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ABSTRACT

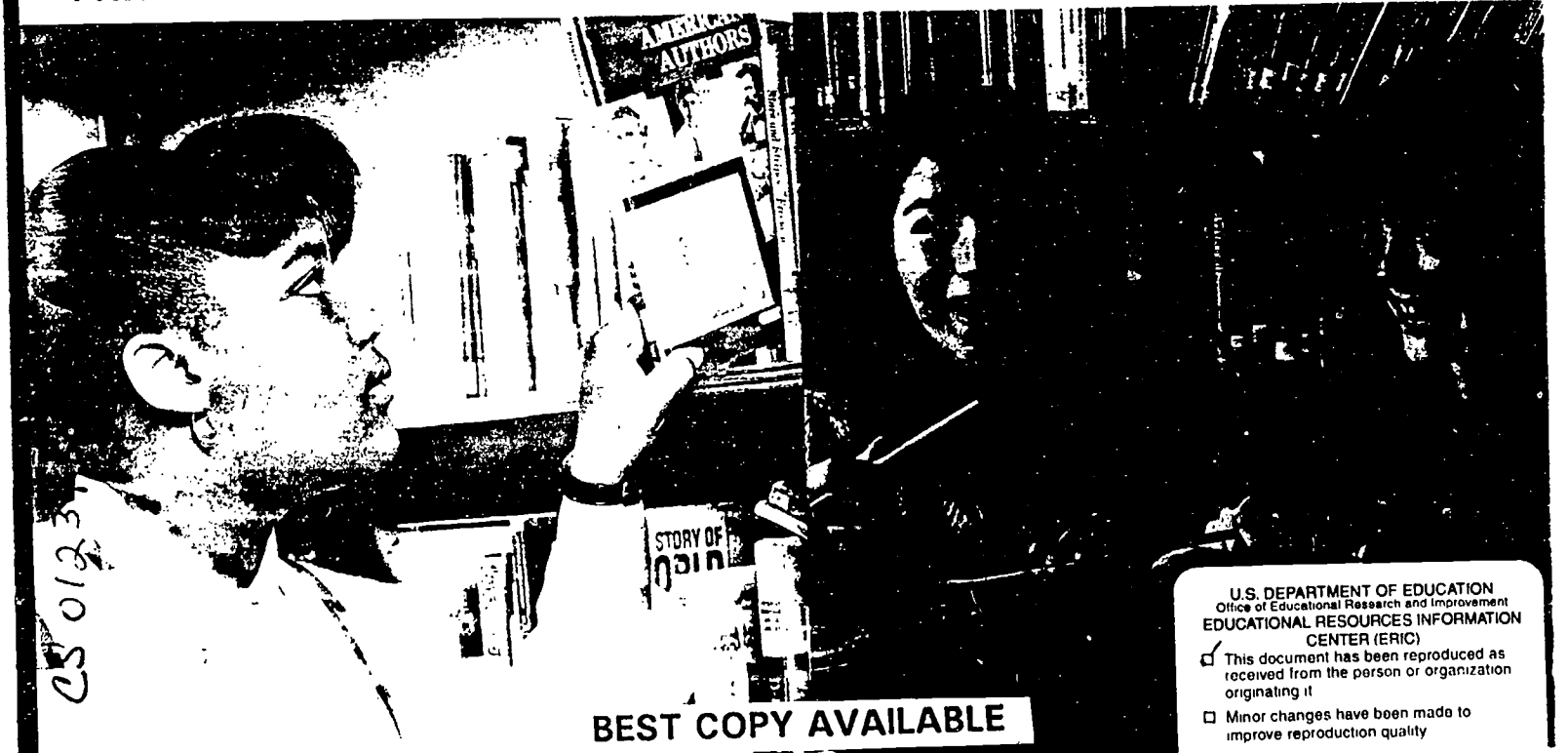
This revised report presents a look at national and state-level findings of students' overall proficiency in the National Assessment of Educational Progress (NAEP) 1994 reading assessment for grades 4, 8, and 12 and provides comparisons with the performance of their 1992 counterparts. The first chapter introduces the report, discussing topics such as the NAEP, the national sample, the trial state assessment program, the proficiency scale, achievement levels, and cautions in interpretations. The second and third chapters present a first look at the average reading proficiency and the attainment of achievement levels by America's students, discussing average national reading proficiency and average reading proficiency by region and by major reporting subgroups (race/ethnicity, gender, parents' educational level, public and nonpublic schools, and cross-state proficiency findings). Major findings include: (1) the average reading proficiency of 12th-grade students declined significantly from 1992 to 1994; (2) across all three grade levels, female students continued to display higher reading achievement than male students; (3) reading proficiency was higher on average for students whose parents had more education; and (4) students attending nonpublic schools displayed higher average reading proficiency than their counterparts attending public schools. Appendixes present national and state sample descriptions, reporting subgroup(s) definitions, comparisons among states based on average proficiency, cross-state proficiency and achievement level tabular summaries, and state contextual background factors. Contains 7 figures and 12 tables of data. (RS)

NATIONAL CENTER FOR EDUCATION STATISTICS

REVISED EDITION

NAEP 1994 READING : A FIRST LOOK

FINDINGS FROM THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS



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The National Assessment Governing Board

NATIONAL CENTER FOR EDUCATION STATISTICS

REVISED EDITION
October 1995

NAEP 1994 READING : A First Look

Findings from the National Assessment of Educational Progress

Paul L. Williams
Clyde M. Reese
Jay R. Campbell
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Gary W. Phillips

October 1995

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HIGHLIGHTS

The 1994 National Assessment of Educational Progress (NAEP) in reading continues a 25-year mandate to assess and report the educational progress of students at grades 4, 8, and 12. National results are provided that describe students' reading achievement at each grade and within various subgroups of the general population. In addition, results are reported for individual states that choose to participate. The 1994 NAEP Reading Assessment included a state-by-state component at Grade 4, as well as the national component at all three grades.

This report is a *first look* at the results of the 1994 reading assessment. It presents national and state-level findings of students' overall proficiency in reading. Furthermore, this report provides comparisons between students' reading performance in 1994 and the performance of their counterparts in 1992. Results are also reported according to the reading achievement levels established by the National Assessment Governing Board. The following highlights represent the major findings presented in this report:

- The most striking finding from the 1994 assessment is that the average reading proficiency of twelfth-grade students declined significantly from 1992 to 1994. This decline was observed across a broad range of subgroups. Significant changes in average proficiency were not observed for the nation at grades 4 or 8.

- The percentage of twelfth-grade students reaching the Proficient achievement level in reading declined since 1992. There also was a decrease from 1992 to 1994 in the percentage of twelfth graders at or above the Basic level.

- In 1994, 30 percent of fourth graders, 30 percent of eighth graders, and 36 percent of twelfth graders attained the Proficient level in reading. Across the three grades, three to seven percent reached the Advanced level.

- In 1994, twelfth graders in the Northeast, Central, and West regions displayed lower average reading proficiency than their counterparts in 1992.

- Across the nation, declines in average proficiency from 1992 to 1994 were observed for fourth-grade Hispanic students as well as for White, Black, and Hispanic students in grade 12.

- Across all three grades, female students continued to display higher reading achievement than male students. The national decline in twelfth-grade reading performance since 1992 was evident for both males and females.

- Consistent with previous reports, reading proficiency at all grades was higher on average for students whose parents had more education. Among twelfth graders, the decline in average reading proficiency since 1992 was evident at all levels of parental education.

- In 1994, fourth-, eighth-, and twelfth-grade students attending nonpublic schools displayed higher average reading proficiency than their counterparts attending public schools. Both public school and nonpublic school twelfth graders demonstrated a decline in performance since 1992.

- The eight states with the highest average reading proficiency in 1994 for public school fourth graders included — Maine, North Dakota, Wisconsin, New Hampshire, Massachusetts, Iowa, Connecticut, and Montana.

- Between 1992 and 1994, there were significant declines in average reading proficiency in eight jurisdictions — California, Delaware, Louisiana, New Hampshire, New Mexico, Pennsylvania, South Carolina, and Virginia.

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CHAPTER 1

Introduction

With the completion of its 1994 assessment program, the National Assessment of Educational Progress (NAEP) concluded its 25th year as the only nationally representative and continuous assessment of what America's students know and can do in various subject areas. This report, which highlights selected portions of the 1994 Reading Assessment results, is a *first look* into the reading assessment program that was conducted during this milestone year. The complete results of the assessment will be presented in the forthcoming *NAEP 1994 Reading Report Card*.

This report provides a discussion of the initial findings for public and nonpublic school students in grades 4, 8, and 12 across the nation. The report also presents state-level findings for representative samples of fourth-grade public school students in jurisdictions that participated in NAEP's 1994 Trial State Assessment Program in Reading. State-level results for nonpublic schools will appear in the *NAEP 1994 Reading Report Card*.

The National Assessment of Educational Progress (NAEP)

NAEP is a congressionally mandated survey administered by the National Center for Education Statistics, U.S. Department of Education. Since 1969, NAEP has reported on the educational achievement of American students and provided accurate and useful information to parents, educators, and policymakers at the national, state, and local levels. NAEP has become an integral part of our nation's evaluation of the condition and progress of education.

Since its beginning, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, history, geography, and other fields. The 1994 NAEP program included assessments in reading, United States history, and world geography.

The NAEP National Sample

The 1994 NAEP assessment was based on a national probability sample of public and nonpublic school students enrolled in fourth, eighth, and twelfth grade. The sample was selected using a stratified, three-stage ling plan.

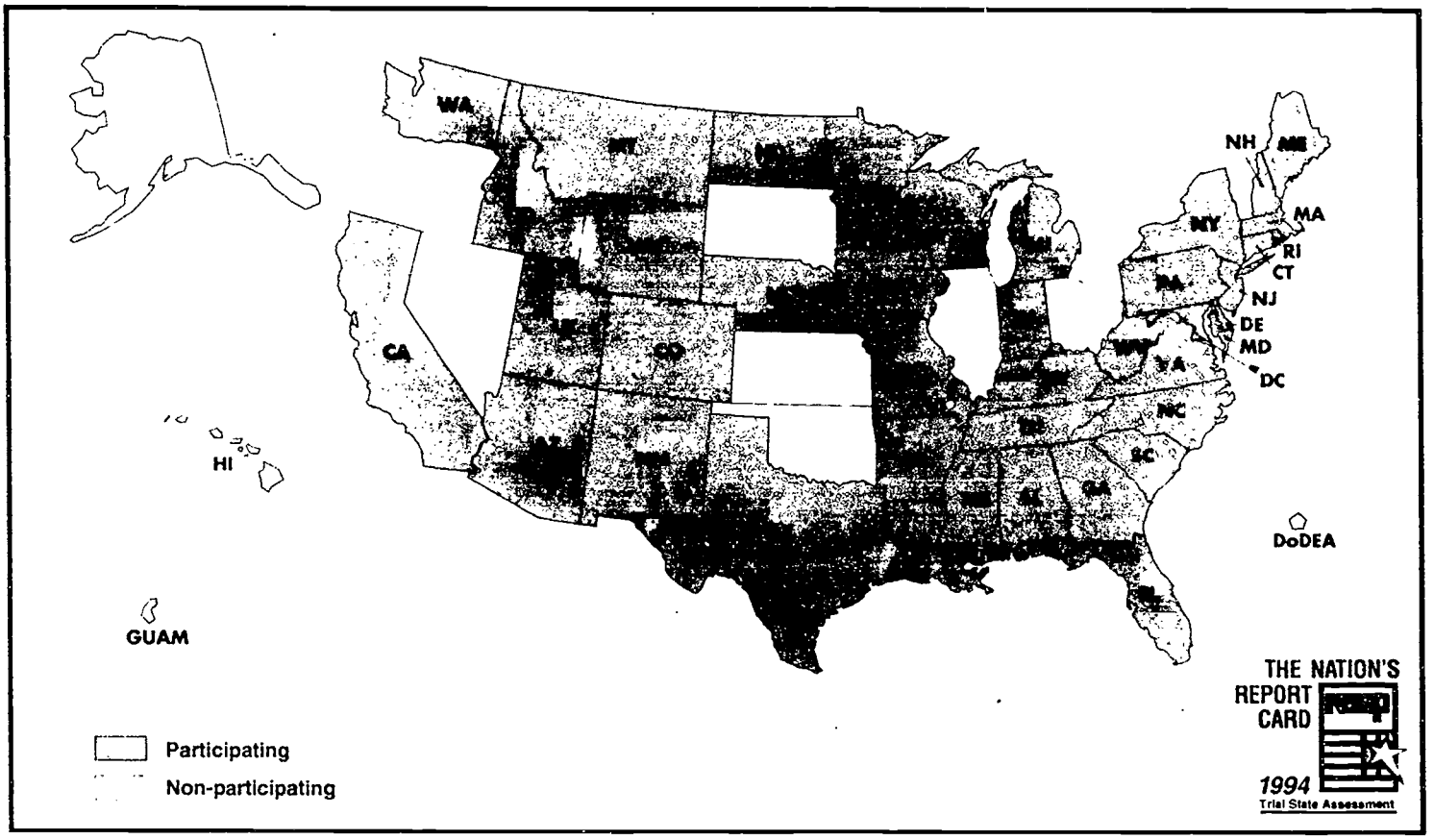
This sampling process resulted in the selection of three grade-specific, national samples of approximately 7,400 fourth-grade students, 10,000 eighth-grade students, and 10,000 twelfth-grade students. Detailed information regarding the student and school national sample sizes and participation rates is presented in Tables A.1 and A.2 in Appendix A. The national sample includes students attending domestic Department of Defense schools and Bureau of Indian Affairs schools. Students attending Department of Defense Education Activity (DoDEA) Overseas Schools and schools in Guam are not included in the national sample but are included as jurisdictions in the 1994 Trial State Assessment.

The NAEP Trial State Assessment Program

In response to legislation passed by Congress in 1988, the NAEP program includes voluntary state-by-state assessments. The state assessment program was initiated in 1990 on a trial basis with an assessment of the mathematics achievement of eighth-grade students in public schools. These efforts were expanded in the 1992 assessment, in which public school students were assessed in fourth-grade reading and fourth- and eighth-grade mathematics.

The 1994 Trial State Assessment Program was comprised of state-by-state reading assessments of fourth-grade students attending public and nonpublic schools. Forty-four jurisdictions participated in the voluntary program (see Figure 1). To help ensure valid state-by-state results, the 1994 Trial State Assessment Program established a number of school and student participation rate standards that jurisdictions were required to meet (see Appendix A for details). Two states, Idaho and Michigan, did not meet minimum school participation guidelines for public schools; therefore, their public school results are not presented in this report. Several other states failed to meet more stringent participation rate standards; results for these jurisdictions are included in the report but are properly noted in the relevant tables and appendices. Another jurisdiction, Washington, DC, withdrew from the Trial State Assessment after the data collection phase. Results for Washington, DC, are not contained in this report. The sample selection process yielded student sample sizes typically in excess of 2,500 students for each participating jurisdiction. A tabular description of the school and student samples at the state-level and related participation rates is presented in Table A.2 in Appendix A.

Figure 1. Participating Jurisdictions in the 1994 Trial State Assessments in Reading



The NAEP Reading Assessment

The 1994 NAEP Reading Assessment was developed to correspond with the framework established and used for the 1992 assessment. In both the 1992 and 1994 reading assessments, multiple-choice and constructed-response questions were used to assess the reading abilities of students. Constructed-response questions required students to write short (one or two sentences) or extended (a paragraph or more) answers. The percentage of students' response time devoted to answering constructed-response questions was approximately 60 percent in 1992 and 70 percent in 1994. New exercises were created for the 1994 assessment and in addition, a subset of the reading exercises used in 1992 was re-administered. The common framework and common exercises of the two assessments facilitate the reporting of trend results.

The framework, developed by the National Assessment Governing Board through a national consensus process, considers students' performance in situations that involve reading different kinds of materials for different purposes. The framework was designed to measure three global purposes – **reading for literary experience, reading to gain information, and reading to perform a task**. At grade 4, however, only the *literary experience* and *gain information* purposes were assessed.

The NAEP Reading Assessment asks students to build, extend, and examine text meaning from four stances or orientations.

- *Initial Understanding* – comprehending the overall or general meaning of the text selection
- *Developing an Interpretation* – extending the ideas in the text by making inferences and connections
- *Personal Response* – making explicit connections between ideas in the text and a student's own background knowledge and experiences
- *Critical Stance* – considering how the author crafted a text

These stances are not considered to be hierarchical or completely independent of each other. They provide a foundation from which to generate questions and to consider student performance at all levels.

At each grade, the NAEP Reading Assessment consisted of a set of test booklets that each contained student background questions and reading exercises. The background section requested information from the students about their experiences in and out of school and their motivation in completing the assessment.

The reading exercise section included reading passages and associated questions designed to assess students' reading comprehension. The booklets were distributed randomly to the students and required about one hour to complete.

NAEP Proficiency Scale

Student responses to the 1994 NAEP Reading Assessment were analyzed to determine the percentage of students responding correctly to each multiple-choice question and the percentage of students responding in each of the score categories for constructed-response questions. Item response theory (IRT) methods were used to produce scales that summarize results for each of the three purposes for reading. An overall composite scale was developed by weighting the separate purposes for reading scales based on the relative importance of each purpose in the NAEP reading framework. The resulting 0 to 500 scale, which is linked to the 1992 reading scale through IRT equating procedures, is the reporting metric used in Chapter 2 to present results.

Achievement Levels

In addition to the NAEP proficiency scale, this report also presents data using the reading achievement levels as authorized by the NAEP legislation and adopted by the National Assessment Governing Board (NAGB)[1]. The achievement levels are based on collective judgments, gathered from a broadly representative panel of teachers, education specialists, and members of the general public, about what students should know and be able to do relative to a body of content reflected in the NAEP assessment frameworks. For reporting purposes, the achievement level cut scores for each grade are placed on the traditional NAEP scale resulting in four ranges: *Basic, Proficient, Advanced,* and the region *below Basic*. It should be noted that the achievement level cut scores presented on the following page are different from those used in the 1992 reading assessment reports. The reason why revisions were made to the cut scores is explained in Appendix F. The definitions of the three achievement levels are presented below.

Basic	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
Proficient	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.
Advanced	This level signifies superior performance.

It should be noted that the setting of achievement levels on the National Assessment is relatively new and in transition. There have been evaluations which concluded that the percentages of students at certain levels may be underestimated.[2] On the other hand, there have been critiques of those evaluations, which found that such conclusions were not supported by the weight of the empirical evidence present in the evaluations.[3]

The student achievement levels in this report have been developed carefully and responsibly, and have been subject to refinements and revisions in procedures as new technologies have become available. Upon review of the available information, the Commissioner of NCES has judged that the achievement levels are in a developmental status. However, the Commissioner and the Governing Board also believe that the achievement levels are useful and valuable in reporting on the educational achievement of American students.

Definitions of the three levels of reading achievement for each of the three grades that were assessed are shown on the following page. For each grade, the definitions are cumulative from Basic through Advanced.

Reading Achievement Levels

GRADE 4

BASIC (208) Fourth-grade students performing at the Basic 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.

PROFICIENT (238) Fourth-grade students performing at the Proficient 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 connection between the text and what the student infers should be clear.

ADVANCED (268) Fourth-grade students performing at the Advanced 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.

GRADE 8

BASIC (243) Eighth-grade students performing at the Basic 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.

PROFICIENT (281) Eighth-grade students performing at the Proficient 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. Proficient eighth graders should be able to identify some of the devices authors use in composing text.

ADVANCED (323) Eighth-grade students performing at the Advanced 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; 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.

GRADE 12

BASIC (265) Twelfth-grade students performing at the Basic level should be able to demonstrate an overall understanding and make some interpretations of the text. When reading text appropriate to twelfth grade, they should be able to identify and relate aspects of the text to its overall meaning, extend the ideas in the text by making simple inferences, recognize interpretations, make connections among and relate ideas in the text to their personal experiences, and draw conclusions. They should be able to identify elements of an author's style.

PROFICIENT (302) Twelfth-grade students performing at the Proficient level should be able to show an overall understanding of the text which includes inferential as well as literal information. When reading text appropriate to twelfth grade, they should be able to extend the ideas of the text by making inferences, drawing conclusions, and making connections to their own personal experiences and other readings. Connections between inferences and the text should be clear, even when implicit. These students should be able to analyze the author's use of literary devices.

ADVANCED (346) Twelfth-grade students performing at the Advanced level should be able to describe more abstract themes and ideas in the overall text. When reading text appropriate to twelfth grade, they should be able to analyze both the meaning and the form of the text and explicitly support their analyses with specific examples from the text. They should be able to extend the information from the text by relating it to their experiences and to the world. Their responses should be thorough, thoughtful, and extensive.

Overview of this Report

The two remaining chapters of this report present results expressed in terms of *average reading proficiency* and *student achievement levels*, respectively. Within each of these chapters, findings are presented for the nation, for the regions, and for states. In addition, each chapter presents national results for the major reporting subgroups described below. State-by-state subgroup results are presented in Appendix D. More detailed descriptions of the reporting subgroups are presented in Appendix B.

- *Race/Ethnicity*. Estimates are reported for students' self-identification of their race/ethnicity according to one of the following mutually exclusive categories: White, Black, Hispanic, Asian, Pacific Islander, and American Indian (including Alaskan Native). Between the 1992 and 1994 reading assessments, the student racial/ethnic subgroup question was revised. Asian and Pacific Islander categories were a combined data collection category in the 1992 assessment, preventing 1992 estimates and trend results from being reported for these categories.
- *Gender*. Estimates are reported separately for males and females.
- *Parents' Education Level*. Estimates are reported based on students' reports of the highest level of their parents' education: did not finish high school, graduated from high school, some education after high school, or graduated from college.
- *Public/Nonpublic Schools*. Estimates are reported for students attending public schools and nonpublic schools, including Catholic and other nonpublic schools.

This report examines and compares the results for groups of students defined by shared demographic characteristics or responses to background questions (e.g., males compared to females) and does not include an analysis of the relationships among combinations of these groups (e.g., White males compared to Black males).

The means and percentages presented in the report are *estimates* because they are based on samples rather than the entire population(s). As such, the results are subject to a measure of uncertainty, reflected in the *standard error* of the estimate. Although standard errors are not provided with the estimates presented in this report, a full set of standard errors will be available in future NAEP reports. The significant differences presented in the following chapters take into account the standard errors associated with the estimates.

The comparisons presented in the report are based on statistical tests that consider both the magnitude of the difference between the group means or percentages and the standard errors of those statistics. The report presents significant differences (1) among the estimates for the reporting subgroups in the 1994 assessment and (2) between 1992 and 1994 results. Throughout this report, differences are defined as significant when they are significant from a statistical perspective. This means that observed differences are unlikely to be due to chance factors associated with sampling variability. All differences reported are statistically significant at the 0.05 level with appropriate adjustments for multiple comparisons. The term "significant," therefore, is not necessarily intended to imply judgment about the absolute magnitude or educational relevance of the differences. The term is intended to identify statistically dependable *population* differences as an aid in focusing subsequent dialogue among policymakers, educators, and the public.

This report also contains a series of appendices. Appendix A provides information about sampling and participation rates. Appendix B includes descriptions of the reporting subgroups. Appendices C through E provide cross-state tabular summaries related to the 1994 Trial State Assessment Program in Reading. Detailed information about measurement methodology and data analysis techniques will be available in the forthcoming *NAEP 1994 Reading Report Card* and the national and state technical reports.

Cautions in Interpretations

The reader is cautioned against making simple or causal inferences related to subgroup membership, effectiveness of public and nonpublic schools, and state educational systems. For example, differences observed among racial/ethnic subgroups can almost certainly be associated with a broad range of socioeconomic and educational factors not discussed in this report and possibly not addressed by the NAEP assessment program. Similarly, differences between public and nonpublic schools may be better understood after accounting for factors such as composition of the student body, parents' education levels, and parental interest. Finally, differences in reading performance among states most likely reflect an interaction between the effectiveness of the educational programs within the state and the challenges posed by economic constraints and student demographic demands.

Endnotes

1. P.L. 103-382. Improving America's School Act of 1994.
2. *Education Achievement Standards, NAGB's Approach Yields Misleading Interpretations*, United States General Accounting Office Report to Congressional Requestors (Washington, DC: United States General Accounting Office, June 1993.) GAO/PEMD-93-12 Educational Achievement Standards.

   Setting Achievement Levels for the Nation, The second Report of the National Academy of Education Panel on the Evaluation of the NAEP Trial State Assessment, 1992 Trial State Assessment (Stanford, CA: National Academy of Education, 1993.)
3. American College Testing, *Technical report on setting achievement levels on the 1992 National Assessment of Educational Progress in mathematics, reading, and writing* (Washington, DC: National Assessment Governing Board, 1993.)

   Cizek, G., *Reactions to National Academy of Education report* (Washington, DC: National Assessment Governing Board, 1993.)

   Kane, M., *Comments on the NAE evaluation of the NAGB achievement levels* (Washington, DC: National Assessment Governing Board, 1993.)

   American College Testing, *NAEP Reading Revisit: An Evaluation of the 1992 Achievement Levels Descriptions* (Washington, DC: National Assessment Governing Board, 1995.)

CHAPTER 2

A First Look at the Average Reading Proficiency of America's Students

Overview

This chapter presents the overall average reading proficiency of students in grades 4, 8, and 12. Findings are presented for the nation, by region, and by major subgroups of students. In addition, results from the 1994 Trial State Assessment Program are provided. Average scale scores from the 1992 reading assessment provided in this chapter are slightly different from those presented in the 1992 reading reports. The reason why 1992 scale scores were recalculated is explained in Appendix F.

The most striking finding from the 1994 NAEP Reading Assessment concerns the nation's high school seniors – *twelfth-grade students scored, on average, significantly lower on the 1994 reading assessment than they did on the 1992 assessment*. This overall decline did not result from a large decline in the reading proficiency of just one subgroup of students. Rather, a broad range of subgroups showed significant decreases in reading proficiency, including male and female students; White, Black, and Hispanic students; and students from the Northeast, Central, and West regions of the country.

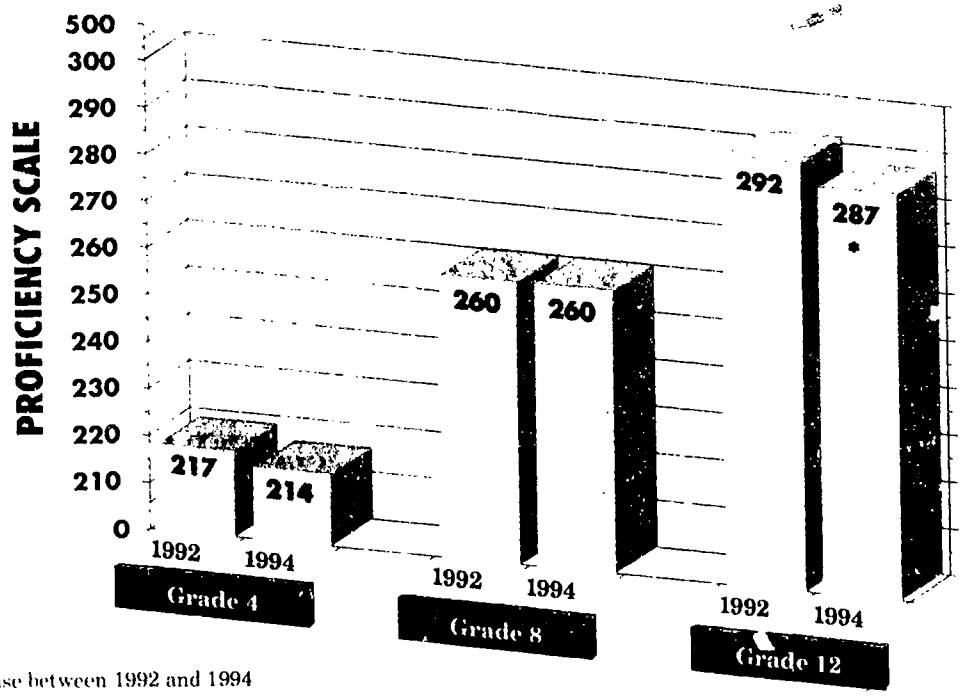
The magnitude of the changes in average proficiency did not differ significantly among regions of the country, racial/ethnic subgroups, parents' education levels, or types of schools (i.e., the four-point decline for public school twelfth graders is not statistically different from the six-point decline for nonpublic school twelfth graders). However, at grade 12, the decline in average proficiency for males (seven points) was significantly larger than the decline for females (three points).

Reasons for the decline in average reading proficiency at grade 12 will be explored in greater detail in the forthcoming *NAEP 1994 Reading Report Card*. Average reading proficiency at grades 4 and 8 showed no statistically significant changes between 1992 and 1994.

Average National Reading Proficiency

Table 1 and Figure 2 present national estimates of the 1992 and 1994 average student proficiency scores on the NAEP reading scale. The average proficiency of twelfth-grade students declined by five points between 1992 and 1994. This difference represents a statistically significant change. The estimates of the average proficiency of fourth- and eighth-grade students in 1994 were not statistically different from their 1992 counterparts.

Figure 2. Overall National Reading Proficiency by Grade — NAEP 1992 and 1994



*Significant decrease between 1992 and 1994

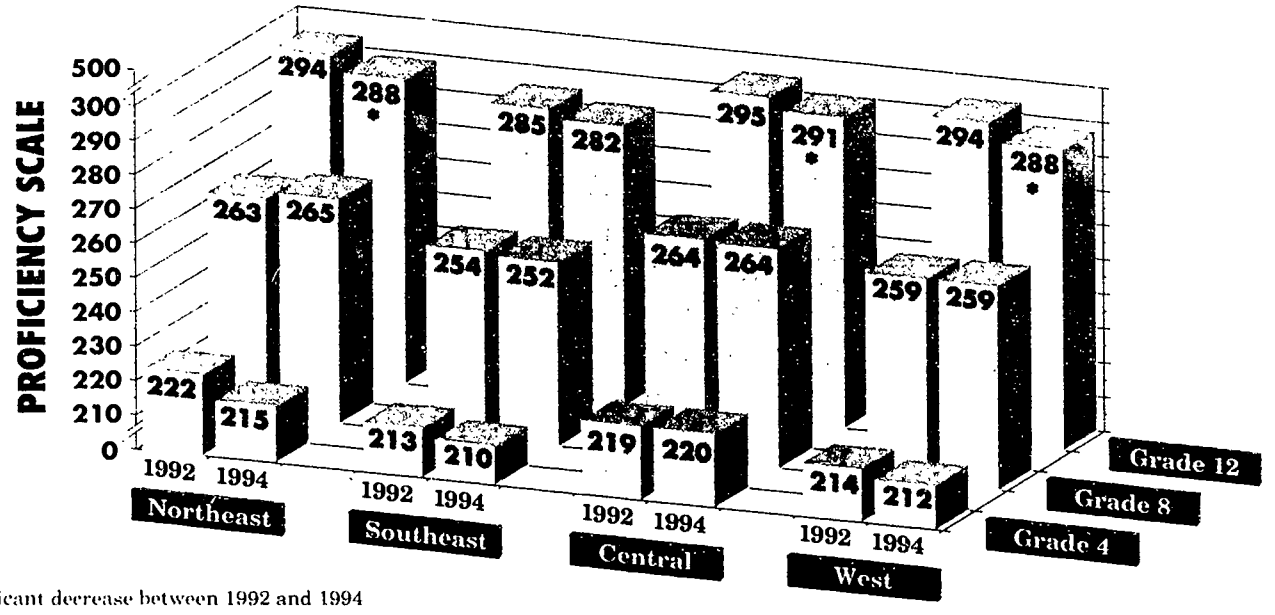
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Average Reading Proficiency by Region

Average proficiencies by region are presented in Table 1 and Figure 3 for both the 1992 and 1994 NAEP Reading Assessments. The 1994 results show regional differences that are similar to those reported in 1992.[1] In 1994, eighth- and twelfth-grade students in the Southeast exhibited lower average reading proficiencies than their counterparts did in the other three regions of the country. Eighth-grade students in the Central region exhibited a higher average proficiency than students in the West, while the average proficiency of fourth-grade students in the Central region was higher than that of their counterparts in the Southeast. The average proficiency estimates among the other regions for the 1994 assessment for grade 4 were not statistically different.

The overall average proficiency decline between 1992 and 1994 for twelfth-grade students was clearly evident in three of the four regions of the country. The statistically significant declines from 1992 levels reported for the three regions were six points in the West region, six points in the Northeast region, and five points in the Central region.[2] In the Southeast, the 1994 estimate of average proficiency was not significantly different from the 1992 estimate. Other changes in regional proficiency estimates between 1992 and 1994 were not statistically significant, including the seven-point change in the estimates for fourth-grade students in the Northeast.

Figure 3. Average Reading Proficiency by Grade and by Region — NAEP 1992 and 1994



*Significant decrease between 1992 and 1994

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

TABLE 1

Average Reading Proficiency by Region

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1994		
	Percentage of Students	Average Proficiency	Change From 1992
Grade 4			
Total	100	214	–2
Region			
Northeast	23	215	–7
Southeast	23	210	–2
Central	25	220	0
West	29	212	–1
Grade 8			
Total	100	260	0
Region			
Northeast	20	265	1
Southeast	26	252	–2
Central	24	264	0
West	30	259	–1
Grade 12			
Total	100	287	–5*
Region			
Northeast	20	288	–6*
Southeast	23	282	–3
Central	27	291	–5*
West	29	288	–6*

Differences between two groups may be partially explained by other factors not included in this table.

The NAEP reading scale ranges from 0 to 500.

* The value for the 1994 assessment was signinficantly different from the value for 1992 at about the 95 percent confidence level.

The standard errors for the 1994 national averages are between 0.7 and 1.0 scale score points. The standard errors for the 1994 regional averages range from 1.2 to 2.4 points

Percentages may not total 100 percent due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Average Reading Proficiency by Major Reporting Subgroups

Tables 2 through 5 present the average reading proficiency estimates for major subgroups of the fourth-, eighth-, and twelfth-grade student populations. The results provided in this section of the report address the *statistically significant differences* that were reported either between reporting subgroups or between assessment years. There are, of course, other differences in reading proficiency estimates among the student subgroups, but these differences were not statistically significant.

Race/Ethnicity. Table 2 presents the average proficiencies by racial/ethnic subgroups. The 1994 assessment, like previous assessments, reported substantial variation in the average reading proficiency estimates among the different racial/ethnic subgroups (see Endnote 1). At all three grades, the average proficiencies of Asian and White students were significantly higher than those of Black and Hispanic students; they were also higher than those of American Indian students at grades 4 and 8. At grade 12, White students outperformed Asian students.

The overall decline in reading proficiency at grade 12 between 1992 and 1994 can be seen in large decreases in the average proficiencies of White, Black, and Hispanic students. In addition, the proficiency of Hispanic fourth-grade students showed a significant decline of 10 points between 1992 and 1994. No racial/ethnic group of students at any grade level showed a significant improvement in reading proficiency between 1992 and 1994.

Note that trends could not be estimated for Asian and Pacific Islander students at any grade because their race/ethnicity data were collected as a single category for the 1992 assessment. It is also important to reiterate that differences among the NAEP reading proficiency estimates should not be associated, in a simple or causal manner, with subgroup membership because any difference can almost certainly be associated with a broad range of socioeconomic and educational factors, many of which are not addressed directly by the NAEP assessment program.

TABLE 2

Average Reading Proficiency by Race/Ethnicity

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1994		
	Percentage of Students	Average Proficiency	Change From 1992
Grade 4			
Total	100	214	–2
Race/Ethnicity			
White	69	224	–1
Black	15	187	–6
Hispanic	12	191	–10*
Asian	2	232	—
Pacific Islander	1	219	—
American Indian	2	201	–5
Grade 8			
Total	100	260	0
Race/Ethnicity			
White	70	268	0
Black	15	237	–1
Hispanic	11	240	–1
Asian	2	273	—
Pacific Islander	1	259!	—
American Indian	1	251	0
Grade 12			
Total	100	287	–5*
Race/Ethnicity			
White	73	294	–4*
Black	13	265	–8*
Hispanic	8	270	–9*
Asian	3	280	—
Pacific Islander	1	280!	—
American Indian	1	275!	***

Differences between two groups may be partially explained by other factors not included in this table.

The NAEP reading scale ranges from 0 to 500.

* The value for the 1994 assessment was significantly different from the value for 1992 at about the 95 percent confidence level

! Interpret with caution any comparisons involving this statistic. The nature of the sample does not allow accurate determination of the variability of this value.

The standard errors for the 1994 national averages are between 0.7 and 1.0 scale score points. The standard errors for the 1994 race/ethnicity averages range from 0.7 to 7.4 points.

— Due to significant changes in the wording of the race/ethnicity question between the 1992 and 1994 assessments, the 1992 results for Asian and Pacific Islander students are not comparable to 1994 results. Therefore, 1992 results for these two subgroups are not presented.

*** Sample size is insufficient to permit a reliable estimate.

Percentages may not total 100 percent due to rounding or, in the case of the race/ethnicity variable, because some students categorized themselves as "other."

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Gender. As can be seen in Table 3, female students at all three grades had significantly higher reading proficiencies than male students. Specifically, female students scored 10 points higher than males at grade 4, 15 points higher than males at grade 8, and 14 points higher than males at grade 12. Similar reading proficiency differences also were observed in the 1992 assessment (see Endnote 1 and 2).

The overall decline in reading proficiency at grade 12 between 1992 and 1994 was reflected again in the proficiency estimates of both male and female students. Neither male nor female students showed an improvement in proficiency at any of the assessed grades between 1992 and 1994.

TABLE 3

Average Reading Proficiency by Gender

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1994		
	Percentage of Students	Average Proficiency	Change From 1992
Grade 4			
Total	100	214	–2
Gender			
Male	51	209	–4
Female	49	220	–1
Grade 8			
Total	100	260	0
Gender			
Male	50	252	–1
Female	50	267	0
Grade 12			
Total	100	287	–5*
Gender			
Male	50	280	–7*
Female	50	294	–3*

Differences between two groups may be partially explained by other factors not included in this table.

The NAEP reading scale ranges from 0 to 500.

* The value for the 1994 assessment was signinficantly different from the value for 1992 at about the 95 percent confidence level.

The standard errors for the 1994 national averages are between 0.7 and 1.0 scale score points. The standard errors for the 1994 gender averages range from 0.8 to 1.3 points.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Parents' Education Level. The NAEP 1994 Reading Assessment results are consistent with previous results that reveal a relationship between the students' reading proficiency and their description of their parents' education level (see Table 4). In fairness, it should be noted that substantial numbers of fourth-grade students (34 percent) report that they do not know the education level of either of their parents. Even at grade 8, almost one in 10 students reported that they do not know their parents' education level. Furthermore, existing research has raised at least some question about the accuracy of student-reported data among these groups of students.[3]

Despite these data limitations, a degree of consistency among the parents' education level results is evident across the three grade levels. For 1994, as in past assessments, increasing levels of parents' education in general corresponded with higher average reading proficiencies. In comparing the groups of students at all three grades that report knowing their parents' education levels, students with at least one parent who either graduated from college or had some education after high school had higher average proficiencies than did students who reported lower levels of parents' education. Furthermore, at all three grades, students who reported that their parents did not finish high school had lower average proficiencies than those with at least one parent who graduated from high school.

Once again, the overall drop in proficiency at grade 12 is shown regardless of parents' education level. For each of the five levels, estimated differences between 1992 and 1994 were statistically significant. For grades 4 and 8, the differences between 1992 and 1994 estimates, including the 10-point decrease found for fourth-grade students who reported that their parents did not finish high school, were not statistically significant for any of the parents' education levels. No students, at any grade, with respect to any parents' education level group, showed significant improvement in reading proficiency between 1992 and 1994.

TABLE 4

Average Reading Proficiency by Parents' Education Level

THE NATION'S REPORT CARD 1992 1994

	1994		
	Percentage of Students	Average Proficiency	Change From 1992
Grade 4			
Total	100	214	–2
Parents' Education Level			
Graduated College	42	224	–1
Some Education After HS	8	223	1
Graduated HS	13	207	–5
Did Not Finish HS	4	188	–10
I Don't Know	34	206	–4
Grade 8			
Total	100	260	0
Parents' Education Level			
Graduated College	43	270	–1
Some Education After HS	20	266	0
Graduated HS	21	252	1
Did Not Finish HS	7	238	–5
I Don't Know	9	238	1
Grade 12			
Total	100	287	–5*
Parents' Education Level			
Graduated College	43	298	–3*
Some Education After HS	25	289	–5*
Graduated HS	21	277	–6*
Did Not Finish HS	7	266	–9*
I Don't Know	3	248	–10*

Differences between two groups may be partially explained by other factors not included in this table.

The NAEP reading scale ranges from 0 to 500.

*The value for the 1994 assessment was signinficantly different from the value for 1992 at about the 95 percent confidence level.

The standard errors for the 1994 national averages are between 0.7 and 1.0 scale score points. The standard errors for the 1994 parents' education level averages range from 0.9 to 3.4 points.

Percentages may not total 100 percent due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Public and Nonpublic Schools. The 1994 results presented in Table 5 are consistent with the 1992 results; students at all three grades who attended nonpublic schools (either Catholic or other nonpublic schools) had a significantly higher average proficiency than did students attending public schools. The overall decline in twelfth-grade proficiency, however, was reflected in the 1994 results for both public and nonpublic schools. For both types of schools, estimates of reading proficiency decreased from 1992 levels, and these changes were statistically significant. At grades 4 and 8, no statistically significant changes from 1992 levels were observed for either school type.

As was discussed in Chapter 1, the reader is cautioned against making simplistic inferences about the relative effectiveness of public and nonpublic schools. Average performance differences between the two types of schools are in part related to socioeconomic and students' home factors, such as parents' education and involvement. To interpret more fully the differences noted in Table 5, more in-depth analyses need to be considered. Such analyses will be featured in a future NAEP research and development report.

TABLE 5

Average Reading Proficiency by Type of School

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1994		
	Percentage of Students	Average Proficiency	Change From 1992
Grade 4			
Total	100	214	–2
Type of School			
Public Schools Only	90	212	–2
Nonpublic Schools Only	10	231	–1
Catholic Schools	7	229	0
Other Nonpublic Schools	4	234	–4!
Grade 8			
Total	100	260	0
Type of School			
Public Schools Only	89	257	–1
Nonpublic Schools Only	11	279	1
Catholic Schools	7	279	3
Other Nonpublic Schools	4	280	–3
Grade 12			
Total	100	287	–5*
Type of School			
Public Schools Only	89	286	–4*
Nonpublic Schools Only	10	301	–6*
Catholic Schools	6	298	–9*
Other Nonpublic Schools	4	307	–2

Differences between two groups may be partially explained by other factors not included in this table.

The NAEP reading scale ranges from 0 to 500.

* The value for the 1994 assessment was signinficantly different from the value for 1992 at about the 95 percent confidence level.

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow accurate determination of the variability of this value.

The standard errors for the 1994 national averages are between 0.7 and 1.0 scale scare points. The standard errors for the 1994 type of school averages range from 0.7 to 3.7 points.

Percentages may not total 100 percent due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Cross-State Proficiency Findings. In addition to the 1994 reading proficiency findings discussed above, state-level results also are reported for 41 jurisdictions. Table 6 presents the average reading proficiency for *fourth-grade public school* students by jurisdiction from the 1992 and 1994 NAEP Trial State Assessments. (Note that two states, Montana and Washington, and the Department of Defense Education Activity (DoDEA) Overseas Schools participated in the 1994 assessment but did not participate in 1992.)

Similar to the results cited at the national level for fourth grade, most states exhibited no significant change in average proficiency between 1992 and 1994. However, approximately 20 percent of the jurisdictions that participated in both assessments did show significant decreases in average reading proficiency between the two assessments. States exhibiting a significant decrease are indicated with < or << next to the 1994 average. The difference between the two symbols is explained in the table's footnote. No state exhibited a significant increase. (For detailed comparisons among the states, readers should refer to the cross-state, multiple comparisons figure in Appendix C.)

Each jurisdiction faces a unique set of challenges with respect to the demographic characteristics of its school-age populations and the economic and political environment in which its public school systems operate. These factors no doubt influence the effectiveness of each jurisdiction's school systems and need to be considered when comparing performance. Results presented in Appendices D and E provide some background to inform discussion of state differences. *The NAEP 1994 Reading Report Card* and other future reports will contain state-level data, which will provide a more complete context for interpreting state differences.

TABLE 6

Average Grade 4 Reading Proficiency NAEP Trial State Assessments in Reading Public Schools Only

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1992 Average Proficiency	1994 Average Proficiency
Nation	215	212
Region		
Northeast	220	212
Southeast	211	208
Central	218	218
West	212	212
State		
Alabama	207	208
Arizona	209	206
Arkansas	211	209
California	202	197<
Colorado	217	213
Connecticut	222	222
Delaware	213	206<<
Florida	208	205
Georgia	212	207
Hawaii	203	201
Indiana	221	220
Iowa	225	223
Kentucky	213	212
Louisiana	204	197<<
Maine	227	228
Maryland	211	210
Massachusetts	226	223
Minnesota	221	218
Mississippi	199	202
Missouri	220	217
Montana†	—	222
Nebraska†	221	220
New Hampshire†	228	223<
New Jersey	223	219
New Mexico	211	205<
New York	215	212
North Carolina	212	214
North Dakota	226	225
Pennsylvania†	221	215<
Rhode Island†	217	220
South Carolina	210	203<<
Tennessee†	212	213
Texas	213	212
Utah	220	217
Virginia	221	213<<
Washington	—	213
West Virginia	216	213
Wisconsin†	224	224
Wyoming	223	221
Other Jurisdictions		
DoDEA	—	218
Guam	182	181

Differences between two groups may be partially explained by other factors not included in this table.

<< The value for 1994 was significantly lower than the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, < indicates the value for 1994 was significantly lower than the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

— Jurisdiction did not participate in 1992 Trial State Assessment

DoDEA Department of Defense Education activity Overseas Schools

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Endnotes

1. Mullis, I.V.S., Campbell, J.R., & Farstrup, A.E., *NAEP 1992 Reading Report Card for the Nation and the States* (Washington, DC: National Center for Education Statistics, Government Printing Office, 1993.)
2. The differences discussed in the text and presented in the tables are calculated from the unrounded means or percentages for the two groups being compared. Therefore, the differences between the rounded means or percentages presented in the tables and figures may not match those displayed in the "Change from 1992" or those discussed in the text. For example, if Group A has a mean of 218.17 (rounded to 218) and Group B has a mean of 223.55 (rounded to 224), the appropriate difference between the two groups' means is 5.38 (rounded to 5).
3. Looker, E. Dianne, "Accuracy of Proxy Reports of Parental Status Characteristics," in *Sociology of Education, 62(4)*, pp. 257-276, 1989.

CHAPTER 3

A First Look at Attainment of Achievement Levels by America's Students

Overview

The reading achievement levels attained by fourth-, eighth-, and twelfth-grade students from the NAEP Reading Assessment are presented in this chapter. Results are displayed for the nation, by region, and by the major reporting subgroups. In addition, state-level reading achievement results from the 1992 and 1994 Trial State Assessments are presented. As a result of recalculating 1992 scale scores and revising the achievement level cut scores, results from the last reading assessment presented in this chapter are different from those published in the 1992 reports. See Appendix F for more information about the revisions made to achievement level cut scores. When interpreting differences among subgroups and among states, the reader is reminded of the cautions presented in Chapter 1.

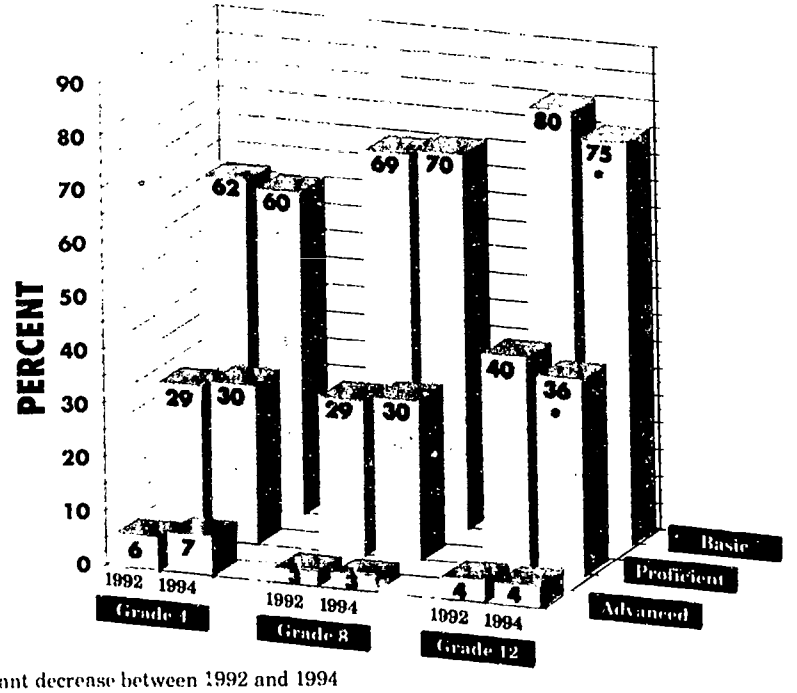
The three reading achievement levels — Basic, Proficient, and Advanced — were established by the National Assessment Governing Board (NAGB) for reporting NAEP results. The *Basic* level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade. The *Proficient* level, the central level, represents solid academic performance and demonstrated competence over challenging subject matter. The *Advanced* level signifies superior performance beyond Proficient.

Many of the findings presented in the prior chapter also were reflected in the NAEP achievement level findings, which also revealed a decline in the reading achievement of our nation's twelfth-grade students. The NAEP achievement level results show that on the 1994 assessments, *proportionately fewer twelfth-grade students were performing at or above the Proficient and Basic levels in 1994 than in 1992.*

Reading Achievement Levels for the Nation

The percentages of fourth-, eighth-, and twelfth-grade students at the three reading achievement levels are shown in Figure 4 and Table 7 for the 1992 and 1994 NAEP Reading Assessments. The percentage of students at or above the Basic level for the 1994 reading assessment ranged from 60 at grade 4 to 75 for grade 12. When looking at the central level, the achievement level identified by NAGB as the level all students should reach, less than one-third (30 percent) of fourth- and eighth-

Figure 4. Percent of Students At or Above the Reading Achievement Levels by Grade — NAEP 1992 and 1994



*Significant decrease between 1992 and 1994

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

grade students were classified as at or above Proficient. Slightly more twelfth-grade students (36 percent) were at or above the Proficient level. Few students at any grade were at or above the Advanced level — seven percent at grade 4; three percent at grade 8; and four percent at grade 12.

Consistent with the results reported in Chapter 2, the percentage of twelfth-grade students *at or above the Proficient level* decreased by four percentage points from 1992 to 1994. Furthermore, the percentage of 1994 twelfth-grade students *below the Basic level* increased by five percentage points. Fourth- and eighth-grade results indicate little or no change from 1992 to 1994 in the percentage of students at or above any of the three achievement levels. As mentioned in Chapter 2, possible explanations for the decline in the achievement levels of twelfth-grade students will be explored in the forthcoming *1994 Reading Report Card*.

Reading Achievement Levels by Region

Figure 5 and Table 7 present the regional percentages of students at or above each achievement level for the 1992 and 1994 NAEP Reading Assessments. Across the three grades, no statistically significant differences among regions were found in the percentage of students at or above the Advanced level. However, significant differences were observed in the percentages of students attaining the Proficient and Basic levels.

In 1994, no statistically significant differences among the regions were found in the percentages of students at or above the Proficient level at the fourth grade. The percentage of fourth-grade students at or above the Basic level for the Southeast region was less than that for the Central region. Other regional differences at or above the Basic level were not significant.

TABLE 7

Reading Achievement Levels by Region

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1992 Assessment					1994 Assessment				
		Percentage of Students					Percentage of Students			
	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic
Grade 4										
Nation		6	29	62	38		7	30	60	40
Region										
Northeast	21	9	34	66	34	23	8	31	61	39
Southeast	23	5	24	58	42	23	7	25	55	45
Central	27	6	30	66	34	25	8	34	66	34
West	28	6	27	59	41	29	7	29	59	41
Grade 8										
Nation		3	29	69	31		3	30	70	30
Region										
Northeast	22	4	33	72	28	20	4	35	74	26
Southeast	25	2	23	64	36	26	2	23	62	38
Central	25	4	32	74	26	24	3	33	75	25
West	28	3	29	69	31	30	3	29	69	31
Grade 12										
Nation		4	40	80	20		4	36<	75<	25>
Region										
Northeast	24	5	44	81	19	20	5	37	76	24
Southeast	23	2	31	73	27	23	3	30	70	30
Central	26	4	44	84	16	27	5	40	78<	22>
West	27	4	42	81	19	29	4	38	74<	26>

Differences between two groups may be partially explained by other factors not included in this table

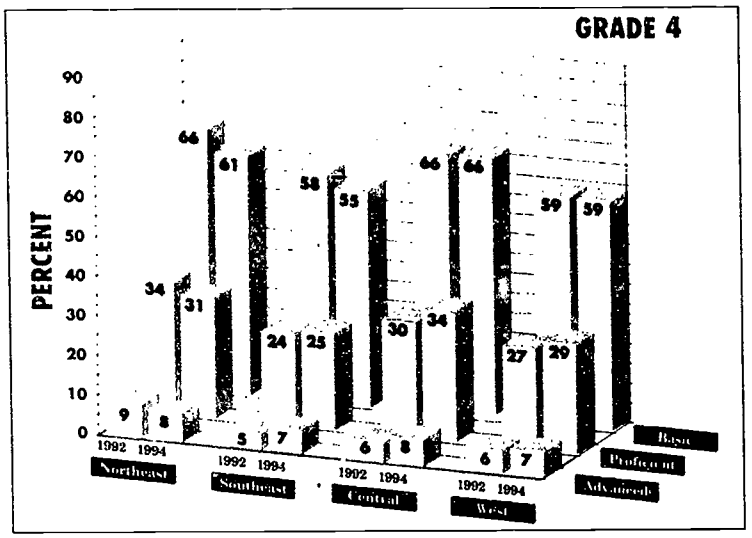
< The value for the 1994 assessment was significantly lower (> higher) than the value for 1992 at about the 95 percent confidence level

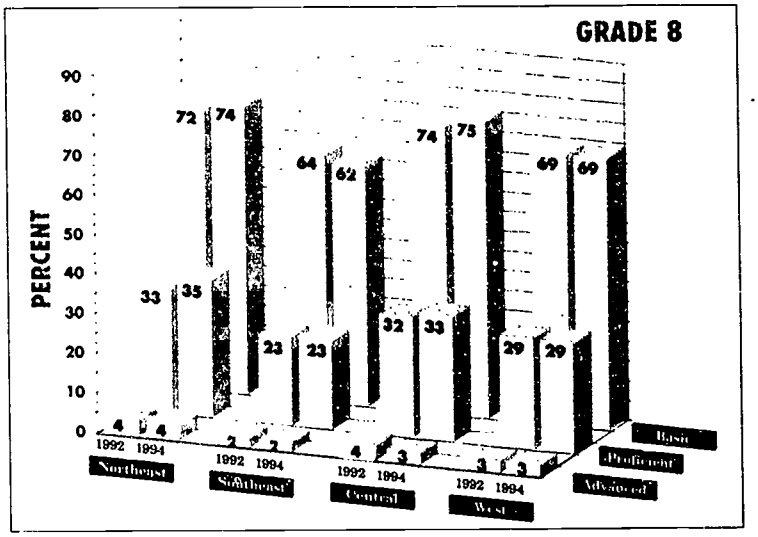
The percentages of students in the regions may not total 100 percent due to rounding

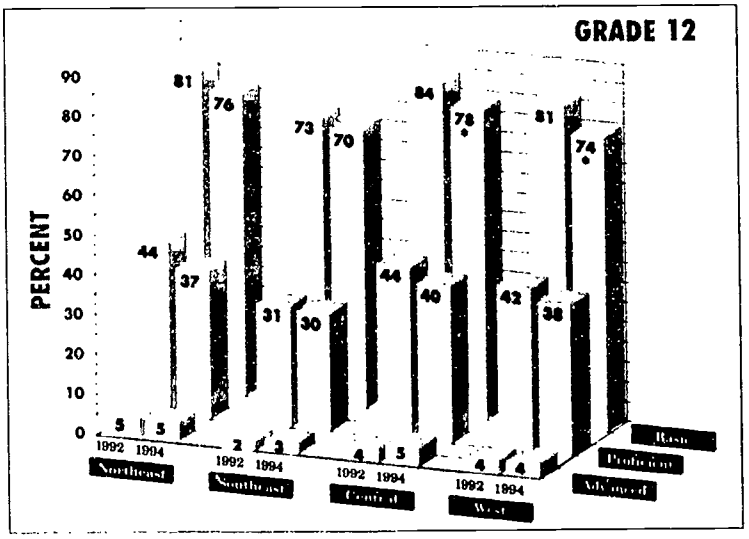
The standard errors for the 1994 (a) Advanced Level, regional percentages range from 0.4 to 1.4; (b) Proficient Level, regional percentages range from 1.3 to 2.7, and (c) Basic Level, regional percentages range from 1.2 to 2.6

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Figure 5. Percent of Students At or Above the Reading Achievement Levels by Grade and by Region — NAEP 1992 and 1994







*Significant decrease between 1992 and 1994
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

At the eighth grade, a smaller percentage of students were at or above the Proficient level in the Southeast than in the other three regions. Similarly, the percentage of students at or above Basic in the Southeast region was less than the other regions. The percentage of eighth graders at or above Basic in the West was less than in the Central region.

At the twelfth grade, the percentage of Southeast students at or above the Proficient level was less than that of the corresponding percentages of students in the Central and West regions. The percentage of students at or above Basic in the Southeast region was less than the Central region.

The results from the 1992 and 1994 NAEP Reading Assessments indicate no significant change in the percentage of fourth-, and eighth-grade students at any of the three achievement levels for the four regions of the country. Statistically significant decreases in the percentage of students at or above the Basic level at grade 12 were observed in the Central and West regions. The significant decrease observed nationally for grade 12 students was not reflected by significant changes in the Northeast and Southeast regional estimates.

Reading Achievement Levels by Major Reporting Subgroups

Tables 8 through 11 present the percentages of fourth-, eighth-, and twelfth-grade students at or above the three achievement levels — Basic, Proficient, and Advanced — by major reporting subgroups. As previously noted, the discussion of the findings is restricted to *statistically significant differences* between reporting subgroups and assessment years.

Race/Ethnicity. Consistent with past assessments, results presented in Table 8 from the 1994 reading assessment indicated large racial/ethnic differences. Significant differences among racial/ethnic groups were observed in the percentage of students at or above each of the three achievement levels — Basic, Proficient, and Advanced.

At all three grades, few significant differences were found for the percent of students reaching the Advanced achievement level. The percentage of White students at or above this level was significantly higher than the

TABLE 8

Reading Achievement Levels by Race/Ethnicity

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1992 Assessment					1994 Assessment				
		Percentage of Students					Percentage of Students			
	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic
Grade 4										
Total		6	29	62	38		7	30	60	40
Race/Ethnicity										
White	71	8	35	71	29	69	9	37	71	29
Black	16	1	8	33	67	15	1	9	31	69
Hispanic	9	3	16	44	56	12	2	13	36	64
Asian	—	—	—	—	—	2	16	48	78	22
Pacific Islander	—	—	—	—	—	1	8	35	67	33
American Indian	2	3	18	53	47	2	3	18	48	52
Grade 8										
Total		3	29	69	31		3	30	70	30
Race/Ethnicity										
White	70	4	36	78	22	70	4	36	78	22
Black	15	0	9	45	55	15	0	9	44	56
Hispanic	10	1	14	49	51	11	1	14	49	51
Asian	—	—	—	—	—	2	6	44	81	19
Pacific Islander	—	—	—	—	—	1	3!	26!	68!	32!
American Indian	1	1	20	61	39	1	1	20	63	37
Grade 12										
Total		4	40	80	20		4	36<	75<	25>
Race/Ethnicity										
White	72	5	47	86	14	73	5	43	81<	19>
Black	15	1	18	61	39	13	1	13	52	48
Hispanic	9	2	24	66	34	8	1	20	58	42
Asian	—	—	—	—	—	3	3	33	67	33
Pacific Islander	—	—	—	—	—	1	3!	27!	71!	29!
American Indian	0	***	***	***	***	1	2!	20!	61!	39!

Differences between two groups may be partially explained by other factors not included in this table.

< The value for the 1994 assessment was significantly lower (> higher) than the value for 1992 at about the 95 percent confidence level.

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow accurate determination of the variability of this value.

— Due to significant changes in the wording of the race/ethnicity question between the 1992 and 1994 assessments, the 1992 results for Asian and Pacific Islander students are not comparable to 1994 results.

*** Sample size is insufficient to permit a reliable estimate.

The percentages of students in the subgroups may not total 100 percent due to rounding.

The standard errors for the 1994 (a) Advanced Level, race/ethnicity percentages range from 0.2 to 5.7; (b) Proficient Level, race/ethnicity percentages range from 1.0 to 8.1; and (c) Basic Level, race/ethnicity percentages range from 0.7 to 9.9.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

corresponding percentages of Black or Hispanic students at all three grades. No other significant differences were observed at the Advanced level.

The Proficient level is defined to represent solid academic achievement in reading. When the percentages of students from various subgroups reaching or exceeding this level are compared, significant differences are found at all three grades. At grades 4, 8, and 12, the percentages of Asian and White students at or above the Proficient level were significantly greater than the percentages for Black or Hispanic students. The percentage of White fourth graders at this achievement level was higher than that of their American Indian counterparts. The percentage of Pacific Islander students at grade 4 also was higher than the percentages for Black or Hispanic students. At the lower two grades, the percentage of Asian students at or above this level also exceeded that of American Indian students. Finally, at grade 12, the percentage of White students at or above the Proficient level was significantly greater than the percentage of Asian students.

The lowest achievement level defined for the NAEP Reading Assessment is the Basic level. For the nation as a whole, more than a quarter of the students at each grade failed to reach this lowest level. The percentage of students at or above the Basic level differed among racial/ethnic subgroups. At all three grades, the percentage of White students at or above the Basic level was significantly larger than the percentages for Black or Hispanic students. At grades 4 and 8, the percentage of Asian students at or above Basic also was larger than that of Black and Hispanic students. The percentage of twelfth-grade Asian students at or above this level was significantly greater than that of Black students but not of Hispanic students

At grades 4 and 8, the percentage of American Indian students at or above Basic was greater than that of Black students. At grade 4, the percentage of Pacific Islander students performing at or above Basic was greater than that of Black or Hispanic students. Also, at grade 4, the percentage of White and Asian students at the Basic level or above was greater than that of American Indian students. Finally, at grade 12, the percentage of White students at or above the Basic level was significantly higher than the percentage of Asian students.

For the Pacific Islander student samples at grades 8 and 12, and for the American Indian student sample at grade 12, the nature of the samples does not allow accurate determination of the variability of the percentages. For this reason, differences among these samples and other racial/ethnic subgroups are not discussed.

Across all three grades, the only significant change from 1992 to 1994 occurred for White students at grade 12. Significantly fewer twelfth-grade White students were at the Basic level in 1994 than in 1992. No other significant differences were found between 1992 and 1994 in the percentages at or above any of the achievement levels for White, Black, Hispanic, and American Indian students. Trends could not be estimated for Asian and Pacific Islander students because their race/ethnicity data were collected as a single category for the 1992 assessment.

Gender. Table 9 presents achievement level results for males and females. Consistent with results from the 1992 reading assessment (see Endnote 1 in Chapter 2), the 1994 assessment showed that across all three grades, a significantly higher percentage of female students than male students were at or above each of the three achievement levels.

A significant decrease was reported between 1992 and 1994 in the percentage of twelfth-grade males at or above the Proficient and Basic levels and in the percentage of twelfth-grade females at or above the Basic level. No significant change was noted in the percentages of students at or above Advanced for either males or females. At the fourth- and eighth-grade, no significant differences were noted in the percentages of male and female students at or above any of the achievement levels.

Parents' Education Level. In general, across all three grade levels, a positive relationship between levels of parents' education and the percentage of students at or above the three achievement levels is evident (see Table 10). This finding is consistent with prior assessments and with the proficiency results discussed in the previous chapter. Again it should be noted that a sizable number of fourth-grade students were not able to identify their parents' education level.

At all three grades, the percentage of students reporting that at least one of their parents graduated from college who performed at or above the Advanced achievement level was significantly greater than the corresponding percentages for students reporting that at least one parent graduated from high school or that neither parent graduated from high school. Also, at all three grades, the percentage at or above the Advanced level for the group of students reporting that at least one parent had some education after high school was higher than that of students reporting neither parent graduated from high school.

Among groups of 1994 students that reported knowing their parents' education levels, the percentage at or above the Proficient level was lowest for students who said their parents did not finish high school. This result was evident at each of the three grade levels. In addition, across all three grades, significantly higher percentages of students were at or above the Proficient level among students reporting at least one of their parents graduated from college or received some education after high school than among those who reported having parents who only graduated from high school. At the two higher grades, the percentage of students attaining at least the Proficient level was greater among students who reported at least

TABLE 9

Reading Achievement Levels by Gender

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1992 Assessment					1994 Assessment				
		Percentage of Students					Percentage of Students			
	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic
Grade 4										
Total		6	29	62	38		7	30	60	40
Gender										
Male	51	5	25	58	42	51	6	26	55	45
Female	49	8	32	67	33	49	9	34	66	34
Grade 8										
Total		3	29	69	31		3	30	70	30
Gender										
Male	51	2	23	64	36	50	2	23	62	38
Female	49	4	35	76	24	50	4	36	77	23
Grade 12										
Total		4	40	80	20		4	36<	75<	25>
Gender										
Male	49	2	34	75	25	50	2	29<	69<	31>
Female	51	5	46	84	16	50	6	43	80<	20>

Differences between two groups may be partially explained by other factors not included in this table.

< The value for the 1994 assessment was significantly lower (> higher) than the value for 1992 at about the 95 percent confidence level.

The standard errors for the 1994 (a) Advanced Level, gender percentages range from 0.3 to 0.9; (b) Proficient Level, gender percentages range from 1.1 to 1.5; and (c) Basic Level, gender percentages range from 1.0 to 1.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

one parent graduated from college than among students who reported that at least one parent had some education after high school.

For students who reported that neither of their parents graduated from high school, a significantly smaller percentage were at or above Basic when compared to students reporting higher levels of parents' education. Students who reported that at least one parent graduated from high school had a lower percentage at or above Basic compared to students reporting that at least one of their parents continued their education after high school. Also, the percentage attaining the Basic level or above among students who reported high school graduation as the highest parental education level was lower than among students with at least one parent who had graduated from college. These results were observed for all three grades. Finally, for grade 12, the group of students who reported that at least one parent had some education after high school had a smaller percentage at or above Basic than did students who reported at least one parent graduated from college.

Reflecting the overall decline at twelfth grade observed for the nation, there was a significant decrease between 1992 and 1994 in the percentage of students at or above Basic for each level of parental education. No other significant differences between the 1992 and 1994 assessments in the percentages of fourth-, eighth, and twelfth-grade students at or above the Advanced and Proficient levels were found for any of the parents' education level groups.

TABLE 10

Reading Achievement Levels by Parents' Education Level

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1992 Assessment					1994 Assessment				
	Percentage of Students					Percentage of Students				
	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic
Grade 4										
Total		6	29	62	38		7	30	60	40
Parent's Education Level										
Graduated College	39	10	39	71	29	42	11	39	70	30
Some Education after H.S.	9	8	33	69	31	8	9	37	70	30
Graduated High School	12	3	22	58	42	13	4	22	54	46
Did Not Finish High School	4	1	12	39	61	4	1	9	32	68
I Don't Know	36	3	21	55	45	34	4	22	52	48
Grade 8										
Total		3	29	69	31		3	30	70	30
Parent's Education Level										
Graduated College	41	5	40	80	20	43	5	40	79	21
Some Education after H.S.	19	3	32	76	24	20	3	33	77	23
Graduated High School	24	1	19	61	39	21	1	20	62	38
Did Not Finish High School	8	1	13	51	49	7	0	10	46	54
I Don't Know	8	0	12	45	55	9	0	12	48	52
Grade 12										
Total		4	40	80	20		4	36<	75<	25>
Parent's Education Level										
Graduated College	41	6	52	87	13	43	7	48	84<	16>
Some Education after H.S.	27	3	41	83	17	25	3	36	78<	22>
Graduated High School	22	2	28	72	28	21	2	24	66<	34>
Did Not Finish High School	8	0	21	63	37	7	1	15	53<	47>
I Don't Know	2	0	10	44	56	3	0	6	32	68

Differences between two groups may be partially explained by other factors not included in this table.

< The value for the 1994 assessment was significantly lower (> higher) than the value for 1992 at about the 95 percent confidence level.

The percentages of students in the subgroups may not total 100 percent due to rounding.

The standard errors for the 1994 (a) Advanced Level, parents' education level percentages range from 0.3 to 1.8; (b) Proficient Level, parents' education level percentages range from 1.2 to 2.6; and (c) Basic Level, parents' education level percentages range from 0.7 to 3.9

SOURCE National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

Public and Nonpublic Schools. Results from public and nonpublic school students are presented in Table 11. At each grade level for the 1994 assessment, the percentages of nonpublic school students at or above the three achievement levels were significantly higher than the percentages for students attending public schools. No significant differences between the 1992 and 1994 assessments in the percentages of students at or above the Advanced or Proficient levels were observed for either public or nonpublic schools at any of the three grades. However, at grade 12 for both types of schools, the percentage of students at or above Basic decreased between 1992 and 1994. This is consistent with the decrease in average proficiency at grade 12.

Cross-State Achievement Level Findings. Table 12 presents the percentage of students at or above the three achievement levels for fourth-grade public school students. Results from the 1992 and 1994 Trial State Assessments in Reading are provided for 41 jurisdictions. [Note that two states, Montana and Washington, as well as the Department of Defense Education Activities (DoDEA) Overseas Schools participated only in the 1994 assessment; therefore, only 1994 results are presented for these three jurisdictions.]

Overall, seven states — Arizona, Connecticut, Florida, Kentucky, Maine, Maryland, and Mississippi — showed a significant increase between 1992 and 1994 in the percentage of fourth grade students at or above the Advanced level. Mississippi also showed a significant increase in the percentage of students at or above Proficient, the only significant change at this level. Finally, five states had a significant decrease in the percentage of fourth graders at or above Basic: Delaware, Louisiana, Massachusetts, Pennsylvania, and Virginia.

TABLE 11

Reading Achievement Levels by Type of School

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

	1992 Assessment					1994 Assessment				
		Percentage of Students					Percentage of Students			
	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic	Percentage of Students	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic
Grade 4										
Total		6	29	62	38		7	30	60	40
Type of School										
Public Schools Only	88	6	27	60	40	90	7	28	59	41
Nonpublic Schools Only	11	12	45	79	21	10	13	43	77	23
Catholic Schools	8	10	41	76	24	7	12	42	76	24
Other Nonpublic Schools	4	15!	53!	84!	16!	4	14	46	80	20
Grade 8										
Total		3	29	69	31		3	30	70	30
Type of School										
Public Schools Only	89	2	27	67	33	89	2	27	67	33
Nonpublic Schools Only	11	7	48	87	13	11	6	49	89	11
Catholic Schools	6	6	45	84	16	7	6	49	88	12
Other Nonpublic Schools	4	10	54	90	1(	4	7	50	89	11
Grade 12										
Total		4	40	80	20		4	36<	75<	25>
Type of School										
Public Schools Only	87	3	37	78	22	89	4	35	73<	27>
Nonpublic Schools Only	13	9	60	92	8	10	8	52	87<	13>
Catholic Schools	9	8	59	93	7	6	6	47	85<	15>
Other Nonpublic Schools	4	12	61	89	11	4	11	59	89	11

Differences between two groups may be partially explained by other factors not included in this table.

< The value for the 1994 assessment was significantly lower (> higher) than the value for 1992 at about the 95 percent confidence level.

! Interpret with caution any comparisons involving this statistic. The nature of the sample does not allow accurate determination of the variability of this value.

Percentages of students in public school only and nonpublic school only may not total 100 percent and the percentages of students in the two types of nonpublic schools may not total the percentage of nonpublic schools due to rounding.

The standard errors for the 1994 (a) Advanced Level, type of school percentages range from 0.3 to 2.9; (b) Proficient Level, type of school percentages range from 0.9 to 4.0; and (c) Basic Level, type of school percentages range from 0.7 to 4.2.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

TABLE 12

Grade 4 Reading Achievement Levels
NAEP Trial State Assessment in Reading
Public Schools Only

THE NATION'S REPORT CARD naep 1992 1994 Reading Assessment

	Grade 4 – 1992 Assessment					Grade 4 – 1994 Assessment				
		Percentage of Students					Percentage of Students			
	Average Proficiency	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic	Average Proficiency	At or Above Advanced	At or Above Proficient	At or Above Basic	Below Basic
Nation	215	6	27	60	40	212	7	28	59	41
Region										
Northeast	220	9	32	65	35	212	7	28	58	42
Southeast	211	4	22	55	45	208	6	23	53	47
Central	218	6	29	65	35	218	7	33	65	35
West	212	5	24	56	44	212	7	28	59	41
State										
Alabama	207	3	20	51	49	208	5	23	52	48
Arizona	209	3	21	54	46	206	6>	24	52	48
Arkansas	211	4	23	56	44	209	5	24	54	46
California	202	4	19	48	52	197<	3	18	44	56
Colorado	217	4	25	64	36	213	6	28	59	41
Connecticut	222	6	34	69	31	222	11>	38	68	32
Delaware	213	5	24	57	43	206<<	5	23	52<	48>
Florida	208	3	21	53	47	205	5>	23	50	50
Georgia	212	5	25	57	43	207	7	26	52	48
Hawaii	203	3	17	48	52	201	4	19	46	54
Indiana	221	6	30	68	32	220	7	33	66	34
Iowa	225	7	36	73	27	223	8	35	69	31
Kentucky	213	3	23	58	42	212	6>	26	56	44
Louisiana	204	2	15	46	54	197<<	2	15	40<	60>
Maine	227	6	36	75	25	228	10>	41	75	25
Maryland	211	4	24	57	43	210	7>	26	55	45
Massachusetts	226	7	36	74	26	223	8	36	69<	31>
Minnesota	221	6	31	68	32	218	7	33	65	35
Mississippi	199	2	14	41	59	202	4>	18>	45	55
Missouri	220	6	30	67	33	217	7	31	62	38
Montana†	—	—	—	—	—	222	7	35	69	31
Nebraska†	221	6	31	68	32	220	8	34	66	34
New Hampshire†	228	8	38	76	24	223<	9	36	70	30
New Jersey	223	8	35	69	31	219	8	33	65	35
New Mexico	211	4	23	55	45	205<	4	21	49	51
New York	215	5	27	61	39	212	6	27	57	43
North Carolina	212	5	25	56	44	214	8	30	59	41
North Dakota	226	6	35	74	26	225	8	38	73	27
Pennsylvania†	221	6	32	68	32	215<	7	30	61<	39>
Rhode Island†	217	5	28	63	37	220	8	32	65	35
South Carolina	210	4	22	53	47	203<<	4	20	48	52
Tennessee†	212	4	23	57	43	213	6	27	58	42
Texas	213	4	24	57	43	212	6	26	58	42
Utah	220	5	30	67	33	217	6	30	64	36
Virginia	221	6	31	67	33	213<<	7	26	57<<	43>>
Washington	—	—	—	—	—	213	6	27	59	41
West Virginia	216	5	25	61	39	213	6	26	58	42
Wisconsin†	224	6	33	71	29	224	7	35	71	29
Wyoming	223	5	33	71	29	221	6	32	68	32
Other Jurisdictions										
DoDEA	—	—	—	—	—	218	6	28	63	37
Guam	182	1	8	28	72	181	1	8	27	73

Differences between two groups may be partially explained by other factors not included in this table.

<< The value for the 1994 assessment was significantly lower (> higher) than the value for 1992 at about the 95 percent confidence level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, < indicated the value for 1994 was significantly lower (>higher) than the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

— Jurisdiction did not participate in 1992 Trial State Assessment.

DoDEA Department of Defense Education Activity Overseas Schools

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

APPENDIX A

National and State Sample Descriptions

The national and regional results presented in this report are based on nationally representative probability samples of fourth-, eighth-, and twelfth-grade students. The samples were selected using a complex multistage sampling design involving the sampling of students from selected schools within selected geographic areas across the country. The sample design had the following stages:

1) selection of geographic areas (counties or groups of counties);

2) selection of schools (both public and nonpublic) within the selected areas; and

3) selection of students within selected schools.

Each selected school that participated in the assessment, and each student assessed, represents a portion of the population of interest. To make valid inferences from the student samples to the respective populations from which they were drawn, sampling weights are needed. Sampling weights are required to account for disproportionate representation due to oversampling of students attending schools with a high concentration of Black and/or Hispanic students and oversampling of students attending nonpublic schools. Lower sampling rates for very small schools must also be accounted for with the sampling weights.

Table A.1 provides a summary of the weighted and unweighted student sample sizes for the national reading assessment. The numbers reported include both public and nonpublic school students.

The results of the 1994 Trial State Assessment Program provided in the report are based on state-level samples of fourth-grade public school students. The samples were selected based on a two-stage sample design — selection of schools within participating states and selection of students within schools. The first-stage samples of schools were selected with probability proportional to the fourth-grade enrollment in the schools. Special procedures were used for states with many small schools and for jurisdictions having a small number of schools.

As with the national samples, the state samples were weighted to allow for valid inferences back to the populations of interest. Table A.2 contains the unweighted number of participating schools and students as well as weighted school and student participation rates. Two weighted school participation rates are provided for each jurisdiction. The first is the weighted percentage of schools participating in the assessment **before** substitution. This rate is based only on those schools that were initially selected for the assessment. The numerator of this rate is the sum of the number of students represented by each initially selected school that participated in the assessment. The denominator is the sum of the number of students represented by each of the initially selected schools found to have eligible students enrolled. This included both participating and nonparticipating schools.

The second school participation rate is the weighted participation rate after substitution. The numerator of this rate is the sum of the number of students represented by each of the participating schools, whether originally selected or a substitute. The denominator is the same as that for the weighted participation rate for the initial sample. This means, for a given jurisdiction, the weighted participation rate after substitution is always at least as great as the weighted participation rate before substitutions.

Also presented in Table A.2 are the weighted percentages of students participating after make-up sessions. This rate provides the percentage of the eligible student population from participating schools within the jurisdiction that are represented by the students who participated in the assessment (in either an initial session or a make-up session). The numerator of this rate is the sum, across all assessed students, of the number of students represented by each assessed student. The denominator is the sum of the number of students represented by each selected student who was invited and eligible to participate, including students who did not participate.

In carrying out the 1994 Trial State Assessment, the National Center for Education Statistics established participation rate standards that jurisdictions were required to meet in order for their results to be reported (see footnoted jurisdictions in Table A.2). Additional standards were also established that required the annotation of published results for jurisdictions whose sample participation rates were low enough to raise concerns about their representativeness. Two states, Idaho and Michigan, failed to meet the initial school participation rate of 70 percent. For these two states, results for the fourth-grade public school students are not reported in this or any report of 1994 NAEP findings. Several other jurisdictions for which results are published are flagged to note the potential for non-response bias associated with school-level non-response.

NCES standards specify weighted school participation rates of at least 85 percent to guard against potential bias due to school non-response. Six states (Nebraska, New Hampshire, Pennsylvania, Rhode Island, Tennessee, and Wisconsin) failed to meet the following NCES guideline:

A jurisdiction will receive a notation if its weighted participation rate for the initial sample of public schools was below 85 percent AND the weighted public school participation rate after substitution was below 90 percent.

For jurisdictions that did not use substitute schools, the participation rates were based on participating schools from the original sample. The first part of this guideline, referring to the weighted school participation rate for the initial sample of schools, is in direct accordance with NCES standards. To help ensure adequate sample representation for each jurisdiction participating in the 1994 Trial State Assessment Program, NAEP provided substitutes for nonparticipating public schools. When possible, a substitute school was provided for each initially selected school that declined participation before November 15, 1993. For jurisdictions that used substitute schools, the assessment results were based on the student data from all schools participating from both the original sample and the list of substitutes (unless both an initial school and its substitute eventually participated, in which case only the data from the initial school were used). The NCES standards do not explicitly address the use of substitute schools to replace initially selected schools that decide not to participate in the assessment. However, considerable technical consideration was given to this issue. Even though the characteristics of the substitute schools were matched as closely as possible to the characteristics of the initially selected schools, substitution does not entirely eliminate bias due to the nonparticipation of initially selected schools. Thus, for the weighted school participation rates including substitute schools, the guideline was set at 90 percent.

The NCES standards specify that attention should be given to the representativeness of the sample coverage. Thus, if some important segment of the jurisdiction's population was not adequately represented, it was of concern, regardless of the overall participation rate. One state, Montana, failed to meet the following NCES guideline concerning strata-specific participation rates.

A jurisdiction with otherwise adequate weighted public school participation will receive a notation if the nonparticipating public schools included a class of schools with similar characteristics, which together accounted for more than five percent of the jurisdiction's total fourth-grade weighted sample of public schools. The classes of schools from each of which a jurisdiction needed minimum school participation levels were by degree of urbanization, minority enrollment, and median household income of the area in which the school is located.

This guideline addresses the fact that, if nonparticipating schools were concentrated within a particular class of schools, the potential for substantial bias remained, even if the overall level of school participation appeared to be satisfactory. Non-response adjustment cells for public schools were formed within each jurisdiction, and the schools within each cell were similar with respect to minority enrollment, degree of urbanization, and/or median household income, as appropriate for each jurisdiction. If more than five percent (weighted) of the sample schools (after substitution) were nonparticipants from a single adjustment cell, then the potential for non-response bias was too great. This guideline was based on the NCES standard for strata-specific school non-response rates.

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table A.1 Unweighted and Weighted Sample Size by Grade for the 1994 Assessment in Reading, Public and Nonpublic Schools

	Unweighted Sample Size (and Percent of Total)		
	Grade 4	Grade 8	Grade 12
Nation	7382 (100.0%)	10,135 (100.0%)	9,935 (100.0%)
Region			
Northeast	1816 (24.6%)	1918 (18.9%)	2289 (23.0%)
Southeast	1888 (25.6%)	3132 (30.9%)	2777 (28.0%)
Central	1571 (21.3%)	2149 (21.2%)	2005 (20.2%)
West	2107 (28.6%)	2936 (29.0%)	2864 (28.8%)

	Weighted Sample Size (and Percent of Total)		
	Grade 4	Grade 8	Grade 12
Nation	3,527,410 (100.0%)	2,245,276 (100.0%)	1,811,014 (100.0%)
Region			
Northeast	800,903 (22.7%)	459,134 (20.5%)	366,999 (20.3%)
Southeast	826,167 (23.4%)	581,039 (25.9%)	423,235 (23.4%)
Central	870,268 (24.7%)	542,615 (24.2%)	488,863 (27.0%)
West	1,030,072 (29.2%)	662,489 (29.5%)	531,917 (29.4%)

Percentages may not total 100 percent due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD
1992 1994 Reading Assessment

Table A.2 School and Student Participation Rates by State for the 1994 Trial State Assessment, Grade 4, Public Schools Only

	Weighted Percentage School Participation Before Substitution	Weighted Percentage School Participation After Substitution	Total Number of Schools That Participated	Weighted Percentage Student Participation After Make-ups	Total Number of Students Assessed
Nation	86	87	227	95	6,030
Region					
Northeast	93	93	49	94	1,367
Southeast	91	93	61	95	1,649
Central	85	87	52	95	1,184
West	77	77	65	95	1,830
States					
Alabama	87	93	99	96	2,646
Arizona	99	99	104	94	2,651
Arkansas	86	94	97	96	2,535
California	80	91	97	94	2,252
Colorado	100	100	108	94	2,730
Connecticut	96	96	101	96	2,577
Delaware	100	100	51	96	2,239
Florida	100	100	107	94	2,666
Georgia	99	99	105	95	2,766
Hawaii	99	99	104	95	2,732
Idaho	69	91	98	96	2,598
Indiana	83	92	100	96	2,655
Iowa	85	99	107	96	2,759
Kentucky	88	96	101	97	2,758
Louisiana	100	100	103	96	2,713
Maine	94	97	104	94	2,436
Maryland	94	96	100	95	2,555
Massachusetts	97	97	99	95	2,517
Michigan[1]	63	80	83	95	2,142
Minnesota	86	95	100	95	2,655
Mississippi	95	99	103	97	2,762
Missouri	96	98	105	95	2,670
Montana[3]	85	89	111	96	2,501
Nebraska[2]	71	77	109	95	2,395
New Hampshire[2]	71	79	86	96	2,197
New Jersey	85	91	96	95	2,509
New Mexico	100	100	105	95	2,635
New York	75	91	96	95	2,495
North Carolina	99	99	105	96	2,832
North Dakota	80	91	117	97	2,544
Pennsylvania[2]	80	84	89	94	2,290
Rhode Island[2]	80	86	92	95	2,341
South Carolina	95	97	102	96	2,707
Tennessee[2]	72	74	76	96	1,998
Texas	91	93	98	96	2,454
Utah	100	100	105	95	2,733
Virginia	98	99	105	95	2,719
Washington	100	100	104	94	2,737
West Virginia	99	100	111	96	2,757
Wisconsin[2]	79	86	91	96	2,331
Wyoming	98	98	112	96	2,699
Other Jurisdictions					
DoDEA	99	99	81	95	2,413
Guam	100	100	21	96	2,203

[1] State's public-school weighted participation rate for the initial sample was less than 70 percent. NCES reporting guidelines prohibit the reporting of results for these two states.

[2] The state's public-school weighted participation rate for the initial sample of schools was below 85 percent AND the weighted school participation rate after substitution was below 90 percent.

[3] The nonparticipating public schools included a class of schools with similar characteristics, which together account for more than five percent of the state's total fourth-grade weighted sample of public schools.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

APPENDIX B

Reporting Subgroup(s) Definitions

Findings from the 1994 NAEP Reading Assessment are presented for groups of students that are defined by shared characteristics. Data are reported for subpopulations only where sufficient numbers of students and adequate school representation are present. For public school students, there must be at least 62 students in a particular subgroup from at least 10 different schools; for nonpublic school students the minimum requirement is 62 students representing at least six different schools. However, data for all students, regardless of whether their subgroup was reported separately, were included in computing overall national and regional results.

The reporting subgroups presented in this report include: race/ethnicity, gender, parents' education level, public/nonpublic school, and region. Definitions of these subgroups are provided below.

Race/Ethnicity. Results are presented for students of different racial/ethnic groups based on the students' self-identification of their race/ethnicity according to the following mutually exclusive categories: White, Black, Hispanic, Asian, Pacific Islander, and American Indian (including Alaskan Native). For the 1992 assessment it was not possible to report separate results for Asian and Pacific Islander students. Consequently, the 1992 data and trend results for the separate categories are not presented in this report.

Gender. Results are reported separately for males and females.

Parents' Education Level. Results are presented by the student's report of the extent of schooling for each of their parents — did not finish high school, graduated from high school, some education after high school, graduated from college, or did not know. The response indicating the higher level of education was selected for reporting. Note that a substantial percentage of fourth-grade students did not know their parents' education level.

Public/Nonpublic School. Results are reported by the type of school that the student attends — public or nonpublic school. Nonpublic schools include Catholic and other nonpublic schools. Bureau of Indian Affairs (BIA) schools and domestic Department of Defense (DoD) schools were not classified in either the public or nonpublic categories. Results for the BIA and DoD schools are included, however, in the overall national results.

Region. Results are reported for four regions of the nation: Northeast, Southeast, Central, and West. States included in each region are shown in the following figure. All 50 states and the District of Columbia are listed. Guam and the Department of Defense Education Activity (DoDEA) Overseas Schools were not assigned to a region. States that participated in the 1994 Trial State Assessment appear in boldface type. Note that the part of Virginia that is included in the Washington, DC, metropolitan statistical area is included in the Northeast region; the remainder of the state is included in the Southeast region.

The regional results are based on a separate sample from that used to report the state results. Regional results are based on national assessment samples, not on aggregated Trial State Assessment samples.

NORTHEAST	SOUTHEAST	CENTRAL	WEST
Connecticut	**Alabama**	Illinois	Alaska
Delaware	**Arkansas**	**Indiana**	**Arizona**
District of Columbia	**Florida**	**Iowa**	**California**
Maine	**Georgia**	Kansas	**Colorado**
Maryland	**Kentucky**	**Michigan**	**Hawaii**
Massachusetts	**Louisiana**	**Minnesota**	**Idaho**
New Hampshire	**Mississippi**	**Missouri**	**Montana**
New Jersey	**North Carolina**	**Nebraska**	Nevada
New York	**South Carolina**	**North Dakota**	**New Mexico**
Pennsylvania	**Tennessee**	Ohio	Oklahoma
Rhode Island	**Virginia**	South Dakota	Oregon
Vermont	**West Virginia**	**Wisconsin**	**Texas**
Virginia			**Utah**
			Washington
			Wyoming

APPENDIX C

Comparisons Among States Based on Average Proficiency

Figure C.1 is provided as a visual representation of the distribution of proficiency results for each participating jurisdiction. The darkest box at the midpoint of each distribution shows the 95 percent confidence interval around the average proficiency. The lighter shaded boxes indicate the locations of selected percentiles of each jurisdiction distribution. The intervals take into account the sampling and measurement error associated with the estimates of average proficiency. Jurisdictions are listed by overall average reading proficiency — beginning with the state of Maine whose average reading proficiency for fourth-grade public school students is 229 with a standard error of 1.3 points.

Figure C.2 is provided to help interpret differences in the average proficiencies across states for grade 4 in 1994. The figure provides a method for making appropriate comparisons in average overall reading proficiency across the participating jurisdictions. The figure shows whether or not the differences in average performance between the pairs of jurisdictions are statistically significant.[1]

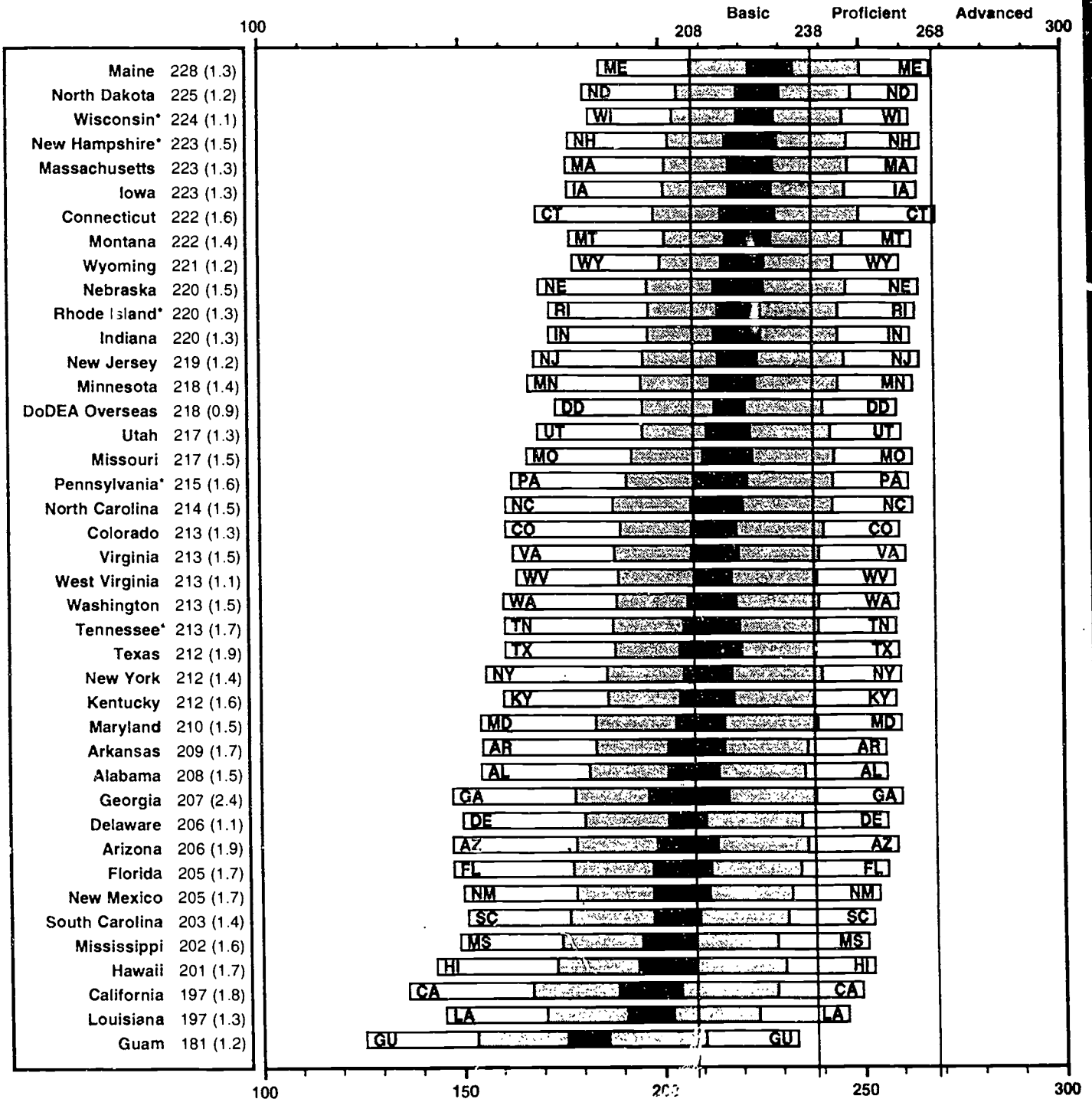
For example, in Figure C.2, although the average proficiencies in the fourth grade appear to be different between Maine (229) and Montana (223), they in fact are **not** statistically different. The computations underlying Figure C.2 take the sampling and measurement error associated with the estimates of average proficiency into account, as well as controlling for the large number of comparisons that are being made.

As an example of how to read Figure C.2, let us say we are attempting to compare the state of Texas to all other jurisdictions. Reading vertically down the Figure C.2 column labeled Texas, we see that, on average, students in Texas scored lower than did students in all the states listed from Maine through Montana (the dark grey shaded states), about the same, on average, as students in the states listed from Wyoming through South Carolina (the white shaded states), and better, on average, than students in all the states from Mississippi to Guam (the light grey shaded states).

1. The significance tests in Figure C.2 are based on a Bonferroni procedure for multiple comparisons that holds to five percent across all possible comparisons the probability of erroneously declaring the means of any two states to be different when they are not.

THE NATION'S REPORT CARD
1992
1994
Reading Assessment

Figure C.1 Distribution of Overall Reading Proficiency Organized by Average Proficiency for the 1994 Trial State Reading Assessment, Grade 4, Public Schools Only



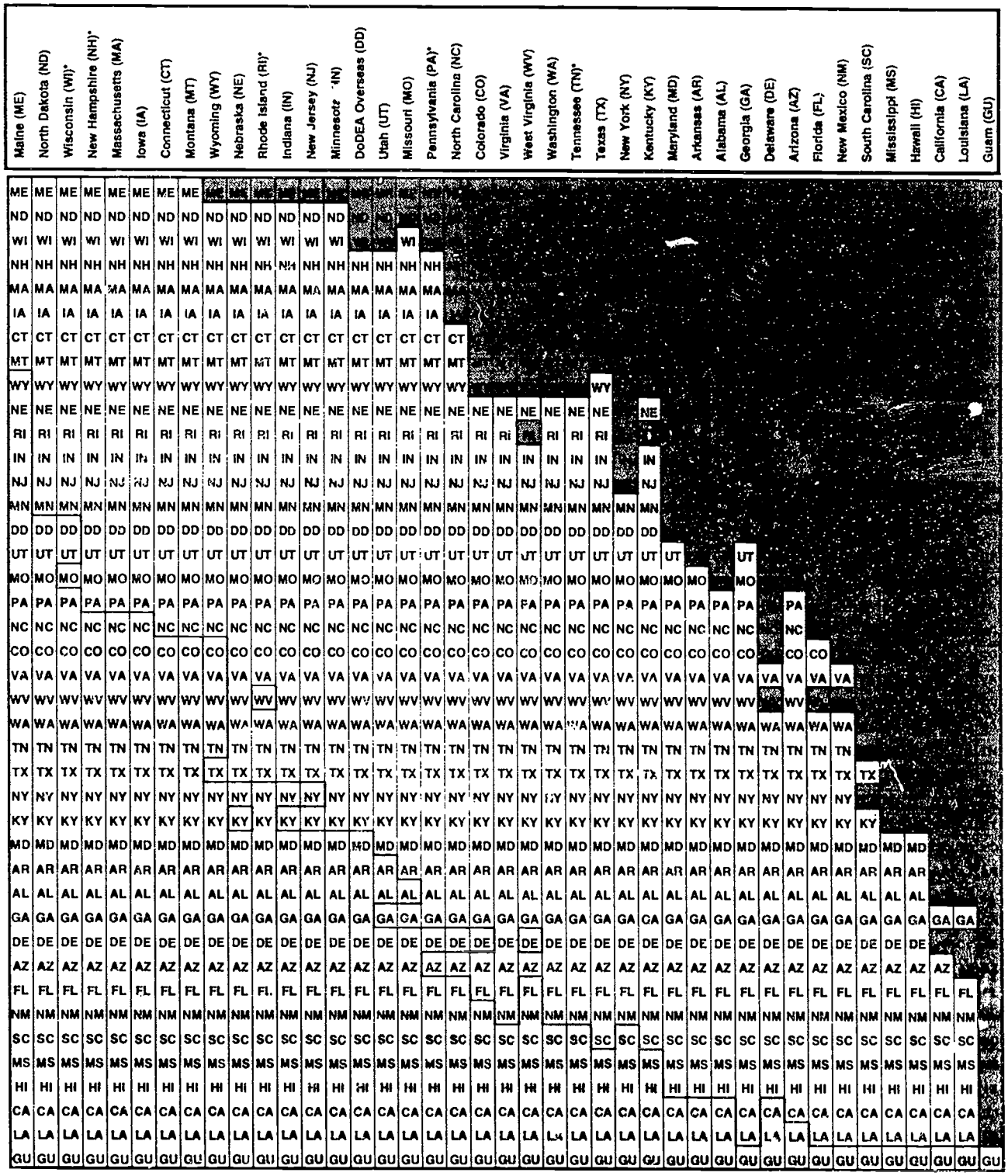
The center ***darkest*** box indicates a simultaneous confidence interval around the average reading proficiency for the state based on the Bonferroni procedure for multiple comparisons. The ***darker shaded*** boxes indicate the ranges between the 25th and 75th percentiles of the reading proficiency distribution, and the ***lighter shaded*** boxes the ranges between the 10th to 25th percentiles and the 75th to 90th percentiles of the distribution.

*Did not satisfy one or more of the guidelines for sample participation rates (see Appendix for details).

THE NATION'S REPORT CARD
1992
1994
Reading Assessment

Figure C.2 Comparisons of Overall Reading Average Proficiency for the 1994 Trial State Reading Assessment, Grade 4, Public Schools Only

INSTRUCTIONS: Read ***down*** the column directly under a state name listed in the heading at the top of the chart. Match the shading intensity surrounding a state postal abbreviation to the key below to determine whether the average reading performance of this state is higher than, the same as, or lower than the state in the column heading.



- State has statistically significantly higher average proficiency than the state listed at the top of the chart.
- No statistically significant difference from the state listed at the top of the chart.
- State has statistically significantly lower average proficiency than the state listed at the top of the chart.

The between state comparisons take into account sampling and measurement error and that each state is being compared with every other state. Significance is determined by an application of the Bonferroni procedure.

*Did not satisfy one or more of the guidelines for sample participation rates (see Appendix for details).

APPENDIX D

Cross-State Proficiency and Achievement Level Tabular Summaries

Selected tabular summaries of the 1994 Trial State Assessment in Reading for fourth-grade public school students are presented in this appendix. Tables D.1 through D.3 present average reading proficiency results for selected reporting subgroups — gender, race/ethnicity, and level of parents' education — by participating jurisdictions. Tables D.4 through D.6 provide similar summaries related to the percentage of students at or above the three achievement levels.

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.1 Average Reading Proficiency for Grade 4 Students by Gender for the 1994 Trial State Assessment with Changes in Average Proficiency from 1992, Public Schools Only

	Male			Female		
	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992
Nation	51	207	-4	49	218	-1
Region						
Northeast	50	207	-10	50	216	-7
Southeast	52	202	-3	48	215	-2
Central	53	212	-3	47	225	5
West	51	207	-1	49	217	0
States						
Alabama	51	203	-1	49	213	2
Arizona	50	201	-5	50	211	-2
Arkansas	50	204	-3	50	213	-1
California	51	194	-4	49	200	-7*
Colorado	50	209	-5	50	218	-2
Connecticut	50	218	-1	50	226	2
Delaware	49	200	-9**	51	212	-5*
Florida	49	199	-6*	51	210	-1
Georgia	48	201	-9*	52	212	-3
Hawaii	51	194	-4	49	208	-1
Indiana	49	216	-2	51	223	-1
Iowa	51	219	-3	49	227	-2
Kentucky	51	206	-3	49	217	1
Louisiana	49	193	-7*	51	200	-7*
Maine	50	225	1	50	231	2
Maryland	52	205	-1	48	214	-1
Massachusetts	50	221	-4	50	226	-2
Minnesota	51	214	-3	49	223	-2
Mississippi	49	196	0	51	207	4
Missouri	51	213	-5	49	221	-1
Montana†	51	218	---	49	227	---
Nebraska†	51	216	-2	49	224	-1
New Hampshire†	50	218	-6*	50	229	-2
New Jersey	49	216	-4	51	222	-3
New Mexico	48	201	-8*	52	208	-5
New York	50	207	-4	50	216	-2
North Carolina	51	209	0	49	220	5*
North Dakota	50	221	-3	50	230	3
Pennsylvania†	50	211	-7*	50	220	-4
Rhode Island†	49	215	0	51	225	6*
South Carolina	51	199	-7*	49	208	-6*
Tennessee†	49	208	-1	51	217	2
Texas	50	210	1	50	214	-2
Utah	50	213	-4	50	222	-2
Virginia	50	208	-9**	50	219	-6*
Washington	52	209	---	48	217	---
West Virginia	51	208	-3	49	218	-1
Wisconsin†	49	221	0	51	227	1
Wyoming	51	218	-2	49	224	-2
Other Jurisdictions						
DoDEA	50	213	---	50	223	---
Guam	51	172	-3	49	190	0

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.2 Average Reading Proficiency for Grade 4 Students by Race/Ethnicity for the 1994 Trial State Assessment with Changes in Average Proficiency from 1992, Public Schools Only

	White			Black			Hispanic		
	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992
Nation	68	223	0	16	186	-6*	12	188	-11*
Region									
Northeast	62	224	-5	22	184	-14*	10	191	-9
Southeast	63	219	-1	26	188	-5	8	184	-10!
Central	80	225	1	11	182	-4	6	199	-10
West	66	222	1	7	186!	2	20	186	-11
States									
Alabama	62	220	2	29	188	0	6	178	-12
Arizona	58	220	-1	4	183	-17	29	188	-9*
Arkansas	70	218	-2	21	183	-7*	6	192	4
California	44	211	-7	7	182	-2	33	174	-9*
Colorado	67	222	0	5	191	-11!	21	193	-9*
Connecticut	70	234	4	12	190	-6	14	190	-3
Delaware	63	215	-7**	23	188	-7*	9	190	3
Florida	57	218	-1	21	183	-3	19	189	-13*
Georgia	56	222	-1	32	185	-11*	9	184	-7
Hawaii	17	219	5	3	189	-2	11	185	-8
Indiana	81	225	0	10	193	-8	7	201	-10
Iowa	88	225	-2	3	186!	-23	6	204	-7
Kentucky	83	215	0	10	190	-6	5	196	1
Louisiana	51	213	-3	38	180	-11**	8	175	-13
Maine	92	229	1	1	***	***	5	218	9
Maryland	57	223	2	32	185	-7	6	197	0
Massachusetts	77	231	0	7	199	-6	11	194	-7
Minnesota	84	222	-1	3	173	-18	8	202	-1
Mississippi	46	220	3	45	187	0	7	181	-4
Missouri	75	223	-3	14	192	-4	7	200	-2
Montana†	79	226	---	1	***	---	10	208	---
Nebraska†	82	224	-1	4	190!	-6	10	205	0
New Hampshire†	91	224	-4	1	***	***	5	213	-2
New Jersey	60	231	-2	16	193	-7	17	200	1
New Mexico	41	219	-4	3	196	-5	44	196	-4
New York	54	226	0	21	191	-11*	19	193	6
North Carolina	65	225	4	26	193	-1	4	189	-3
North Dakota	88	228	1	1	***	***	6	212	-9
Pennsylvania†	76	224	-3	14	180	-10	7	187	-12
Rhode Island†	80	226	1	6	197	10	9	195	4
South Carolina	53	219	-2	37	184	-11**	8	182	-13*
Tennessee†	74	220	1	19	188	-5	4	196	0
Texas	50	227	3	12	191	-9	34	198	-3
Utah	82	221	-2	1	***	***	12	199	-4
Virginia	59	224	-4	29	192	-11**	7	206	4
Washington	73	217	---	5	198	---	11	190	---
West Virginia	90	215	-2	3	202	-2	4	192	-4
Wisconsin†	84	228	1	5	197	-4	7	203	-7
Wyoming	82	224	-2	1	***	***	13	209	0
Other Jurisdictions									
DoDEA	47	224	---	19	205	---	18	211	---
Guam	9	192	-3	4	171	5	18	171	6

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

*** Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment

!Interpret with caution any comparison involving this statistic. The nature of the sample does not allow accurate determination of the variability of this value.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.2 Average Reading Proficiency for Grade 4 Students by Race/Ethnicity for the 1994 Trial State Assessment with Changes in Average Proficiency from 1992, Public Schools Only (continued)

	Asian			Pacific Islander			American Indian		
	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992
Nation	2	231	•••	1	216	•••	2	200	-5
Region									
Northeast	2	•••	•••	1	•••	•••	1	•••	•••
Southeast	1	•••	•••	0	•••	•••	1	•••	•••
Central	1	•••	•••	0	•••	•••	1	•••	•••
West	3	226!	•••	1	•••	•••	2	•••	•••
States									
Alabama	1	•••	•••	0	•••	•••	2	•••	•••
Arizona	1	•••	•••	1	•••	•••	8	181	-3
Arkansas	1	•••	•••	0	•••	•••	2	•••	•••
California	8	211	•••	5	213!	•••	2	•••	•••
Colorado	2	•••	•••	1	•••	•••	4	204	1
Connecticut	2	•••	•••	0	•••	•••	1	•••	•••
Delaware	1	•••	•••	0	•••	•••	3	•••	•••
Florida	1	•••	•••	1	•••	•••	2	•••	•••
Georgia	2	•••	•••	0	•••	•••	1	•••	•••
Hawaii	19	219	•••	46	191	•••	2	•••	•••
Indiana	1	•••	•••	0	•••	•••	1	•••	•••
Iowa	1	•••	•••	0	•••	•••	2	•••	•••
Kentucky	1	•••	•••	0	•••	•••	1	•••	•••
Louisiana	1	•••	•••	0	•••	•••	2	•••	•••
Maine	1	•••	•••	0	•••	•••	2	•••	•••
Maryland	3	232	•••	1	•••	•••	2	•••	•••
Massachusetts	2	201!	•••	0	•••	•••	2	•••	•••
Minnesota	2	•••	•••	0	•••	•••	3	196	•••
Mississippi	0	•••	•••	0	•••	•••	1	•••	•••
Missouri	1	•••	•••	0	•••	•••	2	212	•••
Montana†	1	•••	---	0	---	---	9	203	---
Nebraska†	1	•••	•••	1	•••	•••	3	202	•••
New Hampshire†	1	•••	•••	0	•••	•••	2	•••	•••
New Jersey	4	237	•••	1	•••	•••	1	•••	•••
New Mexico	1	•••	•••	0	•••	•	10	185	-15!
New York	3	230	•••	1	•••	•••	2	•••	•••
North Carolina	1	•••	•••	0	•••	•••	3	201!	-3
North Dakota	1	•••	•••	0	•••	•••	4	197!	-14
Pennsylvania†	1	•••	•••	1	•••	•••	1	•••	•••
Rhode Island†	3	203	•••	0	•••	•••	1	•••	•••
South Carolina	0	•••	•••	1	•••	•••	2	•••	•••
Tennessee†	1	•••	•••	0	•••	•••	1	•••	•••
Texas	2	•••	•••	0	•••	•••	1	•••	•••
Utah	1	•••	•••	1	•••	•••	3	195	•••
Virginia	2	•••	•••	1	•••	•••	1	•••	•••
Washington	4	220	---	2	208	---	4	207	---
West Virginia	1	•••	•••	0	•••	•••	1	•••	•••
Wisconsin†	2	•••	•••	0	•••	•••	2	•••	•••
Wyoming	1	•••	•••	0	•••	•••	4	210!	-1
Other Jurisdictions									
DoDEA	5	222	---	5	215	---	3	210	---
Guam	3	180	•••	64	183	•••	1	•••	•••

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, • indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow accurate determination of the variability of this value

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.3 Average Reading Proficiency for Grade 4 Students by Parents' Education Level for the 1994 Trial State Assessment with Changes in Average Proficiency from 1992, Public Schools Only

	Graduated College			Some Education After High School			Graduated High School		
	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992
Nation	41	222	-1	8	222	0	13	206	-4
Region									
Northeast	43	221	-11	6	222	1	14	202	-10
Southeast	35	216	-2	9	222	7	17	207	-1
Central	45	226	3	8	221	-3	12	215	1
West	40	223	4	7	221	-1	10	201	-9
States									
Alabama	37	217	2	9	217	0	18	201	-6
Arizona	34	218	0	9	219	3	10	200	-4
Arkansas	33	215	-2	10	221	-1	19	203	-8
California	39	207	-8	8	207	1	9	191	-7
Colorado	44	222	-3	8	220	-3	10	213	3
Connecticut	49	231	-1	8	234	4	9	209	-4
Delaware	40	214	-5*	8	217	-4	12	202	-2
Florida	40	212	-1	8	219	3	12	195	-11*
Georgia	40	217	-4	8	219	0	15	199	-7
Hawaii	38	208	-2	7	215	7	13	194	-2
Indiana	37	229	2	10	230	0	18	216	-2
Iowa	43	229	-5	8	232	1	13	219	-3
Kentucky	30	218	-2	11	222	1	19	212	-2
Louisiana	34	200	-7	8	209	-6	18	196	-5
Maine	44	236	1	9	237	2	14	225	2
Maryland	48	217	-1	7	215	-4	11	202	-5
Massachusetts	49	232	-3	9	230	-3	10	212	-9
Minnesota	42	229	2	8	220	-10*	11	212	-6
Mississippi	37	207	3	7	213	3	17	199	1
Missouri	37	225	-3	9	227	0	17	216	1
Montana†	39	230	---	10	227	---	13	219	---
Nebraska†	43	231	3	7	232	1	13	215	-1
New Hampshire†	41	231	-4	9	236	2	11	220	0
New Jersey	46	230	-3	10	225	-5	11	209	-7
New Mexico	34	215	-6	9	220	1	14	200	-10*
New York	42	220	-6	7	224	3	11	208	0
North Carolina	44	223	4	8	226	8	13	204	-2
North Dakota	46	233	1	8	232	3	11	217	-7
Pennsylvania†	37	224	-5	12	221	-10*	18	210	-6
Rhode Island†	40	228	2	11	230	2	10	217	8
South Carolina	40	213	-5	7	216	-5	17	193	-7
Tennessee†	36	219	-1	9	225	3	18	213	3
Texas	37	222	0	9	224	5	13	207	-1
Utah	42	226	-1	9	225	-3	10	211	-4
Virginia	41	221	-8*	8	220	-5	13	207	-8
Washington	40	223	---	8	216	---	10	209	---
West Virginia	33	221	-4	9	226	2	21	213	1
Wisconsin†	37	233	2	9	228	-5	14	223	4
Wyoming	39	228	-3	9	230	-1	13	215	-3
Other Jurisdictions									
DoDEA	42	223	---	11	226	---	9	209	---
Guam	36	185	2	6	189	-3	13	176	-6

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.3 Average Reading Proficiency for Grade 4 Students by Parents' Education Level for the 1994 Trial State Assessment with Changes in Average Proficiency from 1992, Public Schools Only (continued)

	Did Not Finish High School			I Don't Know		
	Percentage of Students	Average Proficiency	Change from 1992	Percentage of Students	Average Proficiency	Change from 1992
Nation	4	188	-10	34	204	-4
Region						
Northeast	3	•••	•••	34	205	-7
Southeast	6	186	-11	34	200	-5
Central	4	•••	•••	31	210	-3
West	5	188	-7	38	203	-3
States						
Alabama	8	197	0	28	201	2
Arizona	5	189	-7	42	198	-6
Arkansas	6	196	-5	31	204	0
California	4	166	-12	39	189	-4
Colorado	3	192	-10	35	204	-4
Connecticut	3	204	4	30	212	1
Delaware	3	185	-13	37	199	-10**
Florida	4	187	-13	37	200	-4
Georgia	6	185	-16	31	199	-7
Hawaii	3	192	-6	39	195	-5
Indiana	4	198	-13	31	210	-6*
Iowa	3	211	5	33	215	-3
Kentucky	8	195	-6	33	206	0
Louisiana	8	188	-8	33	194	-8*
Maine	4	214	1	29	218	1
Maryland	3	195	-1	31	203	-1
Massachusetts	3	206	1	29	212	-3
Minnesota	2	•••	•••	37	210	-5
Mississippi	8	192	3	32	197	2
Missouri	5	199	-12*	32	208	-5
Montana†	3	211	---	35	215	---
Nebraska†	2	•••	•••	34	208	-3
New Hampshire†	4	207	-4	35	215	-7*
New Jersey	3	193	-13	30	209	-3
New Mexico	6	188	-6	36	196	-7
New York	4	196	-1	36	202	-5
North Carolina	5	195	0	30	206	1
North Dakota	2	•••	•••	33	217	2
Pennsylvania†	4	187	-22*	28	208	-5
Rhode Island†	4	203	0	35	211	2
South Carolina	6	189	-9	30	198	-7*
Tennessee†	7	200	-2	30	204	0
Texas	6	195	-5	35	205	-2
Utah	2	•••	•••	37	209	-5
Virginia	5	196	-11	32	208	-5
Washington	2	197	---	38	203	---
West Virginia	7	196	-7	31	205	-3
Wisconsin†	4	212	0	37	217	0
Wyoming	4	203	-7	35	216	1
Other Jurisdictions						
DoDEA	2	•••	---	36	212	---
Guam	5	164	-11	41	181	-1

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.
--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.4 Percentage of Grade 4 Students by Gender At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992, Public Schools Only

	At or Above Advanced				At or Above Proficient			
	Male		Female		Male		Female	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	6	1	8	1	24	0	32	3
Region								
Northeast	7	-1	7	-3	25	-5	31	-4
Southeast	4	1	7	2	20	1	27	2
Central	6	1	9	3	27	-1	39	9
West	6	2	9	2	25	5	32	3
States								
Alabama	4	2	6	2	20	4	26	3
Arizona	4	2	8	4*	20	3	28	4
Arkansas	3	0	6	1	21	1	27	2
California	3	0	4	-1	15	-2	20	-2
Colorado	5	2	7	2	25	3	31	3
Connecticut	8	3*	14	5	34	3	43	6
Delaware	4	0	6	0	19	-2	27	-1
Florida	4	1	7	3*	19	-1	26	3
Georgia	6	2	7	1	23	0	28	1
Hawaii	3	1	5	2	16	2	22	2
Indiana	6	1	8	2	29	1	36	4
Iowa	6	1	10	1	30	-2	40	0
Kentucky	4	1	8	4*	22	1	29	4
Louisiana	2	0	3	0	13	-1	16	0
Maine	8	3	12	4	38	4	44	6
Maryland	5	2	8	3	23	3	30	2
Massachusetts	7	2	9	1	33	-1	39	1
Minnesota	5	1	10	2	28	1	37	1
Mississippi	3	1	5	3*	14	2	21	6*
Missouri	6	2	9	2	28	0	34	1
Montana†	6	---	9	---	30	---	40	---
Nebraska†	6	2	11	4	30	2	39	4
New Hampshire†	6	-1	12	2	30	-4	42	0
New Jersey	7	0	10	1	29	-2	37	-2
New Mexico	3	0	6	2	17	-4	24	0
New York	5	0	8	2	24	0	31	2
North Carolina	5	0	10	5*	26	2	34	7*
North Dakota	6	1	10	3	33	0	42	5
Pennsylvania†	5	0	9	2	25	-4	35	1
Rhode Island†	5	1	10	5	27	1	37	7
South Carolina	3	0	5	1	17	-2	23	-1
Tennessee†	5	1	7	3	23	2	30	5
Texas	5	2	7	2	24	4	28	0
Utah	5	1	8	2	26	-1	34	1
Virginia	6	0	9	1	21	-7	32	-3
Washington	5	---	7	---	24	---	29	---
West Virginia	4	1	7	1	22	1	30	1
Wisconsin†	5	1	9	1	31	2	39	2
Wyoming	4	-1	7	2	28	-2	36	0
Other Jurisdictions								
DoDEA	4	---	8	---	22	---	34	---
Guam	1	0	2	1	5	0	11	1

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.4 Percentage of Grade 4 Students by Gender At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992, Public Schools Only (Continued)

	At or Above Basic				Below Basic			
	Male		Female		Male		Female	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	53	-2	64	0	47	2	36	0
Region								
Northeast	53	-8	63	-5	47	8	37	5
Southeast	46	-2	59	-2	54	2	41	2
Central	59	-3	71	4	41	3	29	-4
West	54	3	64	2	46	-3	36	-2
States								
Alabama	48	0	57	2	52	0	43	-2
Arizona	47	-3	56	-2	53	3	44	2
Arkansas	49	-3	58	-1	51	3	42	1
California	41	-3	48	-4	59	3	52	4
Colorado	55	-6	64	-3	45	6	36	3
Connecticut	65	-2	71	0	35	2	29	0
Delaware	46	-7	59	-4	54	7	41	4
Florida	45	-4	55	-1	55	4	45	1
Georgia	47	-8	57	-2	53	8	43	2
Hawaii	41	-2	52	-1	59	2	48	1
Indiana	63	-2	69	-3	37	2	31	3
Iowa	66	-4	73	-4	34	4	27	4
Kentucky	51	-4	62	0	49	4	38	0
Louisiana	38	-5	43	-7	62	5	57	7
Maine	72	0	78	0	28	0	22	0
Maryland	51	-1	60	-2	49	1	40	2
Massachusetts	67	-7*	72	-3	33	7*	28	3
Minnesota	61	-4	69	-1	39	4	31	1
Mississippi	40	1	50	6	60	-1	50	-6
Missouri	58	-5	66	-4	42	5	34	4
Montana†	64	---	74	---	36	---	26	---
Nebraska†	63	-2	69	-3	37	2	31	3
New Hampshire†	65	-7	76	-4	35	7	24	4
New Jersey	63	-4	67	-5	37	4	33	5
New Mexico	46	-6	52	-5	54	6	48	5
New York	53	-6	62	-2	47	6	38	2
North Carolina	54	1	64	5	46	-1	36	-5
North Dakota	69	-3	76	0	31	3	24	0
Pennsylvania†	57	-7	65	-6	43	7	35	6
Rhode Island†	61	1	69	4	39	-1	31	-4
South Carolina	44	-5	52	-5	56	5	48	5
Tennessee†	53	0	62	2	47	0	38	-2
Texas	56	3	59	-1	44	-3	41	1
Utah	59	-4	69	-2	41	4	31	2
Virginia	52	-10*	63	-9*	48	10*	37	9*
Washington	55	---	62	---	45	---	38	---
West Virginia	53	-4	63	-3	47	4	37	3
Wisconsin†	67	-1	75	1	33	1	25	-1
Wyoming	66	-2	71	-4	34	2	29	4
Other Jurisdictions								
DoDEA	57	---	68	---	43	---	32	---
Guam	20	-3	35	2	80	3	65	-2

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD
1992 1994 Reading Assessment

Table D.5 Percentage of Grade 4 Students by Race/Ethnicity At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992, Public Schools Only

	At or Above Advanced											
	White		Black		Hispanic		Asian		Pacific Islander		American Indian	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	9	1	1	0	2	0	15	•••	6	•••	3	0
Region												
Northeast	9	-3	1	0	2	1	•••	•••	•••	•••	•••	•••
Southeast	8	2	1	0	1	1!	•••	•••	•••	•••	•••	•••
Central	9	2	0	0	3	-3	•••	•••	•••	•••	•••	•••
West	9	2	1!	1	2	1	12!	•••	•••	•••	•••	•••
States												
Alabama	7	3	1	1	0	-1	•••	•••	•••	•••	•••	•••
Arizona	9	4	2	0	3	2	•••	•••	•••	•••	1	1
Arkansas	6	1	0	0	3	3	•••	•••	•••	•••	•••	•••
California	5	-1	1	0	1	0	9	•••	2!	•••	•••	•••
Colorado	8	3	2	1	1	0	•••	•••	•••	•••	5	2
Connecticut	14	6*	1	0	2	1	•••	•••	•••	•••	•••	•••
Delaware	7	0	1	1	1	1	•••	•••	•••	•••	•••	•••
Florida	7	3	1	0	3	1	•••	•••	•••	•••	•••	•••
Georgia	10	2	2	1	2	0	•••	•••	•••	•••	•••	•••
Hawaii	7	3	1	0	2	1	9	•••	1	•••	•••	•••
Indiana	9	2	1	0	1	-2	•••	•••	•••	•••	•••	•••
Iowa	8	1	0!	-1	5	2	•••	•••	•••	•••	•••	•••
Kentucky	6	3	1	1	2	-1	•••	•••	•••	•••	•••	•••
Louisiana	4	1	0	0	0	0	•••	•••	•••	•••	•••	•••
Maine	10	4*	•••	•••	5	4	•••	•••	•••	•••	•••	•••
Maryland	10	4	1	0	1	1	13	•••	•••	•••	•••	•••
Massachusetts	10	2	2	1	1	0	4!	•••	•••	•••	•••	•••
Minnesota	8	2	2	1	4	3	•••	•••	•••	•••	3	•••
Mississippi	7	3	1	1	1	0	•••	•••	•••	•••	•••	•••
Missouri	9	2	3	2	2	2	•••	•••	•••	•••	4	•••
Montana†	9	---	•••	---	2	---	•••	---	•••	---	2	---
Nebraska†	9	3	1!	1	4	3	•••	•••	•••	•••	3	•••
New Hampshire†	9	1	•••	•••	4	1	•••	•••	•••	•••	•••	•••
New Jersey	11	0	2	1	4	2	17	•••	•••	•••	•••	•••
New Mexico	7	1	1	0	3	1	•••	•••	•••	•••	2	2!
New York	9	3	1	-1	3	2	13	•••	•••	•••	•••	•••
North Carolina	11	4	1	0	2	0	•••	•••	•••	•••	0!	4
North Dakota	9	3	•••	•••	4	-3	•••	•••	•••	•••	1!	0
Pennsylvania†	8	1	1	0	1	-1	•••	•••	•••	•••	•••	•••
Rhode Island†	9	3	3	2	2	1	4	•••	•••	•••	•••	•••
South Carolina	7	1	1	0	1	0	•••	•••	•••	•••	•••	•••
Tennessee†	8	2	1	0	2	1	•••	•••	•••	•••	•••	•••
Texas	10	3	1	0	2	0	•••	•••	•••	•••	•••	•••
Utah	7	2	•••	•••	2	0	•••	•••	•••	•••	0	•••
Virginia	10	1	1	1	4	3	•••	•••	•••	•••	•••	•••
Washington	7	---	1	---	1	---	9	---	6	---	4	---
West Virginia	6	1	2	-1	1	-1	•••	•••	•••	•••	•••	•••
Wisconsin†	8	1	0	-1	1	-1	•••	•••	•••	•••	•••	•••
Wyoming	6	0	•••	•••	3	1	•••	•••	•••	•••	2!	-1
Other Jurisdictions												
DoDEA	8	---	1	---	3	---	10	---	5	---	2	---
Guam	2	0	0	-1	1	0	2	•••	1	•••	•••	•••

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate

--- Jurisdiction did not participate in the 1992 Trial State Assessment

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow for accurate determination of the variability of the value

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A)

SOURCE National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.5 Percentage of Grade 4 Students by Race/Ethnicity At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992. Public Schools Only (Continued)

	At or Above Proficient											
	White		Black		Hispanic		Asian		Pacific Islander		American Indian	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	35	2	8	0	12	-2	45	***	33	***	18	1
Region												
Northeast	37	-4	7	-4	12	-3	***	***	***	***	***	***
Southeast	31	2	9	0	8	-3!	***	***	***	***	***	***
Central	37	4	7	3	23	-1	***	***	***	***	***	***
West	36	4	9!	4	10	-1	40!	***	***	***	***	***
States												
Alabama	32	4	8	3	4	-3	***	***	***	***	***	***
Arizona	32	3	10	-6	13	3	***	***	***	***	10	3
Arkansas	30	1	6	0	14	6	***	***	***	***	***	***
California	25	-6	8	-1	6	-1	32	***	24!	***	***	***
Colorado	35	5	11	-1!	12	0	***	***	***	***	22	6
Connecticut	48	6	9	0	14	5	***	***	***	***	***	***
Delaware	30	-2	10	1	10	3	***	***	***	***	***	***
Florida	31	3	7	0	13	-1	***	***	***	***	***	***
Georgia	36	2	10	1	13	-3	***	***	***	***	***	***
Hawaii	34	8	10	0	13	2	33	***	11	***	***	***
Indiana	37	4	8	-3	14	-8	***	***	***	***	***	***
Iowa	37	-1	7!	-10	16	-1	***	***	***	***	***	***
Kentucky	28	3	12	3	11	-2	***	***	***	***	***	***
Louisiana	25	1	4	-3	6	-1	***	***	***	***	***	***
Maine	42	5	***	***	25	11	***	***	***	***	***	***
Maryland	37	5	8	-1	12	0	49	***	***	***	***	***
Massachusetts	42	1	13	3	10	0	16!	***	***	***	***	***
Minnesota	35	1	9	5	21	7	***	***	***	***	15	***
Mississippi	31	5	7	2	6	3	***	***	***	***	***	***
Missouri	35	0	12	3	17	4	***	***	***	***	22	***
Montana†	39	---	***	---	20	---	***	---	***	---	17	---
Nebraska†	37	3	9!	-1	21	5	***	***	***	***	17	***
New Hampshire†	37	-2	***	***	21	-3	***	***	***	***	***	***
New Jersey	42	-2	12	2	17	4	52	***	***	***	***	***
New Mexico	30	-5	11	-1	15	2	***	***	***	***	8	-1!
New York	39	3	9	-3	13	4	46	***	***	***	***	***
North Carolina	39	6	11	1	11	-3	***	***	***	***	11!	-8
North Dakota	40	4	***	***	22	-7	***	***	***	***	15!	-2
Pennsylvania†	36	-1	7	0	11	-3	***	***	***	***	***	***
Rhode Island†	37	4	11	4	12	3	19	***	***	***	***	***
South Carolina	31	-1	6	-2	8	-3	***	***	***	***	***	***
Tennessee†	32	4	9	1	12	-2	***	***	***	***	***	***
Texas	38	3	10	1	13	0	***	***	***	***	***	***
Utah	33	1	***	***	15	1	***	***	***	***	9	***
Virginia	35	-4	8	-4	20	8	***	***	***	***	***	***
Washington	31	---	11	---	9	---	33	---	19	---	20	---
West Virginia	28	2	13	1	11	-5	***	***	***	***	***	***
Wisconsin†	39	2	9	-1	14	-2	***	***	***	***	***	***
Wyoming	35	-1	***	***	20	3	***	***	***	***	20!	3
Other Jurisdictions												
DoDEA	36	---	14	---	22	---	34	---	[illegible]	---	17	---
Guam	15	0	5	-1	6	1	9	***	[illegible]	***	***	***

No significant differences between the two assessments observed at this achievement level.

*** Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow for accurate determination of the variability of this value

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.5 Percentage of Grade 4 Students by Race/Ethnicity At or Above the Achievement Levels for the 1994 Trial State Reading Assessments with Changes in this Percentage from 1992, Public Schools Only (Continued)

	At or Above Basic											
	White		Black		Hispanic		Asian		Pacific Islander		American Indian	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	69	0	30	-2	33	-9	77	***	63	***	47	-5
Region												
Northeast	72	-3	27	-9	37	-6	***	***	***	***	***	***
Southeast	65	-2	32	-2	26	-12!	***	***	***	***	***	***
Central	71	0	28	0	42	-11	***	***	***	***	***	***
West	69	3	31!	6	32	-6	73!	***	***	***	***	***
States												
Alabama	65	1	29	1	21	-12	***	***	***	***	***	***
Arizona	65	-3	31	-13	34	-6	***	***	***	***	27	2
Arkansas	64	-2	25	-4	36	4	***	***	***	***	***	***
California	59	-6	31	2	22	-4	55	***	58!	***	***	***
Colorado	69	-2	36	-12!	37	-9	***	***	***	***	49	2
Connecticut	80	0	33	-1	38	1	***	***	***	***	***	***
Delaware	62	-7	33	-2	34	3	***	***	***	***	***	***
Florida	64	-2	28	1	35	-7	***	***	***	***	***	***
Georgia	67	-3	30	-7	36	2	***	***	***	***	***	***
Hawaii	67	5	35	3	33	-1	65	***	35	***	***	***
Indiana	71	-1	34	-7	46	-8	***	***	***	***	***	***
Iowa	72	-3	26!	-28	49	-9	***	***	***	***	***	***
Kentucky	59	-2	37	-2	36	2	***	***	***	***	***	***
Louisiana	58	-4	21	-7*	22	-10	***	***	***	***	***	***
Maine	76	-1	***	***	65	14	***	***	***	***	***	---
Maryland	69	1	31	-5	39	0	79	***	***	***	***	***
Massachusetts	78	-2	39	-9	37	-5	42!	***	***	***	***	***
Minnesota	69	-2	27	-2	49	3	***	***	***	***	38	***
Mississippi	65	1	28	3	27	4	***	***	***	***	***	***
Missouri	68	-5	36	-2	43	1	***	***	***	***	58	***
Montana†	73	---	***	---	55	---	***	---	***	---	47	---
Nebraska†	70	-3	34!	-1	50	2	***	***	***	***	42	***
New Hampshire†	71	-6	***	***	59	-3	***	***	***	***	***	***
New Jersey	78	-3	35	-5	44	5	83	***	***	***	***	***
New Mexico	63	-6	39	-2	41	0	***	***	***	***	30	-12!
New York	73	-2	33	-12	39	7	75	***	***	***	***	***
North Carolina	71	3	35	-1	34	-2	***	***	***	***	45!	2
North Dakota	75	0	***	***	58	-13	***	***	***	***	40!	-16
Pennsylvania†	70	-6*	26	-3	35	-6	***	***	***	***	***	***
Rhode Island†	72	0	39	13	38	6	45	***	***	***	***	***
South Carolina	66	-2	25	-9*	27	-6	***	***	***	***	***	***
Tennessee†	66	0	30	-3	40	1	***	***	***	***	***	***
Texas	73	2	38	-2	41	0	***	***	***	***	***	***
Utah	68	-3	***	***	47	1	***	***	***	***	39	***
Virginia	70	-6	31	-12*	49	4	***	***	***	***	***	***
Washington	64	---	41	---	36	---	65	---	51	---	51	---
West Virginia	59	-3	44	2	39	1	***	***	***	***	***	***
Wisconsin†	76	1	39	-2	46	-10	***	***	***	***	***	***
Wyoming	71	-3	***	***	53	-1	***	***	***	***	55!	1
Other Jurisdictions												
DoDEA	70	---	49	---	57	---	64	---	57	---	52	---
Guam	39	-3	21	2	20	3	28	***	28	***	***	***

No significant difference between the two assessments observed at this achievement level.

*** Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow for accurate determination of the variability of this value

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE. National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.5 Percentage of Grade 4 Students by Race/Ethnicity At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992. Public Schools Only (Continued)

	Below Basic											
	White		Black		Hispanic		Asian		Pacific Islander		American Indian	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	31	0	70	2	67	9	23	•••	37	•••	53	5
Region												
Northeast	28	3	73	9	63	6	•••	•••	•••	•••	•••	•••
Southeast	35	2	68	2	74	12!	•••	•••	•••	•••	•••	•••
Central	29	0	72	0	58	11	•••	•••	•••	•••	•••	•••
West	31	-3	69!	-6	68	6	27!	•••	•••	•••	•••	•••
States												
Alabama	35	-1	71	-1	79	12	•••	•••	•••	•••	•••	•••
Arizona	35	3	69	13	66	6	•••	•••	•••	•••	73	-2
Arkansas	36	2	75	4	64	-4	•••	•••	•••	•••	•••	•••
California	41	6	69	-2	78	4	45	•••	42!	•••	•••	•••
Colorado	31	2	64	12!	63	9	•••	•••	•••	•••	51	-2
Connecticut	20	0	67	1	62	-1	•••	•••	•••	•••	•••	•••
Delaware	38	7	67	2	66	-3	•••	•••	•••	•••	•••	•••
Florida	36	2	72	-1	65	7	•••	•••	•••	•••	•••	•••
Georgia	33	3	70	7	64	-2	•••	•••	•••	•••	•••	•••
Hawaii	33	-5	65	-3	67	1	35	•••	65	•••	•••	•••
Indiana	29	1	66	7	54	8	•••	•••	•••	•••	•••	•••
Iowa	28	3	74!	28	51	9	•••	•••	•••	•••	•••	•••
Kentucky	41	2	63	2	64	-2	•••	•••	•••	•••	•••	•••
Louisiana	42	4	79	7*	78	10	•••	•••	•••	•••	•••	•••
Maine	24	1	•••	•••	35	-14	•••	•••	•••	•••	•••	•••
Maryland	31	-1	69	5	61	0	21	•••	•••	•••	•••	•••
Massachusetts	22	2	61	9	63	5	58!	•••	•••	•••	•••	•••
Minnesota	31	2	73	2	51	-3	•••	•••	•••	•••	62	•••
Mississippi	35	-1	72	-3	73	-4	•••	•••	•••	•••	•••	•••
Missouri	32	5	64	2	57	-1	•••	•••	•••	•••	42	•••
Montana†	27	---	•••	---	45	---	•••	---	•••	---	53	---
Nebraska†	30	3	66!	1	50	-2	•••	•••	•••	•••	58	•••
New Hampshire†	29	6	•••	•••	41	3	•••	•••	•••	•••	•••	•••
New Jersey	22	3	65	5	56	-5	17	•••	•••	•••	•••	•••
New Mexico	37	6	61	2	59	0	•••	•••	•••	•••	70	12!
New York	27	2	67	12	61	-7	25	•••	•••	•••	•••	•••
North Carolina	29	-3	65	1	66	2	•••	•••	•••	•••	55!	-2
North Dakota	25	0	•••	•••	42	13	•••	•••	•••	•••	60!	16
Pennsylvania†	30	6*	74	3	65	6	•••	•••	•••	•••	•••	•••
Rhode Island†	28	0	61	-13	62	-6	55	•••	•••	•••	•••	•••
South Carolina	34	2	75	9*	73	6	•••	•••	•••	•••	•••	•••
Tennessee†	34	0	70	3	60	-1	•••	•••	•••	•••	•••	•••
Texas	27	-2	62	2	59	0	•••	•••	•••	•••	•••	•••
Utah	32	3	•••	•••	53	-1	•••	•••	•••	•••	61	•••
Virginia	30	6	69	12*	51	-4	•••	•••	•••	•••	•••	•••
Washington	36	---	59	---	64	---	35	---	49	---	49	---
West Virginia	41	3	56	-2	61	-1	•••	•••	•••	•••	•••	•••
Wisconsin†	24	-1	61	2	54	10	•••	•••	•••	•••	•••	•••
Wyoming	29	3	•••	•••	47	1	•••	•••	•••	•••	45!	-1
Other Jurisdictions												
DoDEA	30	---	51	---	43	---	36	---	43	---	48	---
Guam	61	3	79	-2	80	-3	72	•••	72	•••	•••	•••

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

! Interpret with caution any comparison involving this statistic. The nature of the sample does not allow for accurate determination of the variability of this value.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.6 Percentage of Grade 4 Students by Parents' Education Level At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992. Public Schools Only

	At or Above Advanced									
	College Graduate		Some Education After High School		Graduated High School		Did Not Finish High School		I Don't Know	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	11	1	9	1	4	1	1	0	4	1
Region										
Northeast	11	-4	8	-2	4	0	•••	•••	3	0
Southeast	9	1	11	5	4	2	1	1	3	1
Central	11	3	7	0	6	3	•••	•••	4	-1
West	11	3	9	0	2	-1	1	0	5	2
States										
Alabama	8	3	8	3	2	0	2	0	3	2
Arizona	9	4	11	8	3	1	2	0	4	2
Arkansas	7	1	8	2	3	0	1	0	3	1
California	6	-1	4	1	2	-1	0	0	2	0
Colorado	8	2	7	3	5	3	2	1	3	1
Connecticut	15	4	14	6	5	3	7	7	6	3
Delaware	8	0	8	1	3	1	1	1	3	-1
Florida	7	2	7	3	4	1	1	0	4	2
Georgia	11	3	9	0	4	0	1	-1	3	1
Hawaii	5	2	9	6	2	0	2	1	3	1
Indiana	11	3	11	4	6	2	1	-1	3	-1
Iowa	11	1	12	4	5	0	2	-1	5	1
Kentucky	8	3	9	3	6	3	3	2	3	1
Louisiana	4	1	5	0	2	1	0	-1	1	0
Maine	14	3	13	7	7	4	3	3	5	2
Maryland	9	3	7	2	5	2	2	1	4	2
Massachusetts	11	1	10	2	3	0	2	0	4	2
Minnesota	11	3	6	-2	7	3	•••	•••	4	1
Mississippi	6	4	7	3	2	1	2	1	2	1
Missouri	11	2	11	3	7	4	1	-2	4	1
Montana†	11	---	8	---	5	---	1	---	4	---
Nebraska†	12	5	12	2	6	3	•••	•••	4	1
New Hampshire†	11	0	15	5	8	3	5	4	4	0
New Jersey	12	0	10	1	4	0	3	0	4	0
New Mexico	8	1	7	3	2	-1	2	2	2	1
New York	9	0	9	5	4	3	2	2	4	1
North Carolina	12	3	12	7	3	0	1	-1	4	1
North Dakota	12	3	10	3	3	-1	•••	•••	4	2
Pennsylvania†	11	1	8	-2	3	0	1	-1	3	1
Rhode Island†	12	3	8	1	5	3	6	5	4	2
South Carolina	7	0	6	1	2	1	1	0	2	0
Tennessee†	8	1	11	4	5	3	1	0	3	2
Texas	10	2	7	4	4	2	0	-1	3	1
Utah	9	2	8	0	4	1	•••	•••	3	0
Virginia	10	0	9	2	4	0	2	0	5	2
Washington	9	---	5	---	4	---	2	---	3	---
West Virginia	8	1	10	3	5	2	2	0	3	0
Wisconsin†	11	1	8	-1	6	3	4	3	3	0
Wyoming	8	-1	7	-1	3	1	1	0	4	1
Other Jurisdictions										
DoDEA	8	---	7	---	2	---	•••	---	3	---
Guam	2	1	3	1	0	0	0	-1	1	0

No significant differences between the two assessments observed at this achievement level.

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.6 Percentage of Grade 4 Students by Parents' Education Level At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992, Public Schools Only (Continued)

	At or Above Proficient									
	College Graduate		Some Education After High School		Graduated High School		Did Not Finish High School		I Don't Know	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	37	1	36	4	22	1	9	-3	21	1
Region										
Northeast	37	-11	38	4	21	2	•••	•••	21	-2
Southeast	31	1	36	8	19	1	7	-2	16	1
Central	40	5	36	4	30	8	•••	•••	25	0
West	39	6	34	1	20	-4	11	-3	21	3
States										
Alabama	32	5	30	2	16	-1	11	1	19	6
Arizona	34	5	34	7	18	3	13	2	17	2
Arkansas	31	2	35	1	20	-2	11	-3	18	3
California	24	-6	23	-1	11	-4	3	-1	13	0
Colorado	36	3	33	0	25	7	13	-1	19	2
Connecticut	47	0	49	7	22	2	26	16	27	7
Delaware	30	-3	32	4	20	5	8	-1	16	-4
Florida	28	1	34	8	17	-2	11	-3	18	1
Georgia	35	2	34	1	19	1	8	-5	18	0
Hawaii	24	3	33	10	13	1	12	-2	15	1
Indiana	44	6	42	2	29	2	15	-3	21	-2
Iowa	41	-6	46	4	28	-1	19	6	27	2
Kentucky	31	1	38	5	24	1	11	0	21	4
Louisiana	18	0	24	-3	14	1	8	-1	11	-1
Maine	50	4	49	2	34	4	27	11	29	5
Maryland	33	2	27	-2	20	1	11	-1	19	3
Massachusetts	45	-2	40	-1	24	-4	17	2	25	2
Minnesota	43	5	33	-12	29	2	•••	•••	22	0
Mississippi	22	5	28	5	16	4	9	2	14	4
Missouri	40	0	40	2	29	5	12	-5	21	0
Montana†	44	---	41	---	32	---	20	---	26	---
Nebraska†	45	6	47	4	28	7	•••	•••	21	2
New Hampshire†	43	-3	50	5	32	3	22	5	27	-5
New Jersey	44	-2	38	-6	22	-2	13	-2	22	-1
New Mexico	29	-4	32	3	15	-3	12	4	13	-3
New York	34	-3	40	8	25	4	14	2	19	0
North Carolina	39	5	40	11	19	1	12	2	20	2
North Dakota	47	3	43	3	27	-5	•••	•••	28	6
Pennsylvania†	40	-2	36	-8	22	-2	8	-10	22	0
Rhode Island†	42	5	41	2	26	7	19	5	22	1
South Carolina	28	-2	32	2	11	-2	10	0	13	-3
Tennessee†	33	1	38	2	25	6	15	3	19	5
Texas	36	1	36	7	20	3	9	-3	18	1
Utah	39	0	36	-3	24	2	•••	•••	21	-1
Virginia	35	-8	29	-6	18	-5	10	-6	21	0
Washington	37	---	25	---	24	---	13	---	18	---
West Virginia	35	-2	37	4	25	4	13	0	18	2
Wisconsin†	47	4	39	-4	32	4	22	8	25	0
Wyoming	39	-3	43	2	25	1	13	-4	25	1
Other Jurisdictions										
DoDEA	34	---	34	---	19	---	•••	---	22	---
Guam	10	1	14	4	7	-2	2	-4	6	0

No significant differences between the two assessments observed at this achievement level.

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.
--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.6 Percentage of Grade 4 Students by Parents' Education Level At or Above the Achievement Levels for the 1994 Trial State Reading Assessments with Changes in this Percentage from 1992, Public Schools Only (Continued)

	At or Above Basic									
	College Graduate		Some Education After High School		Graduated High School		Did Not Finish High School		I Don't Know	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	68	0	68	0	54	-2	32	-6	51	-4
Region										
Northeast	67	-10	68	2	51	-6	***	***	51	-5
Southeast	60	-2	68	7	52	-1	28	-11	45	-4
Central	72	2	71	-1	61	-1	***	***	57	-1
West	71	7	66	-4	52	0	37	1	49	-3
States										
Alabama	61	3	62	-2	46	-5	40	2	45	2
Arizona	63	-1	63	-2	46	-3	35	-2	44	-4
Arkansas	60	-2	68	-1	48	-9	41	-2	48	0
California	54	-6	54	1	37	-8	16	-9	37	-1
Colorado	68	-6	65	-8	60	4	37	-7	49	-5
Connecticut	77	-4	79	0	53	-6	48	1	58	1
Delaware	59	-6	64	-4	49	1	29	-9	46	-8
Florida	57	-1	65	3	41	-9	31	-9	45	-3
Georgia	61	-6	62	1	44	-8	34	-9	46	-3
Hawaii	54	0	63	7	40	2	34	-10	39	-4
Indiana	75	1	78	0	63	-1	45	-12	55	-7
Iowa	75	-7	80	-1	66	-4	59	13	60	-4
Kentucky	62	-3	68	-2	56	-5	37	-6	51	2
Louisiana	44	-6	55	-4	41	-2	28	-6	36	-6
Maine	82	-1	83	-3	73	0	60	2	65	1
Maryland	62	-1	60	-5	50	-2	40	2	48	-2
Massachusetts	79	-4	77	-8	59	-14	48	3	56	-5
Minnesota	75	1	68	-10	61	-6	***	***	55	-5
Mississippi	50	4	60	8	44	2	34	5	40	3
Missouri	70	-5	72	-3	63	1	43	-13	53	-6
Montana†	78	---	75	---	67	---	60	---	60	---
Nebraska†	76	0	78	-1	62	-2	***	***	54	-2
New Hampshire†	78	-5	83	0	66	-3	50	-8	62	-8
New Jersey	76	-4	73	-7	54	-8	34	-15	53	-3
New Mexico	59	-8	66	2	45	-10	35	3	40	-5
New York	66	-8	69	0	53	-3	41	2	47	-6
North Carolina	68	3	72	9	49	0	36	-2	51	1
North Dakota	80	-2	81	1	65	-9	***	***	64	3
Pennsylvania†	69	-7	68	-11	56	-7	35	-19	54	-5
Rhode Island†	73	0	79	3	62	8	47	-1	55	1
South Carolina	57	-3	61	-8	35	-8	34	-5	41	-7
Tennessee†	63	-2	71	2	59	3	42	-2	50	3
Texas	67	1	72	5	54	2	40	-3	49	-1
Utah	73	-3	73	-3	56	-5	***	***	56	-4
Virginia	65	-10*	65	-9	52	-9	38	-12	51	-8
Washington	69	---	64	---	58	---	44	---	48	---
West Virginia	67	-5	70	-1	59	1	38	-9	48	-3
Wisconsin†	79	1	75	-7	69	2	57	-4	64	1
Wyoming	76	-4	78	-2	62	-4	50	-2	62	-1
Other Jurisdictions										
DoDEA	68	---	75	---	52	---	***	---	56	---
Guam	30	1	37	0	24	-4	13	-7	26	0

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

*** Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.

--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table D.6 Percentage of Grade 4 Students by Parents' Education Level At or Above the Achievement Levels for the 1994 Trial State Reading Assessment with Changes in this Percentage from 1992, Public Schools Only (Continued)

	Below Basic									
	College Graduate		Some Education After High School		Graduated High School		Did Not Finish High School		I Don't Know	
	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992	1994 Percentage	Change from 1992
Nation	32	0	32	0	46	2	68	6	49	4
Region										
Northeast	33	10	32	-2	49	6	•••	•••	49	5
Southeast	40	2	32	-7	48	1	72	11	55	4
Central	28	-2	29	1	39	1	•••	•••	43	1
West	29	-7	34	4	48	0	63	-1	51	3
States										
Alabama	39	-3	38	2	54	5	60	-2	55	-2
Arizona	37	1	37	2	54	3	65	2	56	4
Arkansas	40	2	32	1	52	9	59	2	52	0
California	46	6	46	-1	63	8	84	9	63	1
Colorado	32	6	35	8	40	-4	63	7	51	5
Connecticut	23	4	21	0	47	6	52	-1	42	-1
Delaware	41	6	36	4	51	-1	71	9	54	8
Florida	43	1	35	-3	59	9	69	9	55	3
Georgia	39	6	38	-1	56	8	66	9	54	3
Hawaii	46	0	37	-7	60	-2	66	10	61	4
Indiana	25	-1	22	0	37	1	55	12	45	7
Iowa	25	7	20	1	34	4	41	-13	40	4
Kentucky	38	3	32	2	44	5	63	6	49	-2
Louisiana	56	6	45	4	59	2	72	6	64	6
Maine	18	1	17	3	27	0	40	-2	35	-1
Maryland	38	1	40	5	50	2	60	-2	52	2
Massachusetts	21	4	23	8	41	14	52	-3	44	5
Minnesota	25	-1	32	10	39	6	•••	•••	45	5
Mississippi	50	-4	40	-8	56	-2	66	-5	60	-3
Missouri	30	5	28	3	37	-1	57	13	47	6
Montana†	22	---	25	---	33	---	40	---	40	---
Nebraska†	24	0	22	1	38	2	•••	•••	46	2
New Hampshire†	22	5	17	0	34	3	50	8	38	8
New Jersey	24	4	27	7	46	8	66	15	47	3
New Mexico	41	8	34	-2	55	10	65	-3	60	5
New York	34	8	31	0	47	3	59	-2	53	6
North Carolina	32	-3	28	-9	51	0	64	2	49	-1
North Dakota	20	2	19	-1	35	9	•••	•••	36	-3
Pennsylvania†	31	7	32	11	44	7	65	19	46	5
Rhode Island†	27	0	21	-3	38	-8	53	1	45	-1
South Carolina	43	3	39	8	65	8	66	5	59	7
Tennessee†	37	2	29	-2	41	-3	58	2	50	-3
Texas	33	-1	28	-5	46	-2	60	3	51	1
Utah	27	3	27	3	44	5	•••	•••	44	4
Virginia	35	10*	35	9	48	9	62	12	49	8
Washington	31	---	36	---	42	---	56	---	52	---
West Virginia	33	5	30	1	41	-1	62	9	52	3
Wisconsin†	21	-1	25	7	31	-2	43	4	36	-1
Wyoming	24	4	22	2	38	4	50	2	38	1
Other Jurisdictions										
DoDEA	32	---	25	---	48	---	•••	---	44	---
Guam	70	-1	63	0	76	4	87	7	74	0

** The value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on 38 jurisdictions participating in both 1994 and 1992. If looking at only one state, * indicates the value for 1994 was significantly different from the value for 1992 at or about the 95 percent certainty level. Statistically significant differences between 1994 and 1992 for the state comparison samples for the nation and regions are not indicated.

••• Sample size in the 1992 or 1994 assessment is insufficient to permit a reliable estimate.
--- Jurisdiction did not participate in the 1992 Trial State Assessment.

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1994 Reading Assessments

APPENDIX E

State Contextual Background Factors

Included in this appendix are summaries of contextual variables collected as part of the NAEP assessment on a state-by-state basis. The contextual variables are classified as school-level (Table E.1), teacher-level (Tables E.2), and student-level (Table E.3). To supplement the data available from the NAEP assessment, co-statistics have been compiled from sources external to NAEP (Table E.4).

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table E.1 Selected School-Level Educational Characteristics by State for the 1994 Trial State Assessment, Public Schools Only

	Percent of Students Whose		
	Schools Report at Least Moderate Absenteeism	Teachers Report Getting All or Most of the Resources They Need	Teachers Report Their Average Class Size is Less Than 25 Students
Nation	[illegible]	65	59
Region			
Northeast	10	59	73
Southeast	20	68	63
Central	15	66	62
West	18	64	44
States			
Alabama	22	65	57
Arizona	34	63	49
Arkansas	26	68	75
California	29	58	14
Colorado	14	71	56
Connecticut	20	63	85
Delaware	12	57	57
Florida	21	67	38
Georgia	12	76	67
Hawaii	17	47	46
Indiana	12	77	74
Iowa	7	70	79
Kentucky	15	76	69
Louisiana	20	61	54
Maine	5	63	95
Maryland	22	63	52
Massachusetts	5	58	79
Minnesota	9	70	56
Mississippi	23	66	70
Missouri	17	70	57
Montana†	16	69	72
Nebraska†	9	85	85
New Hampshire†	6	54	76
New Jersey	10	72	85
New Mexico	24	49	61
New York	12	62	53
North Carolina	10	61	64
North Dakota	3	59	80
Pennsylvania†	10	70	61
Rhode Island†	9	38	77
South Carolina	11	74	70
Tennessee†	25	61	72
Texas	25	76	100
Utah	17	60	24
Virginia	15	73	79
Washington	16	62	51
West Virginia	14	69	85
Wisconsin†	4	73	77
Wyoming	9	83	88
Other Jurisdictions			
DoDEA	0	80	75
Guam	34	38	88

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Reading Assessment

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table E.2 Selected Teacher-Level Educational Characteristics by State for the 1994 Trial State Assessment, Public Schools Only

	Percent of Students Whose Teachers			
	Primarily Use Trade Books for Reading Instruction	Ask Students to Write About What They Have Read Almost Every Day	Have Students Read Books of Their Own Choosing Almost Every Day	Use a Variety of Books Almost Every Day
Nation	20	30	69	49
Region				
Northeast	20	46	62	53
Southeast	13	24	62	42
Central	15	26	70	37
West	29	26	81	61
States				
Alabama	6	20	60	37
Arizona	17	33	75	48
Arkansas	8	18	65	31
California	37	47	82	61
Colorado	43	39	84	69
Connecticut	28	43	74	53
Delaware	17	34	66	51
Florida	12	27	73	49
Georgia	7	24	68	51
Hawaii	21	32	78	47
Indiana	13	15	62	34
Iowa	23	34	86	56
Kentucky	25	40	63	56
Louisiana	3	15	53	27
Maine	54	38	80	69
Maryland	36	52	68	52
Massachusetts	17	33	74	48
Minnesota	15	29	68	45
Mississippi	3	15	49	29
Missouri	11	26	69	41
Montana†	19	29	69	47
Nebraska†	14	30	78	54
New Hampshire†	30	32	82	54
New Jersey	23	33	62	48
New Mexico	18	28	67	46
New York	29	42	68	57
North Carolina	14	34	74	50
North Dakota	4	20	69	37
Pennsylvania†	15	28	68	45
Rhode Island†	22	33	76	56
South Carolina	15	25	74	54
Tennessee†	6	10	47	30
Texas	10	32	69	44
Utah	16	22	81	53
Virginia	27	35	76	60
Washington	24	31	84	57
West Virginia	4	18	62	36
Wisconsin†	25	28	75	45
Wyoming	20	28	67	53
Other Jurisdictions				
DoDEA	4	32	75	45
Guam	20	38	73	56

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A)

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Reading Assessment

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table E.3 Selected Student-Level Educational Characteristics by State for the 1994 Trial State Assessment, Public Schools Only

	Percent of Students Who		
	Read More Than 10 Pages in School and for Homework	Watch Television 5 Hours or More a Day	Regularly Read for Fun on Their Own Time
Nation	54	31	45
Region			
Northeast	49	35	45
Southeast	51	37	40
Central	60	27	46
West	56	27	46
States			
Alabama	51	31	41
Arizona	58	25	44
Arkansas	54	35	41
California	63	30	45
Colorado	63	20	47
Connecticut	60	28	48
Delaware	49	36	42
Florida	51	32	41
Georgia	53	32	45
Hawaii	61	28	42
Indiana	58	29	41
Iowa	67	23	50
Kentucky	57	36	40
Louisiana	48	38	38
Maine	62	20	46
Maryland	52	34	45
Massachusetts	62	21	46
Minnesota	64	20	48
Mississippi	45	39	39
Missouri	60	31	44
Montana†	65	17	49
Nebraska†	63	23	46
New Hampshire†	59	21	47
New Jersey	57	33	43
New Mexico	55	20	44
New York	55	33	49
North Carolina	59	29	46
North Dakota	66	19	47
Pennsylvania†	54	28	43
Rhode Island†	59	25	48
South Carolina	53	33	44
Tennessee†	51	29	39
Texas	55	30	42
Utah	64	15	47
Virginia	57	34	47
Washington	58	21	48
West Virginia	58	31	39
Wisconsin†	65	23	49
Wyoming	62	19	51
Other Jurisdictions			
DoDEA	55	27	48
Guam	45	31	44

† Did not satisfy one of the guidelines for school sample participation rates (see Appendix A).

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Reading Assessment

THE NATION'S REPORT CARD 1992 1994 Reading Assessment

Table E.4 School System Characteristics from Non-NAEP Sources

	Current Expenditure Per Pupil 1991-92	Percent of Total Current Expenditures, by Function		
		Instruction	Non-Instructional	Support Services
Nation	5,421			
States				
Alabama	3,616	62.1	8.4	29.6
Arizona	4,381	51.2	3.0	45.8
Arkansas	4,031	60.3	8.9	30.9
California	4,746	59.3	4.1	36.6
Colorado	5,172	61.0	3.6	35.4
Connecticut	8,017	63.2	4.2	32.6
Delaware	6,093	62.6	3.9	33.5
Florida	5,243	58.5	5.0	36.6
Georgia	4,375	62.5	5.8	31.7
Hawaii	5,420	60.6	6.6	32.8
Indiana	5,074	62.1	4.5	33.5
Iowa	5,096	61.6	4.5	33.9
Kentucky	4,719	61.2	4.9	33.9
Louisiana	4,354	59.8	9.0	31.1
Maine	5,652	66.8	2.5	30.7
Maryland	6,679	60.5	4.9	34.6
Massachusetts	6,408	60.0	3.4	36.6
Minnesota	5,409	63.5	4.0	32.6
Mississippi	3,245	62.5	8.3	29.2
Missouri	4,830	60.7	4.4	35.0
Montana	5,423	61.1	4.2	34.7
Nebraska	5,263	60.3	10.8	28.9
New Hampshire	5,790	63.4	3.3	33.4
New Jersey	9,317	56.9	3.6	39.5
New Mexico	3,765	58.3	4.9	36.8
New York	8,527	66.9	3.0	30.1
North Carolina	4,555	61.7	7.8	30.5
North Dakota	4,441	60.7	7.9	31.3
Pennsylvania	6,613	63.3	3.8	33.0
Rhode Island	6,546	66.6	2.3	31.1
South Carolina	4,436	59.0	8.9	32.1
Tennessee	3,692	63.6	3.4	33.0
Texas	4,632	60.1	6.3	33.6
Utah	3,040	65.7	6.2	28.2
Virginia	4,880	59.5	5.3	35.1
Washington	5,271	59.8	4.7	35.6
West Virginia	5,109	60.5	6.5	33.0
Wisconsin	6,139	63.1	3.1	33.9
Wyoming	5,812	62.4	3.6	34.1
Other Jurisdictions				
DoDEA	8,510	64.3	9.8	18.5
Guam	5,349	46.5	6.6	46.9

Current Expenditure per Pupil, 1991-92 -- Source: Table 166, "Current expenditure per pupil in average daily attendance in public elementary and secondary schools, by State: 1959-60 to 1991-92." U.S. Department of Education, National Center for Education Statistics, *Statistics of State School Systems*; and Common Core of Data surveys. **Percent of Total Current Expenditures, by Function** -- Source: *State Profiles of Public Elementary and Secondary Education, 1991-1992*. U.S Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement. Information for DoDEA Schools was provided by the DoDEA.

Table E.4 School System Characteristics from Non-NAEP Sources (continued)

	Pupil-Teacher Ratio Fall 1992	1992-93 Average Annual Teacher Salary		Percent Nonpublic School Enrollment	Status Dropout Rate, Persons Ages 16-19 1990
		NEA	AFT		
Nation	17.4	35,934	35,104	---	11.2
States					
Alabama	17.4	27,651	27,490	7.2	12.6
Arizona	18.7	32,164	31,352	4.8	14.3
Arkansas	17.0	28,144	28,013	5.1	10.9
California	24.1	41,072	39,922	9.8	14.3
Colorado	18.3	34,410	33,541	5.7	9.6
Connecticut	14.3	49,595	48,918	10.7	9.2
Delaware	16.7	37,155	36,217	19.3	11.2
Florida	18.4	31,979	31,172	9.6	14.2
Georgia	18.0	30,829	28,758	6.0	14.1
Hawaii	17.6	37,415	36,472	16.3	7.0
Indiana	17.6	35,974	35,068	10.1	11.4
Iowa	15.8	30,910	30,124	11.0	6.5
Kentucky	17.3	31,921	31,115	9.0	13.0
Louisiana	16.6	28,332	26,074	15.2	11.9
Maine	14.1	31,034	30,250	4.6	8.4
Maryland	16.9	39,757	38,753	9.6	11.0
Massachusetts	15.0	39,213	39,245	11.4	9.5
Minnesota	17.6	36,002	35,093	12.0	6.1
Mississippi	18.2	24,998	24,367	8.9	11.7
Missouri	16.2	30,143	29,421	13.5	11.2
Montana	15.8	28,332	27,617	4.5	7.1
Nebraska	14.6	29,513	28,768	12.3	6.6
New Hampshire	15.6	34,810	33,931	6.5	9.9
New Jersey	13.6	43,786	43,355	15.5	9.3
New Mexico	17.6	27,219	26,463	5.2	10.8
New York	15.2	46,165	44,999	16.0	10.1
North Carolina	16.7	30,074	29,108	4.7	13.2
North Dakota	15.2	25,864	25,211	6.7	4.3
Pennsylvania	17.0	42,283	41,515	18.0	9.4
Rhode Island	14.3	38,916	40,548	13.3	12.9
South Carolina	17.0	29,981	29,151	6.5	11.9
Tennessee	19.4	29,710	29,313	6.8	13.6
Texas	15.7	30,710	30,974	5.2	12.5
Utah	24.2	27,945	26,997	1.5	7.9
Virginia	15.9	33,143	32,896	6.7	10.4
Washington	20.2	36,685	35,870	6.6	10.2
West Virginia	15.2	31,086	30,301	4.7	10.6
Wisconsin	15.5	36,857	36,477	18.0	6.9
Wyoming	17.2	30,859	30,317	2.8	6.3
Other Jurisdictions					
DoDEA	25.0	---	---	---	---
Guam	18.5	---	---	---	---

Pupil-Teacher Ratio, Fall 1992 -- Source: Table 66, "Teachers, enrollment, and pupil-teacher ratios in public elementary and secondary schools, by State: Fall 1985 to 1992". U.S. Department of Education, National Center for Education Statistics, Common Core of Data surveys. **1992-93 Average Annual Teacher Salary (NEA)** -- Source: Table 78, "Estimated average annual salary of teachers in public elementary and secondary schools, by State: 1969-70 to 1993-94". National Educational Association *Estimates of School Statistics*; and unpublished data. **1992-93 Average Annual Teacher Salary (AFT)** -- Source: Table 79, "Minimum and average teacher salaries, by State: 1989-90, 1990-91, and 1992-93. American Federation of Teachers, *Survey and Analysis of Salary Trends*, 1991 and 1993. Note: Data in this table reflect results of surveys conducted by the American Federation of Teachers. Because of differing survey and estimation methods, these data are not entirely comparable with figures appearing in other tables. **Percent Nonpublic School Enrollment** -- Source: Quality Education Data, Inc., December 1994. **Status Dropout Rate, Persons Ages 16-19, 1990** -- Source: 1990 Census data in Table C1 in *Dropout Rates in the United States: 1991*. U.S. Department of Education, National Center for Education Statistics, 1992.

--- information not available

APPENDIX F

Revisions to the 1992 and 1994 Findings

Following the release of the *1994 NAEP Reading: A First Look* report in April 1995, two technical problems were discovered in the procedures used to develop the NAEP reading scale and achievement levels. Errors were associated with the scale scores computed by the NAEP contractor, the Educational Testing Service (ETS), and the achievement levels developed by the American College Testing Program (ACT). These errors affected the 1992 and 1994 NAEP reading assessment results. The National Center for Education Statistics (NCES) and the National Assessment Governing Board (NAGB) have evaluated the impact of the errors and have taken steps to reanalyze and rereport findings from both reading assessments. The first step in correcting the technical errors is to revise and release this report.

The two technical problems that were discovered are discussed in greater detail in the NAEP 1994 *Technical Report* and the *Technical Report of the NAEP 1994 Trial State Assessment in Reading.* A brief summary is presented below.

The first technical problem arose from an error in the computer program used to compute NAEP scale score results. The error involved the convention used in treating omitted responses in the IRT scaling of the partial-credit, constructed-response questions. It was limited only to those questions. As a result of the error, in 1992 and 1994 NAEP reading analyses, all blank responses (both omitted and not-reached responses) to affected questions were treated as missing — an acceptable treatment but not the conventional option of choice for NAEP. Upon discovery of the problem, ETS and NCES quickly took steps to rectify the problem. Both the national and state assessment results were recalculated using the intended convention for the treatment of omitted responses.

In general, the effect of this technical problem on the previously reported 1992 NAEP reading findings is minimal and had little impact on policy-related interpretations. The recalculated 1992 and 1994 reading scale score results, at both the national and state levels, are quite similar to those published in the 1992 reading reports and the initial version of this report.

The second technical problem is related to the development of the NAEP reading achievement level cut scores. The error involved the mapping of the NAGB-approved achievement levels onto the NAEP reading scale. In deriving the final levels recommended to the Board, panelists' ratings for the multiple-choice and constructed-response questions were combined to obtain an overall rating for the questions. In combining the ratings, the ratings are weighted according to the amount of information provided by each type of question. In other words some of the questions "count more" toward the overall cut scores than others. The weighting was carried out incorrectly, resulting in the constructed-response questions receiving more weight than intended. Therefore the cut scores established by mapping the achievement levels onto the NAEP reading scale were incorrect and the percentages of students at or above these levels were incorrectly estimated. The weighting and scaling errors contributed to these incorrect estimates.

The program that mapped the achievement levels to the NAEP scale was promptly corrected by ACT to appropriately weight the constructed-response questions and revised achievement level cut scores based on the corrected scaling procedures were developed. The net effect was to lower the cut scores for the three achievement levels at each grade. The percentages of students at or above the achievement levels were recalculated using the corrected cut scores and the revised 1992 and 1994 percentages, for both the national and state assessments, are presented in this report.

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The NAEP project at ETS is directed by Paul Williams and resides in the Center for the Assessment of Educational Progress (CAEP) managed by Archie Lapointe and Paul Williams. Steve Lazer managed test development activities, and John Olson coordinated state services. Jay Campbell worked with the Reading Item Development committee to develop the assessment instruments. Jules Goodison managed the operational aspects together with John Olson, and sampling and data collection activities were carried out by Westat under the direction of Rene Slobasky, Nancy Caldwell, and Keith Rust. Printing, distribution, scoring, and processing activities were conducted by NCS, under the supervision of Judy Moyer, Brad Thayer, Mathilde Kennel, Linda Reynolds, and Barbara Price.

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