7.5)	40 (6.0)	37 (7.3)	52 (7.9)
Michigan	–	–	‡	27 (5.1)!	–	–	‡	‡
Minnesota	‡	‡	–	16 (5.8)	21 (7.4)	16 (4.3)	–	26 (5.0)
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	‡	‡	‡	‡	‡	‡	‡	‡
Nebraska	–	–	14 (4.0)	11 (3.0)	–	–	‡	‡
Nevada	10 (1.8)	9 (1.6)	8 (1.6)	8 (1.2)	21 (5.4)	24 (4.9)	24 (4.6)	25 (4.6)
New Hampshire	–	–	–	‡	–	–	–	‡
New Jersey	–	–	–	17 (2.3)	–	–	–	62 (3.6)
New Mexico	14 (1.6)	15 (1.5)	12 (1.2)	12 (1.0)	‡	‡	‡	‡
New York	12 (2.1)	10 (2.6)	15 (3.1)	18 (2.8)	43 (9.5)!	49 (8.4)!	36 (6.8)!	42 (5.2)
North Carolina	‡	‡	18 (6.4)	15 (2.9)	‡	‡	‡	30 (8.8)
North Dakota	–	–	‡	‡	–	–	‡	‡
Ohio	–	–	‡	37 (9.0)!	–	–	‡	‡
Oklahoma	10 (4.1)	16 (4.8)	14 (4.5)	17 (3.9)	‡	‡	‡	‡
Oregon	13 (4.0)	15 (3.6)	14 (4.1)	18 (3.1)	33 (6.9)	35 (7.4)	41 (5.3)	34 (9.1)
Pennsylvania	–	–	14 (3.6)!	24 (6.3)	–	–	27 (7.5)!	‡
Rhode Island	10 (2.9)	10 (3.2)	12 (2.1)	8 (1.5)	34 (6.2)	30 (6.9)	19 (4.3)	23 (5.9)
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	–	–	–	‡	–	–	–	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	14 (1.8)	14 (2.1)	17 (1.5)	14 (1.6)	45 (8.5)	43 (8.1)	39 (9.2)!	37 (7.0)!
Utah	23 (6.4)	20 (4.3)	9 (2.9)	13 (4.2)	‡	‡	22 (5.3)	28 (6.4)
Vermont	–	–	‡	‡	–	–	‡	‡
Virginia	24 (8.1)	28 (7.1)	23 (5.4)	31 (4.6)	43 (8.5)	38 (8.1)	50 (5.3)	40 (7.1)
Washington	12 (4.0)	11 (2.7)	20 (4.5)!	16 (4.1)	32 (4.6)	34 (4.0)	39 (7.1)	39 (3.6)
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	18 (4.0)!	19 (5.4)!	–	17 (6.0)	‡	‡	–	24 (6.2)
Wyoming	15 (3.9)	19 (4.3)	13 (3.4)	20 (3.9)	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	15 (7.2)	22 (6.8)	11 (3.4)	11 (3.2)	‡	‡	‡	‡
DDESS <sup>2</sup>	37 (6.5)	43 (6.3)	37 (5.0)	38 (4.3)	‡	‡	‡	‡
DoDDS <sup>3</sup>	26 (5.2)	27 (5.9)	29 (4.6)	35 (4.4)	29 (4.1)	34 (3.7)	37 (4.3)	38 (3.6)

See notes at end of table. ►



**Table A.27 Percentage of students at or above Proficient and standard errors, by race/ethnicity, grade 8 public schools:  
By state, 1998–2003—Continued**

Grade 8	American Indian/Alaska Native				Other <sup>4</sup>			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998
<b>Nation (public)</b> <sup>1</sup>	‡	‡	18 (2.2)	18 (1.6)	‡	‡	24 (4.1)	28 (3.5)
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	11 (1.5)	—	—	—	‡
Arizona	10 (4.1)	7 (2.4) !	12 (3.0) !	8 (2.5) !	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	—	‡	‡	‡	—	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡
Georgia	‡	‡	‡	‡	‡	‡	‡	‡
Hawaii	‡	‡	‡	‡	17 (2.9)	17 (2.9)	24 (3.4)	21 (3.5)
Idaho	—	—	‡	‡	—	—	‡	‡
Illinois	—	—	—	‡	—	—	—	‡
Indiana	—	—	‡	‡	—	—	‡	‡
Iowa	—	—	—	‡	—	—	—	‡
Kansas	‡	‡	‡	‡	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	—	—	‡	‡	—	—	‡	‡
Minnesota	‡	‡	—	‡	‡	‡	—	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	20 (6.2) !	20 (5.9) !	17 (3.9) !	13 (3.7)	‡	‡	‡	‡
Nebraska	—	—	‡	‡	—	—	‡	‡
Nevada	‡	‡	‡	‡	‡	‡	‡	‡
New Hampshire	—	—	—	‡	—	—	—	‡
New Jersey	—	—	—	‡	—	—	—	‡
New Mexico	10 (2.9)	11 (4.0)	9 (1.9)	11 (3.0)	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	21 (6.0) !	21 (6.4) !	‡	10 (7.0) !	‡	‡	‡	‡
North Dakota	—	—	19 (6.0) !	12 (3.7)	—	—	‡	‡
Ohio	—	—	‡	‡	—	—	‡	‡
Oklahoma	22 (3.8)	23 (3.7)	23 (2.6)	26 (2.8)	‡	‡	‡	31 (4.5) !
Oregon	‡	‡	‡	‡	‡	‡	‡	‡
Pennsylvania	—	—	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	15 (3.7)	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	‡	‡	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Washington	15 (5.3)	17 (7.3)	‡	18 (5.1)	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	—	‡	‡	‡	—	‡
Wyoming	13 (5.6) !	12 (4.5)	15 (4.1)	8 (2.8)	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	‡	‡	‡	‡	‡	‡	44 (6.8)	‡
DoDDS <sup>3</sup>	‡	‡	‡	‡	35 (4.4)	36 (3.8)	39 (3.0)	50 (5.6)

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.

‡ Reporting standards not met. Sample size was insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race based on school reports was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Standard errors of the estimated percentages appear in parentheses. State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

## Analyzing Group Differences in Averages and Percentages

Statistical tests determine whether, based on the data from the groups in the sample, there is strong evidence to conclude that the averages or percentages are actually different for those groups in the population. If the evidence is strong (i.e., the difference is statistically significant), the report describes the group averages or percentages as being different (e.g., one group performed higher or lower than another group), regardless of whether the sample averages or percentages appear to be approximately the same. The reader is cautioned to rely on the results of the statistical tests rather than on the apparent magnitude of the difference between sample averages or percentages when determining whether the sample differences are likely to represent actual differences among the groups in the population.

To determine whether a real difference exists between the average scale scores (or percentages of a certain attribute) for two groups in the population, one needs to obtain an estimate of the degree of uncertainty associated with the difference between the averages (or percentages) of these groups for the sample. This estimate of the degree of uncertainty, called the “standard error of the difference” between the groups, is obtained by taking the square of each group’s standard error, summing the squared standard errors, and taking the square root of that sum.

Standard Error of the Difference =

$$SE_{A-B} = \sqrt{(SE_A^2 + SE_B^2)}$$

The standard error of the difference can be used, just like the standard error for an individual group average or per-

centage, to help determine whether differences among groups in the population are real. The difference between the averages or percentages of the two groups plus or minus 1.96 standard errors of the difference represents an approximately 95 percent confidence interval. If the resulting interval includes zero, there is insufficient evidence to claim a real difference between the groups in the population. If the interval does not contain zero, the difference between the groups is statistically significant at the .05 level.

The following example of comparing groups addresses the problem of determining whether the average reading scale score of group A is higher than that of group B. The sample estimates of the average scale scores and estimated standard errors are as follows:

Group	Average Scale Score	Standard Error
A	218	0.9
B	216	1.1

The difference between the estimates of the average scale scores of groups A and B is two points (218–216). The estimated standard error of this difference is

$$\sqrt{(0.9^2 + 1.1^2)} = 1.4$$

Thus, an approximately 95 percent confidence interval for this difference is plus or minus 1.96 standard errors of the difference.

$$2 \pm 1.96 \times 1.4$$

$$2 \pm 2.7$$

$$(-0.7, 4.7)$$

The value zero is within the confidence interval; therefore, there is insufficient evidence to conclude that group A outperformed group B.

The procedure above is appropriate to use when it is reasonable to assume that the groups being compared have been independently sampled for the assessment. Such an assumption is clearly warranted when comparing results across assessment years (e.g., comparing the 2002 and 2003 results for a particular state or subgroup) or when comparing results for one state with another. This is the approach used for NAEP reports when comparisons involving independent groups are made. The assumption of independence is violated to some degree when comparing group results for the nation or a particular state (e.g., comparing national 2003 results for males and females), since these samples of students have been drawn from the same schools. When the groups being compared do not share students (as is the case, for example, in comparing males and females) the impact of this violation of the independence assumption on the outcome of the statistical tests is assumed to be small, and NAEP, by convention, has, for computational convenience, routinely applied the procedures described above to those cases as well.

When making comparisons of results for groups that share a considerable proportion of students in common, it is not appropriate to ignore such dependencies. In such cases, NAEP has used procedures appropriate to comparing dependent groups. When the dependence in group results is due to the overlap in samples (e.g., when a subgroup is being

compared to a total group), a simple modification of the usual standard error of the difference formula can be used. The formula for such cases is:

$$SE_{\text{Total-Subgroup}} = \sqrt{(SE_{\text{Total}}^2 + SE_{\text{Subgroup}}^2 - 2pSE_{\text{Subgroup}}^2)}$$

where  $p$  is the proportion of the total group contained in the subgroup.<sup>19</sup> This formula was used for this report when a state was compared to the aggregate nation or a school district was compared to the entire state it belongs to.

### Conducting Multiple Tests

The procedures used to determine whether group differences in the samples represent actual differences among the groups in the population and the certainty ascribed to intervals (e.g., a 95 percent confidence interval) are based on statistical theory that assumes that only one confidence interval or test of statistical significance is being performed. However, there are times when many different groups are being compared (i.e., multiple sets of confidence intervals are being analyzed). In sets of confidence intervals, statistical theory indicates that the certainty associated with the entire set of intervals is less than that attributable to each individual comparison from the set. To hold the significance level for the set of comparisons at a particular level (e.g., .05), standard methods must be adjusted by multiple comparison procedures.<sup>20</sup> One such procedure, the Benjamini-Hochberg False Discovery Rate (FDR) procedure was used to control the certainty level.<sup>21</sup>

<sup>19</sup> This is a special form of the common formula for standard error of dependent samples. The standard formula can be found, for example, in Kish, L. (1995). *Survey Sampling*. New York: John Wiley and Sons, Inc.

<sup>20</sup> Miller, R. G. (1981). *Simultaneous Statistical Inference* (2nd ed.). New York: Springer-Verlag.

<sup>21</sup> Benjamini, Y., and Hochberg, Y. (1995). Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing. *Journal of the Royal Statistical Society, Series B*, no. 1, 289–300.

Unlike other multiple comparison procedures that control the familywise error rate (i.e., the probability of making even one false rejection in the set of comparisons), the FDR procedure controls the expected proportion of falsely rejected hypotheses. Furthermore, the FDR procedure used in NAEP is considered appropriately less conservative than familywise procedures for large families of comparisons.<sup>22</sup> Therefore, the FDR procedure is more suitable for multiple comparisons in NAEP than other procedures. A detailed description of the FDR procedure will appear in the technical docu-

mentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

To illustrate how the FDR procedure is used, consider the comparisons of current and previous years' average scale scores for the five groups presented in table A.28. Note that the difference in average scale scores and the estimated standard error of the difference are calculated as the example in the previous section. The test statistic shown is the difference in average scale scores divided by the estimated standard error of the difference. (Rounding of the data occurs after the test is done.)

**Table A.28 Example of False Discovery Rate comparisons of average scale scores for different groups of students**

	Previous year		Current year		Previous year and current year			
	Average scale score	Standard error	Average scale score	Standard error	Differences in averages	Standard error of differences	Test statistic	Percent confidence <sup>1</sup>
<b>Group 1</b>	224	1.3	226	1.0	2.08	1.62	1.29	20
<b>Group 2</b>	187	1.7	193	1.7	6.31	2.36	2.68	1
<b>Group 3</b>	191	2.6	197	1.7	6.63	3.08	2.15	4
<b>Group 4</b>	229	4.4	232	4.6	3.24	6.35	0.51	62
<b>Group 5</b>	201	3.4	196	4.7	-5.51	5.81	-0.95	35

<sup>1</sup> The percent confidence is  $2(1-F(x))$  where  $F(x)$  is the cumulative distribution of the t-distribution with the degrees of freedom adjusted to reflect the complexities of the sample design.

The difference in average scale scores and its estimated standard error can be used to find an approximately 95 percent confidence interval, or they can be used to identify a confidence percentage. The confidence percentage for the test statistics is identified from statistical tables instead of checking to see if zero is within the 95 percent confidence interval about the mean. The significance level from the statistical tables can be directly compared to  $100 - 95 = 5$  percent.

If the comparison of average scale scores across two years was made for only one of the five groups, there would be a significant difference between the average scale scores for the two years at a significance level of less than 5 percent. However, because we are interested in the difference in average scale scores across the two years for all five of the groups, comparing each of the significance levels to 5 percent is not adequate. Groups of students defined by shared characteristics,

<sup>22</sup> Williams, V. S. L., Jones, L. V., and Tukey, J. W. (1999). Controlling Error in Multiple Comparisons with Examples From State-to-State Differences in Educational Achievement. *Journal of Educational and Behavioral Statistics*, 24(1), 42-69.

such as racial/ethnic groups, are treated as sets or families when making comparisons. However, comparisons of average scale scores for each pair of years were treated separately, so the steps described in this example would be replicated for the comparison of other current and previous year average scale scores.

Using the FDR procedure to take into account that all comparisons are of interest to us, the percents of confidence in the example are ordered from largest to smallest: 62, 35, 20, 4, and 1. In the FDR procedure, 62 percent confidence for the group 4 comparison would be compared to 5 percent, 35 percent for the group 5 comparison would be compared to  $0.05 \times (5-1)/5 = 0.04 = 4$  percent,<sup>23</sup> 20 percent for the group 1 comparison would be compared to  $0.05 \times (5-2)/5 = 0.03 = 3$  percent, 4 percent for the group 3 comparison would be compared to  $0.05 \times (5-3)/5 = 0.02 = 2$  percent, and 1 percent for the group 2 comparison (actually slightly smaller than 1 prior to rounding) would be compared to  $0.05 \times (5-4)/5 = 0.01 = 1$  percent. The procedure stops with the first contrast found to be significant. The last of these comparisons is the only one for which the percent confidence is smaller than the FDR procedure value. The difference between the current year's and previous years' average scale scores for the group 2 students is significant; for all of the other groups, average scale scores for current and previous year are not significantly different from one another. In practice, a very small number of counterintuitive results

occur when the FDR procedures are used to examine between-year differences in subgroup results by jurisdiction. In those cases, results were not included in this report.

### NAEP Reporting Groups

NAEP results are provided for groups of students defined by shared characteristics—gender, race/ethnicity, parental education, region of the country, type of school, school's type of location, and eligibility for free/reduced-price school lunch. Based on participation rate criteria, results are reported for subpopulations only when sufficient numbers of students and adequate school representation are present. The minimum requirement is at least 62 students in a particular subgroup from at least five primary sampling units (PSUs).<sup>24</sup> However, the data for all students, regardless of whether their subgroup was reported separately, were included in computing overall results. Definitions of the subpopulations are presented below.

**Gender:** Results are reported separately for males and females.

**Race/Ethnicity:** In all NAEP assessments, data about student race/ethnicity is collected from two sources: school records and student self-reports. Prior to 2002, NAEP used students' self-reported race as the primary race/ethnicity reporting variable. As of 2002, the race/ethnicity variable presented in NAEP reports is based on the race reported by the school. When school-recorded information is missing, student-reported data are used to determine race/ethnicity. The mutually

<sup>23</sup> The level of confidence times the number of comparisons minus one divided by the number of comparisons is  $0.05 \times (5-1)/5 = 0.04 = 4$  percent.

<sup>24</sup> For the NAEP national assessments prior to 2002, a PSU is a selected geographic region (a county, group of counties, or metropolitan statistical area). Since 2002, the first-stage sampling units are schools (public and nonpublic) in the selection of the combined sample. Further details about the procedure for determining minimum sample size will appear in the technical documentation section of the NAEP web site (<http://nces.ed.gov/nationsreportcard>).

exclusive racial/ethnic categories are White, Black, Hispanic, Asian/Pacific Islander, American Indian (including Alaska Native), and Other. Information based on student self-reported race/ethnicity is available on the NAEP Data Tool (<http://nces.ed.gov/nationsreportcard/naepdata/>).

**Parental Education:** Eighth-graders were asked the following two questions, the responses to which were combined to derive the parental education variable.

How far in school did your mother go?

- She did not finish high school.
- She graduated from high school.
- She had some education after high school.
- She graduated from college.
- I don't know.

Students were also asked

How far in school did your father go?

- He did not finish high school.
- He graduated from high school.
- He had some education after high school.
- He graduated from college.
- I don't know.

The information was combined into one parental-education reporting variable in the following way: If a student indicated the extent of education for only one parent, that level was included in the data. If a student indicated the extent of education for both parents, the higher of the two levels was included in the data. If a student responded "I don't know" for both parents, or responded "I don't know" for one parent and did not respond for the other, the parental education level was

classified as "I don't know." If the student did not respond for either parent, the student was recorded as having provided no response.

**Region of the Country:** Prior to 2003, NAEP results were reported for four NAEP-defined regions of the nation: Northeast, Southeast, Central, and West. As of 2003, to align NAEP with other federal data collections, NAEP analysis and reports have used Census Bureau definitions of region. The four Census-defined regions are: Northeast, South, Midwest, and West. The Midwest region defined by the Census includes the same states as the NAEP-defined Central region. The Northeast region defined by the Census is made up of the same states in the NAEP-defined Northeast region minus Delaware, the District of Columbia, Maryland, and the section of Virginia in the Washington, DC metropolitan area. The Census-defined West region includes the same states as the NAEP-defined West region except Oklahoma and Texas. The Census-defined South region includes all those states previously defined by NAEP as the Southeast region plus Delaware, the District of Columbia, Maryland, Oklahoma, Texas, and the section of Virginia in the Washington, DC metropolitan area. Due to this change in the region variable, no trend data for each region were provided in this report. Figure A.2 shows how states are subdivided into these census regions. All 50 states and the District of Columbia are listed. Other jurisdictions, including territories and the two Department of Defense Educational Activities jurisdictions, are not assigned to any region.



**Figure A.2 States within regions of the country defined by the U.S. Census Bureau**

<b>Northeast</b>	<b>South</b>	<b>Midwest</b>	<b>West</b>
Connecticut	Alabama	Illinois	Alaska
Maine	Arkansas	Indiana	Arizona
Massachusetts	Delaware	Iowa	California
New Hampshire	District of Columbia	Kansas	Colorado
New Jersey	Florida	Michigan	Hawaii
New York	Georgia	Minnesota	Idaho
Pennsylvania	Kentucky	Missouri	Montana
Rhode Island	Louisiana	Nebraska	Nevada
Vermont	Maryland	North Dakota	New Mexico
	Mississippi	Ohio	Oregon
	North Carolina	South Dakota	Utah
	Oklahoma	Wisconsin	Washington
	South Carolina		Wyoming
	Tennessee		
	Texas		
	Virginia		
	West Virginia		

SOURCE: U.S. Department of Commerce Economics and Statistics Administration.

**Type of School:** Results are reported by the type of school that the student attends—public or nonpublic. Nonpublic schools include Catholic and other private schools.<sup>25</sup> Because they are funded by federal authorities (not state/local governments), Bureau of Indian Affairs schools and Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS) are not included in either the public or nonpublic categories; they are included in the overall national results.

**Type of Location:** Results from the 2003 assessment are reported for students attending schools in three mutually exclusive location types: central city, urban fringe/large town, and rural/small town.

*Central city:* Following standard definitions established by the Federal Office of Management and Budget, the U.S. Census Bureau (see <http://www.census.gov/>) defines “central city” as the largest city of a Metropolitan Statistical Area (MSA) or a Consolidated Metropolitan Statistical Area (CMSA). Typically, an MSA contains a city

<sup>25</sup> A more detailed breakdown of nonpublic school results is available on the NAEP web site (<http://nces.ed.gov/nationsreportcard/naepdata>).

with a population of at least 50,000 and includes its adjacent areas. An MSA becomes a CMSA if it meets the requirements to qualify as a metropolitan statistical area, has a population of 1,000,000 or more, its component parts are recognized as primary metropolitan statistical areas, and local opinion favors the designation. In the NCES Common Core of Data (CCD) locale codes are assigned to schools. For the definition of central city used in this report, two locale codes of the survey are combined. The definition of each school's type of location is determined by the size of the place where the school is located and whether or not it is in an MSA or CMSA. School locale codes are assigned by the U.S. Census Bureau. For the definition of central city, NAEP reporting uses data from two CCD locale codes: large city (a central city of an MSA or CMSA with the city having a population greater than or equal to 25,000) and midsize city (a central city of an MSA or CMSA having a population less than 25,000). Central city is a geographical term and is not synonymous with "inner city."

*Urban fringe/large town:* The urban fringe category includes any incorporated place, census designated place, or nonplace territory within a CMSA or MSA of a large or mid-sized city and defined as urban by the U.S. Census Bureau, but which does not qualify as a central city. A large town is defined as a place outside a CMSA or MSA with a population greater than or equal to 25,000.

*Rural/small town:* Rural includes all places and areas with populations of less than 2,500 that are classified as rural by the U.S. Census Bureau. A small town is defined as a place outside a CMSA or MSA with a population of less than 25,000, but greater than or equal to 2,500.

Results for each type of location are only compared across years 2000 and after. This is due to new methods used by NCES to identify the type of location assigned to each school in the CCD. The new methods were put into place by NCES in order to improve the quality of the assignments, and they take into account more information about the exact physical location of the school. The variable was revised in NAEP beginning with the 2000 assessments.



**Eligibility for Free/Reduced-Price School Lunch:** As part of the Department of Agriculture’s National School Lunch Program, schools can receive cash subsidies and donated commodities in turn for offering free or reduced-price lunches to eligible children. Based on available school records, students were classified as either currently eligible for free/reduced-price school lunch or not eligible. Eligibility for the program is determined by a student’s family income in relation to the federally established poverty level. Free lunch qualification is set at 130 percent of the poverty level, and reduced-price lunch qualification is set at between 130 and 185 percent of the poverty level. Additional information on eligibility may be found on the Department of Agriculture web site (<http://www.fns.usda.gov/cnd/lunch/>). The classification applies only to the school year when the assessment was administered (i.e., the 2002–2003 school year) and is not based on eligibility in previous years. If school records were not available, the student was classified as “Information not available.” If the school did not participate in the program, all students in that school were classified as “Information not available.”

### **Cautions in Interpretations**

As previously stated, the NAEP reading scale makes it possible to examine relationships between students’ performance and various background factors measured by NAEP. However, a relationship that exists between achievement and another variable does not reveal its underlying cause, which may be influenced by a number of other variables. Similarly, the assessments do not reflect the influence of unmeasured variables. The results are most useful when they are considered in combination with other knowledge about the student population and the educational system, such as trends in instruction, changes in the school-age population, and societal demands and expectations.

A caution is also warranted for some small population group estimates. At times in this report, smaller population groups show very large increases or decreases across years in average scores. However, it is necessary to interpret such score gains with extreme caution. Another reason for caution is that the effects of exclusion-rate changes may be more marked for small subgroups than they are for the whole population. The standard errors are often quite large around the score estimates for small groups, which in turn means the standard error around the gain is also large.

# B

## Appendix B

### Subgroup Percentage Appendix

This appendix shows the weighted percentages of students by subgroups. There has been a shift in the racial/ethnic composition of the student population and students participating in NAEP. The percentage of Hispanic students increased from 7 percent in 1992 to 17 percent in 2003 at grade 4, and from 8 percent to 15 percent at grade 8. The percentage of White students decreased from 73 percent in 1992 to 60 percent in 2003 at grade 4, and from 72 percent to 63 percent at grade 8. The percentage of Black students, which has changed less over the years, is approximately 17 percent at grade 4 and 16 percent at grade 8.

**Table B.1 Weighted percentage of students, by region of the country, grades 4 and 8: 2003**

		2003	
<b>Grade 4</b>			
	Northeast		18
	Midwest		23
	South		35
	West		24
<b>Grade 8</b>			
	Northeast		18
	Midwest		23
	South		36
	West		23

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table B.2 Weighted percentage of students, by gender, grades 4 and 8: 1992–2003**

		Accommodations not permitted				Accommodations permitted			
		1992	1994	1998	2000	1998	2000	2002	2003
<b>Grade 4</b>									
	Male	51	51	50	50	50	50	51	51
	Female	49	49	50	50	50	50	49	49
<b>Grade 8</b>									
	Male	51	50	50	—	51	—	50	50
	Female	49	50	50	—	49	—	50	50

— Not available. Data were not collected at grade 8 in 2000.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

**Table B.3 Weighted percentage of students, by race/ethnicity, grades 4 and 8: 1992–2003**

	Accommodations not permitted				Accommodations permitted			
	1992	1994	1998	2000	1998	2000	2002	2003
<b>Grade 4</b>								
White	73	72	70	69	66	63	61	60
Black	17	17	16	16	15	17	17	17
Hispanic	7	7	10	11	14	14	16	17
Asian/Pacific Islander	2	3	3	3	4	4	4	4
American Indian/Alaska Native	1	1	1	1	1	1	1	1
Other <sup>1</sup>	#	#	#	#	1	1	1	1
<b>Grade 8</b>								
White	72	72	70	–	70	–	65	63
Black	16	16	15	–	15	–	15	16
Hispanic	8	8	11	–	11	–	14	15
Asian/Pacific Islander	3	3	3	–	3	–	4	4
American Indian/Alaska Native	1	1	#	–	#	–	1	1
Other <sup>1</sup>	1	#	#	–	#	–	1	1

– Not available. Data were not collected at grade 8 in 2000.

# The estimate rounds to zero.

<sup>1</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

**Table B.4 Weighted percentage of students, by eligibility for free/reduced-price school lunch, grades 4 and 8: 1998–2003**

	Accommodations not permitted		Accommodations permitted			
	1998	2000	1998	2000	2002	2003
<b>Grade 4</b>						
Eligible	35	34	38	38	40	40
Not eligible	54	51	51	48	47	50
Information not available	12	15	11	14	13	10
<b>Grade 8</b>						
Eligible	27	–	28	–	31	33
Not eligible	56	–	56	–	54	55
Information not available	17	–	17	–	15	11

– Not available. Data were not collected at grade 8 in 2000.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, and 2003 Reading Assessments.

**Table B.5 Weighted percentages of students, by eligibility for free/reduced-price school lunch and race/ethnicity, grades 4 and 8: 2003**

	Eligible	Not eligible	Not available
<b>Grade 4</b>			
White	23	66	12
Black	70	24	7
Hispanic	71	22	7
Asian/Pacific Islander	35	52	13
American Indian/Alaska Native	64	29	7
<b>Grade 8</b>			
White	19	69	13
Black	61	31	8
Hispanic	64	27	9
Asian/Pacific Islander	33	51	15
American Indian/Alaska Native	54	41	5

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table B.6 Weighted percentage of students, by student-reported parents' highest level of education, grade 8: 1992-2003**

	Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003
<b>Grade 8</b>						
Less than high school	8	7	7	7	7	7
Graduated high school	24	22	22	22	17	17
Some education after high school	19	20	18	18	19	18
Graduated college	41	43	44	44	48	48
Unknown	8	9	9	9	9	10

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table B.7 Weighted percentage of students, by type of school, grades 4 and 8: 1992–2003**

	Accommodations not permitted				Accommodations permitted			
	1992	1994	1998	2000	1998	2000	2002	2003
<b>Grade 4</b>								
Public	89	90	89	89	90	90	90	90
Nonpublic	11	10	11	11	10	10	10	10
Nonpublic: Catholic	8	7	7	6	6	6	6	5
Nonpublic: Other	4	4	4	5	4	5	5	5
<b>Grade 8</b>								
Public	89	89	89	–	89	–	91	91
Nonpublic	11	11	11	–	11	–	9	9
Nonpublic: Catholic	6	7	7	–	7	–	5	5
Nonpublic: Other	4	4	4	–	4	–	4	4

– Not available. Data were not collected at grade 8 in 2000.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments.

**Table B.8 Weighted percentages of students, by parents' highest level of education and type of school, grade 8: 2003**

	Less than high school	Graduated high school	Some education after high school	Graduated college	Unknown
<b>Grade 8</b>					
Public	7	18	18	46	11
Nonpublic	1	9	13	72	5

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table B.9 Weighted percentage of students, by type of location, grades 4 and 8: 2000–2003**

	Accommodations not permitted	Accommodations permitted		
	2000	2000	2002	2003
<b>Grade 4</b>				
Central city	32	33	30	31
Urban fringe/large town	45	45	42	41
Rural/small town	23	23	28	28
<b>Grade 8</b>				
Central city	–	–	29	29
Urban fringe/large town	–	–	42	41
Rural/small town	–	–	29	29

– Not available. Data were not collected at grade 8 in 2000.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000, 2002, and 2003 Reading Assessments.

**Table B.10 Weighted percentage of students, by gender, grade 4: By state, 1992–2003**

Grade 4	Male						Female					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b>	51	51	50	50	51	51	49	49	50	50	49	49
Alabama	52	51	51	51	49	52	48	49	49	49	51	48
Alaska	—	—	—	—	—	51	—	—	—	—	—	49
Arizona	48	50	49	49	51	50	52	50	51	51	49	50
Arkansas	50	50	50	51	53	50	50	50	50	49	47	50
California	49	51	48	47	53	50	51	49	52	53	47	50
Colorado	51	50	49	50	—	51	49	50	51	50	—	49
Connecticut	51	50	47	49	52	50	49	50	53	51	48	50
Delaware	50	49	51	51	49	49	50	51	49	49	51	51
Florida	51	49	50	50	50	51	49	51	50	50	50	49
Georgia	51	48	50	50	51	52	49	52	50	50	49	48
Hawaii	51	51	50	50	51	51	49	49	50	50	49	49
Idaho	50	—	—	—	53	51	50	—	—	—	47	49
Illinois	—	—	—	—	—	51	—	—	—	—	—	49
Indiana	50	49	—	—	50	49	50	51	—	—	50	51
Iowa	50	51	50	51	50	51	50	49	50	49	50	49
Kansas	—	—	53	53	50	52	—	—	47	47	50	48
Kentucky	53	51	50	50	52	49	47	49	50	50	48	51
Louisiana	50	49	49	50	51	52	50	51	51	50	49	48
Maine	48	50	51	52	53	51	52	50	49	48	47	49
Maryland	49	52	49	50	52	50	51	48	51	50	48	50
Massachusetts	50	50	48	48	51	53	50	50	52	52	49	47
Michigan	50	—	49	49	51	49	50	—	51	51	49	51
Minnesota	51	51	51	51	52	51	49	49	49	49	48	49
Mississippi	52	49	49	49	52	52	48	51	51	51	48	48
Missouri	50	51	52	51	50	50	50	49	48	49	50	50
Montana	—	51	50	51	51	51	—	49	50	49	49	49
Nebraska	52	51	—	—	50	49	48	49	—	—	50	51
Nevada	—	—	50	50	51	50	—	—	50	50	49	50
New Hampshire	51	50	51	51	—	50	49	50	49	49	—	50
New Jersey	50	49	—	—	—	51	50	51	—	—	—	49
New Mexico	50	48	49	50	50	51	50	52	51	50	50	49
New York	52	50	49	48	48	50	48	50	51	52	52	50
North Carolina	51	51	49	50	49	50	49	49	51	50	51	50
North Dakota	51	50	—	—	52	51	49	50	—	—	48	49
Ohio	50	—	—	—	50	50	50	—	—	—	50	50
Oklahoma	49	—	50	50	51	49	51	—	50	50	49	51
Oregon	—	—	49	49	50	51	—	—	51	51	50	49
Pennsylvania	48	50	—	—	53	51	52	50	—	—	47	49
Rhode Island	51	49	53	53	51	51	49	51	47	47	49	49
South Carolina	48	51	48	49	51	50	52	49	52	51	49	50
South Dakota	—	—	—	—	—	51	—	—	—	—	—	49
Tennessee	50	49	50	50	52	52	50	51	50	50	48	48
Texas	52	50	50	51	48	51	48	50	50	49	52	49
Utah	48	50	52	52	51	51	52	50	48	48	49	49
Vermont	—	—	—	—	51	51	—	—	—	—	49	49
Virginia	51	50	50	50	51	51	49	50	50	50	49	49
Washington	—	52	51	51	50	50	—	48	49	49	50	50
West Virginia	51	51	48	48	49	51	49	49	52	52	51	49
Wisconsin	50	49	50	51	—	51	50	51	50	49	—	49
Wyoming	51	51	51	52	52	51	49	49	49	48	48	49
<b>Other jurisdictions</b>												
District of Columbia	50	50	48	48	49	49	50	50	52	52	51	51
DDESS <sup>1</sup>	—	—	49	49	51	51	—	—	51	51	49	49
DoDDS <sup>2</sup>	—	50	50	50	51	51	—	50	50	50	49	49

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table B.11 Weighted percentage of students, by gender, grade 8: By state, 1998–2003**

Grade 8	Male				Female			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b>	51	51	50	50	49	49	50	50
Alabama	50	50	51	50	50	50	49	50
Alaska	–	–	–	51	–	–	–	49
Arizona	50	51	51	51	50	49	49	49
Arkansas	51	52	50	51	49	48	50	49
California	50	51	52	51	50	49	48	49
Colorado	52	52	–	51	48	48	–	49
Connecticut	51	53	50	50	49	47	50	50
Delaware	50	50	51	52	50	50	49	48
Florida	49	49	48	49	51	51	52	51
Georgia	51	51	50	50	49	49	50	50
Hawaii	50	51	50	51	50	49	50	49
Idaho	–	–	48	50	–	–	52	50
Illinois	–	–	–	49	–	–	–	51
Indiana	–	–	52	49	–	–	48	51
Iowa	–	–	–	49	–	–	–	51
Kansas	50	51	50	50	50	49	50	50
Kentucky	51	52	50	50	49	48	50	50
Louisiana	49	50	49	48	51	50	51	52
Maine	50	50	50	51	50	50	50	49
Maryland	51	51	50	51	49	49	50	49
Massachusetts	51	51	48	50	49	49	52	50
Michigan	–	–	49	50	–	–	51	50
Minnesota	51	52	–	51	49	48	–	49
Mississippi	49	48	48	49	51	52	52	51
Missouri	52	52	49	49	48	48	51	51
Montana	48	48	52	50	52	52	48	50
Nebraska	–	–	53	49	–	–	47	51
Nevada	52	52	51	49	48	48	49	51
New Hampshire	–	–	–	49	–	–	–	51
New Jersey	–	–	–	51	–	–	–	49
New Mexico	49	48	52	50	51	52	48	50
New York	49	50	51	48	51	50	49	52
North Carolina	48	49	49	50	52	51	51	50
North Dakota	–	–	52	50	–	–	48	50
Ohio	–	–	51	48	–	–	49	52
Oklahoma	50	49	50	49	50	51	50	51
Oregon	51	51	49	51	49	49	51	49
Pennsylvania	–	–	50	50	–	–	50	50
Rhode Island	50	50	49	51	50	50	51	49
South Carolina	48	48	49	48	52	52	51	52
South Dakota	–	–	–	49	–	–	–	51
Tennessee	49	49	51	52	51	51	49	48
Texas	50	50	49	52	50	50	51	48
Utah	51	51	50	49	49	49	50	51
Vermont	–	–	50	50	–	–	50	50
Virginia	50	50	50	49	50	50	50	51
Washington	51	52	49	51	49	48	51	49
West Virginia	50	50	49	50	50	50	51	50
Wisconsin	50	51	–	52	50	49	–	48
Wyoming	52	52	51	53	48	48	49	47
<b>Other jurisdictions</b>								
District of Columbia	48	47	47	48	52	53	53	52
DDESS <sup>1</sup>	52	54	49	51	48	46	51	49
DoDDS <sup>2</sup>	51	51	50	51	49	49	50	49

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.



**Table B.12 Weighted percentage of students, by race/ethnicity, grade 4: By state, 1992–2003**

Grade 4	Nation (public)	White						Black					
		Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
		1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
Alabama	65	66	65	65	60	60	33	32	33	33	37	37	
Alaska	—	—	—	—	—	54	—	—	—	—	—	5	
Arizona	61	63	59	60	51	50	5	4	5	5	6	5	
Arkansas	75	76	74	75	70	69	23	23	23	23	24	25	
California	51	48	47	46	34	34	8	7	9	9	7	8	
Colorado	74	74	74	75	—	67	5	5	7	7	—	5	
Connecticut	76	74	75	76	71	69	12	13	12	12	13	14	
Delaware	68	68	64	62	58	56	27	28	29	31	33	33	
Florida	63	61	55	56	49	51	24	24	27	27	25	23	
Georgia	60	60	54	55	53	51	37	35	41	40	37	38	
Hawaii	23	22	18	19	18	16	3	3	3	3	3	2	
Idaho	92	—	—	—	84	84	#	—	—	—	1	1	
Illinois	—	—	—	—	—	60	—	—	—	—	—	21	
Indiana	87	86	—	—	80	80	11	11	—	—	12	12	
Iowa	93	94	91	91	88	87	3	3	4	4	5	5	
Kansas	—	—	80	79	77	78	—	—	11	11	8	10	
Kentucky	90	88	87	88	86	85	10	11	10	10	11	12	
Louisiana	54	53	52	52	47	44	44	43	45	44	49	53	
Maine	98	98	96	97	96	95	#	1	1	1	2	2	
Maryland	63	61	55	55	52	52	31	34	35	35	36	37	
Massachusetts	84	81	82	82	78	74	8	8	6	6	9	10	
Michigan	80	—	78	78	72	71	15	—	17	17	21	21	
Minnesota	92	91	87	86	81	81	3	3	6	6	6	8	
Mississippi	42	49	53	53	47	45	57	50	46	46	51	53	
Missouri	83	81	80	80	80	78	15	16	16	16	17	18	
Montana	—	88	89	89	85	85	—	1	1	1	1	1	
Nebraska	89	89	—	—	82	81	6	4	—	—	6	6	
Nevada	—	—	66	65	54	54	—	—	10	10	10	10	
New Hampshire	97	97	96	96	—	94	1	1	1	1	—	2	
New Jersey	69	64	—	—	—	58	16	17	—	—	—	18	
New Mexico	47	41	40	39	37	32	3	3	3	3	2	3	
New York	63	58	61	62	55	52	15	23	18	17	20	20	
North Carolina	66	68	65	65	58	58	30	28	29	29	33	29	
North Dakota	96	92	—	—	87	88	#	1	—	—	1	1	
Ohio	85	—	—	—	75	78	12	—	—	—	21	17	
Oklahoma	78	—	70	70	62	61	8	—	9	9	11	11	
Oregon	—	—	83	81	78	76	—	—	3	3	3	3	
Pennsylvania	82	80	—	—	76	74	13	16	—	—	17	19	
Rhode Island	82	83	78	79	75	69	6	6	7	7	8	9	
South Carolina	57	57	57	56	55	55	41	41	41	41	42	40	
South Dakota	—	—	—	—	—	84	—	—	—	—	—	1	
Tennessee	75	77	71	72	73	71	23	21	26	25	23	25	
Texas	50	53	50	50	37	41	14	13	17	17	17	14	
Utah	93	91	86	86	86	83	#	1	1	1	1	2	
Vermont	—	—	—	—	95	95	—	—	—	—	2	2	
Virginia	71	62	65	65	63	62	25	31	27	27	26	27	
Washington	—	79	78	79	76	70	—	5	5	4	6	7	
West Virginia	96	96	95	95	95	95	2	3	4	4	4	4	
Wisconsin	87	87	83	82	—	79	7	5	10	10	—	9	
Wyoming	90	90	87	88	83	86	1	1	1	1	2	1	
<b>Other jurisdictions</b>													
District of Columbia	5	5	5	6	3	5	91	90	84	84	88	85	
DDESS <sup>1</sup>	—	—	47	48	39	47	—	—	29	29	26	27	
DoDDS <sup>2</sup>	—	51	47	47	47	49	—	20	19	18	16	21	

See notes at end of table. ►

**Table B.12 Weighted percentage of students, by race/ethnicity, grade 4: By state, 1992–2003—Continued**

Grade 4	Hispanic						Asian/Pacific Islander					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b>	7	7	10	14	17	18	2	3	2	4	4	4
Alabama	#	#	1	1	1	1	#	1	1	1	1	1
Alaska	—	—	—	—	—	4	—	—	—	—	—	8
Arizona	23	25	29	28	34	36	1	3	2	2	2	2
Arkansas	#	1	2	2	4	4	1	1	#	#	1	1
California	28	30	29	29	47	47	12	14	13	13	10	10
Colorado	17	16	15	15	—	23	2	4	3	2	—	3
Connecticut	10	10	9	8	12	14	2	3	2	2	3	3
Delaware	3	2	3	5	6	8	2	2	2	1	3	3
Florida	11	14	15	15	22	21	2	1	1	1	2	2
Georgia	1	2	2	2	5	6	1	2	2	2	2	2
Hawaii	3	3	2	2	3	3	62	59	64	63	63	67
Idaho	6	—	—	—	11	13	1	—	—	—	2	1
Illinois	—	—	—	—	—	16	—	—	—	—	—	2
Indiana	1	2	—	—	4	5	#	1	—	—	1	1
Iowa	2	2	2	2	4	5	2	1	2	2	2	2
Kansas	—	—	6	7	11	8	—	—	1	2	2	2
Kentucky	#	1	#	#	1	1	#	1	#	#	1	1
Louisiana	1	2	1	1	2	1	1	2	1	2	1	1
Maine	#	#	#	#	1	1	1	1	1	1	1	1
Maryland	2	2	4	4	5	5	3	3	5	5	5	5
Massachusetts	4	6	7	7	8	11	4	4	4	3	4	4
Michigan	2	—	3	3	4	5	2	—	2	2	1	2
Minnesota	1	1	2	2	4	4	3	3	3	4	4	6
Mississippi	#	#	#	#	1	1	#	1	#	#	1	1
Missouri	1	1	2	2	2	3	1	1	2	1	1	1
Montana	—	1	1	1	2	2	—	1	1	1	1	1
Nebraska	3	4	—	—	8	9	1	2	—	—	1	1
Nevada	—	—	17	17	27	28	—	—	5	6	7	6
New Hampshire	1	1	1	1	—	2	1	1	2	2	—	1
New Jersey	11	12	—	—	—	16	4	6	—	—	—	7
New Mexico	44	43	43	44	47	51	1	2	2	2	1	2
New York	16	14	15	15	19	21	4	3	5	5	4	5
North Carolina	1	1	3	3	5	6	1	1	1	2	2	2
North Dakota	#	1	—	—	1	2	#	1	—	—	1	1
Ohio	1	—	—	—	2	2	1	—	—	—	1	1
Oklahoma	3	—	6	5	7	7	1	—	1	1	1	1
Oregon	—	—	7	9	11	14	—	—	5	4	4	4
Pennsylvania	3	2	—	—	4	4	1	2	—	—	2	1
Rhode Island	7	6	9	9	13	18	4	3	3	3	3	4
South Carolina	#	1	1	1	2	3	1	1	1	1	1	1
South Dakota	—	—	—	—	—	2	—	—	—	—	—	1
Tennessee	1	1	1	1	3	2	1	#	1	1	1	1
Texas	33	31	29	31	43	42	2	2	3	2	3	3
Utah	3	4	7	8	9	11	2	3	3	3	3	3
Vermont	—	—	—	—	1	1	—	—	—	—	1	2
Virginia	1	3	4	3	4	5	2	4	3	3	4	4
Washington	—	6	6	6	7	12	—	7	7	7	7	8
West Virginia	#	#	#	#	#	#	1	1	#	1	#	1
Wisconsin	3	4	3	4	—	6	2	3	2	2	—	3
Wyoming	6	6	7	7	9	8	1	1	1	1	1	1
<b>Other jurisdictions</b>												
District of Columbia	3	4	8	8	7	9	1	1	2	2	1	1
DDESS <sup>1</sup>	—	—	13	13	14	18	—	—	2	2	3	3
DoDDS <sup>2</sup>	—	10	6	6	7	12	—	9	9	9	7	10

See notes at end of table. ►

**Table B.12 Weighted percentage of students, by race/ethnicity, grade 4: By state, 1992–2003—Continued**

Grade 4	American Indian/Alaska Native						Other <sup>3</sup>					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b>	1	1	1	1	1	1	#	#	#	#	1	1
Alabama	1	1	1	1	1	1	#	#	#	#	#	#
Alaska	—	—	—	—	—	28	—	—	—	—	—	1
Arizona	9	6	5	6	6	7	#	#	#	#	#	#
Arkansas	#	#	1	#	#	1	#	#	#	#	#	#
California	1	#	1	1	1	#	1	#	1	2	#	#
Colorado	1	1	1	1	—	1	1	#	#	#	—	#
Connecticut	#	#	1	1	#	#	#	1	1	1	#	1
Delaware	#	#	#	#	#	#	#	#	#	#	#	#
Florida	#	#	#	#	#	#	#	#	#	#	2	2
Georgia	#	#	#	#	#	#	1	1	1	1	1	2
Hawaii	#	1	#	#	#	#	8	12	12	13	12	11
Idaho	1	—	—	—	3	2	#	—	—	—	#	#
Illinois	—	—	—	—	—	#	—	—	—	—	—	#
Indiana	#	#	—	—	1	#	#	#	—	—	2	2
Iowa	#	#	#	#	1	1	#	#	#	#	#	#
Kansas	—	—	1	1	1	1	—	—	#	#	#	#
Kentucky	#	#	#	#	#	#	#	#	1	1	1	2
Louisiana	#	#	1	1	1	1	#	#	#	#	#	#
Maine	#	#	1	#	#	1	#	#	#	#	#	#
Maryland	#	#	#	#	1	#	#	#	#	#	#	#
Massachusetts	#	#	#	#	#	#	#	1	#	1	1	#
Michigan	1	—	#	#	2	1	#	—	#	#	1	1
Minnesota	1	2	2	2	4	1	#	#	#	#	1	#
Mississippi	#	#	#	#	#	#	#	#	#	#	#	#
Missouri	#	#	#	#	#	#	#	#	#	#	#	1
Montana	—	9	8	8	11	11	—	#	#	#	#	#
Nebraska	1	1	—	—	3	2	#	#	—	—	#	1
Nevada	—	—	2	2	2	2	—	—	#	#	#	#
New Hampshire	#	#	#	#	—	#	1	#	#	#	—	#
New Jersey	#	#	—	—	—	#	#	1	—	—	—	#
New Mexico	4	10	11	11	13	13	1	1	1	1	1	1
New York	#	1	#	#	#	1	1	1	1	1	1	#
North Carolina	2	2	1	1	1	2	#	#	1	1	2	2
North Dakota	3	4	—	—	9	9	#	#	—	—	#	#
Ohio	#	—	—	—	#	#	#	—	—	—	1	2
Oklahoma	9	—	14	14	17	18	1	—	1	1	3	2
Oregon	—	—	2	2	2	2	—	—	1	1	2	1
Pennsylvania	#	#	—	—	#	#	#	#	—	—	#	#
Rhode Island	#	1	1	1	#	#	1	1	1	1	#	#
South Carolina	#	#	#	#	#	#	#	#	#	#	#	#
South Dakota	—	—	—	—	—	12	—	—	—	—	—	#
Tennessee	#	#	1	#	#	#	#	#	#	#	#	#
Texas	#	#	1	1	1	1	1	#	#	#	#	#
Utah	1	1	2	1	1	1	#	#	1	1	#	#
Vermont	—	—	—	—	#	1	—	—	—	—	1	#
Virginia	#	#	1	1	1	1	#	#	#	#	2	1
Washington	—	2	3	3	3	3	—	1	1	1	#	1
West Virginia	#	#	#	#	#	#	#	#	1	1	#	#
Wisconsin	1	1	1	1	—	2	#	#	#	#	—	#
Wyoming	2	2	3	3	4	4	#	#	#	#	1	#
<b>Other jurisdictions</b>												
District of Columbia	#	#	#	#	#	#	#	#	1	1	#	#
DDESS <sup>1</sup>	—	—	1	1	1	1	—	—	8	8	18	4
DoDDS <sup>2</sup>	—	1	1	1	1	1	—	8	18	19	22	8

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

<sup>3</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table B.13 Weighted percentage of students, by race/ethnicity, grade 8: By state, 1998–2003**

Grade 8	Weighted percentage of students, by race/ethnicity, grade 8: By state, 1998–2003							
	Accommodations not permitted	White			Accommodations not permitted	Black		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b>	68	68	64	61	15	16	15	17
Alabama	64	63	61	63	33	34	37	35
Alaska	–	–	–	58	–	–	–	4
Arizona	61	62	56	51	4	4	4	5
Arkansas	76	75	75	73	22	22	21	22
California	42	40	35	35	8	9	7	9
Colorado	72	73	–	70	5	4	–	6
Connecticut	76	77	70	71	12	12	13	14
Delaware	65	64	63	63	28	30	29	27
Florida	57	57	58	51	27	27	21	27
Georgia	58	58	54	54	36	36	38	39
Hawaii	19	19	16	15	2	2	2	2
Idaho	–	–	89	87	–	–	1	#
Illinois	–	–	–	63	–	–	–	20
Indiana	–	–	86	82	–	–	10	12
Iowa	–	–	–	91	–	–	–	3
Kansas	84	83	82	80	8	8	8	9
Kentucky	89	89	90	87	10	9	8	10
Louisiana	58	58	55	49	41	41	41	46
Maine	97	97	96	96	1	1	1	2
Maryland	59	59	55	58	32	33	35	32
Massachusetts	79	79	73	78	7	7	9	8
Michigan	–	–	77	70	–	–	18	24
Minnesota	87	85	–	83	3	4	–	6
Mississippi	51	51	53	49	47	48	45	49
Missouri	85	85	81	82	13	13	16	15
Montana	91	90	87	87	#	#	#	#
Nebraska	–	–	86	84	–	–	6	5
Nevada	68	68	60	56	8	8	10	11
New Hampshire	–	–	–	94	–	–	–	2
New Jersey	–	–	–	60	–	–	–	20
New Mexico	42	42	38	34	3	3	2	3
New York	61	60	57	55	18	19	20	21
North Carolina	65	64	64	60	28	29	29	31
North Dakota	–	–	94	90	–	–	1	1
Ohio	–	–	81	78	–	–	15	18
Oklahoma	72	72	62	64	9	9	10	9
Oregon	85	86	82	80	3	3	2	3
Pennsylvania	–	–	81	80	–	–	13	15
Rhode Island	83	82	76	75	6	7	7	8
South Carolina	58	58	56	54	40	40	41	43
South Dakota	–	–	–	88	–	–	–	1
Tennessee	76	76	77	73	22	22	21	24
Texas	50	50	44	44	13	12	12	15
Utah	90	90	86	86	1	1	1	1
Vermont	–	–	96	96	–	–	1	1
Virginia	67	66	66	65	26	27	25	27
Washington	80	79	78	74	3	4	4	6
West Virginia	96	95	95	94	3	3	4	5
Wisconsin	84	85	–	84	9	9	–	9
Wyoming	89	89	88	88	1	1	1	2
<b>Other jurisdictions</b>								
District of Columbia	3	3	3	3	87	90	88	88
DDESS <sup>1</sup>	42	42	41	40	27	30	25	25
DoDDS <sup>2</sup>	48	48	47	51	19	19	17	19

See notes at end of table. ►

**Table B.13 Weighted percentage of students, by race/ethnicity, grade 8: By state, 1998–2003—Continued**

Grade 8 Nation (public)	Hispanic				Asian/Pacific Islander			
	Accommodations not permitted 1998	Accommodations permitted			Accommodations not permitted 1998	Accommodations permitted		
		1998	2002	2003		1998	2002	2003
Alabama	1	1	1	1	1	#	1	1
Alaska	—	—	—	4	—	—	—	6
Arizona	26	26	31	36	2	2	2	2
Arkansas	2	2	2	3	1	1	1	1
California	37	37	45	41	11	11	12	13
Colorado	18	19	—	20	3	3	—	4
Connecticut	8	8	12	11	3	3	4	3
Delaware	4	3	5	6	2	2	2	3
Florida	13	13	17	19	2	3	2	2
Georgia	3	2	4	4	2	3	3	2
Hawaii	2	2	3	2	66	66	68	70
Idaho	—	—	8	10	—	—	1	1
Illinois	—	—	—	14	—	—	—	3
Indiana	—	—	2	3	—	—	1	1
Iowa	—	—	—	4	—	—	—	2
Kansas	5	6	7	7	2	2	2	3
Kentucky	#	#	#	1	1	1	1	1
Louisiana	1	1	2	2	1	1	1	1
Maine	#	#	#	1	1	1	1	1
Maryland	4	3	6	6	4	4	5	4
Massachusetts	9	9	11	9	5	4	5	4
Michigan	—	—	2	3	—	—	2	2
Minnesota	2	2	—	3	4	6	—	5
Mississippi	#	#	1	1	1	1	1	1
Missouri	1	1	2	1	1	1	1	1
Montana	1	2	2	2	1	1	1	1
Nebraska	—	—	6	7	—	—	2	1
Nevada	17	18	22	25	4	4	7	6
New Hampshire	—	—	—	2	—	—	—	1
New Jersey	—	—	—	14	—	—	—	6
New Mexico	45	44	45	52	1	1	1	1
New York	15	15	17	17	4	4	6	7
North Carolina	2	1	3	4	1	1	1	2
North Dakota	—	—	1	1	—	—	1	1
Ohio	—	—	2	2	—	—	1	1
Oklahoma	4	4	7	6	1	1	2	2
Oregon	6	6	8	9	4	4	5	4
Pennsylvania	—	—	3	3	—	—	3	1
Rhode Island	8	7	13	13	3	3	4	3
South Carolina	1	1	1	2	1	1	1	1
South Dakota	—	—	—	1	—	—	—	1
Tennessee	1	1	1	2	1	1	1	1
Texas	32	33	40	37	3	3	4	3
Utah	5	5	8	9	3	2	3	2
Vermont	—	—	#	1	—	—	2	1
Virginia	3	3	4	4	3	3	4	3
Washington	7	7	6	9	7	6	9	8
West Virginia	#	#	#	#	#	1	1	#
Wisconsin	3	3	—	3	2	2	—	3
Wyoming	6	6	6	6	1	1	1	1
<b>Other jurisdictions</b>								
District of Columbia	8	6	7	8	2	1	2	1
DDESS <sup>1</sup>	23	20	19	23	1	1	4	7
DoDDS <sup>2</sup>	7	7	7	10	9	9	9	10

See notes at end of table. ►

**Table B.13 Weighted percentage of students, by race/ethnicity, grade 8: By state, 1998–2003—Continued**

Grade 8 Nation (public)	American Indian/Alaska Native				Other <sup>3</sup>			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003	1998	1998	2002	2003
	#	#	1	1	#	#	1	1
Alabama	#	#	#	1	#	#	#	#
Alaska	—	—	—	26	—	—	—	2
Arizona	6	6	6	6	#	#	#	#
Arkansas	#	#	1	1	#	#	#	#
California	1	2	1	1	1	1	1	1
Colorado	1	1	—	1	#	#	—	#
Connecticut	#	#	1	#	1	1	1	#
Delaware	#	#	#	#	#	#	#	#
Florida	#	#	#	#	#	#	1	1
Georgia	#	#	#	#	1	1	1	1
Hawaii	#	#	#	#	10	11	11	11
Idaho	—	—	2	1	—	—	#	#
Illinois	—	—	—	#	—	—	—	#
Indiana	—	—	#	#	—	—	1	2
Iowa	—	—	—	#	—	—	—	#
Kansas	1	1	1	1	#	#	#	#
Kentucky	#	#	#	#	#	1	1	1
Louisiana	#	#	1	1	#	#	#	#
Maine	1	1	#	#	#	#	#	#
Maryland	#	#	#	#	#	#	#	#
Massachusetts	#	#	#	#	#	#	1	#
Michigan	—	—	1	2	—	—	#	#
Minnesota	2	3	—	2	#	#	—	#
Mississippi	#	#	#	#	#	#	#	#
Missouri	#	#	#	#	#	#	#	#
Montana	6	6	9	10	1	1	#	#
Nebraska	—	—	1	2	—	—	#	#
Nevada	2	2	2	2	#	#	#	#
New Hampshire	—	—	—	#	—	—	—	#
New Jersey	—	—	—	#	—	—	—	#
New Mexico	8	8	13	9	1	1	1	1
New York	#	#	#	1	1	1	#	#
North Carolina	4	3	1	2	1	1	1	1
North Dakota	—	—	4	7	—	—	#	1
Ohio	—	—	#	#	—	—	1	1
Oklahoma	13	13	18	16	1	1	1	2
Oregon	1	1	2	2	1	1	1	1
Pennsylvania	—	—	#	#	—	—	#	#
Rhode Island	#	#	#	#	#	#	#	#
South Carolina	#	#	#	#	#	#	#	#
South Dakota	—	—	—	9	—	—	—	#
Tennessee	#	#	#	#	#	#	#	#
Texas	1	2	#	#	#	#	#	#
Utah	2	2	2	2	#	#	#	#
Vermont	—	—	1	1	—	—	#	#
Virginia	1	#	1	#	#	#	1	1
Washington	3	3	2	3	#	#	#	1
West Virginia	#	#	#	#	#	#	#	#
Wisconsin	1	1	—	1	#	#	—	#
Wyoming	3	4	3	3	#	#	#	#
<b>Other jurisdictions</b>								
District of Columbia	#	#	#	#	#	#	#	#
DDESS <sup>1</sup>	1	1	1	#	7	6	10	5
DoDDS <sup>2</sup>	1	1	1	1	17	16	19	9

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

<sup>3</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table B.14 Weighted percentage of students, by eligibility for free/reduced-price school lunch, grade 4: By state, 1998–2003**

Grade 4	Eligible												Not eligible			Information not available		
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted								
		1998	1998	2002		2003	1998	1998		2002	2003	1998	1998	2002	2003			
<b>Nation (public)</b>	38	41	43	44	54	51	50	52	7	7	7	4						
Alabama	49	48	55	54	48	49	32	45	3	3	13	#						
Alaska	–	–	–	34	–	–	–	59	–	–	–	6						
Arizona	41	39	45	47	45	45	37	43	14	16	18	11						
Arkansas	47	47	55	53	49	49	42	43	4	4	3	3						
California	42	44	46	50	43	43	37	45	15	13	16	4						
Colorado	27	27	–	30	71	70	–	69	2	2	–	1						
Connecticut	24	23	28	30	66	66	66	67	10	11	6	4						
Delaware	36	39	38	38	62	60	59	54	2	1	2	8						
Florida	48	47	56	48	47	49	42	50	4	4	2	2						
Georgia	49	48	46	47	44	45	51	46	6	7	3	7						
Hawaii	46	46	47	48	53	53	51	51	1	1	1	#						
Idaho	–	–	45	42	–	–	47	52	–	–	9	6						
Illinois	–	–	–	42	–	–	–	54	–	–	–	4						
Indiana	–	–	35	35	–	–	58	63	–	–	7	2						
Iowa	27	28	31	32	69	69	69	67	3	3	#	1						
Kansas	34	34	42	41	62	61	58	58	4	5	#	#						
Kentucky	47	46	49	50	52	53	49	47	1	1	2	2						
Louisiana	61	61	59	63	34	34	32	33	5	5	9	4						
Maine	35	35	33	33	63	63	61	65	2	2	6	2						
Maryland	33	33	39	34	65	64	58	61	2	3	3	4						
Massachusetts	27	26	27	29	68	69	67	62	5	5	6	9						
Michigan	34	33	38	36	61	62	57	63	6	5	5	1						
Minnesota	27	28	29	29	69	68	58	71	3	4	13	#						
Mississippi	64	63	64	66	36	36	26	28	1	1	10	5						
Missouri	37	38	42	39	60	60	55	56	3	3	3	5						
Montana	34	34	40	36	56	56	55	58	10	10	5	5						
Nebraska	–	–	38	34	–	–	58	59	–	–	4	7						
Nevada	34	33	38	41	62	62	56	54	5	5	6	6						
New Hampshire	18	17	–	17	72	74	–	73	10	9	–	10						
New Jersey	–	–	–	30	–	–	–	62	–	–	–	8						
New Mexico	56	56	55	67	31	31	31	26	13	13	15	8						
New York	45	45	45	52	52	52	50	45	3	3	6	3						
North Carolina	41	41	47	42	54	54	49	52	5	5	4	6						
North Dakota	–	–	32	33	–	–	66	66	–	–	3	1						
Ohio	–	–	33	35	–	–	60	57	–	–	7	8						
Oklahoma	48	47	52	55	47	48	45	42	5	5	3	3						
Oregon	36	36	35	35	57	57	51	63	7	8	14	2						
Pennsylvania	–	–	35	38	–	–	63	60	–	–	3	3						
Rhode Island	37	35	33	39	63	65	54	54	#	#	12	7						
South Carolina	46	47	52	52	53	52	43	47	1	1	5	#						
South Dakota	–	–	–	37	–	–	–	62	–	–	–	1						
Tennessee	44	43	45	41	53	53	50	54	3	4	4	5						
Texas	45	47	56	54	50	50	39	43	5	4	5	2						
Utah	32	32	32	33	51	51	63	66	17	17	5	1						
Vermont	–	–	29	29	–	–	67	69	–	–	5	3						
Virginia	31	31	33	31	61	62	64	67	8	7	3	2						
Washington	33	33	33	38	64	64	58	51	3	3	9	11						
West Virginia	48	49	50	54	50	50	47	45	1	1	3	1						
Wisconsin	24	25	–	29	71	69	–	67	5	6	–	4						
Wyoming	34	33	42	34	62	62	55	64	4	4	4	2						
<b>Other jurisdictions</b>																		
District of Columbia	79	78	78	70	12	13	21	25	9	9	1	5						
DDESS <sup>1</sup>	50	50	32	37	48	48	36	54	2	2	32	9						
DoDDS <sup>2</sup>	9	9	10	–	19	19	23	–	72	73	67	–						

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table B.15 Weighted percentage of students, by eligibility for free/reduced-price school lunch, grade 8: By state, 1998–2003**

Grade 8	Eligible												Not eligible				Information not available			
	Accommodations not permitted				Accommodations permitted				Accommodations not permitted				Accommodations permitted							
	1998	1998	2002	2003	1998	1998	2002	2003	1998	1998	2002	2003	1998	1998	2002	2003				
<b>Nation (public)</b>	30	30	34	36	58	58	57	58	12	11	10	6								
Alabama	40	41	43	48	58	58	42	52	2	2	15	#								
Alaska	—	—	—	25	—	—	—	65	—	—	—	10								
Arizona	34	32	35	38	53	53	52	50	13	14	13	12								
Arkansas	37	38	44	46	59	58	55	49	4	4	2	5								
California <sup>1</sup>	37	40	36	42	44	42	47	46	19	18	17	12								
Colorado	24	22	—	26	67	67	—	72	9	10	—	1								
Connecticut	17	18	29	25	70	70	63	71	13	13	8	4								
Delaware	27	26	32	33	61	60	67	58	12	15	1	9								
Florida	39	40	42	46	52	50	53	49	9	10	5	5								
Georgia	36	37	40	41	53	52	55	54	11	11	5	5								
Hawaii	35	35	41	42	60	60	59	57	5	4	#	1								
Idaho	—	—	33	34	—	—	58	57	—	—	8	9								
Illinois	—	—	—	34	—	—	—	62	—	—	—	4								
Indiana	—	—	25	29	—	—	70	68	—	—	6	3								
Iowa	—	—	—	25	—	—	—	72	—	—	—	3								
Kansas	33	33	29	33	65	65	68	65	2	2	3	2								
Kentucky	40	39	40	42	57	58	57	56	3	4	3	2								
Louisiana	48	49	48	50	45	44	37	38	7	7	15	12								
Maine	24	25	23	28	68	67	70	70	8	8	7	2								
Maryland	26	28	28	26	72	70	70	67	2	2	2	7								
Massachusetts	23	23	28	23	73	72	69	64	4	5	3	13								
Michigan	—	—	33	28	—	—	61	63	—	—	6	8								
Minnesota	22	22	—	22	72	71	—	77	6	6	—	1								
Mississippi	50	51	57	56	42	41	37	41	8	7	6	3								
Missouri	27	28	29	30	70	69	65	67	3	3	6	3								
Montana	24	24	29	29	66	66	68	66	10	10	2	6								
Nebraska	—	—	35	30	—	—	63	66	—	—	2	4								
Nevada	25	25	27	33	66	65	64	63	9	10	10	4								
New Hampshire	—	—	—	14	—	—	—	79	—	—	—	7								
New Jersey	—	—	—	24	—	—	—	67	—	—	—	9								
New Mexico	42	42	50	50	42	43	30	42	16	15	20	9								
New York	37	38	38	43	48	46	55	51	15	15	7	6								
North Carolina	30	31	37	37	63	62	53	52	7	7	10	11								
North Dakota	—	—	24	26	—	—	74	73	—	—	1	1								
Ohio	—	—	23	23	—	—	67	65	—	—	10	13								
Oklahoma	34	34	46	44	57	57	49	54	10	9	5	2								
Oregon	26	25	26	27	68	69	64	67	5	6	10	6								
Pennsylvania	—	—	30	28	—	—	69	70	—	—	#	3								
Rhode Island	28	28	23	28	71	72	62	65	#	#	16	7								
South Carolina	40	41	45	47	56	56	51	51	4	4	4	2								
South Dakota	—	—	—	32	—	—	—	67	—	—	—	1								
Tennessee	30	33	34	36	65	64	56	61	4	3	10	4								
Texas	37	37	45	44	60	60	48	54	3	3	7	2								
Utah	21	21	25	26	68	69	65	70	11	9	10	4								
Vermont	—	—	22	25	—	—	77	74	—	—	1	1								
Virginia	22	23	26	26	71	70	70	70	7	6	3	4								
Washington	23	23	21	28	66	66	57	58	10	10	21	14								
West Virginia	39	39	41	48	57	57	58	51	4	4	1	1								
Wisconsin	20	21	—	21	71	71	—	69	9	8	—	10								
Wyoming	25	26	33	27	74	73	65	72	2	2	2	1								
<b>Other jurisdictions</b>																				
District of Columbia	53	53	68	57	24	23	31	30	23	24	1	12								
DDESS <sup>2</sup>	35	37	24	26	65	63	56	56	#	#	20	18								
DoDDS <sup>3</sup>	4	5	7	—	23	22	23	—	73	73	71	—								

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> Percentages by students' eligibility for free/reduced-price lunch in California in 2002 do not include Los Angeles.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. State-level data were not collected in 1992, 1994, or 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.



**Table B.16 Weighted percentage of students, by gender, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	Male		Female	
	2002	2003	2002	2003
<b>Grade 4</b>				
Nation (public)	51	51	49	49
Large central city (public)	50	50	50	50
Atlanta	47	50	53	50
Boston	—	53	—	47
Charlotte	—	50	—	50
Chicago	50	49	50	51
Cleveland	—	50	—	50
District of Columbia	49	49	51	51
Houston	51	49	49	51
Los Angeles	51	51	49	49
New York City	50	50	50	50
San Diego	—	51	—	49
<b>Grade 8</b>				
Nation (public)	50	50	50	50
Large central city (public)	50	50	50	50
Atlanta	49	47	51	53
Boston	—	47	—	53
Charlotte	—	50	—	50
Chicago	50	46	50	54
Cleveland	—	48	—	52
District of Columbia	47	48	53	52
Houston	51	49	49	51
Los Angeles	53	52	47	48
New York City	—	47	—	53
San Diego	—	48	—	52

— Not available. The district did not participate or did not meet the minimum participation guidelines for reporting.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

**Table B.17 Weighted percentage of students, by race/ethnicity, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	White		Black		Hispanic		Asian/ Pacific Islander		American Indian/Alaska Native		Other <sup>1</sup>	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>												
Nation (public)	60	59	18	17	17	18	4	4	1	1	1	1
Large central city (public)	22	23	38	35	34	33	5	7	1	1	1	1
Atlanta	6	10	90	87	3	2	#	#	#	#	#	#
Boston	—	11	—	49	—	30	—	9	—	1	—	#
Charlotte	—	42	—	45	—	8	—	4	—	#	—	2
Chicago	10	10	48	53	37	35	3	2	1	#	2	#
Cleveland	—	16	—	73	—	7	—	1	—	1	—	2
District of Columbia	3	5	88	85	7	9	1	1	#	#	#	#
Houston	10	10	37	40	50	47	3	3	#	#	#	#
Los Angeles	9	10	12	12	72	72	6	6	1	#	#	#
New York City	15	14	36	37	40	37	8	11	#	1	1	#
San Diego	—	22	—	18	—	43	—	18	—	#	—	#
<b>Grade 8</b>												
Nation (public)	64	61	15	17	15	15	4	4	1	1	1	1
Large central city (public)	26	23	33	36	31	31	9	9	1	1	1	#
Atlanta	5	5	92	91	2	2	1	1	#	#	#	1
Boston	—	16	—	47	—	25	—	11	—	#	—	#
Charlotte	—	46	—	43	—	6	—	4	—	#	—	1
Chicago	11	10	50	52	35	34	2	3	1	#	1	#
Cleveland	—	16	—	78	—	5	—	1	—	#	—	1
District of Columbia	3	3	88	88	7	8	2	1	#	#	#	#
Houston	8	8	31	34	58	56	3	2	#	#	#	#
Los Angeles	10	10	14	13	67	69	9	8	#	#	#	#
New York City	—	13	—	38	—	33	—	16	—	#	—	#
San Diego	—	24	—	16	—	37	—	22	—	#	—	#

— Not available. The district did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> "Other" comprises students whose race based on school records was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

**Table B.18 Weighted percentage of students, by eligibility for free/reduced-price school lunch, grades 4 and 8 public schools: By urban district, 2002 and 2003**

	Eligible		Not eligible		Information not available	
	2002	2003	2002	2003	2002	2003
<b>Grade 4</b>						
Nation (public)	43	44	50	52	7	4
Large central city (public)	68	69	24	28	8	3
Atlanta	74	81	16	19	11	#
Boston	—	81	—	11	—	8
Charlotte	—	44	—	56	—	#
Chicago	88	85	8	6	4	9
Cleveland <sup>1</sup>	—	100	—	0	—	0
District of Columbia	78	70	21	25	1	5
Houston	72	72	24	27	4	2
Los Angeles	79	83	5	5	16	12
New York City	73	89	16	9	11	2
San Diego	—	58	—	35	—	7
<b>Grade 8</b>						
Nation (public)	34	36	57	58	10	6
Large central city (public)	56	61	34	33	10	7
Atlanta	76	78	20	14	4	8
Boston	—	70	—	9	—	20
Charlotte	—	37	—	63	—	#
Chicago	84	88	10	6	6	7
Cleveland <sup>1</sup>	—	100	—	0	—	0
District of Columbia	68	57	31	30	1	12
Houston	68	67	29	32	3	1
Los Angeles	—	67	—	6	—	27
New York City	—	85	—	11	—	4
San Diego	—	53	—	42	—	5

— Not available. The district did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

<sup>1</sup> In 2003 all students in Cleveland were categorized as eligible for the school lunch program.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

**Table B.19** Weighted percentage of students, by student-reported parents' highest level of education, grade 8 public schools: By urban district, 2002 and 2003

	Less than high school		Graduated high school		Some education after high school		Graduated college		Unknown	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
<b>Grade 8</b>										
Nation (public)	7	7	18	18	20	18	46	46	9	11
Large central city (public)	10	11	18	18	19	17	38	38	15	17
Atlanta	7	8	26	22	22	18	35	41	10	11
Boston	–	11	–	18	–	19	–	34	–	19
Charlotte	–	5	–	15	–	16	–	54	–	9
Chicago	14	11	19	22	22	19	31	32	15	16
Cleveland	–	10	–	24	–	21	–	31	–	13
District of Columbia	7	7	21	23	18	18	40	38	14	14
Houston	21	19	19	19	15	12	28	30	17	20
Los Angeles	19	18	14	15	16	14	26	24	26	29
New York City	–	9	–	15	–	13	–	45	–	18
San Diego	–	12	–	13	–	18	–	37	–	20

– Not available. The district did not participate or did not meet the minimum participation guidelines for reporting.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Trial Urban District Reading Assessments.

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## Appendix C

### State and Urban District Subgroup Appendix

Additional state-level and district-level subgroup results are presented in this appendix.

**Table C.1 Gaps in average reading scale scores, by gender, grade 4 public schools: By state, 1992–2003**

Grade 4	Female average score minus male average score					
	Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	8	11	6	5	7	8
Alabama	7	10	6	5	8	7
Alaska	—	—	—	—	—	13
Arizona	8	10	11	10	11	5
Arkansas	6	9	6	8	6	10
California	9	6	8	8	5	7
Colorado	6	9	7	7	—	7
Connecticut	5	8	6	10	7	8
Delaware	8	12*	9	6	4	4
Florida	6	11	9	9	8	9
Georgia	5	11	7	7	7	8
Hawaii	10	13	11	13	10	13
Idaho	4	—	—	—	8	6
Illinois	—	—	—	—	—	5
Indiana	5	6	—	—	3	8
Iowa	7	9	10	9	6	7
Kansas	—	—	7	7	7	8
Kentucky	7	10	4	3	9	8
Louisiana	7	7	9	10	6	10
Maine	4	6	7	6	6	5
Maryland	9	9	12	11	6	7
Massachusetts	2	5	8	7	6	5
Michigan	4	—	10	10	6	6
Minnesota	7*	8	9	8	8	13
Mississippi	6	11	7	8	6	7
Missouri	5	9	11	11	8	7
Montana	—	9	10	10	10	10
Nebraska	7	8	—	—	7	5
Nevada	—	—	7	6	6	9
New Hampshire	7	11	7	4	—	8
New Jersey	5	6	—	—	—	7
New Mexico	4	7	7	8	8	5
New York	6	9	4	4	10	9
North Carolina	6	11	7	10	7	11
North Dakota	3	9	—	—	6	7
Ohio	7	—	—	—	6	8
Oklahoma	5	—	2	2	7	7
Oregon	—	—	8	8	9	10
Pennsylvania	6	9	—	—	5	7
Rhode Island	4	9	3	-1*	5	7
South Carolina	7	8	6	6	9	8
South Dakota	—	—	—	—	—	6
Tennessee	6	9	6	7	6	9
Texas	7	4	8	12	4	6
Utah	7	9	7	6	7	9
Vermont	—	—	—	—	8	5
Virginia	8	11	9	9	4	8
Washington	—	8	9	10	7	10
West Virginia	8	10	6	8	4	8
Wisconsin	5	6	4	4*	—	9
Wyoming	6	6	7	7	5	6
<b>Other jurisdictions</b>						
District of Columbia	6*	10	8	8	10	13
DDESS <sup>2</sup>	—	—	6	9	6*	12
DoDDS <sup>3</sup>	—	10	9	9	5	6

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Score gaps are calculated based on differences between unrounded average scale scores. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table C.2 Gaps in average reading scale scores, by gender, grade 8 public schools: By state, 1998–2003**

Grade 8	Female average score minus male average score			
	Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	14 *	15 *	9	11
Alabama	8 *	11	10	15
Alaska	—	—	—	13
Arizona	10	10	9	10
Arkansas	12	11	11	9
California	8	6	8	8
Colorado	13	12	—	12
Connecticut	13	12	11	11
Delaware	13	12	7	10
Florida	13	13	11	12
Georgia	10	10	9	10
Hawaii	14	15	16	14
Idaho	—	—	14	12
Illinois	—	—	—	6
Indiana	—	—	11	11
Iowa	—	—	—	12
Kansas	10	11	9	13
Kentucky	14	14	9	11
Louisiana	13	12	8	10
Maine	15	15	10	13
Maryland	14	12	12	14
Massachusetts	11	11	9	10
Michigan	—	—	11	11
Minnesota	15	15	—	13
Mississippi	11	9	9	11
Missouri	11	10	6	8
Montana	14	14	7	12
Nebraska	—	—	7	10
Nevada	11	11	11	12
New Hampshire	—	—	—	11
New Jersey	—	—	—	9
New Mexico	11	11	8	11
New York	6	8	6	12
North Carolina	14	14	10	11
North Dakota	—	—	10	10
Ohio	—	—	6	7
Oklahoma	12	11	10	12
Oregon	15	17 *	9	11
Pennsylvania	—	—	5 *	12
Rhode Island	10	10	8	11
South Carolina	10	9	10	10
South Dakota	—	—	—	11
Tennessee	13	15	12	13
Texas	10	10	11	11
Utah	9	9	12	10
Vermont	—	—	9	11
Virginia	9	10	11	9
Washington	14	16	14	13
West Virginia	14	13	8	11
Wisconsin	13	15	—	15
Wyoming	15	15	11	10
<b>Other jurisdictions</b>				
District of Columbia	12	12	10	14
DDESS <sup>2</sup>	3	6	6 *	17
DoDDS <sup>3</sup>	9	9	8	8

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Score gaps are calculated based on differences between unrounded average scale scores. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.



**Table C.3 Percentages of students, by gender and reading achievement level, grade 4 public schools: By state, 2003**

Grade 4	Male				Female			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	42	58	26	6	35	65	33	8
Alabama	50	50	21	4	44	56	24	5
Alaska	48	52	23	4	36	64	33	8
Arizona	49	51	21	4	43	57	26	5
Arkansas	45	55	25	5	36	64	31	7
California	54	46	18	4	47	53	24	6
Colorado	33	67	32	7	28	72	41	11
Connecticut	30	70	38	10	23	77	47	15
Delaware	31	69	30	5	27	73	36	8
Florida	42	58	29	6	33	67	35	9
Georgia	45	55	24	5	37	63	30	8
Hawaii	53	47	17	3	39	61	26	6
Idaho	38	62	28	5	33	67	33	7
Illinois	41	59	28	6	37	63	33	9
Indiana	38	62	29	6	30	70	37	10
Iowa	33	67	31	5	26	74	38	9
Kansas	38	62	29	6	29	71	36	9
Kentucky	40	60	27	5	32	68	34	8
Louisiana	56	44	17	3	46	54	23	4
Maine	32	68	32	7	27	73	39	9
Maryland	42	58	29	8	34	66	36	10
Massachusetts	29	71	38	8	24	76	43	13
Michigan	39	61	30	6	33	67	34	8
Minnesota	37	63	31	6	25	75	44	12
Mississippi	55	45	17	2	48	52	20	4
Missouri	35	65	31	7	29	71	37	10
Montana	35	65	30	6	26	74	40	10
Nebraska	37	63	30	7	31	69	35	9
Nevada	54	46	16	2	42	58	24	4
New Hampshire	29	71	35	7	22	78	45	12
New Jersey	33	67	35	9	27	73	42	12
New Mexico	55	45	18	3	51	49	20	4
New York	37	63	30	7	28	72	38	10
North Carolina	40	60	27	6	29	71	38	11
North Dakota	35	65	28	5	28	72	36	7
Ohio	35	65	31	7	27	73	37	9
Oklahoma	43	57	23	4	37	63	29	6
Oregon	42	58	26	4	31	69	36	9
Pennsylvania	38	62	30	6	32	68	36	8
Rhode Island	41	59	26	5	34	66	33	8
South Carolina	45	55	22	4	36	64	30	7
South Dakota	34	66	31	6	28	72	36	8
Tennessee	47	53	22	5	38	62	30	8
Texas	44	56	24	5	38	62	29	7
Utah	38	62	28	5	30	70	36	9
Vermont	29	71	34	7	24	76	40	9
Virginia	36	64	32	7	27	73	39	11
Washington	37	63	27	5	28	72	39	10
West Virginia	40	60	25	5	30	70	32	7
Wisconsin	36	64	28	5	28	72	37	8
Wyoming	34	66	30	6	28	72	37	9
<b>Other jurisdictions</b>								
District of Columbia	74	26	8	2	64	36	13	4
DDESS <sup>1</sup>	37	63	28	6	25	75	42	12
DoDDS <sup>2</sup>	32	68	32	7	24	76	38	10

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.4 Percentages of students, by gender and reading achievement level, grade 8 public schools: By state, 2003**

Grade 8	Male				Female			
	Below <b>Basic</b>	At or above <b>Basic</b>	At or above <b>Proficient</b>	At <b>Advanced</b>	Below <b>Basic</b>	At or above <b>Basic</b>	At or above <b>Proficient</b>	At <b>Advanced</b>
<b>Nation (public)</b>	33	67	25	2	23	77	35	4
Alabama	42	58	17	1	28	72	28	2
Alaska	39	61	22	2	28	72	32	4
Arizona	38	62	21	1	29	71	29	2
Arkansas	34	66	23	1	26	74	31	3
California	42	58	20	1	35	65	25	3
Colorado	27	73	29	2	18	82	43	6
Connecticut	28	72	31	3	19	81	43	6
Delaware	28	72	26	2	18	82	37	3
Florida	39	61	21	1	26	74	32	3
Georgia	37	63	22	1	24	76	30	2
Hawaii	46	54	17	1	32	68	26	3
Idaho	29	71	26	1	18	82	39	4
Illinois	25	75	31	2	21	79	38	4
Indiana	28	72	26	2	18	82	39	3
Iowa	26	74	28	1	15	85	43	4
Kansas	29	71	28	2	18	82	42	5
Kentucky	27	73	27	2	17	83	40	4
Louisiana	41	59	18	1	31	69	26	2
Maine	26	74	29	2	15	85	45	5
Maryland	35	65	24	2	23	77	37	5
Massachusetts	23	77	37	4	14	86	49	7
Michigan	30	70	27	2	20	80	38	3
Minnesota	27	73	29	2	16	84	46	4
Mississippi	41	59	16	1	28	72	26	2
Missouri	25	75	30	2	16	84	39	4
Montana	22	78	30	1	14	86	45	4
Nebraska	27	73	29	2	18	82	41	3
Nevada	43	57	15	#	31	69	26	2
New Hampshire	24	76	34	2	14	86	47	5
New Jersey	25	75	32	2	17	83	42	5
New Mexico	43	57	16	1	32	68	24	2
New York	31	69	28	2	19	81	42	5
North Carolina	33	67	23	1	22	78	34	3
North Dakota	22	78	31	1	15	85	46	4
Ohio	25	75	30	2	19	81	38	4
Oklahoma	32	68	24	1	20	80	35	3
Oregon	30	70	27	2	21	79	39	4
Pennsylvania	30	70	26	1	18	82	38	3
Rhode Island	34	66	25	2	23	77	34	4
South Carolina	36	64	19	1	26	74	29	2
South Dakota	23	77	32	2	14	86	45	4
Tennessee	38	62	21	1	24	76	31	3
Texas	35	65	21	1	24	76	31	3
Utah	28	72	26	1	19	81	38	3
Vermont	23	77	32	2	14	86	45	6
Virginia	25	75	31	2	18	82	41	5
Washington	30	70	27	1	19	81	39	5
West Virginia	35	65	20	1	22	78	30	3
Wisconsin	29	71	29	1	16	84	45	5
Wyoming	26	74	29	1	15	85	40	3
<b>Other jurisdictions</b>								
District of Columbia	62	38	8	1	45	55	13	1
DDESS <sup>1</sup>	27	73	28	2	11	89	47	5
DoDDS <sup>2</sup>	17	83	34	2	12	88	46	4

# The estimate rounds to zero.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.5 Percentage of students at or above Basic in reading, by gender, grade 4 public schools: By state, 1992–2003**

Grade 4	Male						Female					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	56	53*	57	55	59	58	65	64	64	60*	65	65
Alabama	48	48	53	53	48	50	55	57	59	59	56	56
Alaska	—	—	—	—	—	52	—	—	—	—	—	64
Arizona	50	47	47	46	46	51	58	56	58	56	56	57
Arkansas	52	49*	51	50	56	55	59	58*	58	58	61	64
California	43	41	44	45	48	46	52	48	52	51	53	53
Colorado	61	55***	65	63	—	67	67	64***	73	71	—	72
Connecticut	66	65	76	72	71	70	71	71	81	81	78	77
Delaware	53***	46***	52***	50***	69	69	62***	59***	62***	56***	73	73
Florida	49***	45***	49***	48***	56	58	56***	55***	58***	57***	65	67
Georgia	54	47***	52	51	56	55	60	57	58	57	62	63
Hawaii	43	41	40*	39*	46	47	53*	52***	51***	51***	58	61
Idaho	64	—	—	—	63	62	69	—	—	—	72	67
Illinois	—	—	—	—	—	59	—	—	—	—	—	63
Indiana	64	63	—	—	65	62	71	69	—	—	70	70
Iowa	69	66	66	63	67	67	77	73	75	72	72	74
Kansas	—	—	67	65	65	62	—	—	75	75	71	71
Kentucky	54*	51***	61	61	59	60	62*	62*	65	63	70	68
Louisiana	42	38*	43	39	48	44	50	43***	53	49	53	54
Maine	73	72	69	69	69	68	78	78	77	75	75	73
Maryland	51	51*	55	52	59	58	62	60***	66	63	64	66
Massachusetts	73	67	70	67	77*	71	75	72	76	73	83*	76
Michigan	60	—	59	58	62	61	65	—	68	67	67	67
Minnesota	65	61	65	63	68*	63	71	69	73	70	78	75
Mississippi	39*	40	44	43	43	45	44*	50	51	50	48	52
Missouri	64	58	57*	56***	62	65	70	66	69	67	69	71
Montana	—	64	68	67	67	65	—	74	78	76	75	74
Nebraska	64	63	—	—	66	63	73	69	—	—	70	69
Nevada	—	—	50	47	51	46	—	—	57	54	56	58
New Hampshire	72	65*	71	72	—	71	80	76	78	77	—	78
New Jersey	66	63	—	—	—	67	72	67***	—	—	—	73
New Mexico	52*	46	47	46	48	45	57*	52	56	54	55	49
New York	59	53***	59	60	61	63	64***	62***	65*	64*	72	72
North Carolina	53*	54*	59	54*	63	60	59***	64***	66	63***	70	71
North Dakota	72*	69	—	—	69	65	76	76	—	—	74	72
Ohio	60	—	—	—	65	65	67*	—	—	—	71	73
Oklahoma	65*	—	65*	65***	57	57	70*	—	66	66	62	63
Oregon	—	—	57	53	62	58	—	—	65	63	70	69
Pennsylvania	64	57	—	—	64	62	71	65	—	—	69	68
Rhode Island	61	61	64	65	63	59	65	69	66	64	67	66
South Carolina	49*	44***	51	49*	54	55	57*	52***	58	57*	63	64
South Dakota	—	—	—	—	—	66	—	—	—	—	—	72
Tennessee	53	53	55	53	54	53	60	62	61	60	63	62
Texas	53	56	58	52	60	56	60	59	67	66	64	62
Utah	63	59	59	59	65	62	71	69	66	66	73	70
Vermont	—	—	—	—	69	71	—	—	—	—	77	76
Virginia	62	52***	60	58*	70	64	72	63***	69	67*	72	73
Washington	—	55***	59	59	66	63	—	62***	67	70	74	72
West Virginia	57	53***	59	56	63	60	65	63***	65	65	67	70
Wisconsin	68	67	70	68	—	64	73	75	75	71	—	72
Wyoming	67	66	62	60	66	66	75	71	69	68	71	72
<b>Other jurisdictions</b>												
District of Columbia	29	21*	24	24	26	26	32	27***	31	29**	36	36
DDESS <sup>2</sup>	—	—	61	59	70*	63	—	—	68*	67***	75	75
DoDDS <sup>3</sup>	—	57***	65	63*	69	68	—	68***	74	71	75	76

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table C.6 Percentage of students at or above *Basic* in reading, by gender, grade 8 public schools: By state, 1998–2003**

Grade 8	Male				Female			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	65	64*	70*	67	79	79	79*	77
Alabama	62	61	59	58	71	73	69	72
Alaska	—	—	—	61	—	—	—	72
Arizona	68*	67	64	62	78*	78*	73	71
Arkansas	62	63	67	66	74	74	77	74
California	60	60	58	58	68	67	64	65
Colorado	70	72	—	73	83	83	—	82
Connecticut	76	75	71	72	88*	87	82	81
Delaware	60***	58***	78*	72	73*	70***	83	82
Florida	59	59	66	61	72	74	78	74
Georgia	63	63	64	63	73	74	75	76
Hawaii	52	51	55	54	68	67	72	68
Idaho	—	—	72	71	—	—	86*	82
Illinois	—	—	—	75	—	—	—	79
Indiana	—	—	72	72	—	—	83	82
Iowa	—	—	—	74	—	—	—	85
Kansas	77	77	77	71	85	85	84	82
Kentucky	67	67	74	73	81	81	82	83
Louisiana	57	56	63	59	71	70	72	69
Maine	77	76	77	74	90*	89	86	85
Maryland	64	64	67	65	79	76	79	77
Massachusetts	76	75	78	77	85	83	85	86
Michigan	—	—	71	70	—	—	82	80
Minnesota	76	72	—	73	86	85	—	84
Mississippi	56	57	62	59	66	67	71	72
Missouri	70	69	80	75	82	81	84	84
Montana	77	76	81	78	89	90	88	86
Nebraska	—	—	80*	73	—	—	86*	82
Nevada	64*	65***	56	57	74	76*	68	69
New Hampshire	—	—	—	76	—	—	—	86
New Jersey	—	—	—	75	—	—	—	83
New Mexico	63	65*	60	57	76***	76***	70	68
New York	75	72	72	69	80	79	80	81
North Carolina	68	67	71	67	83	81	82	78
North Dakota	—	—	77	78	—	—	87	85
Ohio	—	—	79	75	—	—	85	81
Oklahoma	74	74*	71	68	86*	86***	81	80
Oregon	71	69	76	70	85*	86***	84	79
Pennsylvania	—	—	75	70	—	—	79	82
Rhode Island	69	70	70	66	79	81	77	77
South Carolina	60	62	63	64	70	70	74	74
South Dakota	—	—	—	77	—	—	—	86
Tennessee	64	63	66	62	77	77	77	76
Texas	71	69	68	65	80	79	79	76
Utah	73	73	69	72	82	81	81	81
Vermont	—	—	78	77	—	—	87	86
Virginia	73	73	75	75	82	83	86	82
Washington	70	68	72	70	84	83	84	81
West Virginia	67	68	73*	65	82	82	82	78
Wisconsin	74	72	—	71	85	85	—	84
Wyoming	69*	69	73	74	83	83	84	85
<b>Other jurisdictions</b>								
District of Columbia	39	37	42	38	50	49	54	55
DDESS <sup>2</sup>	74	75	84*	73	81	80	90	89
DoDDS <sup>3</sup>	76*	76*	85	83	85	85	92*	88

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table C.7 Gaps in average reading scale scores, by race/ethnicity, grade 4 public schools: By state, 1992–2003**

Grade 4	White score minus Black score						White score minus Hispanic score					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	32	38*	32	31	29	30	28	36*	30	31	28	28
Alabama	30	33	29	31	30	30	‡	‡	‡	‡	‡	‡
Alaska	–	–	–	–	–	17	–	–	–	–	–	17
Arizona	22	31	28	28	21	27	23	31	37	31	32	28
Arkansas	29	34	33	32	33	33	‡	‡	‡	‡	18	19
California	36	30	29	31	27	31	37	40	39	35	31	33
Colorado	21	29	28	30	–	23	20*	29	27	26	–	27
Connecticut	34	45	35	34	31	37	43	51*	39	41	33	33
Delaware	26	28*	22	30*	24	22	‡	‡	17	42	21	24
Florida	33	36	31	31	30	31	15	24	20	20	19	18
Georgia	28	37*	32	30	26	27	‡	‡	‡	‡	26	25
Hawaii	7	17	9	11	12	10	19	25	19	17	16	18
Idaho	‡	–	–	–	‡	‡	23	–	–	–	27	23
Illinois	–	–	–	–	–	34	–	–	–	–	–	31
Indiana	25	31	–	–	23	28	‡	‡	–	–	9	12
Iowa	18*	39	30	31	18*	30	‡	‡	‡	‡	22	21
Kansas	–	–	34	30	20	28	–	–	12	25	21	18
Kentucky	18	24	23	21	23	20	‡	‡	‡	‡	‡	‡
Louisiana	26*	35	38	38	30	35	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	29	37	36	34	30	31	24	‡	20	18	21	22
Massachusetts	26	33	28	26	27	27	34	47*	36	34	32	32
Michigan	35	–	36	36	31	40	‡	–	22	22	21	24
Minnesota	34	45	37	40	27	35	‡	‡	‡	‡	26	34
Mississippi	31	33	25	26	29	29	‡	‡	‡	‡	‡	‡
Missouri	30	30	35*	33*	28	24	‡	‡	‡	‡	‡	9
Montana	–	‡	‡	‡	‡	‡	–	‡	‡	‡	‡	‡
Nebraska	28	33	–	–	17	21	19	24	–	–	23	23
Nevada	–	–	27	30	22	25	–	–	23	25	22	25
New Hampshire	‡	‡	‡	‡	–	‡	‡	‡	‡	‡	–	23
New Jersey	35	40	–	–	–	36	38*	37*	–	–	–	24
New Mexico	21	24	28	26	‡	20	23	23	25	27	21	25
New York	27	36	36	37	32	32	42*	37*	39*	40*	30	27
North Carolina	26	32	28	30	27	29	‡	‡	24	‡	19	20
North Dakota	‡	‡	–	–	‡	‡	‡	‡	–	–	‡	‡
Ohio	23	–	–	–	27	25	‡	–	–	–	‡	19
Oklahoma	22	–	31	30	32	25	16	–	14	21	23	21
Oregon	–	–	25	25	20	19	–	–	32	39*	24	23
Pennsylvania	36	46	–	–	37	36	35	‡	–	–	31	32
Rhode Island	31	28	35	34	26	28	40	32	50*	48*	32	28
South Carolina	27	36*	27	29	26	27	‡	‡	‡	‡	‡	21
South Dakota	–	–	–	–	–	‡	–	–	–	–	–	‡
Tennessee	26	31	29	25	26	32	‡	‡	‡	‡	28	14
Texas	24	36	39*	39*	30	25	23	28	26	30*	24	22
Utah	‡	‡	‡	‡	‡	‡	21	27	34	29	23	29
Vermont	–	–	–	–	‡	‡	–	–	–	–	‡	‡
Virginia	26	32	24	27	27	25	‡	13	26	18	9*	21
Washington	–	19	19	17	14	14	–	32	25	22	23	25
West Virginia	‡	13	25	23	13	17	‡	‡	‡	‡	‡	‡
Wisconsin	28	32	36*	41*	–	25	18	24	20	27	–	16
Wyoming	‡	‡	‡	‡	‡	‡	19	15	15	15	17	11
<b>Other jurisdictions</b>												
District of Columbia	62	73	71	72	60*	70	57	64	67	74	55*	67
DDESS <sup>2</sup>	–	–	20	19	16	19	–	–	18	14	9	16
DoDDS <sup>3</sup>	–	18	18	18	15	15	–	10	13	16	7	10

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Score gaps are calculated based on differences between unrounded average scale scores. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table C.8 Gaps in average reading scale scores, by race/ethnicity, grade 8 public schools: By state, 1998–2003**

Grade 8	White score minus Black score				White score minus Hispanic score			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	28	26	27	27	26	27	26	27
Alabama	27	28	30	26	‡	‡	‡	‡
Alaska	–	–	–	19	–	–	–	21
Arizona	26	21	17	24	26	25	25	28
Arkansas	29	29	28	33	‡	‡	‡	9
California	25	30	23	26	30	30	27	29
Colorado	25	22	–	26	29	26	–	27
Connecticut	35	32	38	31	31	30	38	31
Delaware	25	28	23	24	17	15	25	27
Florida	32	28	25	29	17	17	17	17
Georgia	28	27	22	25	‡	‡	25	24
Hawaii	‡	‡	10	‡	‡	‡	17	10
Idaho	–	–	‡	‡	–	–	21	25
Illinois	–	–	–	29	–	–	–	26
Indiana	–	–	20	24	–	–	‡	22
Iowa	–	–	–	25	–	–	–	25
Kansas	19	22	29	27	23	31	20	26
Kentucky	22	19	19	24	‡	‡	‡	‡
Louisiana	27	26	28	28	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	30	32	28	26	10	11	21	20
Massachusetts	25	27	31	26	30	32	31	32
Michigan	–	–	28	31	–	–	‡	16
Minnesota	34	38	–	29	‡	‡	–	32
Mississippi	26	25	28	25	‡	‡	‡	‡
Missouri	22	23	22	28	‡	‡	‡	‡
Montana	‡	‡	‡	‡	‡	‡	‡	‡
Nebraska	–	–	27	32	–	–	22	30
Nevada	26	23	25	29	21	22	22	25
New Hampshire	–	–	–	‡	–	–	–	‡
New Jersey	–	–	–	29	–	–	–	28
New Mexico	‡	‡	‡	22	23	20*	20*	25
New York	28	28	28	32	28	28	23	28
North Carolina	22	25	27	24	‡	‡	22	27
North Dakota	–	–	‡	‡	–	–	‡	‡
Ohio	–	–	27	22	–	–	‡	3
Oklahoma	17	16*	29	27	20	14	17	16
Oregon	28	30	‡	15	23	32*	22	17
Pennsylvania	–	–	35*	25	–	–	31*	11
Rhode Island	14*	22	25	26	27	29	28	30
South Carolina	26	25	26	25	‡	‡	‡	‡
South Dakota	–	–	–	‡	–	–	–	‡
Tennessee	29	29	26	26	‡	‡	‡	‡
Texas	27	25	30	25	21	22	26	24
Utah	‡	‡	‡	‡	14*	21	30	27
Vermont	–	–	‡	‡	–	–	‡	‡
Virginia	23	24	24	25	15	8	14	9
Washington	19	25	24	17	23	27	24	22
West Virginia	16	14	22	12	‡	‡	‡	‡
Wisconsin	36	35	–	38	15	13*	–	28
Wyoming	‡	‡	‡	‡	21	15	18	14
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	23	30	19	26	7	2	6	13
DoDDS <sup>3</sup>	17	19	15	17	16	12	11	8

– Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Score gaps are calculated based on differences between unrounded average scale scores. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table C.9 Percentages of students, by race/ethnicity and reading achievement level, grade 4 public schools: By state, 2003**

Grade 4	White				Black			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	26	74	39	10	61	39	12	2
Alabama	34	66	30	6	69	31	9	1
Alaska	27	73	40	10	44	56	21	1
Arizona	29	71	35	7	59	41	13	2
Arkansas	30	70	35	8	68	32	10	1
California	31	69	36	9	63	37	11	1
Colorado	22	78	45	12	46	54	18	1
Connecticut	16	84	54	17	54	46	12	1
Delaware	18	82	44	10	46	54	16	2
Florida	25	75	42	11	60	40	13	2
Georgia	28	72	38	10	58	42	12	2
Hawaii	32	68	35	9	42	58	18	1
Idaho	31	69	33	7	‡	‡	‡	‡
Illinois	26	74	42	11	64	36	10	2
Indiana	29	71	36	9	62	38	11	2
Iowa	26	74	37	8	66	34	8	1
Kansas	29	71	37	9	60	40	14	2
Kentucky	33	67	33	7	56	44	16	2
Louisiana	30	70	34	7	70	30	8	1
Maine	29	71	36	8	‡	‡	‡	‡
Maryland	24	76	44	13	59	41	14	2
Massachusetts	19	81	48	13	50	50	15	2
Michigan	25	75	40	9	70	30	8	1
Minnesota	24	76	43	11	62	38	14	2
Mississippi	33	67	30	6	67	33	8	1
Missouri	27	73	39	9	54	46	14	1
Montana	26	74	38	9	‡	‡	‡	‡
Nebraska	29	71	36	9	53	47	17	3
Nevada	37	63	28	5	63	37	9	1
New Hampshire	24	76	41	10	‡	‡	‡	‡
New Jersey	18	82	49	14	59	41	14	2
New Mexico	33	67	34	8	55	45	18	3
New York	18	82	48	13	56	44	14	2
North Carolina	23	77	44	12	56	44	12	2
North Dakota	28	72	34	6	‡	‡	‡	‡
Ohio	26	74	39	9	56	44	16	3
Oklahoma	32	68	32	6	59	41	13	1
Oregon	32	68	34	7	52	48	19	3
Pennsylvania	25	75	40	9	68	32	9	1
Rhode Island	29	71	36	9	60	40	12	1
South Carolina	26	74	36	8	60	40	11	1
South Dakota	26	74	37	8	‡	‡	‡	‡
Tennessee	33	67	32	8	70	30	9	1
Texas	26	74	39	9	56	44	16	2
Utah	29	71	35	8	‡	‡	‡	‡
Vermont	27	73	37	8	‡	‡	‡	‡
Virginia	23	77	44	12	51	49	16	2
Washington	27	73	38	9	42	58	23	3
West Virginia	35	65	29	6	55	45	13	#
Wisconsin	27	73	36	7	58	42	13	2
Wyoming	29	71	36	8	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	10	90	70	37	73	27	7	1
DDESS <sup>1</sup>	22	78	44	12	43	57	21	3
DoDDS <sup>2</sup>	22	78	43	11	38	62	22	3

See notes at end of table. ▶

**Table C.9 Percentages of students, by race/ethnicity and reading achievement level, grade 4 public schools: By state, 2003—Continued**

Grade 4	Hispanic				Asian/Pacific Islander			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	57	43	14	2	31	69	37	11
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	45	55	21	2	50	50	18	2
Arizona	62	38	12	2	32	68	38	11
Arkansas	52	48	18	2	‡	‡	‡	‡
California	67	33	9	1	32	68	37	12
Colorado	52	48	18	3	31	69	33	9
Connecticut	51	49	18	3	26	74	44	14
Delaware	47	53	20	3	14	86	48	13
Florida	45	55	24	5	21	79	44	15
Georgia	52	48	17	3	23	77	43	21
Hawaii	47	53	17	2	50	50	18	3
Idaho	61	39	12	1	‡	‡	‡	‡
Illinois	58	42	15	2	16	84	46	11
Indiana	42	58	26	5	‡	‡	‡	‡
Iowa	52	48	17	1	‡	‡	‡	‡
Kansas	49	51	19	3	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	48	52	23	3	20	80	52	18
Massachusetts	57	43	15	2	26	74	40	13
Michigan	52	48	16	3	25	75	51	16
Minnesota	64	36	16	4	63	37	15	3
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	39	61	30	8	‡	‡	‡	‡
Montana	‡	‡	‡	‡	‡	‡	‡	‡
Nebraska	56	44	14	2	‡	‡	‡	‡
Nevada	64	36	11	1	41	59	21	3
New Hampshire	52	48	19	3	‡	‡	‡	‡
New Jersey	44	56	21	4	21	79	47	17
New Mexico	59	41	13	2	‡	‡	‡	‡
New York	49	51	18	3	25	75	42	12
North Carolina	44	56	24	5	27	73	36	11
North Dakota	‡	‡	‡	‡	‡	‡	‡	‡
Ohio	52	48	23	5	‡	‡	‡	‡
Oklahoma	56	44	14	2	‡	‡	‡	‡
Oregon	57	43	15	3	39	61	33	10
Pennsylvania	59	41	10	1	‡	‡	‡	‡
Rhode Island	61	39	12	2	33	67	28	7
South Carolina	52	48	20	3	‡	‡	‡	‡
South Dakota	‡	‡	‡	‡	‡	‡	‡	‡
Tennessee	49	51	27	7	‡	‡	‡	‡
Texas	52	48	17	3	27	73	39	11
Utah	64	36	11	1	46	54	23	4
Vermont	‡	‡	‡	‡	‡	‡	‡	‡
Virginia	45	55	20	2	21	79	50	17
Washington	56	44	16	3	36	64	29	6
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	46	54	20	4	46	54	27	7
Wyoming	41	59	23	4	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	71	29	8	2	‡	‡	‡	‡
DDESS <sup>1</sup>	41	59	26	6	‡	‡	‡	‡
DoDDS <sup>2</sup>	34	66	29	7	30	70	31	7

See notes at end of table. ►



**Table C.9 Percentages of students, by race/ethnicity and reading achievement level, grade 4 public schools: By state, 2003—Continued**

Grade 4	American Indian/Alaska Native				Other <sup>3</sup>			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	53	47	16	2	34	66	31	7
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	70	30	9	1	‡	‡	‡	‡
Arizona	75	25	6	#	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	‡	‡	‡	‡	‡	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	26	74	42	13
Georgia	‡	‡	‡	‡	42	58	24	6
Hawaii	‡	‡	‡	‡	45	55	22	5
Idaho	‡	‡	‡	‡	‡	‡	‡	‡
Illinois	‡	‡	‡	‡	‡	‡	‡	‡
Indiana	‡	‡	‡	‡	29	71	30	5
Iowa	‡	‡	‡	‡	‡	‡	‡	‡
Kansas	‡	‡	‡	‡	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	‡	‡	‡	‡	‡	‡	‡	‡
Minnesota	‡	‡	‡	‡	‡	‡	‡	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	62	38	15	2	‡	‡	‡	‡
Nebraska	‡	‡	‡	‡	‡	‡	‡	‡
Nevada	66	34	12	#	‡	‡	‡	‡
New Hampshire	‡	‡	‡	‡	‡	‡	‡	‡
New Jersey	‡	‡	‡	‡	‡	‡	‡	‡
New Mexico	75	25	6	1	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	59	41	8	1	23	77	44	10
North Dakota	57	43	13	2	‡	‡	‡	‡
Ohio	‡	‡	‡	‡	35	65	27	7
Oklahoma	48	52	18	3	‡	‡	‡	‡
Oregon	‡	‡	‡	‡	‡	‡	‡	‡
Pennsylvania	‡	‡	‡	‡	‡	‡	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	60	40	11	1	‡	‡	‡	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	‡	‡	‡	‡	‡	‡	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Washington	43	57	21	2	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	42	58	25	4	‡	‡	‡	‡
Wyoming	70	30	10	1	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>1</sup>	‡	‡	‡	‡	‡	‡	‡	‡
DoDDS <sup>2</sup>	‡	‡	‡	‡	30	70	38	12

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

<sup>3</sup> "Other" comprises students whose race, based on school records, was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.10 Percentages of students, by race/ethnicity and reading achievement level, grade 8 public schools: By state, 2003**

Grade 8	White				Black			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	18	82	39	4	47	53	12	#
Alabama	25	75	30	2	54	46	9	#
Alaska	21	79	36	4	40	60	13	1
Arizona	20	80	36	3	48	52	16	#
Arkansas	21	79	33	3	58	42	6	#
California	24	76	34	4	52	48	12	#
Colorado	15	85	43	5	40	60	16	1
Connecticut	16	84	45	6	46	54	12	#
Delaware	15	85	40	3	40	60	13	#
Florida	21	79	37	4	52	48	11	1
Georgia	19	81	36	2	46	54	12	#
Hawaii	31	69	31	4	‡	‡	‡	‡
Idaho	21	79	35	3	‡	‡	‡	‡
Illinois	13	87	45	5	44	56	13	#
Indiana	19	81	36	3	46	54	13	#
Iowa	18	82	38	3	44	56	10	#
Kansas	18	82	40	4	47	53	10	#
Kentucky	19	81	36	3	46	54	14	1
Louisiana	20	80	33	3	54	46	9	#
Maine	21	79	37	3	‡	‡	‡	‡
Maryland	20	80	40	5	45	55	13	1
Massachusetts	14	86	49	6	38	62	18	1
Michigan	16	84	39	3	51	49	12	#
Minnesota	17	83	42	3	49	51	12	#
Mississippi	20	80	32	2	50	50	9	#
Missouri	15	85	39	3	48	52	10	#
Montana	15	85	40	3	‡	‡	‡	‡
Nebraska	18	82	39	3	53	47	10	#
Nevada	25	75	29	2	57	43	7	#
New Hampshire	18	82	41	4	‡	‡	‡	‡
New Jersey	12	88	46	4	42	58	15	1
New Mexico	20	80	35	3	45	55	14	#
New York	13	87	48	5	45	55	14	1
North Carolina	17	83	38	3	44	56	13	1
North Dakota	16	84	40	3	‡	‡	‡	‡
Ohio	18	82	39	4	40	60	13	1
Oklahoma	20	80	34	3	49	51	13	#
Oregon	23	77	36	3	39	61	18	2
Pennsylvania	19	81	36	2	48	52	11	#
Rhode Island	22	78	36	3	50	50	15	#
South Carolina	18	82	35	3	47	53	10	#
South Dakota	15	85	41	3	‡	‡	‡	‡
Tennessee	24	76	32	2	53	47	9	#
Texas	16	84	39	3	44	56	14	#
Utah	20	80	35	2	‡	‡	‡	‡
Vermont	18	82	39	4	‡	‡	‡	‡
Virginia	15	85	44	5	38	62	15	#
Washington	20	80	36	3	40	60	19	1
West Virginia	28	72	25	2	40	60	13	#
Wisconsin	17	83	41	3	60	40	8	#
Wyoming	18	82	36	2	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	55	45	8	#
DDESS <sup>1</sup>	11	89	50	5	30	70	19	1
DoDDS <sup>2</sup>	10	90	46	4	25	75	22	1

See notes at end of table. ▶

**Table C.10 Percentages of students, by race/ethnicity and reading achievement level, grade 8 public schools: By state, 2003—Continued**

Grade 8	Hispanic				Asian/Pacific Islander			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	46	54	14	1	22	78	38	5
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	44	56	17	#	36	64	23	1
Arizona	49	51	12	#	‡	‡	‡	‡
Arkansas	32	68	25	2	‡	‡	‡	‡
California	54	46	11	#	24	76	37	4
Colorado	43	57	14	1	16	84	47	6
Connecticut	45	55	14	#	12	88	54	11
Delaware	40	60	13	#	13	87	52	10
Florida	38	62	19	1	‡	‡	‡	‡
Georgia	45	55	16	#	30	70	39	5
Hawaii	41	59	28	1	41	59	19	1
Idaho	47	53	12	#	‡	‡	‡	‡
Illinois	39	61	16	1	13	87	53	8
Indiana	43	57	16	1	‡	‡	‡	‡
Iowa	46	54	13	1	‡	‡	‡	‡
Kansas	45	55	17	1	25	75	35	5
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	39	61	20	1	13	87	55	13
Massachusetts	44	56	14	#	13	87	52	11
Michigan	33	67	27	1	‡	‡	‡	‡
Minnesota	54	46	16	2	36	64	26	2
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	‡	‡	‡	‡	‡	‡	‡	‡
Nebraska	51	49	11	1	‡	‡	‡	‡
Nevada	56	44	8	#	25	75	25	1
New Hampshire	‡	‡	‡	‡	‡	‡	‡	‡
New Jersey	39	61	17	1	8	92	62	12
New Mexico	47	53	12	#	‡	‡	‡	‡
New York	39	61	18	1	23	77	42	7
North Carolina	48	52	15	1	24	76	30	7
North Dakota	‡	‡	‡	‡	‡	‡	‡	‡
Ohio	19	81	37	2	‡	‡	‡	‡
Oklahoma	38	62	17	1	‡	‡	‡	‡
Oregon	40	60	18	1	28	72	34	6
Pennsylvania	36	64	24	1	‡	‡	‡	‡
Rhode Island	54	46	8	1	42	58	23	3
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	‡	‡	‡	‡	‡	‡	‡	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	41	59	14	1	14	86	37	4
Utah	49	51	13	#	26	74	28	2
Vermont	‡	‡	‡	‡	‡	‡	‡	‡
Virginia	22	78	31	2	12	88	40	2
Washington	45	55	16	1	21	79	39	5
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	49	51	17	1	39	61	24	2
Wyoming	34	66	20	1	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	49	51	11	#	‡	‡	‡	‡
DDESS <sup>1</sup>	21	79	38	4	‡	‡	‡	‡
DoDDS <sup>2</sup>	19	81	35	4	14	86	38	2

See notes at end of table. ▶

**Table C.10 Percentages of students, by race/ethnicity and reading achievement level, grade 8 public schools: By state, 2003—Continued**

Grade 8	American Indian/Alaska Native				Other <sup>3</sup>			
	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
<b>Nation (public)</b>	41	59	18	1	27	73	28	2
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	56	44	11	#	‡	‡	‡	‡
Arizona	55	45	8	#	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	‡	‡	‡	‡	‡	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡
Georgia	‡	‡	‡	‡	‡	‡	‡	‡
Hawaii	‡	‡	‡	‡	40	60	21	2
Idaho	‡	‡	‡	‡	‡	‡	‡	‡
Illinois	‡	‡	‡	‡	‡	‡	‡	‡
Indiana	‡	‡	‡	‡	‡	‡	‡	‡
Iowa	‡	‡	‡	‡	‡	‡	‡	‡
Kansas	‡	‡	‡	‡	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	‡	‡	‡	‡	‡	‡	‡	‡
Minnesota	‡	‡	‡	‡	‡	‡	‡	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	40	60	13	#	‡	‡	‡	‡
Nebraska	‡	‡	‡	‡	‡	‡	‡	‡
Nevada	‡	‡	‡	‡	‡	‡	‡	‡
New Hampshire	‡	‡	‡	‡	‡	‡	‡	‡
New Jersey	‡	‡	‡	‡	‡	‡	‡	‡
New Mexico	48	52	11	1	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	48	52	10	#	‡	‡	‡	‡
North Dakota	51	49	12	1	‡	‡	‡	‡
Ohio	‡	‡	‡	‡	‡	‡	‡	‡
Oklahoma	31	69	26	1	19	81	31	2
Oregon	‡	‡	‡	‡	‡	‡	‡	‡
Pennsylvania	‡	‡	‡	‡	‡	‡	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	46	54	15	#	‡	‡	‡	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	‡	‡	‡	‡	‡	‡	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Washington	38	62	18	1	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	‡	‡	‡	‡	‡	‡
Wyoming	52	48	8	#	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>1</sup>	‡	‡	‡	‡	‡	‡	‡	‡
DoDDS <sup>2</sup>	‡	‡	‡	‡	9	91	50	6

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

<sup>3</sup> "Other" comprises students whose race, based on school records, was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: Detail may not sum to totals because of rounding. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.11 Percentage of students at or above *Basic* in reading, by race/ethnicity, grade 4 public schools: By state, 1992–2003**

Grade 4	Nation (public) <sup>1</sup>	White						Black					
		Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
		1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
Alabama	63	64	68	69	65	66	28	28	32	30	30	31	
Alaska	—	—	—	—	—	73	—	—	—	—	—	56	
Arizona	67	64**	67	64*	67	71	41	34	34	33	42	41	
Arkansas	65*	62***	64*	63***	69	70	28	25	25	25	29	32	
California	63	59***	62	62	70	69	28	30	31	32	37	37	
Colorado	70***	67***	77	74	—	78	44	36*	42	41	—	54	
Connecticut	79***	79***	87	85	84	84	34	33*	46	45	48	46	
Delaware	67***	61***	65***	65***	81	82	35***	32***	39***	33***	54	54	
Florida	64***	62***	66***	64***	74	75	26***	26***	32	31*	39	40	
Georgia	70	66***	71	68	72	72	36	29***	34*	34***	41	42	
Hawaii	58	60	60	60	66	68	50	41	48	46	57	58	
Idaho	69	—	—	—	72	69	‡	—	—	—	‡	‡	
Illinois	—	—	—	—	—	74	—	—	—	—	—	36	
Indiana	72	70	—	—	72	71	40	34	—	—	44	38	
Iowa	74	70	73	70	72	74	52	26	38	34	51	34	
Kansas	—	—	76	75	73	71	—	—	39	44	49	40	
Kentucky	60***	59***	66	65	68	67	37	36	38	37	40	44	
Louisiana	61***	58***	69	64***	69	70	27	20***	24	22***	32	30	
Maine	75*	75*	73	72	72	71	‡	‡	‡	‡	‡	‡	
Maryland	68***	68***	76	72	76	76	34	30***	35	34	42	41	
Massachusetts	79	77*	80	76	86*	81	47	36***	45	44	57	50	
Michigan	70*	—	73	71	73	75	24	—	28	28	36	30	
Minnesota	71*	68***	73	71	77	76	29	29	33	32	44	38	
Mississippi	63	63	62	61	64	67	25*	28	31	30	28	33	
Missouri	72	67***	70	68*	72	73	36*	34*	31*	32***	39	46	
Montana	—	72	76	75	74	74	—	‡	‡	‡	‡	‡	
Nebraska	72	69	—	—	73	71	34	35	—	—	54	47	
Nevada	—	—	60	58	64	63	—	—	31	27	38	37	
New Hampshire	76	71*	75	75	—	76	‡	‡	‡	‡	—	‡	
New Jersey	81	78	—	—	—	82	37	33	—	—	—	41	
New Mexico	69	65	71	70	69	67	43	37	37	36	‡	45	
New York	74***	72***	77*	77***	81	82	41	33***	33*	33***	43	44	
North Carolina	66***	70***	74	69***	79	77	35*	34***	39	35*	46	44	
North Dakota	75	74	—	—	75	72	‡	‡	—	—	‡	‡	
Ohio	67***	—	—	—	76	74	38	—	—	—	43	44	
Oklahoma	72	—	72	72	68	68	41	—	33	34	31	41	
Oregon	—	—	65	63	70	68	—	—	35	38	48	48	
Pennsylvania	75	69***	—	—	75	75	29	24	—	—	33	32	
Rhode Island	70	70	74	73	73	71	32	39	35	35	44	40	
South Carolina	67*	64***	68	67*	72	74	33*	24***	35	33*	41	40	
South Dakota	—	—	—	—	—	74	—	—	—	—	—	‡	
Tennessee	64	65	67	65	67	67	31	30	33	32	34	30	
Texas	71	73	80	77	80	74	39	37	36	32***	43	44	
Utah	69	66	67	66	72	71	‡	‡	‡	‡	‡	‡	
Vermont	—	—	—	—	74	73	—	—	—	—	‡	‡	
Virginia	75	70***	73	72	80	77	43	31***	44	40	47	49	
Washington	—	63***	68	69	74	73	—	41***	45	45	53	58	
West Virginia	62	58***	63	61	66	65	‡	42	31	36	51	45	
Wisconsin	74	75	78*	76	—	73	38	38	31	27*	—	42	
Wyoming	73	70	67	66	72	71	‡	‡	‡	‡	‡	‡	
<b>Other jurisdictions</b>													
District of Columbia	90	85	88	89	91	90	27	20***	23	22*	28	27	
DDESS <sup>2</sup>	—	—	75	71*	80	78	—	—	52	51	63	57	
DoDDS <sup>3</sup>	—	68***	76	74	78	78	—	48***	54	54	59	62	

See notes at end of table. ▶

**Table C.11 Percentage of students at or above Basic in reading, by race/ethnicity, grade 4 public schools: By state, 1992–2003—Continued**

Grade 4	Hispanic												Asian/Pacific Islander					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted								
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003						
<b>Nation (public)</b> <sup>1</sup>	37	32 *	38	36	43	43	59	64	61	55	69	69						
Alabama	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡						
Alaska	—	—	—	—	—	55	—	—	—	—	—	50						
Arizona	39	33	29*	31	32	38	‡	35	‡	‡	70	68						
Arkansas	‡	‡	‡	‡	49	48	‡	‡	‡	‡	‡	‡						
California	23***	19***	27	28	35	33	52***	52***	57	57	66	68						
Colorado	44	35***	45	45	—	48	63	50*	67	‡	—	69						
Connecticut	29***	29***	43	40	44	49	‡	68	‡	‡	85	74						
Delaware	‡	‡	44	26***	57	53	‡	‡	‡	‡	85	86						
Florida	45*	38***	46	46	53	55	‡	‡	‡	‡	74	79						
Georgia	‡	‡	‡	‡	45	48	‡	‡	‡	‡	68	77						
Hawaii	33	29***	38	42	46	53	44	42***	41***	41***	48	50						
Idaho	38	—	—	—	38	39	‡	—	—	—	‡	‡						
Illinois	—	—	—	—	—	42	—	—	—	—	—	84						
Indiana	‡	‡	—	—	58	58	‡	‡	—	—	‡	‡						
Iowa	‡	‡	‡	‡	46	48	‡	‡	‡	‡	‡	‡						
Kansas	—	—	64	53	49	51	—	—	‡	‡	‡	‡						
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡						
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡						
Maine	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡						
Maryland	43	‡	53	51	53	52	63	78	80	78	79	80						
Massachusetts	34	25***	33	34	51	43	60	53*	54	50	79	74						
Michigan	‡	—	43	43	46	48	‡	—	‡	‡	‡	75						
Minnesota	‡	‡	‡	‡	46	36	50	53	57	43	66***	37						
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡						
Missouri	‡	‡	‡	‡	‡	61	‡	‡	‡	‡	‡	‡						
Montana	—	‡	‡	‡	‡	‡	—	‡	‡	‡	‡	‡						
Nebraska	49	46	—	—	45	44	‡	‡	—	—	‡	‡						
Nevada	—	—	36	32	37	36	—	—	61	59	69	59						
New Hampshire	‡	‡	‡	‡	—	48	‡	‡	‡	‡	—	‡						
New Jersey	34***	35***	—	—	—	56	80	81	—	—	—	79						
New Mexico	41	41	42	40	46	41	‡	‡	‡	‡	‡	‡						
New York	30***	35***	31***	31***	47	51	64	68	78	76	82	75						
North Carolina	‡	‡	43	‡	58	56	‡	‡	‡	‡	‡	73						
North Dakota	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡						
Ohio	‡	—	—	—	‡	48	‡	—	—	—	‡	‡						
Oklahoma	49	—	52	48	39	44	‡	—	‡	‡	‡	‡						
Oregon	—	—	28	25	41	43	—	—	59	55	64	61						
Pennsylvania	33	‡	—	—	40	41	‡	‡	—	—	80	‡						
Rhode Island	24	36	21*	23***	38	39	27***	42***	46	48	44*	67						
South Carolina	‡	‡	‡	‡	‡	48	‡	‡	‡	‡	‡	‡						
South Dakota	—	—	—	—	—	‡	—	—	—	—	—	‡						
Tennessee	‡	‡	‡	‡	32	51	‡	‡	‡	‡	‡	‡						
Texas	40***	40***	49	43	52	48	‡	‡	56	‡	77	73						
Utah	41	39	30	33	44	36	‡	58	53	64	59	54						
Vermont	—	—	—	—	‡	‡	—	—	—	—	‡	‡						
Virginia	‡	54	43	51	72	55	77	70	65	62	76	79						
Washington	—	30*	37	42	48	44	—	56	56	57	68	64						
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡						
Wisconsin	56	48	55	43	—	54	‡	47	‡	‡	—	54						
Wyoming	49	49	51	47	52	59	‡	‡	‡	‡	‡	‡						
<b>Other jurisdictions</b>																		
District of Columbia	27	32	29	27	34	29	‡	‡	‡	‡	‡	‡						
DDESS <sup>2</sup>	—	—	57	57	70	59	—	—	‡	‡	‡	‡						
DoDDS <sup>3</sup>	—	59	64	58	68	66	—	62	71	71	72	70						

See notes at end of table. ▶

**Table C.11 Percentage of students at or above *Basic* in reading, by race/ethnicity, grade 4 public schools: By state, 1992–2003—Continued**

Grade 4	American Indian/Alaska Native						Other <sup>4</sup>					
	Accommodations not permitted			Accommodations permitted			Accommodations not permitted			Accommodations permitted		
	1992	1994	1998	1998	2002	2003	1992	1994	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	‡	60	‡	‡	51	47	‡	‡	‡	‡	59	66
Alabama	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	—	—	30	—	—	—	—	—	‡
Arizona	18	20	34	22	24	25	‡	‡	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	‡	‡	—	‡	‡	‡	‡	‡	—	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	74
Georgia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	69	58
Hawaii	‡	‡	‡	‡	‡	‡	52	45	49	44	54	55
Idaho	‡	—	—	—	27	‡	‡	—	—	—	‡	‡
Illinois	—	—	—	—	—	‡	—	—	—	—	—	‡
Indiana	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	71
Iowa	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Kansas	—	—	‡	‡	‡	‡	—	—	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	‡	—	‡	‡	‡	‡	‡	—	‡	‡	‡	‡
Minnesota	‡	‡	‡	‡	66	‡	‡	‡	‡	‡	‡	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Montana	—	49	47	42	53 *	38	—	‡	‡	‡	‡	‡
Nebraska	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Nevada	—	—	‡	‡	‡	34	—	—	‡	‡	‡	‡
New Hampshire	‡	‡	‡	‡	—	‡	‡	‡	‡	‡	—	‡
New Jersey	‡	‡	—	—	—	‡	‡	‡	—	—	—	‡
New Mexico	40	25	21	23	25	25	‡	‡	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	‡	‡	‡	‡	‡	41	‡	‡	‡	‡	‡	77
North Dakota	50	42	—	—	44	43	‡	‡	—	—	‡	‡
Ohio	‡	—	—	—	‡	‡	‡	—	—	—	‡	65
Oklahoma	58	—	62	62	54	52	‡	—	‡	‡	75	‡
Oregon	—	—	‡	‡	‡	‡	—	—	‡	‡	‡	‡
Pennsylvania	‡	‡	—	—	‡	‡	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	—	—	40	—	—	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	—	—	‡	‡	—	—	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Washington	—	‡	42	44	55	57	—	‡	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	‡	‡	—	58	‡	‡	‡	‡	—	‡
Wyoming	44	45	40	36	50	30	‡	‡	‡	‡	‡	‡
<b>Other jurisdictions</b>												
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	—	—	‡	‡	‡	‡	—	—	64	61	73	‡
DoDDS <sup>3</sup>	—	‡	‡	‡	‡	‡	—	69	73	65	70	70

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race, based on school records, was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previous years' results, and from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2002, and 2003 Reading Assessments.

**Table C.12 Percentage of students at or above *Basic* in reading, by race/ethnicity, grade 8 public schools: By state, 1998–2003**

Grade 8	White				Black			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	2002
<b>Nation (public)</b> <sup>1</sup>	80	79	83	82	49	50	54	53
Alabama	78	79	77	75	43	44	42	46
Alaska	–	–	–	79	–	–	–	60
Arizona	85	83	80	80	53	60	60	52
Arkansas	76	77	79	79	41	41	47	42
California	81	82	79	76	50	47	50	48
Colorado	84	84	–	85	57	61	–	60
Connecticut	89*	88	87	84	48	52	47	54
Delaware	75*,**	74*,**	89*	85	46*	43*,**	64	60
Florida	78	78	81	79	40	44	55	48
Georgia	81	80	80	81	48	48	56	54
Hawaii	72	72	76	69	‡	‡	65	‡
Idaho	–	–	82	79	–	–	‡	‡
Illinois	–	–	–	87	–	–	–	56
Indiana	–	–	80	81	–	–	56	54
Iowa	–	–	–	82	–	–	–	56
Kansas	84	86	85	82	60	60	54	53
Kentucky	76*	76*	79	81	53	55	56	54
Louisiana	79	77	83	80	44	43	48	46
Maine	84*	83*	82	79	‡	‡	‡	‡
Maryland	82	82	83	80	50	47	56	55
Massachusetts	86	85	89	86	55	54	56	62
Michigan	–	–	82	84	–	–	53	49
Minnesota	84	82	–	83	44	40	–	51
Mississippi	77	78	83	80	43	45	48	50
Missouri	79*	79*	86	85	53	51	60	52
Montana	84	85	88	85	‡	‡	‡	‡
Nebraska	–	–	86*	82	–	–	55	47
Nevada	76	77	71	75	49	52	41	43
New Hampshire	–	–	–	82	–	–	–	‡
New Jersey	–	–	–	88	–	–	–	58
New Mexico	84	84	78	80	‡	‡	‡	55
New York	88	87	86	87	58	55	57	55
North Carolina	84	82	86	83	60	57	56	56
North Dakota	–	–	83	84	–	–	‡	‡
Ohio	–	–	87	82	–	–	57	60
Oklahoma	84	84	82	80	66	67	48	51
Oregon	81	81	82	77	49	46	‡	61
Pennsylvania	–	–	83	81	–	–	45	52
Rhode Island	77	80	80	78	66	58	54	50
South Carolina	78	79	82	82	47	48	50	53
South Dakota	–	–	–	85	–	–	–	‡
Tennessee	79	78	77	76	43	44	48	47
Texas	87	86	88	84	55	57	57	56
Utah	79	80	79	80	‡	‡	‡	‡
Vermont	–	–	83	82	–	–	‡	‡
Virginia	85	85	86	85	59	60	64	62
Washington	81	79	82	80	58	51	55	60
West Virginia	75	75	78*	72	56	58	53	60
Wisconsin	84	83	–	83	42	43	–	40
Wyoming	77*	77	81	82	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	42	41	46	45
DDESS <sup>2</sup>	85	85	93	89	62	62	77	70
DoDDS <sup>3</sup>	86	86	92	90	71	68	80	75

See notes at end of table. ▶



**Table C.12 Percentage of students at or above *Basic* in reading, by race/ethnicity, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	Nation (public) <sup>1</sup>	Hispanic				Asian/Pacific Islander			
		Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002	2003	1998	1998	2002	2003
		53	52	56	54	75	73	75	78
	Alabama	‡	‡	‡	‡	‡	‡	‡	‡
	Alaska	—	—	—	56	—	—	—	64
	Arizona	53	54	51	51	‡	‡	‡	‡
	Arkansas	‡	‡	‡	68	‡	‡	‡	‡
	California	46	46	46	46	70	71	67	76
	Colorado	52	54	—	57	77	75	—	84
	Connecticut	55	54	46	55	90	94	75	88
	Delaware	55	55	62	60	‡	‡	92	87
	Florida	59	61	62	62	90	85	‡	‡
	Georgia	‡	‡	51	55	‡	‡	77	70
	Hawaii	‡	‡	55	59	56	56	61	59
	Idaho	—	—	56	53	—	—	‡	‡
	Illinois	—	—	—	61	—	—	—	87
	Indiana	—	—	‡	57	—	—	‡	‡
	Iowa	—	—	—	54	—	—	—	‡
	Kansas	64	57	61	55	‡	‡	‡	75
	Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
	Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
	Maine	‡	‡	‡	‡	‡	‡	‡	‡
	Maryland	73	73	65	61	88	82	88	87
	Massachusetts	51	46	54	56	72	79	81	87
	Michigan	—	—	‡	67	—	—	‡	‡
	Minnesota	‡	‡	—	46	55	45	—	64
	Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
	Missouri	‡	‡	‡	‡	‡	‡	‡	‡
	Montana	‡	‡	‡	‡	‡	‡	‡	‡
	Nebraska	—	—	65*	49	—	—	‡	‡
	Nevada	52	50	43	44	71	73	70	75
	New Hampshire	—	—	—	‡	—	—	—	‡
	New Jersey	—	—	—	61	—	—	—	92
	New Mexico	58	61*	57	53	‡	‡	‡	‡
	New York	58	56	65	61	84	89	69	77
	North Carolina	‡	‡	63	52	‡	‡	‡	76
	North Dakota	—	—	‡	‡	—	—	‡	‡
	Ohio	—	—	‡	81	—	—	‡	‡
	Oklahoma	60	66	65	62	‡	‡	‡	‡
	Oregon	53	46	59	60	87	77	83	72
	Pennsylvania	—	—	52	64	—	—	61	‡
	Rhode Island	44	46	49	46	78	69	59	58
	South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
	South Dakota	—	—	—	‡	—	—	—	‡
	Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
	Texas	65	62	62	59	81	84	82	86
	Utah	59	56	45	51	‡	‡	65	74
	Vermont	—	—	‡	‡	—	—	‡	‡
	Virginia	74	79	75	78	85	90	88	88
	Washington	57	52	55	55	74	77	79	79
	West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
	Wisconsin	70	72	—	51	‡	‡	—	61
	Wyoming	58	63	60	66	‡	‡	‡	‡
	<b>Other jurisdictions</b>								
	District of Columbia	55	59	53	51	‡	‡	‡	‡
	DDESS <sup>2</sup>	81	85	89	79	‡	‡	‡	‡
	DoDDS <sup>3</sup>	70	77	85	81	78	78	89	86

See notes at end of table. ▶

**Table C.12 Percentage of students at or above *Basic* in reading, by race/ethnicity, grade 8 public schools: By state, 1998–2003—Continued**

Grade 8	American Indian/Alaska Native				Other <sup>4</sup>			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
	1998	1998	2002	2003	1998	1998	2002	2003
<b>Nation (public)</b> <sup>1</sup>	‡	‡	64	59	‡	‡	72	73
Alabama	‡	‡	‡	‡	‡	‡	‡	‡
Alaska	—	—	—	44	—	—	—	‡
Arizona	49	45	53	45	‡	‡	‡	‡
Arkansas	‡	‡	‡	‡	‡	‡	‡	‡
California	‡	‡	‡	‡	‡	‡	‡	‡
Colorado	‡	‡	—	‡	‡	‡	—	‡
Connecticut	‡	‡	‡	‡	‡	‡	‡	‡
Delaware	‡	‡	‡	‡	‡	‡	‡	‡
Florida	‡	‡	‡	‡	‡	‡	‡	‡
Georgia	‡	‡	‡	‡	‡	‡	‡	‡
Hawaii	‡	‡	‡	‡	60	55	65	60
Idaho	—	—	‡	‡	—	—	‡	‡
Illinois	—	—	—	‡	—	—	—	‡
Indiana	—	—	‡	‡	—	—	‡	‡
Iowa	—	—	—	‡	—	—	—	‡
Kansas	‡	‡	‡	‡	‡	‡	‡	‡
Kentucky	‡	‡	‡	‡	‡	‡	‡	‡
Louisiana	‡	‡	‡	‡	‡	‡	‡	‡
Maine	‡	‡	‡	‡	‡	‡	‡	‡
Maryland	‡	‡	‡	‡	‡	‡	‡	‡
Massachusetts	‡	‡	‡	‡	‡	‡	‡	‡
Michigan	—	—	‡	‡	—	—	‡	‡
Minnesota	‡	‡	—	‡	‡	‡	—	‡
Mississippi	‡	‡	‡	‡	‡	‡	‡	‡
Missouri	‡	‡	‡	‡	‡	‡	‡	‡
Montana	67	63	64	60	‡	‡	‡	‡
Nebraska	—	—	‡	‡	—	—	‡	‡
Nevada	‡	‡	‡	‡	‡	‡	‡	‡
New Hampshire	—	—	—	‡	—	—	—	‡
New Jersey	—	—	—	‡	—	—	—	‡
New Mexico	55	54	47	52	‡	‡	‡	‡
New York	‡	‡	‡	‡	‡	‡	‡	‡
North Carolina	67	69	‡	52	‡	‡	‡	‡
North Dakota	—	—	62	49	—	—	‡	‡
Ohio	—	—	‡	‡	—	—	‡	‡
Oklahoma	74	74	73	69	‡	‡	‡	81
Oregon	‡	‡	‡	‡	‡	‡	‡	‡
Pennsylvania	—	—	‡	‡	—	—	‡	‡
Rhode Island	‡	‡	‡	‡	‡	‡	‡	‡
South Carolina	‡	‡	‡	‡	‡	‡	‡	‡
South Dakota	—	—	—	54	—	—	—	‡
Tennessee	‡	‡	‡	‡	‡	‡	‡	‡
Texas	‡	‡	‡	‡	‡	‡	‡	‡
Utah	‡	‡	‡	‡	‡	‡	‡	‡
Vermont	—	—	‡	‡	—	—	‡	‡
Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Washington	59	63	‡	62	‡	‡	‡	‡
West Virginia	‡	‡	‡	‡	‡	‡	‡	‡
Wisconsin	‡	‡	—	‡	‡	‡	—	‡
Wyoming	63	54	57	48	‡	‡	‡	‡
<b>Other jurisdictions</b>								
District of Columbia	‡	‡	‡	‡	‡	‡	‡	‡
DDESS <sup>2</sup>	‡	‡	‡	‡	‡	‡	85	‡
DoDDS <sup>3</sup>	‡	‡	‡	‡	80	80	90	91

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

<sup>4</sup> "Other" comprises students whose race, based on school records, was "other race" or, if school data were missing, who self-reported their race as "multiracial" but not "Hispanic," or did not self-report racial/ethnic information.

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table C.13 Percentages of students, by eligibility for free/reduced-price school lunch and reading achievement level, grade 4 public schools: By state, 2003**

Grade 4	Eligible				Not eligible				Information not available			
	Below Basic	At or above Basic	At or above Proficient	At Advanced	Below Basic	At or above Basic	At or above Proficient	At Advanced	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Nation (public)</b>	56	44	15	2	25	75	41	11	35	65	33	8
Alabama	63	37	11	1	29	71	36	9	‡	‡	‡	‡
Alaska	63	37	13	2	30	70	36	8	49	51	25	9
Arizona	63	37	11	1	28	72	36	8	43	57	27	4
Arkansas	51	49	20	4	26	74	39	10	59	41	19	4
California	67	33	10	1	32	68	34	9	52	48	18	4
Colorado	49	51	19	3	22	78	45	12	‡	‡	‡	‡
Connecticut	50	50	18	3	16	84	53	17	24	76	50	17
Delaware	44	56	18	2	20	80	41	9	19	81	44	9
Florida	51	49	18	3	23	77	45	12	46	54	20	1
Georgia	57	43	13	2	26	74	39	11	36	64	33	10
Hawaii	59	41	13	2	35	65	29	6	‡	‡	‡	‡
Idaho	48	52	20	3	27	73	38	9	28	72	37	8
Illinois	59	41	14	2	22	78	45	12	55	45	17	4
Indiana	51	49	18	3	25	75	40	10	‡	‡	‡	‡
Iowa	47	53	19	2	22	78	42	9	‡	‡	‡	‡
Kansas	49	51	18	3	23	77	42	11	‡	‡	‡	‡
Kentucky	47	53	21	3	24	76	41	10	32	68	35	9
Louisiana	62	38	12	1	30	70	36	8	62	38	15	4
Maine	43	57	24	4	23	77	42	10	‡	‡	‡	‡
Maryland	60	40	13	2	26	74	43	13	41	59	31	8
Massachusetts	47	53	20	3	17	83	51	14	29	71	35	9
Michigan	57	43	16	3	24	76	41	10	42	58	24	4
Minnesota	52	48	19	3	23	77	44	11	‡	‡	‡	‡
Mississippi	62	38	11	1	28	72	36	7	47	53	22	4
Missouri	48	52	19	3	22	78	44	11	26	74	38	10
Montana	47	53	20	3	20	80	44	11	30	70	35	6
Nebraska	48	52	19	3	25	75	40	11	34	66	31	9
Nevada	65	35	10	1	36	64	28	5	41	59	24	3
New Hampshire	49	51	18	2	20	80	45	11	23	77	40	11
New Jersey	54	46	15	2	20	80	48	14	16	84	54	18
New Mexico	62	38	13	2	33	67	32	8	40	60	26	8
New York	49	51	18	3	15	85	51	15	13	87	53	14
North Carolina	52	48	16	2	22	78	45	13	24	76	46	13
North Dakota	45	55	19	2	25	75	38	8	‡	‡	‡	‡
Ohio	49	51	19	3	21	79	43	11	25	75	39	11
Oklahoma	51	49	17	2	25	75	38	8	43	57	19	3
Oregon	50	50	18	3	30	70	37	8	‡	‡	‡	‡
Pennsylvania	58	42	14	1	21	79	44	11	31	69	43	9
Rhode Island	56	44	14	2	24	76	41	10	44	56	25	6
South Carolina	55	45	14	2	24	76	39	9	‡	‡	‡	‡
South Dakota	45	55	21	3	22	78	41	10	‡	‡	‡	‡
Tennessee	58	42	15	2	32	68	34	9	36	64	32	8
Texas	52	48	16	2	28	72	39	10	30	70	41	10
Utah	49	51	20	3	26	74	38	8	‡	‡	‡	‡
Vermont	41	59	22	3	21	79	43	10	‡	‡	‡	‡
Virginia	53	47	16	2	21	79	44	12	25	75	47	15
Washington	47	53	20	3	23	77	42	11	25	75	37	8
West Virginia	43	57	21	3	25	75	38	9	‡	‡	‡	‡
Wisconsin	50	50	18	3	25	75	39	8	33	67	35	7
Wyoming	44	56	23	5	24	76	40	9	47	53	20	1
<b>Other jurisdictions</b>												
District of Columbia	75	25	6	1	52	48	24	9	71	29	8	1
DDESS <sup>1</sup>	36	64	26	5	29	71	40	11	24	76	43	12
DoDDS <sup>2</sup>	—	—	—	—	—	—	—	—	—	—	—	—

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.14 Percentages of students, by eligibility for free/reduced-price school lunch and reading achievement level, grade 8 public schools: By state, 2003**

Grade 8	Eligible				Not eligible				Information not available			
	Below Basic	At or above Basic	At or above Proficient	At Advanced	Below Basic	At or above Basic	At or above Proficient	At Advanced	Below Basic	At or above Basic	At or above Proficient	At Advanced
<b>Nation (public)</b>	44	56	15	1	18	82	39	4	28	72	31	3
Alabama	48	52	11	#	23	77	33	3	‡	‡	‡	‡
Alaska	51	49	12	#	27	73	32	3	31	69	28	3
Arizona	49	51	12	1	23	77	34	2	31	69	29	3
Arkansas	39	61	19	1	20	80	34	3	46	54	19	1
California	53	47	12	#	25	75	33	3	42	58	19	2
Colorado	40	60	17	1	16	84	43	5	‡	‡	‡	‡
Connecticut	44	56	15	#	17	83	45	6	16	84	38	3
Delaware	39	61	16	1	15	85	38	3	16	84	44	5
Florida	45	55	15	1	22	78	35	3	21	79	41	5
Georgia	46	54	12	#	18	82	37	3	35	65	20	#
Hawaii	51	49	12	1	30	70	28	3	‡	‡	‡	‡
Idaho	34	66	22	1	18	82	38	4	19	81	36	2
Illinois	41	59	15	1	13	87	46	5	25	75	27	1
Indiana	41	59	16	1	16	84	40	3	13	87	38	2
Iowa	37	63	18	1	15	85	41	3	10	90	42	2
Kansas	36	64	22	1	16	84	42	4	‡	‡	‡	‡
Kentucky	31	69	23	1	15	85	41	4	‡	‡	‡	‡
Louisiana	46	54	14	1	23	77	33	3	37	63	21	1
Maine	31	69	25	1	17	83	42	4	‡	‡	‡	‡
Maryland	49	51	13	1	22	78	36	4	25	75	43	8
Massachusetts	39	61	19	1	12	88	51	6	16	84	49	8
Michigan	43	57	15	1	16	84	40	4	29	71	30	2
Minnesota	44	56	17	1	15	85	43	4	‡	‡	‡	‡
Mississippi	44	56	12	#	22	78	32	2	30	70	26	1
Missouri	34	66	21	1	15	85	40	3	8	92	48	5
Montana	30	70	25	1	13	87	42	4	21	79	40	6
Nebraska	37	63	21	1	16	84	41	3	28	72	34	2
Nevada	50	50	13	1	30	70	25	1	‡	‡	‡	‡
New Hampshire	34	66	22	3	17	83	43	4	15	85	49	6
New Jersey	44	56	15	1	14	86	45	5	17	83	37	3
New Mexico	49	51	10	#	26	74	28	2	29	71	33	5
New York	41	59	18	1	12	88	48	6	15	85	51	7
North Carolina	44	56	13	#	18	82	37	3	20	80	39	5
North Dakota	29	71	27	1	15	85	42	3	‡	‡	‡	‡
Ohio	40	60	18	1	15	85	40	4	23	77	30	2
Oklahoma	36	64	19	1	17	83	38	3	‡	‡	‡	‡
Oregon	34	66	22	1	22	78	37	4	20	80	40	3
Pennsylvania	42	58	15	#	17	83	39	3	31	69	22	#
Rhode Island	45	55	15	1	19	81	38	4	54	46	12	1
South Carolina	42	58	13	1	20	80	34	3	‡	‡	‡	‡
South Dakota	28	72	30	2	14	86	43	3	‡	‡	‡	‡
Tennessee	45	55	13	1	23	77	32	2	24	76	44	6
Texas	43	57	12	#	19	81	37	3	‡	‡	‡	‡
Utah	38	62	19	#	18	82	37	3	18	82	33	3
Vermont	33	67	19	1	14	86	45	5	‡	‡	‡	‡
Virginia	38	62	17	1	15	85	43	4	20	80	34	1
Washington	42	58	18	1	17	83	39	4	18	82	36	2
West Virginia	37	63	17	1	19	81	32	3	‡	‡	‡	‡
Wisconsin	47	53	17	1	17	83	42	4	13	87	39	4
Wyoming	33	67	21	1	16	84	39	3	‡	‡	‡	‡
<b>Other jurisdictions</b>												
District of Columbia	61	39	6	#	44	56	17	3	38	62	15	1
DDESS <sup>1</sup>	23	77	26	3	18	82	40	3	15	85	44	6
DoDDS <sup>2</sup>	—	—	—	—	—	—	—	—	—	—	—	—

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.15 Percentage of students at or above *Basic* in reading, by student eligibility for free/reduced-price school lunch, grade 4 public schools: By state, 1998–2003**

Grade 4	Eligible				Not eligible				Information not available			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998		2002	2003	1998
		1998	1998	2002	2003	1998	1998	2002	2003	1998	1998	2002
<b>Nation (public)</b> <sup>1</sup>	42	39*	46	44	72	72*	76	75	70	65	62	65
Alabama	38	37	39	37	74	74	68	71	48	54	67	‡
Alaska	—	—	—	37	—	—	—	70	—	—	—	51
Arizona	33	33	35	37	69	66	66	72	57	53	59	57
Arkansas	41*	40***	46	49	68	68	74	74	55	53	54	41
California	28	27	32	33	63	64	72	68	60	65	52	48
Colorado	47	46	—	51	77	76	—	78	60	63	—	‡
Connecticut	49	45	52	50	87	85	83	84	90	88	84	76
Delaware	41***	35***	56	56	66***	65***	80	80	‡	‡	79	81
Florida	38***	37***	49	49	69***	67***	75	77	61	63	‡	54
Georgia	37	37	44	43	74	70	73	74	64	65	59	64
Hawaii	30***	32***	40	41	58*	56***	63	65	‡	‡	‡	‡
Idaho	—	—	56	52	—	—	77	73	—	—	71	72
Illinois	—	—	—	41	—	—	—	78	—	—	—	45
Indiana	—	—	50	49	—	—	77	75	—	—	78	‡
Iowa	55	51	57	53	77	74	75	78	57	63	‡	‡
Kansas	54	53	55	51	79	78	78	77	88	79	‡	‡
Kentucky	49	49	54	53	76	74	76	76	‡	‡	52	68
Louisiana	35	31*	39	38	71	66	75	70	55	50	39	38
Maine	63	61	59	57	78	78	78	77	73	70	74	‡
Maryland	37	36	44	40	73	70	73	74	53	42	73	59
Massachusetts	48	46	60	53	83	79	88*	83	71	72	84	71
Michigan	43	44	48	43	75	72	76	76	58	58	62	58
Minnesota	46	45	64***	48	77	76	78	77	76	65	70	‡
Mississippi	37	35	36	38	67	66	68	72	‡	‡	47	53
Missouri	46	45	49	52	73	71***	79	78	72	69	72	74
Montana	60	58	59	53	81	80	79	80	72	70	‡	70
Nebraska	—	—	53	52	—	—	78	75	—	—	‡	66
Nevada	33	31	40	35	63	60	64	64	65	67	50	59
New Hampshire	56	56	—	51	80	79	—	80	70	72	—	77
New Jersey	—	—	—	46	—	—	—	80	—	—	—	84
New Mexico	39	39	43	38	71	69	71	67	60	58	44	60
New York	39***	40***	49	51	82	81	82	85	69	65	69	87
North Carolina	45	42*	51	48	75	71***	82	78	71	61	67	76
North Dakota	—	—	60	55	—	—	77	75	—	—	‡	‡
Ohio	—	—	49	51	—	—	78	79	—	—	72	75
Oklahoma	53	53	48	49	78	79	75	75	62	62	43	57
Oregon	42*	39***	51	50	73	70	76	70	67	61	63	‡
Pennsylvania	—	—	43	42	—	—	79	79	—	—	65	69
Rhode Island	41	40	45	44	79	78	78	76	‡	‡	60	56
South Carolina	37*	35***	43	45	70*	70*	76	76	‡	‡	70	‡
South Dakota	—	—	—	55	—	—	—	78	—	—	—	‡
Tennessee	40	41	44	42	73	71	72	68	44	35	56	64
Texas	47	41	53	48	79	77	76	72	43	44	57	70
Utah	49	50	56	51	69*	69	75	74	68	66	63	‡
Vermont	—	—	57	59	—	—	80	79	—	—	79	‡
Virginia	42	41	53	47	75	72***	80	79	64	73	89	75
Washington	44	46	55	53	73	73	79	77	74	72	64	75
West Virginia	50*	48***	55	57	75	74	76	75	‡	‡	63	‡
Wisconsin	50	46	—	50	80*	78	—	75	67	60	—	67
Wyoming	52	50	58	56	72	71	76	76	69	66	81*	53
<b>Other jurisdictions</b>												
District of Columbia	21*	20*	25	25	60*	59***	52	48	44*	37	‡	29
DDESS <sup>2</sup>	58	57	68	64	71	69	79*	71	68	57	71	76
DoDDS <sup>3</sup>	65	63	70	—	75	71	75	—	69	67	71	—

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.

\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.

<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. In addition to allowing for accommodations, the accommodations-permitted results for national public schools at grade 4 (1998–2003) differ slightly from previously reported results for 1998, due to changes in sample weighting procedures. See appendix A for more details. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table C.16 Percentage of students at or above *Basic* in reading, by student eligibility for free/reduced-price school lunch, grade 8 public schools: By state, 1998–2003**

Grade 8	Eligible				Not eligible				Information not available			
	Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted			Accommodations not permitted	Accommodations permitted		
		1998	1998	2002		2003	1998	1998		2002	2003	1998
<b>Nation (public)</b> <sup>1</sup>	56	55	60 *	56	80	79 *	83 *	82	75	73	75	72
Alabama	48	50	50	52	79	79	78	77	‡	‡	66	‡
Alaska	—	—	—	49	—	—	—	73	—	—	—	69
Arizona	54	55	50	51	84	82	79	77	77	72	71	69
Arkansas	53 *	53 *	60	61	77	78	81	80	73	70	‡	54
California <sup>2</sup>	44	42	50	47	80	81	74	75	67	67	61	58
Colorado	56	60	—	60	85	85	—	84	69	65	—	‡
Connecticut	59	57	56	56	87	86	85	83	84	84	83	84
Delaware	48 *	47 *	65	61	74 *,**	73 ***	88 *	85	67 *	57 *	‡	84
Florida	51	52	59	55	75	78	81	78	73	73	85	79
Georgia	49	48	56	54	80	80	79	82	72	76	78	65
Hawaii	48	46	52	49	66	65	72	70	73	75	‡	‡
Idaho	—	—	71	66	—	—	84	82	—	—	82	81
Illinois	—	—	—	59	—	—	—	87	—	—	—	75
Indiana	—	—	65	59	—	—	81	84	—	—	83	87
Iowa	—	—	—	63	—	—	—	85	—	—	—	90
Kansas	69	69	62	64	87	88 *	88	84	‡	‡	‡	‡
Kentucky	62	62	65	69	82	82	86	85	75	73	89	‡
Louisiana	52	51	55	54	78	77	82	77	55	56	73	63
Maine	74	73	71	69	87	86	85	83	84	89	82	‡
Maryland	52	48	58	51	79	79	78	78	‡	‡	‡	75
Massachusetts	58	57	64	61	88	87	89	88	76	73	73	84
Michigan	—	—	68	57	—	—	82	84	—	—	65	71
Minnesota	63	59	—	56	86	84	—	85	85	79	—	‡
Mississippi	48	49	56	56	76	78	83	78	59	64	74	70
Missouri	61	58	70	66	82	83	87	85	58	61	81	92
Montana	73	71	75	70	88	88	89	87	79	82	‡	79
Nebraska	—	—	73 *	63	—	—	89 *	84	—	—	‡	72
Nevada	52	55	47	50	75 *	76 *	68	70	73	68	64	‡
New Hampshire	—	—	—	66	—	—	—	83	—	—	—	85
New Jersey	—	—	—	56	—	—	—	86	—	—	—	83
New Mexico	61 *	62 *	54	51	78	79	77	74	69	72	71	71
New York	63	60	62	59	88	87	87	88	81	80	65	85
North Carolina	59	58	63	56	84	83	85	82	73	71	79	80
North Dakota	—	—	73	71	—	—	84	85	—	—	‡	‡
Ohio	—	—	69	60	—	—	87	85	—	—	77	77
Oklahoma	72	72 *	66	64	85	85	84	83	78	79	83	‡
Oregon	63	65	68	66	84 *	82	84 *	78	81	76	83	80
Pennsylvania	—	—	57	58	—	—	85	83	—	—	‡	69
Rhode Island	56	56	58	55	81	83	82	81	‡	‡	62 *	46
South Carolina	48 *	48 *	54	58	77	79	81	80	70	74	73	‡
South Dakota	—	—	—	72	—	—	—	86	—	—	—	‡
Tennessee	51	51	57	55	80	81	79	77	65	65	79	76
Texas	61	58	60	57	85	84	86 *	81	‡	73	74	‡
Utah	66	62	59	62	82	81	82	82	72	81	69	82
Vermont	—	—	68	67	—	—	86	86	—	—	‡	‡
Virginia	56	59	67	62	84	84	85	85	84	80	91	80
Washington	58	56	63	58	83	82	83	83	83	82	78	82
West Virginia	67	67	69	63	81	81	83	81	63	68	‡	‡
Wisconsin	60	61	—	53	85	83	—	83	81	81	—	87
Wyoming	65	64	71	67	79 *	80	82	84	‡	‡	82	‡
<b>Other jurisdictions</b>												
District of Columbia	36	36	43	39	65	62	61	56	43 ***	43 ***	‡	62
DDESS <sup>3</sup>	68	68	83	77	83	83	88	82	‡	‡	88	85
DoDDS <sup>4</sup>	65	65	90	—	78	79	90	—	82	81	88	—

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.  
‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.  
\* Significantly different from 2003 when only one jurisdiction or the nation is being examined.  
\*\* Significantly different from 2003 when using a multiple-comparison procedure based on all jurisdictions that participated in both years.  
<sup>1</sup> National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.  
<sup>2</sup> Percentages by students' eligibility for free/reduced-price lunch in California in 2002 do not include Los Angeles.  
<sup>3</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.  
<sup>4</sup> Department of Defense Dependents Schools (Overseas).

NOTE: State-level data were not collected in 1992, 1994, or 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. Significance tests were performed using unrounded numbers. NAEP sample sizes have increased since 2002, compared to previous years, resulting in smaller detectable differences than in previous assessments.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, and 2003 Reading Assessments.

**Table C.17 Average reading scale scores and achievement-level results, by students with and without disabilities and limited English proficiency, grade 4 public schools: By state, 2003**

Grade 4	Students with disabilities										
	Weighted percentage of students assessed	Average scale scores	YES			Weighted percentage of students assessed	Average scale scores	NO			Weighted percentage of students excluded
			Below Basic	At or above Basic	At or above Proficient			Below Basic	At or above Basic	At or above Proficient	
<b>Nation (public)</b>	10	184	71	29	9	90	220	35	65	32	5
Alabama	10	158	87	13	3	90	212	43	57	24	2
Alaska	14	177	75	25	8	86	217	37	63	31	2
Arizona	7	177	77	23	6	93	211	44	56	25	5
Arkansas	9	164	81	19	5	91	218	37	63	30	5
California	8	176	78	22	5	92	208	48	52	23	3
Colorado	9	185	73	27	8	91	228	26	74	40	2
Connecticut	9	192	64	36	12	91	232	22	78	46	4
Delaware	7	205	52	48	16	93	225	27	73	34	10
Florida	14	184	72	28	10	86	223	32	68	35	3
Georgia	10	181	72	28	10	90	217	38	62	28	3
Hawaii	9	162	89	11	3	91	213	42	58	23	3
Idaho	10	175	81	19	4	90	223	30	70	33	3
Illinois	11	183	69	31	11	89	221	35	65	33	5
Indiana	10	188	67	33	10	90	224	30	70	35	4
Iowa	9	181	80	20	5	91	227	25	75	37	7
Kansas	11	185	71	29	8	89	224	29	71	36	2
Kentucky	6	190	67	33	11	94	221	34	66	32	8
Louisiana	15	172	81	19	6	85	211	46	54	22	6
Maine	12	195	63	37	10	88	228	25	75	39	7
Maryland	8	191	66	34	12	92	221	36	64	34	6
Massachusetts	15	200	59	41	13	85	233	21	79	45	3
Michigan	5	186	70	30	8	95	221	34	66	33	6
Minnesota	11	185	70	30	11	89	227	26	74	40	3
Mississippi	4	191	64	36	12	96	206	51	49	19	6
Missouri	10	196	61	39	15	90	225	29	71	36	7
Montana	10	188	69	31	6	90	226	27	73	38	5
Nebraska	14	190	69	31	10	86	225	28	72	36	4
Nevada	9	172	77	23	6	91	210	45	55	22	5
New Hampshire	14	194	66	34	9	86	233	19	81	45	3
New Jersey	10	196	62	38	13	90	228	26	74	41	3
New Mexico	15	181	72	28	13	85	207	49	51	20	4
New York	9	193	67	33	11	91	225	29	71	37	5
North Carolina	11	194	64	36	13	89	225	31	69	35	6
North Dakota	11	190	71	29	6	89	226	26	74	35	4
Ohio	7	174	80	20	5	93	226	28	72	36	6
Oklahoma	12	172	81	19	6	88	219	34	66	29	5
Oregon	11	188	69	31	10	89	221	33	67	33	7
Pennsylvania	11	179	76	24	7	89	224	30	70	36	3
Rhode Island	17	190	66	34	10	83	222	32	68	33	3
South Carolina	10	193	63	37	12	90	217	38	62	27	7
South Dakota	11	192	65	35	11	89	226	27	73	36	4
Tennessee	10	180	70	30	14	90	216	40	60	27	4
Texas	7	191	67	33	9	93	217	39	61	28	7
Utah	10	179	76	24	7	90	224	29	71	35	3
Vermont	11	203	56	44	13	89	229	23	77	40	6
Virginia	7	201	57	43	18	93	225	30	70	36	8
Washington	10	188	69	31	11	90	225	29	71	35	4
West Virginia	6	192	66	34	12	94	221	33	67	30	9
Wisconsin	10	181	77	23	7	90	225	27	73	35	4
Wyoming	13	184	75	25	6	87	228	25	75	38	2
<b>Other jurisdictions</b>											
District of Columbia	8	148	91	9	3	92	192	67	33	11	5
DDESS <sup>1</sup>	8	190	68	32	14	92	226	28	72	37	4
DoDDS <sup>2</sup>	7	189	69	31	13	93	227	25	75	37	1

See notes at end of table. ►



**Table C.17 Average reading scale scores and achievement-level results, by students with and without disabilities and limited English proficiency, grade 4 public schools: By state, 2003—Continued**

Grade 4	Limited-English-proficient students										
	Weighted percentage of students assessed	Average scale scores	YES			Weighted percentage of students assessed	Average scale scores	NO			Weighted percentage of students excluded
			Below Basic	At or above Basic	At or above Proficient			Below Basic	At or above Basic	At or above Proficient	
<b>Nation (public)</b>	8	186	72	28	7	92	219	35	65	32	2
Alabama	1	‡	‡	‡	‡	99	207	47	53	22	#
Alaska	17	177	76	24	6	83	219	36	64	32	1
Arizona	18	177	81	19	4	82	216	38	62	28	4
Arkansas	3	201	55	45	15	97	214	40	60	29	1
California	30	184	75	25	6	70	215	40	60	28	4
Colorado	8	191	66	34	9	92	226	28	72	39	2
Connecticut	2	‡	‡	‡	‡	98	229	26	74	43	1
Delaware	2	‡	‡	‡	‡	98	225	28	72	33	1
Florida	9	198	57	43	15	91	220	35	65	33	3
Georgia	3	182	72	28	9	97	215	40	60	27	1
Hawaii	5	167	87	13	3	95	211	44	56	22	2
Idaho	6	190	71	29	8	94	220	33	67	32	1
Illinois	5	178	78	22	5	95	219	36	64	32	4
Indiana	2	‡	‡	‡	‡	98	221	33	67	33	#
Iowa	3	195	67	33	6	97	224	29	71	36	1
Kansas	2	191	67	33	7	98	221	33	67	33	1
Kentucky	#	‡	‡	‡	‡	100	219	36	64	31	1
Louisiana	2	‡	‡	‡	‡	98	205	51	49	20	1
Maine	1	‡	‡	‡	‡	99	224	30	70	36	1
Maryland	2	194	64	36	14	98	219	37	63	33	2
Massachusetts	4	193	68	32	7	96	229	25	75	42	2
Michigan	4	204	53	47	22	96	219	35	65	32	2
Minnesota	6	176	84	16	3	94	226	28	72	39	1
Mississippi	#	‡	‡	‡	‡	100	206	51	49	18	1
Missouri	1	‡	‡	‡	‡	99	222	32	68	34	1
Montana	4	177	81	19	4	96	225	29	71	36	1
Nebraska	3	183	77	23	4	97	222	32	68	33	2
Nevada	12	177	79	21	4	88	211	44	56	23	5
New Hampshire	2	201	55	45	12	98	228	25	75	41	1
New Jersey	2	186	80	20	5	98	226	29	71	39	2
New Mexico	26	182	75	25	8	74	211	45	55	23	5
New York	4	189	73	27	5	96	223	31	69	35	3
North Carolina	4	201	56	44	15	96	222	34	66	33	2
North Dakota	3	188	72	28	6	97	223	30	70	33	1
Ohio	1	174	74	26	14	99	222	31	69	34	1
Oklahoma	6	195	63	37	10	94	215	38	62	27	1
Oregon	10	187	72	28	8	90	221	33	67	33	4
Pennsylvania	2	‡	‡	‡	‡	98	219	35	65	33	1
Rhode Island	7	177	81	19	4	93	220	34	66	31	2
South Carolina	1	‡	‡	‡	‡	99	215	40	60	26	1
South Dakota	4	180	79	21	5	96	224	29	71	35	1
Tennessee	1	‡	‡	‡	‡	99	212	43	57	26	1
Texas	12	189	73	27	7	88	218	37	63	29	5
Utah	9	190	69	31	9	91	222	30	70	34	3
Vermont	2	‡	‡	‡	‡	98	226	26	74	37	1
Virginia	4	200	60	40	15	96	224	30	70	36	3
Washington	7	185	77	23	5	93	223	30	70	35	2
West Virginia	1	‡	‡	‡	‡	99	219	35	65	29	#
Wisconsin	4	199	62	38	10	96	222	31	69	34	2
Wyoming	4	190	68	32	10	96	224	30	70	35	#
<b>Other jurisdictions</b>											
District of Columbia	6	174	81	19	3	94	189	68	32	11	1
DDESS <sup>1</sup>	4	‡	‡	‡	‡	96	225	29	71	36	1
DoDDS <sup>2</sup>	7	203	58	42	12	93	226	26	74	37	1

# The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. The results for students with disabilities and limited-English-proficient students are based on students who were assessed and cannot be generalized to the total population of such students. The weighted percentages of students with and without disabilities and limited English proficiency are based on the total number of students assessed while the percentages excluded are based on the number of students sampled.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.



**Table C.18 Average reading scale scores and achievement-level results, by students with and without disabilities and limited English proficiency, grade 8 public schools: By state, 2003**

Grade 8		Students with disabilities										
		YES					NO					Weighted percentage of students excluded
		Weighted percentage of students assessed	Average scale scores	Percentage of students			Weighted percentage of students assessed	Average scale scores	Percentage of students			
Below <b>Basic</b>	At or above <b>Basic</b>			At or above <b>Proficient</b>	Below <b>Basic</b>	At or above <b>Basic</b>			At or above <b>Proficient</b>			
<b>Nation (public)</b>	10	224	68	32	5	90	266	23	77	33	4	
Alabama	11	206	82	18	2	89	259	30	70	25	2	
Alaska	13	221	72	28	4	87	262	28	72	30	2	
Arizona	8	214	80	20	3	92	259	30	70	27	5	
Arkansas	10	214	75	25	3	90	263	24	76	30	4	
California	9	208	80	20	3	91	255	34	66	25	3	
Colorado	9	226	71	29	5	91	272	18	82	39	2	
Connecticut	11	229	60	40	6	89	272	19	81	41	3	
Delaware	8	224	71	29	4	92	268	19	81	33	8	
Florida	14	223	71	29	4	86	263	26	74	30	4	
Georgia	8	212	78	22	2	92	262	26	74	28	2	
Hawaii	13	209	83	17	1	87	258	32	68	25	3	
Idaho	10	223	73	27	2	90	269	18	82	36	3	
Illinois	11	234	60	40	5	89	271	18	82	38	4	
Indiana	11	225	69	31	3	89	270	18	82	36	3	
Iowa	11	228	69	31	4	89	272	14	86	40	4	
Kansas	11	232	61	39	8	89	270	18	82	38	3	
Kentucky	6	229	63	37	7	94	269	19	81	35	7	
Louisiana	9	219	72	28	7	91	257	32	68	23	5	
Maine	12	238	57	43	10	88	273	15	85	41	5	
Maryland	11	228	67	33	7	89	266	25	75	34	3	
Massachusetts	14	239	56	44	11	86	278	13	87	48	3	
Michigan	7	228	63	37	4	93	267	22	78	34	6	
Minnesota	10	231	65	35	6	90	272	17	83	41	3	
Mississippi	3	217	81	19	1	97	256	33	67	22	5	
Missouri	9	237	57	43	7	91	270	17	83	37	8	
Montana	10	239	54	46	6	90	273	14	86	41	5	
Nebraska	12	231	64	36	5	88	271	17	83	39	4	
Nevada	10	214	81	19	2	90	257	32	68	23	2	
New Hampshire	16	238	56	44	8	84	277	12	88	46	3	
New Jersey	14	231	63	37	5	86	274	15	85	42	2	
New Mexico	16	223	69	31	8	84	257	32	68	22	5	
New York	10	227	67	33	8	90	270	20	80	38	5	
North Carolina	11	236	58	42	11	89	265	24	76	31	6	
North Dakota	11	233	62	38	6	89	274	13	87	42	4	
Ohio	7	225	68	32	4	93	270	18	82	36	5	
Oklahoma	11	217	74	26	3	89	267	20	80	33	4	
Oregon	11	233	62	38	7	89	268	21	79	36	4	
Pennsylvania	13	227	69	31	4	87	270	17	83	36	2	
Rhode Island	17	233	61	39	8	83	267	22	78	34	3	
South Carolina	7	229	65	35	4	93	260	28	72	26	8	
South Dakota	8	231	66	34	4	92	273	15	85	41	3	
Tennessee	11	235	56	44	14	89	261	28	72	27	2	
Texas	9	223	68	32	6	91	262	26	74	28	7	
Utah	9	221	76	24	3	91	268	19	81	35	2	
Vermont	14	245	45	55	11	86	275	15	85	43	4	
Virginia	7	236	57	43	9	93	271	18	82	38	8	
Washington	11	222	72	28	4	89	270	19	81	36	3	
West Virginia	9	223	71	29	3	91	264	24	76	27	9	
Wisconsin	10	226	70	30	4	90	271	18	82	40	5	
Wyoming	12	235	61	39	4	88	271	16	84	38	2	
<b>Other jurisdictions</b>												
District of Columbia	10	199	89	11	1	90	243	49	51	11	6	
DDESS <sup>1</sup>	10	222	75	25	1	90	274	13	87	41	2	
DoDDS <sup>2</sup>	6	236	61	39	4	94	275	11	89	42	1	

See notes at end of table. ►

**Table C.18 Average reading scale scores and achievement-level results, by students with and without disabilities and limited English proficiency, grade 8 public schools: By state, 2003—Continued**

Grade 8		Limited-English-proficient students									
		YES					NO				
	Weighted percentage of students assessed	Average scale scores	Percentage of students			Weighted percentage of students assessed	Average scale scores	Percentage of students			Weighted percentage of students excluded
			Below Basic	At or above Basic	At or above Proficient			Below Basic	At or above Basic	At or above Proficient	
<b>Nation (public)</b>	5	222	71	29	5	95	263	25	75	31	2
Alabama	1	‡	‡	‡	‡	99	253	35	65	22	1
Alaska	13	227	65	35	6	87	261	29	71	30	#
Arizona	14	219	74	26	3	86	261	27	73	29	4
Arkansas	1	‡	‡	‡	‡	99	258	29	71	27	1
California	20	221	73	27	4	80	258	30	70	27	2
Colorado	4	228	68	32	4	96	269	21	79	37	2
Connecticut	2	‡	‡	‡	‡	98	267	23	77	37	1
Delaware	2	‡	‡	‡	‡	98	265	22	78	31	1
Florida	6	225	66	34	6	94	259	30	70	28	2
Georgia	2	‡	‡	‡	‡	98	259	30	70	27	1
Hawaii	5	216	80	20	2	95	253	37	63	23	2
Idaho	5	236	55	45	7	95	266	22	78	33	1
Illinois	2	226	67	33	6	98	268	22	78	35	2
Indiana	2	‡	‡	‡	‡	98	265	23	77	33	1
Iowa	2	‡	‡	‡	‡	98	268	20	80	36	1
Kansas	2	‡	‡	‡	‡	98	267	22	78	36	1
Kentucky	1	‡	‡	‡	‡	99	266	22	78	34	#
Louisiana	1	‡	‡	‡	‡	99	254	36	64	22	#
Maine	1	‡	‡	‡	‡	99	269	20	80	37	#
Maryland	2	‡	‡	‡	‡	98	263	28	72	31	1
Massachusetts	2	222	76	24	2	98	274	17	83	44	2
Michigan	1	‡	‡	‡	‡	99	265	24	76	33	1
Minnesota	4	226	71	29	3	96	269	20	80	39	1
Mississippi	1	‡	‡	‡	‡	99	255	35	65	21	#
Missouri	1	‡	‡	‡	‡	99	268	20	80	35	1
Montana	2	‡	‡	‡	‡	98	270	17	83	38	#
Nebraska	2	‡	‡	‡	‡	98	267	22	78	36	2
Nevada	6	218	77	23	2	94	254	34	66	22	2
New Hampshire	1	‡	‡	‡	‡	99	271	18	82	41	#
New Jersey	2	‡	‡	‡	‡	98	269	21	79	37	1
New Mexico	15	228	65	35	4	85	256	33	67	22	5
New York	3	216	77	23	4	97	267	23	77	36	2
North Carolina	2	227	71	29	5	98	262	27	73	29	2
North Dakota	1	‡	‡	‡	‡	99	270	18	82	39	#
Ohio	1	‡	‡	‡	‡	99	267	22	78	34	#
Oklahoma	4	245	45	55	17	96	262	25	75	30	1
Oregon	5	232	60	40	7	95	266	24	76	34	3
Pennsylvania	2	‡	‡	‡	‡	98	265	23	77	32	#
Rhode Island	4	220	76	24	1	96	263	27	73	31	2
South Carolina	#	‡	‡	‡	‡	100	258	30	70	24	#
South Dakota	2	‡	‡	‡	‡	98	271	17	83	40	#
Tennessee	2	‡	‡	‡	‡	98	259	31	69	26	#
Texas	5	213	81	19	2	95	261	27	73	27	3
Utah	6	237	57	43	11	94	266	21	79	34	1
Vermont	1	‡	‡	‡	‡	99	271	19	81	39	#
Virginia	2	‡	‡	‡	‡	98	268	21	79	36	2
Washington	3	224	73	27	4	97	266	23	77	34	1
West Virginia	#	‡	‡	‡	‡	100	260	28	72	25	#
Wisconsin	2	‡	‡	‡	‡	98	268	22	78	37	1
Wyoming	3	234	63	37	2	97	268	20	80	35	#
<b>Other jurisdictions</b>											
District of Columbia	3	231	61	39	6	97	239	52	48	11	2
DDESS <sup>1</sup>	5	‡	‡	‡	‡	95	270	18	82	39	2
DoDDS <sup>2</sup>	3	240	51	49	7	97	274	13	87	41	1

#The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>2</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding. The results for students with disabilities and limited-English-proficient students are based on students who were assessed and cannot be generalized to the total population of such students. The weighted percentages of students with and without disabilities and limited English proficiency are based on the total number of students assessed while the percentages excluded are based on the number of students sampled.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

**Table C.19 Average reading scale score and achievement-level results, by students with disabilities or limited-English-proficient students, grade 4 public schools: By urban district, 2003**

Grade 4	Weighted percentage of students assessed	Average scale scores	Percentage of students		
			Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>
<b>Students with disabilities</b>					
Nation (public)	10	184	71	29	9
Large central city (public)	9	175	79	21	6
Atlanta	6	180	76	24	11
Boston	16	181	80	20	3
Charlotte	14	191	68	32	9
Chicago	10	163	85	15	5
Cleveland	5	161	96	4	1
District of Columbia	8	148	91	9	3
Houston	11	183	78	22	5
Los Angeles	9	167	85	15	4
New York City	12	181	80	20	6
San Diego	11	185	70	30	8
<b>Limited-English-proficient students</b>					
Nation (public)	8	186	72	28	7
Large central city (public)	16	185	75	25	6
Atlanta	2	‡	‡	‡	‡
Boston	13	192	69	31	7
Charlotte	7	190	69	31	4
Chicago	16	176	82	18	4
Cleveland	2	‡	‡	‡	‡
District of Columbia	6	174	81	19	3
Houston	18	186	75	25	5
Los Angeles	54	183	76	24	4
New York City	6	183	79	21	4
San Diego	33	186	74	26	7

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

**Table C.20 Average reading scale score and achievement-level results, by students with disabilities or limited-English-proficient students, grade 8 public schools: By urban district, 2003**

Grade 8	Weighted percentage of students assessed	Average scale scores	Percentage of students		
			Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>
<b>Students with disabilities</b>					
Nation (public)	10	224	68	32	5
Large central city (public)	10	212	80	20	3
Atlanta	8	208	85	15	4
Boston	17	217	81	19	2
Charlotte	10	228	67	33	7
Chicago	12	215	80	20	2
Cleveland	9	208	85	15	1
District of Columbia	10	199	89	11	1
Houston	12	222	73	27	3
Los Angeles	10	195	86	14	1
New York City	13	211	84	16	2
San Diego	10	209	79	21	2
<b>Limited-English-proficient students</b>					
Nation (public)	5	222	71	29	5
Large central city (public)	10	216	79	21	3
Atlanta	1	‡	‡	‡	‡
Boston	9	215	82	18	1
Charlotte	5	230	65	35	7
Chicago	4	212	82	18	4
Cleveland	1	‡	‡	‡	‡
District of Columbia	3	231	61	39	6
Houston	11	214	84	16	1
Los Angeles	31	205	88	12	1
New York City	7	212	81	19	2
San Diego	20	220	78	22	2

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

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## Appendix D

### State- and District-Level Contextual Variables

To help place results from the NAEP 2003 state Trial Urban District Assessment program into context, this appendix presents selected state- and district-level data from sources other than NAEP. These data are taken from the *Digest of Education Statistics 2002*.

**Table D.1 Population and public school enrollment, from non-NAEP sources: By state, April 2000 and fall 2000**

	Estimated resident populations: April 1, 2000		Enrollment in public elementary and secondary schools: Fall 2000		
	Total (in thousands)	5- to 17-year-olds (in thousands)	Total (in thousands)	Kindergarten through grade 8 <sup>1</sup> (in thousands)	Grades 9-12 (in thousands)
<b>Nation</b>	281,422	53,118	47,223	33,709	13,514
Alabama	4,447	827	740	539	201
Alaska	627	143	133	94	39
Arizona	5,131	985	878	641	237
Arkansas	2,673	499	450	318	132
California	33,872	6,763	6,142	4,409	1,733
Colorado	4,301	803	725	517	208
Connecticut	3,406	618	562	406	156
Delaware	784	143	115	81	34
Florida	15,982	2,701	2,435	1,760	675
Georgia	8,186	1,574	1,445	1,060	385
Hawaii	1,212	218	184	132	52
Idaho	1,294	271	245	170	75
Illinois	12,419	2,369	2,049	1,474	575
Indiana	6,080	1,151	989	703	286
Iowa	2,926	545	495	334	161
Kansas	2,688	524	471	323	147
Kentucky	4,042	729	666	472	194
Louisiana	4,469	902	743	547	197
Maine	1,275	231	207	146	61
Maryland	5,296	1,003	853	609	244
Massachusetts	6,349	1,103	975	703	273
Michigan	9,938	1,924	1,743	1,256	488
Minnesota	4,919	957	854	578	277
Mississippi	2,845	571	498	364	134
Missouri	5,595	1,058	913	645	268
Montana	902	175	155	105	50
Nebraska	1,711	333	286	195	91
Nevada	1,998	366	341	251	90
New Hampshire	1,236	234	208	147	61
New Jersey	8,414	1,524	1,308	953	355
New Mexico	1,819	378	320	225	95
New York	18,976	3,451	2,882	2,029	853
North Carolina	8,049	1,425	1,294	945	348
North Dakota	642	121	109	72	37
Ohio	11,353	2,133	1,835	1,294	541
Oklahoma	3,451	656	623	445	178
Oregon	3,421	624	546	379	167
Pennsylvania	12,281	2,194	1,814	1,258	556
Rhode Island	1,048	184	157	114	44
South Carolina	4,012	745	677	493	184
South Dakota	755	152	129	88	41
Tennessee	5,689	1,024	909	668	241
Texas	20,852	4,262	4,060	2,943	1,117
Utah	2,233	509	482	333	148
Vermont	609	114	102	70	32
Virginia	7,079	1,276	1,145	816	329
Washington	5,894	1,120	1,005	694	310
West Virginia	1,808	301	286	201	85
Wisconsin	5,364	1,026	879	595	285
Wyoming	494	98	90	60	30
<b>Other Jurisdictions</b>					
District of Columbia	572	82	69	54	15
DDESS <sup>2</sup>	—	—	34	31	3
DoDDS <sup>3</sup>	—	—	74	59	14

— Not available.

<sup>1</sup> Includes a number of prekindergarten students.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, *Digest of Education Statistics, 2002* (NCES 2003-060), tables 17 and 37 (pp. 24, 50-51), 2003; U.S. Department of Commerce, U.S. Census Bureau, Current Population Reports, Series P-25, No. 1095 at the national level, SF1-P12 and unpublished data; and Common Core of Data surveys.

**Table D.2 Poverty status of school-age children and children served under Individuals with Disabilities Education Act and Chapter 1, from non-NAEP sources: By state, 2001 and school years 1990–1991 through 2000–2001**

	Poverty status of 5- to 17-year-olds: 2001		Children (birth to age 21) served under IDEA <sup>1</sup> and Chapter 1 of the Education Consolidation and Improvement Act, State Operated Programs	
	Number in poverty (in thousands)	Percent in poverty	Number of children: 2000–2001 school year	Percent change: 1990–1991 to 2000–2001
<b>Nation</b>	7,891	15.1	6,292,930	32.2
Alabama	174	21.1	99,828	5.1
Alaska	14	10.3	17,691	20.0
Arizona	214	20.1	96,442	68.5
Arkansas	124	25.0	62,222	30.1
California	1,101	15.4	645,287	37.5
Colorado	90	10.5	78,806	38.0
Connecticut	58	9.6	73,886	14.4
Delaware	13	8.5	16,760	17.3
Florida	499	17.5	367,335	55.6
Georgia	301	18.4	171,292	67.9
Hawaii	32	14.6	23,951	81.9
Idaho	36	13.1	29,174	32.5
Illinois	342	15.3	297,316	24.3
Indiana	105	9.6	156,320	36.4
Iowa	32	6.1	72,461	19.4
Kansas	58	12.3	61,267	35.5
Kentucky	108	15.5	94,572	19.1
Louisiana	188	21.3	97,938	33.0
Maine	22	11.2	35,633	27.3
Maryland	73	6.8	112,077	22.8
Massachusetts	110	11.3	162,216	4.9
Michigan	206	11.6	221,456	32.7
Minnesota	70	8.1	109,955	35.9
Mississippi	131	24.0	62,281	2.2
Missouri	108	10.7	137,381	34.7
Montana	22	13.7	19,129	11.6
Nebraska	39	12.5	42,793	30.6
Nevada	37	8.9	38,160	106.9
New Hampshire	16	7.1	30,077	53.0
New Jersey	124	8.9	221,715	22.3
New Mexico	85	24.1	52,256	45.0
New York	624	19.0	438,465	42.6
North Carolina	216	14.7	173,067	40.6
North Dakota	16	16.7	13,652	9.2
Ohio	294	15.0	237,643	15.7
Oklahoma	113	18.0	85,577	30.3
Oregon	87	13.8	75,204	36.4
Pennsylvania	257	12.7	242,655	10.6
Rhode Island	16	9.1	30,727	45.8
South Carolina	169	22.2	105,922	36.2
South Dakota	9	6.9	16,825	12.3
Tennessee	169	17.3	125,863	20.0
Texas	897	20.4	491,642	40.2
Utah	54	10.8	53,921	12.9
Vermont	9	9.9	13,623	11.1
Virginia	99	7.4	162,212	42.3
Washington	134	12.1	118,851	39.2
West Virginia	56	20.5	50,333	16.7
Wisconsin	111	12.1	125,358	44.2
Wyoming	7	8.9	13,154	17.4
<b>Other Jurisdictions</b>				
District of Columbia	24	30.9	10,559	67.9

<sup>1</sup> Individuals with Disabilities Education Act.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, *Digest of Education Statistics, 2002* (NCES 2003-060), tables 20 and 55 (pp. 27, 68), 2003; U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Minority Economic Profiles, unpublished data; *Current Population Reports, Series P-60, "Poverty in the United States;" "Money Income of Households, Families, and Persons in the United States;" and "Income, Poverty, and Valuation of Noncash Benefits,"* various years, and "Money Income in the U.S.: 2001," P60-218; U.S. Department of Education, Office of Special Education and Rehabilitative Services, *Annual Report to Congress on the Implementation of The Individuals with Disabilities Education Act*, various years; and unpublished tabulations.



**Table D.3 Expenditure per pupil, average teacher salary, and pupil/teacher ratio in public schools, from non-NAEP sources: By state, school years 1999–2000, 2001–2002, and fall 2000**

In public elementary and secondary schools			
	Expenditure per pupil: 1999–2000	Estimated average annual salary of teachers: 2001–2002	Pupil/teacher ratio: Fall 2000
<b>Nation</b>	\$6,911	\$44,604	16 <sup>1</sup>
Alabama	5,638	39,268	15 <sup>1</sup>
Alaska	8,806	49,418	17
Arizona	4,999	36,966	20
Arkansas	5,277	35,389	14
California	6,314	53,870	21 <sup>1</sup>
Colorado	6,215	40,222	17
Connecticut	9,753	54,300	14
Delaware	8,310	48,363	15
Florida	5,831	38,719	18
Georgia	6,437	44,073	16
Hawaii	6,530	41,951	17
Idaho	5,315	37,482	18
Illinois	7,133	50,000	16
Indiana	7,192	44,195	17
Iowa	6,564	38,230	14
Kansas	6,294	36,673	14
Kentucky	5,921	37,847	17
Louisiana	5,804	35,437	17
Maine	7,667	37,100	13
Maryland	7,731	46,200	16
Massachusetts	8,761	50,293	14
Michigan	8,110	52,037	18 <sup>1</sup>
Minnesota	7,190	43,330	16
Mississippi	5,014	32,800	16
Missouri	6,187	37,695	14
Montana	6,314	34,379	15
Nebraska	6,683	36,236	14
Nevada	5,760	41,524	19
New Hampshire	6,860	38,911	15
New Jersey	10,337	54,575	13
New Mexico	5,825	36,490	15
New York	9,846	53,081	14
North Carolina	6,045	42,959	15
North Dakota	5,667	31,709	13
Ohio	7,065	44,492	16
Oklahoma	5,395	35,412	15
Oregon	7,149	43,886	19
Pennsylvania	7,772	50,599	16
Rhode Island	8,904	49,758	15
South Carolina	6,130	38,943	15
South Dakota	5,632	31,295	14
Tennessee	5,383	38,554	15 <sup>1</sup>
Texas	6,288	39,293	15
Utah	4,378	37,414	22
Vermont	8,323	38,802	12
Virginia	6,841	41,262	13 <sup>1</sup>
Washington	6,376	43,483	20
West Virginia	7,152	36,751	14
Wisconsin	7,806	43,114	14
Wyoming	7,425	37,841	13
<b>Other Jurisdictions</b>			
District of Columbia	10,107	47,049	14
DDESS <sup>2</sup>	—	—	14
DoDDS <sup>3</sup>	—	—	14

— Not available.

<sup>1</sup> Includes imputations for underreporting.

<sup>2</sup> Department of Defense Domestic Dependent Elementary and Secondary Schools.

<sup>3</sup> Department of Defense Dependents Schools (Overseas).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, *Digest of Education Statistics, 2002* (NCES 2003-060), tables 67, 78 and 169 (pp. 79, 88, 198-99), 2003; U.S. Department of Education, National Center for Education Statistics, *Revenues and Expenditures for Public Elementary and Secondary Schools*, various years; *Statistics of State School Systems*, various years; and Common Core of Data surveys; National Education Association, *Estimates of School Statistics*; and unpublished data, 2002.

**Table D.4 Enrollment, expenditure per pupil, and pupil/teacher ratio in public schools, from non-NAEP sources:  
By urban district, fall 2000 and school year 1999–2000**

In public elementary and secondary schools			
	Total enrollment: Fall 2000 (in thousands)	Expenditure per pupil: <sup>1</sup> 1999–2000	Pupil/teacher ratio: Fall 2000
Atlanta	58	\$8,623	15
Boston	63	11,503	11
Charlotte	103	6,617	16
Chicago	435	7,214	18
Cleveland	76	7,679	14
District of Columbia	69	10,874	14
Houston	208	6,196	19
Los Angeles	721	6,740	21
New York City	1,067	9,472	16
San Diego	142	6,765	19

<sup>1</sup> Expenditure per pupil based on fall enrollment collected by the Bureau of the Census.

NOTE: Total enrollment reflects totals reported by school districts and may differ from data derived from summing school level data to school district aggregates.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, *Digest of Education Statistics, 2002* (NCES 2003-060), tables 90 and 91 (pp. 99–116), 2003; U.S. Department of Education, National Center for Education Statistics, Common Core of Data survey; and U.S. Department of Commerce, “Survey of Local Government Finances.”

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# **E**

## **Appendix E**

### **Sample Text from the**

### **NAEP 2003 Reading Assessment**

This appendix contains the reading passages released from the NAEP 2003 reading assessment at each grade. To review passages and questions from previous NAEP assessments, please visit the NAEP web site at <http://nces.ed.gov/nationsreportcard>.



# WATCH OUT FOR WOMBATS!

**A**s we rode along the highway sixty miles northeast of Adelaide, Australia, a diamond-shaped sign suddenly loomed ahead. Watch Out for Wombats, it warned. We peered into the sparse scrub along the roadside and searched for the brown furry animals. In the distance we spotted a mob of red kangaroos bouncing out of sight, and near the road a crowlike bird called a currawong was perched, but nowhere did we see any wombats. However, we later found out that this was not surprising because we were traveling during midday, and wombats are active mostly at night. It wasn't until we visited the animal reserve that we finally saw our first wombat and learned more about this funny-looking creature.

We found that there are two types of wombats in Australia: the hairy-nosed wombat, which lives in Queensland and

South Australia, and the coarse-haired wombat, which lives along the southeast coast. Both have soft brown fur, short ears, and thick-set bodies. They are said to resemble North American badgers. The hairy-nosed wombat is smaller and has pointier ears compared to its coarse-haired cousin; otherwise they are very much alike.

In many ways the wombat is similar to another Australian native, the koala. Like koalas, wombats have strong forelimbs and powerful claws. But instead of using its claws to cling to high tree branches as the koala does, the wombat digs large underground burrows. These burrows are usually nine to fifteen feet across, but they can be enormous—sometimes as long as ninety feet. One end of the burrow is used as a sleeping area—there the wombat builds a nest made of bark.

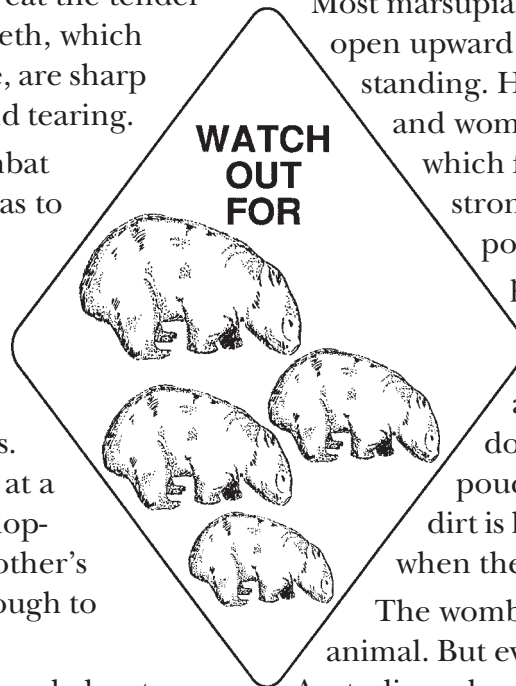
The wombat is a vegetarian, so it also uses its mighty claws to tear up grasses and roots for its food. A mother wombat will pull out single stems of grass and lay them on the ground so her young wombat can eat the tender bases. The wombat's teeth, which grow throughout its life, are sharp and ideal for cutting and tearing.

When a mother wombat gives birth, she never has to worry about finding a baby-sitter—she simply carries her baby along with her. Like most mammals in Australia, wombats are marsupials. A baby wombat is born at a very early stage of development and lives in its mother's pouch until it is old enough to survive on its own.

Wombats have only one baby at a time, usually during the Australian winter months, May to July. A baby wombat is called a joey. At birth the tiny joey—barely an inch long—uses its forelimbs to pull itself along its mother's underside to get into her pouch, where it will be kept warm, protected, and fed.

Marsupials, like all mammals, are nourished by their mothers' milk. The nipples that supply the milk are inside the pouch. Once inside, the wombat joey finds a nipple and grabs it. The

nipple then swells up in the baby's mouth, providing a firm hold and a steady supply of food. The joey stays in its mother's pouch for the next four months and grows rapidly.



Most marsupials have pouches which open upward when the animal is standing. However, both koalas and wombats have pouches which face downwards. A strong muscle keeps the pouch tightly closed and prevents the young wombat or koala from falling out. An advantage of the downward-opening pouch for wombats is that dirt is less likely to get inside when the wombat is burrowing.

The wombat is a shy and gentle animal. But even if you lived in Australia and were willing to keep watch during the nighttime hours, it would be difficult to get to know one. As more and more people move into territories in which wombats live, they destroy the wombat's burrows and food supplies. In some areas where the wombat was once plentiful, it is now almost extinct. Animal reserves have been set up recently to protect the wombat. Perhaps with a little help these friendly creatures will again prosper and multiply. The next time we drive through Australia, we really may have to Watch Out for Wombats!

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## THANK YOU, M'AM

*by Langston Hughes*

She was a large woman with a large purse that had everything in it but a hammer and nails. It had a long strap, and she carried it slung across her shoulder. It was about eleven o'clock at night, dark, and she was walking alone, when a boy ran up behind her and tried to snatch her purse. The strap broke with a sudden single tug the boy gave it from behind. But the boy's weight and the weight of the purse combined caused him to lose his balance. Instead of taking off full blast as he had hoped, the boy fell on his back on the sidewalk and his legs flew up. The large woman simply turned around and kicked him right square in his blue-jeaned sitter. Then she reached down, picked the boy up by his shirtfront, and shook him until his teeth rattled.

After that the woman said, "Pick up my pocketbook, boy, and give it here."

She still held him tightly. But she bent down enough to permit him to stoop and pick up her purse. Then she said, "Now ain't you ashamed of yourself?"

Firmly gripped by his shirtfront, the boy said, "Yes'm."

The woman said, "What did you want to do it for?"

The boy said, "I didn't aim to."

She said, "You a lie!"

By that time two or three people passed, stopped, turned to look, and some stood watching.

"If I turn you loose, will you run?" asked the woman.

"Yes'm," said the boy.

"Then I won't turn you loose," said the woman. She did not release him.

"Lady, I'm sorry," whispered the boy.

"Um-hum! Your face is dirty. I got a great mind to wash your face for you. Ain't you got nobody home to tell you to wash your face?"

"No'm," said the boy.

"Then it will get washed this evening," said the large woman, starting up the street, dragging the frightened boy behind her.

He looked as if he were fourteen or fifteen, frail and willow-wild, in tennis shoes and blue jeans.

The woman said, "You ought to be my son. I would teach you right from wrong. Least I can do right now is to wash your face. Are you hungry?"

"No'm," said the being-dragged boy. "I just want you to turn me loose."

"Was I bothering *you* when I turned that corner?" asked the woman.

"No'm."

“But you put yourself in contact with *me*,” said the woman. “If you think that that contact is not going to last awhile, you got another thought coming. When I get through with you, sir, you are going to remember Mrs. Luella Bates Washington Jones.”

Sweat popped out on the boy’s face and he began to struggle. Mrs. Jones stopped, jerked him around in front of her, put a half nelson about his neck, and continued to drag him up the street. When she got to her door, she dragged the boy inside, down a hall, and into a large kitchenette-furnished room at the rear of the house. She switched on the light and left the door open. The boy could hear other roomers laughing and talking in the large house. Some of their doors were open, too, so he knew he and the woman were not alone. The woman still had him by the neck in the middle of her room.

She said, “What is your name?”

“Roger,” answered the boy.

“Then, Roger, you go to that sink and wash your face,” said the woman, whereupon she turned him loose—at last. Roger looked at the door—looked at the woman—looked at the door—*and went to the sink*.

“Let the water run until it gets warm,” she said. “Here’s a clean towel.”

“You gonna take me to jail?” asked the boy, bending over the sink.

“Not with that face, I would not take you nowhere,” said the woman. “Here I am trying to get home to cook me a bite to eat, and you snatch my pocketbook! Maybe you ain’t been to your supper either, late as it be. Have you?”

“There’s nobody home at my house,” said the boy.

“Then we’ll eat,” said the woman. “I believe you’re hungry—or been hungry—to try to snatch my pocketbook!”

“I want a pair of blue suede shoes,” said the boy.

“Well, you didn’t have to snatch my pocketbook to get some suede shoes,” said Mrs. Luella Bates Washington Jones. “You could’ve asked me.”

“M’am?”

The water dripping from his face, the boy looked at her. There was a long pause. A very long pause. After he had dried his face and not knowing what else to do, dried it again, the boy turned around, wondering what next. The door was open. He could make a dash for it down the hall. He could run, run, run, *run!*

The woman was sitting on the daybed. After a while she said, “I were young once and I wanted things I could not get.”

There was another long pause. The boy’s mouth opened. Then he frowned, not knowing he frowned.

The woman said, “Um-hum! You thought I was going to say *but* didn’t you? You thought I was going to say, *but I didn’t snatch people’s pocketbooks*. Well, I wasn’t going



to say that.” Pause. Silence. “I have done things, too, which I would not tell you, son. Everybody’s got something in common. So you set down while I fix us something to eat. You might run that comb through your hair so you will look presentable.”

In another corner of the room behind a screen was a gas plate and an icebox. Mrs. Jones got up and went behind the screen. The woman did not watch the boy to see if he was going to run now, nor did she watch her purse, which she left behind her on the daybed. But the boy took care to sit on the far side of the room, away from the purse, where he thought she could easily see him out of the corner of her eye if she wanted to. He did not trust the woman not to trust him. And he did not want to be mistrusted now.

“Do you need somebody to go to the store,” asked the boy, “maybe to get some milk or something?”

“Don’t believe I do,” said the woman, “unless you just want sweet milk yourself. I was going to make cocoa out of this canned milk I got here.”

“That will be fine,” said the boy.

She heated some lima beans and ham she had in the icebox, made the cocoa, and set the table. The woman did not ask the boy anything about where he lived, or his folks, or anything else that would embarrass him. Instead, as they ate, she told him about her job in a hotel beauty shop that stayed open late, what the work was like, and how all kinds of women came in and out, blondes, redheads, and Spanish. Then she cut him a half of her ten-cent cake.

“Eat some more, son,” she said.

When they were finished eating, she got up and said, “Now here, take this ten dollars and buy yourself some blue suede shoes. And next time, do not make the mistake of latching onto *my* pocketbook *nor nobody else’s*. I got to get my rest now. But from here on in, son, I hope you will behave yourself.”

She led him down the hall to the front door and opened it. “Good night! Behave yourself, boy!” she said, looking out into the street as he went down the steps.

The boy wanted to say something other than, “Thank you, m’am,” to Mrs. Luella Bates Washington Jones, but although his lips moved, he couldn’t even say that as he turned at the foot of the barren stoop and looked up at the large woman in the door. Then she shut the door.

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