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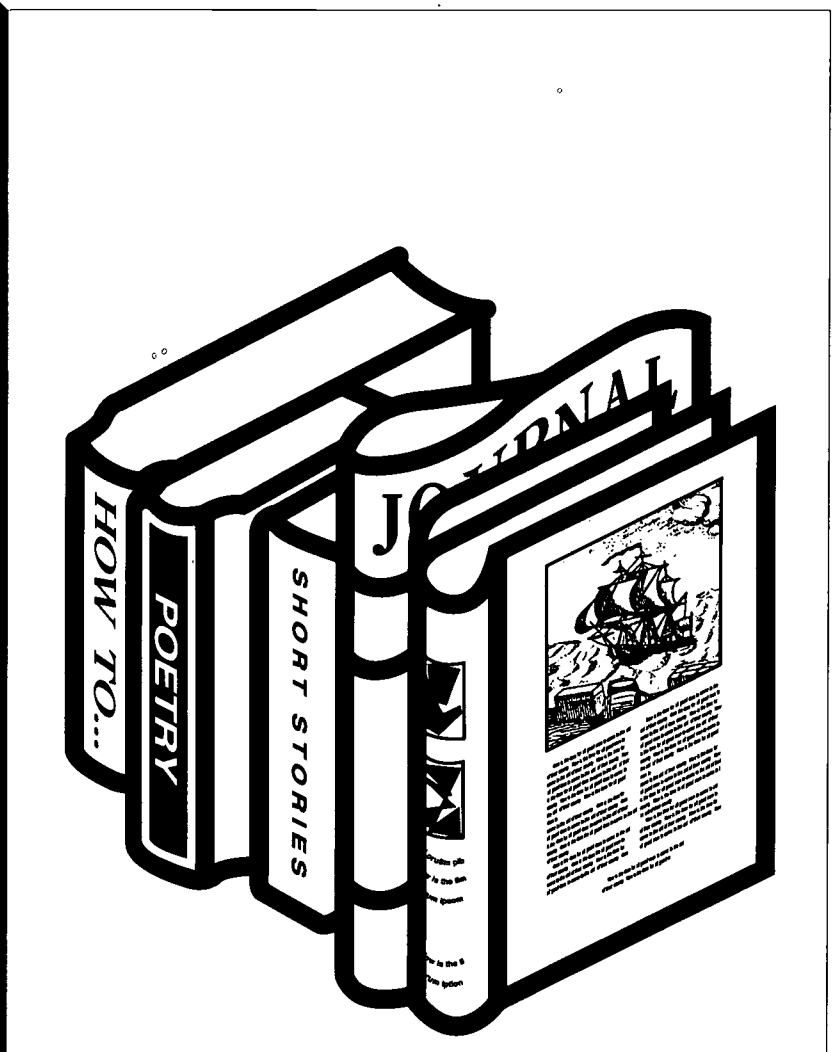
ABSTRACT

The National Assessment of Educational Progress' (NAEP) 1992 reading assessment was administered to nationally representative samples of fourth-, eighth-, and twelfth-grade students attending public and private schools, and to state representative public-school samples of fourth graders in 43 jurisdictions. Nearly 140,000 students were assessed in all. Data were summarized on the NAEP reading proficiency scale ranging from 0 to 500, and results were reported according to three achievement levels at each grade--basic, proficient, and advanced. Major findings were that: (1) 59% of the fourth graders, 69% of eighth graders, and 75% of twelfth graders reached the basic level or beyond; (2) 25%, 28%, and 37% of grades 4, 8, and 12 students met or exceeded the proficient level, respectively; (3) from 2% to 4% of students at any of the grade levels achieved the "advanced" performance level; (4) fourth graders within the basic level generally understood simple narratives; (5) eighth graders reading within the basic level demonstrated literal understanding of passages; (6) twelfth graders within the basic level were able to interpret aspects of the passages they read and make connections between their reading and their own knowledge; (7) students attending private schools had higher average reading proficiency than students at public schools; (8) considerable variation in performance existed within and across participating states; (9) females had higher average reading proficiency than males at all three grade levels; and (10) fourth graders appeared to be learning reading through varied instructional approaches. (Contains 19 tables and 3 figures of data.) (RS)

NATIONAL CENTER FOR EDUCATION STATISTICS

Executive Summary of the NAEP 1992 Reading Report Card for the Nation and the States

Data from the National and Trial State Assessments



THE NATION'S REPORT CARD

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Office of Educational Research and Improvement
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The National Assessment Governing Board

NATIONAL CENTER FOR EDUCATION STATISTICS

Executive Summary of the NAEP 1992 Reading Report Card for the Nation and the States

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Ina V. S. Mullis

Jay R. Campbell

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Report No. 23-ST08 September 1993

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INTRODUCTION

The National Assessment of Educational Progress (NAEP) is a Congressionally mandated project of the National Center for Education Statistics (NCES) that has collected and reported information for nearly 25 years on what American students know and what they can do. It is the nation's only ongoing, comparable, and representative assessment of student achievement. Its assessments are given to scientifically selected samples of youths attending both public and private schools and enrolled in grades four, eight, or twelve. The assessment questions are written around a framework prepared for each content area -- reading, writing, mathematics, science, and others -- that represents the consensus of groups of curriculum experts, educators, members of the general public, and user groups on what should be covered on such an assessment. Reporting includes means and distributions of scores, as well as more descriptive information about the meaning of the data.

New Reading Assessment Framework and Questions

The goal of the National Center for Education Statistics is to make data available for the public and to do so in accurate and understandable ways that are not misleading. The task is challenging because much of what matters in NAEP is changing:

- the *content* in response to the developing standards of various curricular groups;
- the *assessment questions* in response to new developments in assessments; and
- the *reporting* in response to increasing interest in student achievement relative to standards of student performance.

The framework for NAEP's 1992 reading assessment considered students' performance in situations that involved reading different kinds of materials for different purposes. The reading assessment measured three global purposes for reading -- **reading for literary experience, reading to gain information,** and

reading to perform a task. (The third purpose for reading -- reading to perform a task -- was not assessed at grade 4.) Reading for literary experience usually involves the reading of novels, short stories, plays, and essays. In these reading situations, the reader explores or uncovers experiences through the text and considers the interplay among events, emotions, and possibilities. Reading to gain information usually involves the reading of articles in magazines and newspapers, chapters in a textbook, entries in encyclopedias and catalogs, and entire books on particular topics. These reading situations call for different orientations to text from those in reading for literary experience because readers are specifically focused on acquiring information. Reading to perform a task involves reading various types of materials for the purpose of applying the information or directions in completing a specific task. Reading materials used for this purpose may include schedules, directions, or instructions for completing forms.

The 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 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 hierarchical or completely independent of each other, but are iterative. They provide a frame for generating questions and considering student performance at all levels.

The 1992 NAEP reading assessment uses a variety of innovative assessment approaches that are considered significant advancements over previous assessments. In addition to multiple-choice questions, the assessment primarily includes constructed-response questions that ask students to demonstrate comprehension beyond a surface level. Also, longer and naturally-occurring reading materials are used to provide more realistic reading experiences than in previous assessments.

Taken together, the changes in the 1992 reading framework and assessment activities preclude any comparisons between the results in this report

and those for previous NAEP reading assessments.[1] If the current NAEP framework is used in the future, as planned in the 1994 assessment, the 1992 reading data will supply the basis for a trend report comparing 1992 with future performance.

A Transition in Reporting

Over time there have been many changes in emphasis of NAEP reporting, both to take advantage of new technologies and to reflect changing trends in education. In 1984, a new technology called Item Response Theory (IRT) made it possible to create "scale scores" for NAEP similar to those the public was accustomed to seeing for the annual Scholastic Aptitude Test (SAT). Educational Testing Service, in its role as Government grantee carrying out NAEP operations, devised a new way to describe performance against this scale, called "anchor levels." Starting in 1984, NAEP results were reported by "anchor levels." Anchor levels describe performance at selected points along the NAEP scale (i.e., standard deviation units). Anchor levels show how groups of students perform relative to each other, but not whether this performance is adequate.

In 1988, Congress established the National Assessment Governing Board (NAGB), assigning it broad policy making authority over NAEP, including the authority to take "appropriate actions ... to improve the form and use of the National Assessment" and to identify "appropriate achievement goals for each ... grade and subject area to be tested in the National Assessment." To carry out its responsibilities, NAGB developed "achievement levels," which are collective judgments about how students *should* perform relative to a body of content reflected in the NAEP frameworks. The result is translated onto ranges along the NAEP scale. For the 1992 reading assessment, this process was conducted for NAGB under contract by American College Testing (ACT), which has extensive experience in standard-setting in many fields.

With this background, the initial reports for the 1992 reading assessment mark NCES's continued attempt to shift to standards-based reporting of National Assessment statistics. The first transition to reporting NAEP results by

[1] NAEP will continue to report trends in reading proficiency as compared to the past 20 years by readministering the long-term reading trend assessment. Long-term trends in reading achievement as well as in mathematics, science, and writing will be the topic of a subsequent report.

achievement levels was for the NAEP 1992 Trial State Assessment in mathematics.[2] The impetus for this transition lies in the belief that NAEP data will take on more meaning for the public if they show what proportion of our youth are able to meet judgmental standards of performance.

Reporting NAEP results on the basis of achievement levels represents a significant change in practice for NCES. On occasion, this agency makes use of emerging analytical approaches that permit new, and sometimes controversial analyses to be done. When doing so, this agency, just as other statistical agencies do when introducing new measures to supplement or replace old measures, also has provided the data according to the earlier procedures in addition to the new ones. In the case of the 1992 mathematics assessment, for example, the "anchor levels" or "scale anchoring" method of reporting was presented in an appendix.

In this assessment, the "scale anchoring" methodology used by NAEP since 1985 has been used but in a new way. As implemented for this report, the scale anchoring process applies not to regular scale intervals (standard deviation units), but to the achievement levels established for fourth-, eighth-, and twelfth-grade students.[3] The full description and results of this procedure are presented in Appendix A. The critical distinction here is that setting achievement levels attempts to describe what students *should be able to do* in various ranges of the NAEP scale while the anchoring procedure attempts to describe what they *can do* at those achievement levels, using actual student performance data from the NAEP assessments.

Chapter 1 of this report describes how the 1992 standards were prepared and provides examples of assessment questions that illustrate the reading content reflected in the descriptions of the NAEP achievement levels. Chapters 2 - 6 include information on overall means, distributions of reading proficiency, and background questionnaire data, all taken directly from the results of the assessment questions.

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[2] For a summary of the 1992 assessment of mathematics, see *NAEP 1992 Mathematics Report Card for the Nation and the States* (Washington, DC: National Center for Education Statistics, 1993) and the individual 1992 Mathematics State Reports.

[3] First, students at each grade were identified who performed at or around the three achievement levels on the scale. Next, questions were identified that were answered correctly by 65 percent or more of the students at the cutpoint for that achievement level. Finally, reading educators were asked to analyze each anchor-level question and create summary descriptions of the skills and abilities evidenced by students at each grade who answered these sets of questions successfully.

Continuing Development Effort

We believe that the numerous completed and ongoing studies[4] will lead to national debate that can assure the public is well informed about these issues -- as informed they must be because the results will be a vital influence on what Americans come to think about the condition and progress of our schools. Indeed, measures of student learning may be as significant a basis for public understanding about our nation's education system as the Consumer Price Index and the monthly unemployment statistics are in informing the public about our nation's economy.

In addition, members of the public need the data in this report to see for themselves what standards-based reporting might do and to evaluate the often conflicting claims of adherents and detractors of these changes in approaches to reporting on the educational achievement of American students. Reporting NAEP results to the public would be more clear if the language of the achievement levels, or standards, could also directly describe what students know and can do. In order to accomplish that, the frameworks, assessment questions, and achievement levels may need to be developed in tandem. That is easier to say than to do, however, because it implies a substantially larger pool of assessment questions, carefully designed to support reporting about performance relative to a set of performance standards. Clearly this is a developmental effort that will take time and several iterations, during which data supporting appropriate inferences about the performance of American students will be gathered on a continuing basis.

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[4] *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).

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.

Assessing Student Achievement in the States, The First Report of the National Academy of Education Panel on the Evaluation of the NAEP Trial State Assessment (1990 Trial State Assessment). (Stanford, CA: National Academy of Education, 1992).

Robert L. Linn, Daniel M. Koretz, Eva L. Baker, and Leigh Burstein, *The Validity and Credibility of the Achievement Levels for the 1990 National Assessment of Educational Progress in Mathematics*, Technical Report CSE No. 330 (Los Angeles, CA: Center for Research on Evaluation, Standards, and Student Testing, UCLA, 1991).

EXECUTIVE SUMMARY

NAEP's 1992 reading assessment represents an innovative effort to measure the reading achievement of our nation's students in grades 4, 8, and 12. The *NAEP Reading Framework* underlying the assessment encompasses a forward-looking view of reading as a dynamic, interactive, and constructive process, where reading purposes or situations interact with various skills or stances that readers can take. The assessment is based on naturally-occurring reading materials that provide a longer, more realistic reading experience than previous reading assessments, and the questions primarily required students to construct their own written responses.

The assessment was administered to nationally representative samples of fourth-, eighth-, and twelfth-grade students attending public and private schools, and to state representative public-school samples of fourth graders in 43 jurisdictions. Nearly 140,000 students were assessed in all. The data were summarized on the NAEP reading proficiency scale ranging from 0 to 500, and the results are reported according to three achievement levels at each grade -- Basic, Proficient, and Advanced.

Major Findings

- Fifty-nine percent of the fourth graders, 69 percent of the eighth graders, and 75 percent of the twelfth graders were estimated to have reached the Basic level or beyond, indicating at least partial mastery of the knowledge and skills needed for proficient work at each grade.

- For grades 4, 8, and 12, the percentages of students estimated to have met or exceeded the Proficient achievement level were 25, 28, and 37 percent, respectively. Proficient, the central level, represents solid academic performance and competency over challenging subject matter.

- The Advanced achievement level signifies superior performance beyond Proficient. Very few students at any of the three grades assessed attained the Advanced level -- from 2 to 4 percent.

- Fourth graders reading within the Basic level generally understood simple narratives. They could identify important details and relate this information to their own experiences. Fourth graders within the Proficient

level employed both inferential and literal information in reading more difficult, unfamiliar pieces. Those at the Advanced level were able to extend, elaborate, and examine the meaning of literary and informative texts. They provided supported generalizations and displayed an awareness of how writers use language and literary devices in their work. However, few answered the constructed-response questions in much depth.

- Eighth graders reading within the Basic level demonstrated literal understanding of passages. They were able to identify main ideas, recognize relationships between ideas in text, and provide personal reactions to what they read. Eighth-grade students within the Proficient level demonstrated an overall understanding of what they read that included literal as well as inferential information. They were successful in providing evidence of their comprehension with brief written responses. At the Advanced level, eighth-grade students were beginning to demonstrate more thorough and thoughtful answers when extended constructed responses were required. These Advanced students could more fully integrate prior knowledge with text interpretations.

- Twelfth graders within the Basic level were able to interpret aspects of the passages they read and make connections between their reading and their own knowledge and experience. They had success in gaining explicit information from passages that were lengthy and somewhat complex. Proficient readers in the twelfth grade could make appropriate inferences and extend the meaning of text by connecting ideas and concepts in what they read with other readings, as well as their own experiences. These students were beginning to provide more extensive constructed responses demonstrating essential comprehension. At the Advanced level, twelfth graders were able to analyze texts from the perspective of both meaning and form, as well as express their understandings with detailed examples and inferences drawn from text and personal knowledge. In addition, they demonstrated the ability to integrate text and document directions to complete a task accurately and thoroughly.

- At all three grades, students attending private schools (either Catholic or other private schools) had higher average reading proficiency than students attending public schools.

- At grade 4, performance across the regions was similar. At grades 8 and 12, students in the Southeast had lower average reading proficiency than did students in Northeast, Central, and West.

- Within and across participating states, the District of Columbia, and Guam, there was considerable variation in performance.

  -- The percentages of fourth graders estimated to be at the Basic level or beyond ranged from 25 to 73 percent, although for most

participating jurisdictions the majority of fourth graders reached the Basic level.

-- The percentages of fourth graders estimated to have reached the Proficient level ranged from 6 to 34 percent, with approximately one-fifth or more reaching this level in most jurisdictions.

-- Very few fourth graders in any state -- an estimated 1 to 6 percent -- reached the Advanced level.

- The 14 states with the highest average reading proficiency included: New Hampshire, Maine, Massachusetts, North Dakota, Iowa, Wisconsin, Wyoming, New Jersey, Connecticut, Nebraska, Indiana, Minnesota, Virginia, and Pennsylvania.

Results for Student Subgroups

- In general, at all three grades, White and Asian/Pacific Islander students had higher average reading proficiency than Hispanic, Black, and American Indian students. (At grade 4, average proficiency between Asian/Pacific Islander and American Indian students did not differ statistically.)

- Females had higher average reading proficiency than males at all three grades.

- Students attending schools in advantaged urban communities had higher average proficiency than students attending schools in extreme rural, disadvantaged urban, or other types of communities. Students in disadvantaged urban communities had lower average proficiency than students in any of the other three types of communities.

- The subgroup results for fourth graders participating in the Trial State Assessment Program tended to reflect the national patterns at grade 4, although there were variations and relative performance sometimes varied across the states within subgroup. For example, advantaged urban fourth graders in Colorado were among those from the lowest 20 percent of the states, while disadvantaged urban fourth graders performed in the second to highest 20 percent performance band. Advantaged urban students, however, did have higher average proficiency than the disadvantaged urban students.

Fourth-grade Reading Instruction

- Teachers reported that about one-third (31 percent) of the fourth graders were receiving about 30 to 45 minutes of reading instruction per day, about half (51 percent) were receiving about 60 minutes, and the rest (18 percent) were receiving 90 minutes or more.

- Fourth graders appeared to be learning reading through varied instructional approaches. According to their teachers: 61 percent were receiving at least moderate emphasis in phonics instruction, 82 percent were receiving at least moderate emphasis in whole language instruction, 88 percent were receiving moderate emphasis in literature-based reading, and almost all (98 percent) were receiving at least moderate emphasis in integrating reading and writing skills. Fewer students, however, were receiving heavy emphasis in phonics instruction (11 percent) than in the other three instructional approaches (40 to 54 percent).

- More than one-third of the fourth graders (36 percent) had teachers indicating that they relied solely on basal materials for their reading instruction, although about half (49 percent) were being taught through a combination of both basal and trade books. Only 15 percent were being taught without basal materials.

- According to their teachers, worksheets and workbooks were a daily feature of reading instruction for 33 percent of the fourth graders and another 48 percent did such exercises on at least a weekly basis. In comparison, one-half (51 percent) of the fourth graders themselves reported that they used workbooks and worksheets on a daily basis.

- Teachers reported that 72 percent of the fourth graders wrote about what they read on at least a weekly basis (and 56 percent of the students so reported).

- Both the teachers and their students agreed about how frequently students read silently and read books of their own choosing. More than half engaged in both activities almost every day.

- To assess students' progress in reading, teachers reported relying less on multiple-choice tests than on having students write paragraphs about what they have read.

- At grade 4, students whose teachers reported heavy emphasis in literature-based reading instruction had higher average proficiency than students who received little or no such emphasis. A similar (but non-statistically significant) pattern was noted for instructional emphasis on integrating reading and writing. These findings are consistent with research about the instructional effectiveness of these approaches. On the

other hand, teachers may tend to use literature and writing activities more often with the more proficient fourth graders and less often with those who are less fluent readers.

- In comparison, those students whose teachers reported heavy emphasis in phonics instruction had lower average proficiency than students receiving little or no such emphasis. Although some educators have argued that after a certain point stressing a phonics approach can inhibit learning, it is more likely that the tendency to use phonics with young readers carries over into remedial situations. The small percentage of fourth graders receiving heavy emphasis in phonics may be those needing special attention. Greater percentages of fourth graders in the lower one-third performing schools than in the upper one-third performing schools were receiving heavy instructional emphasis in phonics.

- As reported by teachers, students' average proficiency did not vary much with more or less use of various instructional materials and strategies. However, when students' own reports were considered, the higher-performing students were those who did regular workbook assignments, read silently on a daily basis, and were given time to read books of their own choosing.

Reading Habits and Practices

- At all three grades, students who reported reading more frequently for fun on their own time had higher average reading proficiency than those who reported reading less frequently.

- Thirteen percent of the fourth graders reported never or hardly ever reading for fun on their own time and 44 percent reported doing so almost every day. Less frequent leisure reading was reported by eighth and twelfth graders than by fourth graders. At both grades 8 and 12, fewer than one-fourth of the students reported such reading daily and about one-fourth reported never or hardly ever reading for fun on their own time.

- At all three grades, students who reported at least weekly discussion about their reading with friends or family had higher average reading proficiency than students who reported little or no such discussion.

- At least weekly discussion about their reading with friends or family was reported by 62 percent of the fourth graders, 41 percent of the eighth graders, and 55 percent of the twelfth graders.

- At all three grades, students who reported watching six or more hours of television each night had substantially lower average proficiency than their counterparts who reported less viewing.

- Twenty percent of the fourth graders, 14 percent of the eighth graders, and 6 percent of the twelfth graders reported watching six or more hours of television per day.

- Sixty-one percent of the fourth graders, 65 percent of the eighth graders, and 47 percent of the twelfth graders reported watching three or more hours of television per day. At grades 8 and 12, students watching this much television had lower average proficiency than their classmates. At grade 4, those watching four or more hours had lower average proficiency than less frequent viewers.

Achievement Levels

As part of its statutory responsibilities, the National Assessment Governing Board (NAGB) established three achievement levels for reporting NAEP results: Basic, Proficient, and Advanced. The Basic level denotes partial mastery of the knowledge and skills fundamental for proficient work at each grade. Proficient, the central level, represents solid academic performance and demonstrated competence over challenging subject matter. This is the achievement level the Board has determined all students should reach. The Advanced level signifies superior performance beyond Proficient. The process of setting achievement levels incorporated the views of a broadly representative body of teachers, administrators, and interested members of the public, and enables NAEP data to be reported in terms of what students *should* be able to do. A scale anchoring process provides information about what students *can* do at those achievement levels using actual student performance data from the NAEP assessments.

Because the process of setting the reading achievement levels centered on the descriptions of what students *should* be able to do, it is also important to explore whether or not students *actually met* the expectations for performance at the Basic, Proficient, and Advanced levels. To anchor the achievement levels, students' performance at each of the achievement levels was examined relative to each individual assessment question to determine at which achievement level students demonstrated success on the question (at least 65 percent answered correctly). The sets of questions so identified were thoroughly analyzed by reading experts and educators to describe reading performance at each achievement level.

The chart on pages 14 and 15 summarizes the operational definitions of the achievement levels and the anchor descriptions for grades 4, 8, and 12. It also presents the percentages of students performing at or above each achievement level.

For example, looking in the upper left-hand corner of the chart, at grade 4, Advanced-level students *should* be able to generalize about text topics and demonstrate an awareness of how authors compose and use literary devices. They should be able to judge texts critically and give thorough answers that indicate careful thought. As demonstrated by their *actual* answers to assessment questions, Advanced-level fourth graders interpreted and examined text meaning, summarized information across texts, developed their own ideas from the texts, understood some literary devices, and were beginning to be able to formulate more complex questions about text.

Looking at the most difficult achievement level (lower left-hand corner of the chart), Advanced-level twelfth graders *should* be able to describe abstract themes, provide explicitly supported text analyses, relate text information to their own experiences and the world, and provide thorough, thoughtful, and extensive answers. Twelfth grade students at the Advanced level *did* construct complex understandings across genre and about characters, connect their discipline specific knowledge to ideas in the texts, examine authors' devices, judge the value of informative sources, and suggest improvements for documents.

Because NAEP's 1992 reading assessments were developed prior to the Board's development of the achievement levels, the correspondence between the assessment questions and the operational definitions is sometimes uneven. Nevertheless, as called for in the Basic achievement levels, substantial proportions of students demonstrated understanding of reading materials considered straightforward for their grade. However, very few, at any grade, were able to examine more complex materials and extend their thinking beyond the information presented as defined at the Advanced level. Only a handful of students at this top level were able to provide the thorough, thoughtful, and extensive answers expected by the standards setting panelists.

National Assessment of Educational Progress

GRADE 4	Percentage At or Above ADVANCED: 4 (0.5)	Scale cutpoint: 276
Average Proficiency: 218 (1.0)*	**Achievement Level Description**	**Anchoring Description**
	Fourth-grade students 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 4th grade, **they should be able to judge texts critically and, in general, give thorough answers that indicate careful thought**.	Fourth-grade students at the **Advanced level** were able to interpret and examine the meaning of text. They summarized information across whole texts, developed their own ideas about textual information, understood some literary devices, and were beginning to formulate more complex questions about text.

GRADE 8	Percentage At or Above ADVANCED: 2 (0.3)	Scale cutpoint: 328
Average Proficiency: 260 (0.9)*	**Achievement Level Description**	**Anchoring Description**
	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 8th 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**.	Eighth-grade students at the **Advanced level** compared and contrasted information across multiple texts. They could connect inferences with themes, understand underlying meanings, and integrate prior knowledge with text interpretations. They also demonstrated some ability to evaluate the limitations of documents.

GRADE 12	Percentage At or Above ADVANCED: 3 (0.3)	Scale cutpoint: 348
Average Proficiency: 291 (0.6)*	**Achievement Level Description**	**Anchoring Description**
	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 12th 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**.	Twelfth-grade students at the **Advanced level** constructed complex understandings of multiple passages representing different genres. They could interpret multidimensional aspects of characters and connect discipline-specific knowledge to text. They examined authors' devices, judged the value of informative sources, and suggested improvements for documents.

†ACHIEVEMENT LEVEL describes what students should be able to do based on the judgments of broadly representative panels of teachers, administrators, and interested members of the general public. ANCHORING describes what students can do based on the assessment results as summarized by reading experts and educators. Both the achievement level and anchoring descriptions are cumulative from Basic through Advanced.

*erage Proficiency on NAEP's 1992 Reading Scale, which ranges from 0 to 500. ( ) The standard errors of the estimated proficiencies and percentages appear in parentheses.

— 1992 Reading Assessment at a Glance†

Achievement Level Description	Anchoring Description	Achievement Level Description	Anchoring Description
Fourth-grade students 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 4th 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.**	Fourth-grade students at the **Proficient level** could understand and interpret less familiar texts. They provided textual support for interpretations, generalized across text, identified relevant information, understood subtleties in aspects of a story, related text to background experiences, and formulated simple questions.	Fourth-grade students at the **Basic level should demonstrate an understanding of the overall meaning of what they read.** When reading text appropriate for 4th graders, **they should be able to make relatively obvious connections between the text and their own experiences.**	Fourth-grade students at the **Basic level** could understand uncomplicated narratives and high-interest informative texts. They identified obvious themes, located explicit information, summarized parts of text, and made judgments about characters' actions.

Achievement Level Description	Anchoring Description	Achievement Level Description	Anchoring Description
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 8th grade, **they should 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 8th graders **should be able to identify some of the devices authors use in composing text.**	Eighth-grade students at the **Proficient level** were able to move beyond surface understanding of a text or multiple texts. They made inferences about characters and themes, linked generalizations to specific details, supported their opinions about text, recognized an author's intentions, and used a document to solve simple problems.	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 8th grade, **they should be able to identify specific aspects of the text that reflect the overall meaning, recognize and relate interpretations and connections among ideas in the text to personal experience, and draw conclusions based on the text.**	Eighth-grade students at the **Basic level** could understand passages representing familiar genres. They identified literal information, recognized central themes or topics, and identified the central purpose of practical documents. They interpreted and described character traits and connected information from across text.

Achievement Level Description	Anchoring Description	Achievement Level Description	Anchoring Description
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 12th 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.**	Twelfth-grade students at the **Proficient level** integrated background experiences and knowledge with meaning from a variety of texts. They could interpret characters' motives and consider differing points of view. They were able to interpret literary devices, identify text structure and writing style, and apply document information to solve complex problems.	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 12th grade, **they should be able to identify and relate aspects of the text to its overall meaning, 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.**	Twelfth-grade students at the **Basic level** could develop interpretations from a variety of texts. They understood overall arguments, recognized explicit aspects of plot and characters, and supported global generalizations. They were able to respond personally to texts, and use major document features to solve real-world problems.

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

TABLE 1 presents average reading proficiency and performance at the achievement levels at grades 4, 8, and 12. Comparable information for students attending public, Catholic, and other private schools is presented in TABLE 2. As can be seen, students attending private schools outperformed their public-school counterparts. The regional results are found in TABLE 3. The results across the regions were comparable at grade 4, but at grades 8 and 12 students in the Southeast trailed behind those in the other three regions of the country. Average proficiency and achievement level data for the jurisdictions in the Trial State Assessment Program at grade 4 are shown in TABLE 4. Even though there was considerable variation in performance across the states, the results tended to parallel those of the nation. Percentages of students reaching the Advanced level were low, although for most participants a majority of fourth graders reached the Basic level, and one-fifth or more reached the Proficient level. (Please note that the national and regional results included in TABLE 4 and in other tables containing state data will differ from those provided for all students across the nation, which include students in both public and private schools. To be comparable to the data for the jurisdictions participating in the Trial State Assessment Program, the national and regional results in the state tables are based only on students attending public schools. Also, the national and regional data in these tables is from the national assessment at grade 4 and not from an aggregate of the state data. The voluntary nature of NAEP's Trial State Assessment Program does not guarantee representative national or regional results, since not all states participate.)

TABLE 1 **National Overall Average Reading Proficiency and Achievement Levels, Grades 4, 8, and 12, 1992 Reading Assessment**

Grades	Average Proficiency	Percentage of Students At or Above			
		Advanced	Proficient	Basic	Below Basic
4	218(1.0)	4(0.5)	25(1.1)	59(1.1)	41(1.1)
8	260(0.9)	2(0.3)	28(1.1)	69(1.0)	31(1.0)
12	291(0.6)	3(0.3)	37(0.8)	75(0.7)	25(0.7)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 2 Average Reading Proficiency and Achievement Levels by Type of School, Grades 4, 8, and 12

	Percentage of Students	Average Proficiency	Percentage of Students At or Above			
			Advanced	Proficient	Basic	Below Basic
Grade 4						
Public Schools	88(1.3)	216(1.1)	4(0.6)	24(1.2)	57(1.2)	43(1.2)
Catholic Schools	8(0.8)	230(2.2)	7(1.5)	36(2.7)	73(2.5)	27(2.5)
Other Private Schools	4(1.1)!	236(5.3)!	10(2.9)	43(8.1)	78(4.2)	22(4.2)
Grade 8						
Public Schools	89(0.8)	258(1.0)	2(0.3)	25(1.1)	67(1.1)	33(1.1)
Catholic Schools	6(0.6)	275(1.9)	4(1.0)	43(2.7)	84(1.6)	16(1.6)
Other Private Schools	4(0.8)	283(3.0)	7(2.2)	52(4.8)	90(2.6)	10(2.6)
Grade 12						
Public Schools	87(1.2)	289(0.7)	3(0.3)	34(0.9)	73(0.9)	27(0.9)
Catholic Schools	9(1.2)	306(1.5)	6(0.8)	55(2.8)	91(1.2)	9(1.2)
Other Private Schools	4(0.7)	308(3.0)	10(1.5)	58(4.3)	87(2.6)	13(2.6)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. !Interpret with caution -- the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 3 **Average Reading Proficiency and Achievement Levels by Region, Grades 4, 8, and 12, 1992 Reading Assessment**

	Percentage of Students	Average Proficiency	Percentage of Students At or Above			Below Basic
			Advanced	Proficient	Basic	
Grade 4						
Northeast	21(1.1)	223(3.7)	7(2.2)	31(4.1)	63(3.5)	37(3.5)
Southeast	23(1.0)	214(2.4)	4(0.7)	21(2.5)	54(3.2)	46(3.2)
Central	27(0.5)	221(1.4)	4(0.9)	26(2.1)	63(2.0)	37(2.0)
West	28(0.8)	215(1.5)	4(0.6)	24(1.4)	56(1.8)	44(1.8)
Grade 8						
Northeast	22(0.7)	263(1.8)	3(0.4)	31(1.9)	71(2.3)	29(2.3)
Southeast	25(0.5)	254(1.7)	1(0.4)	22(2.3)	63(1.8)	37(1.8)
Central	25(0.5)	264(2.2)	2(0.6)	31(2.4)	73(2.4)	27(2.4)
West	28(0.6)	260(1.2)	2(0.5)	27(1.4)	68(1.5)	32(1.5)
Grade 12						
Northeast	24(0.6)	293(1.2)	4(0.5)	40(1.6)	76(1.6)	24(1.6)
Southeast	23(0.6)	284(1.1)	2(0.3)	28(1.4)	68(1.4)	32(1.4)
Central	26(0.6)	294(1.1)	3(0.4)	40(1.6)	79(1.4)	21(1.4)
West	27(0.8)	292(1.6)	4(0.6)	38(2.2)	77(2.0)	23(2.0)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 4 | **Overall Average Reading Proficiency and Achievement Levels, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Average Proficiency	Percentage of Students At or Above Advanced	Percentage of Students At or Above Proficient	Percentage of Students At or Above Basic	Percentage of Students Below Basic
NATION	216 (1.1)	4 (0.6)	24 (1.2)	57 (1.2)	43 (1.2)
Northeast	221 (4.0)	6 (2.4)	29 (4.4)	62 (3.9)	38 (3.9)
Southeast	212 (2.5)	3 (0.6)	19 (2.4)	52 (3.5)	48 (3.5)
Central	219 (1.6)	4 (0.9)	25 (2.3)	62 (2.0)	38 (2.0)
West	213 (1.7)	3 (0.5)	22 (1.6)	53 (1.9)	47 (1.9)
STATES					
Alabama	208 (1.7)	2 (0.4)	17 (1.3)	48 (2.1)	52 (2.1)
Arizona	210 (1.3)	2 (0.4)	18 (1.1)	51 (1.7)	49 (1.7)
Arkansas	212 (1.2)	3 (0.4)	20 (1.3)	53 (1.6)	47 (1.6)
California	203 (2.1)	3 (0.5)	17 (1.6)	45 (2.3)	55 (2.3)
Colorado	218 (1.2)	3 (0.4)	22 (1.4)	60 (1.6)	40 (1.6)
Connecticut	223 (1.3)	5 (0.9)	30 (1.4)	66 (1.9)	34 (1.9)
Delaware*	214 (0.7)	3 (0.4)	21 (1.3)	54 (1.3)	46 (1.3)
Dist. Columbia	189 (0.8)	1 (0.2)	8 (0.5)	28 (1.1)	72 (1.1)
Florida	209 (1.3)	2 (0.4)	18 (1.1)	49 (1.6)	51 (1.6)
Georgia	213 (1.5)	4 (0.5)	22 (1.5)	53 (1.8)	47 (1.8)
Hawaii	204 (1.7)	2 (0.3)	15 (1.4)	44 (2.0)	56 (2.0)
Idaho	221 (1.0)	3 (0.5)	24 (1.3)	63 (1.3)	37 (1.3)
Indiana	222 (1.3)	4 (0.7)	27 (1.4)	64 (1.7)	36 (1.7)
Iowa	227 (1.1)	5 (0.6)	32 (1.5)	70 (1.4)	30 (1.4)
Kentucky	214 (1.3)	2 (0.5)	19 (1.4)	55 (1.8)	45 (1.8)
Louisiana	205 (1.2)	1 (0.3)	13 (1.0)	42 (1.7)	58 (1.7)
Maine*	228 (1.1)	4 (0.7)	31 (1.7)	72 (1.4)	28 (1.4)
Maryland	212 (1.6)	3 (0.5)	21 (1.1)	53 (1.8)	47 (1.8)
Massachusetts	227 (1.0)	4 (0.6)	32 (1.4)	71 (1.4)	29 (1.4)
Michigan	217 (1.6)	3 (0.5)	23 (1.9)	59 (1.9)	41 (1.9)
Minnesota	222 (1.2)	4 (0.5)	28 (1.4)	65 (1.7)	35 (1.7)
Mississippi	200 (1.3)	1 (0.3)	12 (0.7)	38 (1.8)	62 (1.8)
Missouri	221 (1.3)	4 (0.4)	26 (1.5)	63 (1.5)	37 (1.5)
Nebraska*	222 (1.1)	4 (0.7)	27 (1.6)	65 (1.5)	35 (1.5)
New Hampshire*	229 (1.2)	6 (0.7)	34 (1.5)	73 (1.9)	27 (1.9)
New Jersey*	224 (1.5)	6 (0.9)	31 (1.7)	66 (1.9)	34 (1.9)
New Mexico	212 (1.5)	3 (0.6)	20 (1.6)	51 (1.7)	49 (1.7)
New York*	216 (1.4)	3 (0.5)	23 (1.1)	58 (1.4)	42 (1.4)
North Carolina	213 (1.2)	4 (0.5)	22 (1.2)	53 (1.4)	47 (1.4)
North Dakota	227 (1.2)	4 (0.6)	31 (1.5)	71 (1.9)	29 (1.9)
Ohio	219 (1.4)	3 (0.4)	24 (1.5)	60 (1.8)	40 (1.8)
Oklahoma	221 (1.0)	3 (0.5)	25 (1.1)	64 (1.3)	36 (1.3)
Pennsylvania	222 (1.3)	4 (0.6)	28 (1.5)	64 (1.9)	36 (1.9)
Rhode Island	218 (1.8)	3 (0.5)	24 (1.7)	59 (2.1)	41 (2.1)
South Carolina	211 (1.3)	2 (0.6)	19 (1.2)	49 (1.8)	51 (1.8)
Tennessee	213 (1.5)	3 (0.5)	20 (1.4)	53 (1.7)	47 (1.7)
Texas	214 (1.6)	3 (0.5)	20 (1.7)	53 (2.0)	47 (2.0)
Utah	222 (1.2)	3 (0.5)	26 (1.3)	64 (1.5)	36 (1.5)
Virginia	222 (1.4)	5 (0.8)	28 (1.5)	64 (1.8)	36 (1.8)
West Virginia	217 (1.3)	3 (0.5)	22 (1.3)	58 (1.5)	42 (1.5)
Wisconsin	225 (1.0)	4 (0.5)	29 (1.1)	67 (1.3)	33 (1.3)
Wyoming	224 (1.2)	4 (0.5)	28 (1.7)	68 (1.5)	32 (1.5)
TERRITORY					
Guam	183 (1.4)	1 (0.2)	6 (0.7)	25 (1.2)	75 (1.2)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

Overall Reading Performance for the States

FIGURE 1 provides a method for making appropriate comparisons in overall average reading proficiency across the states participating in NAEP's 1992 reading assessment as well as the District of Columbia and Guam. The jurisdictions are listed by overall average reading proficiency. To find out how any one jurisdiction performed in comparison to the other jurisdictions, find the name of the state or entity across the top of the chart and read down that column. As can be seen, the pattern for virtually all jurisdictions but the top 14 states is one of having lower average proficiency than some states, about the same average proficiency as some states, and higher average proficiency than some states. (None of the 14 highest-performing states had lower average proficiency than any other state.)

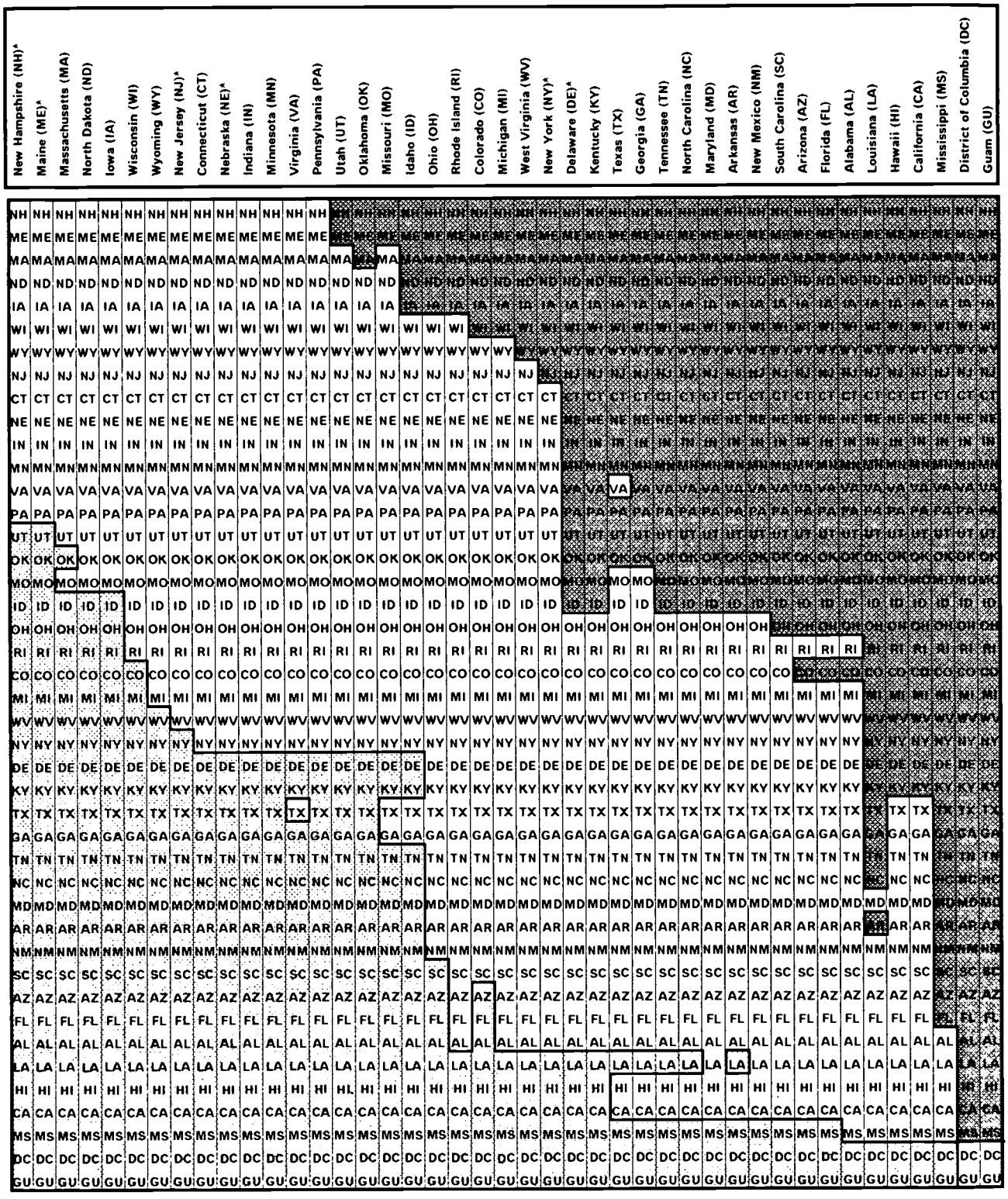
FIGURE 2 provides a visual representation of percentile results for the participating jurisdictions. For example, 25 percent of the students in each state performed below the 25th percentile, and 75 percent performed above the 25th percentile. For the 90th percentile, 10 percent performed above that level and 90 percent below. The dark boxes at the midpoints of the distributions show the 95 percent confidence intervals around the average proficiencies. These intervals take into account the amount of sampling and measurement error associated with the estimates of average proficiency. The results across percentiles show great variation in students' achievement within each state: Differences within individual states across percentiles tended to exceed the differences in average performance across states.

FIGURE 1

Comparisons of Overall Reading Average Proficiency 1992 Grade 4

THE NATION'S REPORT CARD

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.

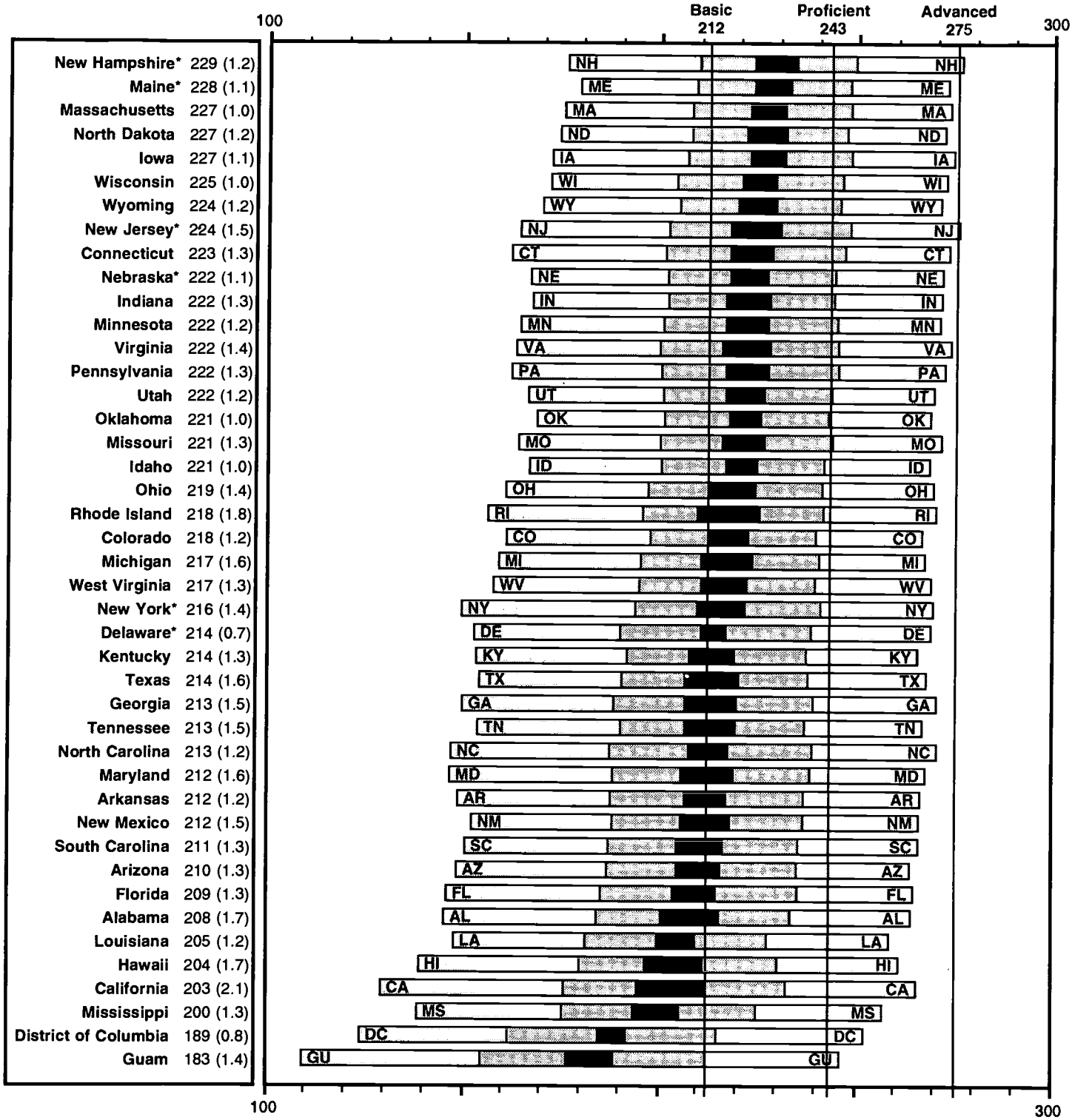
The between state comparisons take into account sampling and measurement error and that each state is being compared with every other state. Significance is determined by an application of the Bonferroni procedure.

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

FIGURE 2

Distribution of Overall Reading Proficiency Organized by Average Proficiency
1992 Grade 4

THE NATION'S REPORT CARD



Percentiles of Performance

5th 25th 75th 95th

Mean and confidence interval

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 5th to 25th percentiles and the 75th to 95th percentiles of the distribution.

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

Performance for Student Subpopulations

TABLE 5 presents national average proficiency for subpopulations of students as defined by race/ethnicity, gender, type of community, and level of parents' education. TABLES 6 through 9 present average proficiency by race/ethnicity, gender, type of community, and level of parents' education for the jurisdictions participating in the state assessments at grade 4. (Please note that for the nation and participating jurisdictions approximately one-third of fourth graders did not know their parents' level of education.)

A Graphic Illustrating Students' Average Performance Across States

FIGURE 3 is designed to highlight the gradations of reading proficiency within subpopulations across the jurisdictions that participated in the 1992 reading assessment. The chart shows those states in the top "quintile," or top 20 percent of performance, looking in particular at key subpopulations. This information can be used to summarize performance across states for the race/ethnicity, gender, community type, and parents' education data presented in TABLES 6 through 9.

For each subpopulation, the average reading proficiency of the states has been ranked and presented by performance bands established according to quintiles. States having average performance in the top 20 percent across participating jurisdictions are indicated by the darkest boxes, with states in successively lower quintiles shown by progressively lighter shadings.

For example, the average reading proficiency of White students in West Virginia fell in the lowest quintile across states. In comparison, the average proficiency for Black students fell in the highest quintile. Therefore, across states, the performance of the White students in West Virginia was among the lowest and the performance of Black students was among the highest. (Black students in West Virginia, however, did not have higher average reading proficiency than White students.)

TABLE 5 **Average Reading Proficiency by Race/Ethnicity, Gender, Type of Community, and Parents' Education Level, Grades 4, 8, and 12, 1992 Reading Assessment**

	Grade 4		Grade 8		Grade 12	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Race/Ethnicity						
White	71 (0.2)	226 (1.2)	70 (0.2)	268 (1.2)	72 (0.4)	297 (0.6)
Black	16 (0.1)	193 (1.7)	16 (0.2)	238 (1.6)	15 (0.4)	272 (1.5)
Hispanic	9 (0.1)	202 (2.2)	10 (0.2)	242 (1.4)	9 (0.4)	277 (2.4)
Asian/Pacific Islander	2 (0.3)	216 (3.3)	3 (0.2)	270 (3.1)	4 (0.2)	291 (3.2)
American Indian	2 (0.2)	208 (4.7)	1 (0.2)	251 (3.7)	0 (0.1)	272 (5.3)
Gender						
Male	51 (0.6)	214 (1.2)	51 (0.7)	254 (1.1)	49 (0.6)	286 (0.7)
Female	49 (0.6)	222 (1.0)	49 (0.7)	267 (1.0)	51 (0.6)	296 (0.7)
Type of Community						
Advantaged Urban	10 (1.9)	240 (3.1)	10 (1.9)	280 (2.1)	12 (2.2)	303 (2.1)
Disadvantaged Urban	9 (1.2)	188 (2.7)	10 (1.5)	237 (1.9)	10 (1.5)	275 (2.6)
Extreme Rural	12 (2.2)	220 (3.0)	7 (2.2)!	263 (3.8)!	10 (1.5)	286 (2.0)
Other	69 (2.9)	218 (1.1)	72 (2.9)	260 (1.1)	68 (3.0)	292 (0.8)
Parents' Education						
Graduated College	39 (1.1)	227 (1.4)	41 (1.2)	271 (1.0)	41 (0.9)	300 (0.8)
Some Education After High School	9 (0.5)	224 (2.2)	19 (0.5)	266 (1.1)	27 (0.6)	293 (0.8)
Graduated High School	12 (0.6)	213 (1.7)	24 (0.8)	251 (1.4)	22 (0.5)	281 (0.8)
Did Not Finish High School	4 (0.4)	199 (2.7)	8 (0.5)	243 (1.5)	8 (0.4)	274 (1.5)
I Don't Know	36 (1.0)	211 (1.2)	8 (0.4)	238 (2.0)	2 (0.2)	257 (2.8)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent confidence for each population of interest, the value for the whole population is within plus or minus two standard error of the estimated for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). When the proportion of students is either 0 percent of 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent or less were rounded to 0 percent. Percentages may not total 100 percent due to rounding error or because some students categorized themselves as "other" when asked to describe their race/ethnicity. !Interpret with caution -- the nature of the sample does not allow determination of the variability of the estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 6 | **Average Reading Proficiency by Race/Ethnicity, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	White		Black		Hispanic		Asian/Pacific Islander		American Indian	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	69 (0.5)	224 (1.4)	17 (0.4)	192 (1.7)	10 (0.3)	200 (2.2)	2 (0.3)	215 (3.7)	2 (0.3)	206 (5.0)
Northeast	68 (3.4)	230 (4.0)	20 (3.2)	198 (3.9)	9 (1.3)	201 (5.0)	2 (0.5)	*** (***)	1 (0.4)	*** (***)
Southeast	63 (2.7)	221 (3.4)	29 (2.6)	195 (2.4)	5 (1.1)	195 (5.1)!	1 (0.3)	*** (***)	1 (0.4)	*** (***)
Central	79 (1.5)	225 (1.9)	11 (1.3)	187 (3.4)	7 (1.0)	210 (4.8)	1 (0.2)	*** (***)	2 (0.4)	*** (***)
West	65 (2.1)	222 (1.8)	11 (1.6)	185 (4.5)	16 (1.9)	197 (2.7)	5 (1.4)	215 (4.2)!	2 (0.6)	*** (***)
STATES										
Alabama	61 (2.4)	219 (1.6)	31 (2.2)	188 (2.3)	5 (0.7)	191 (3.8)	1 (0.2)	*** (***)	2 (0.7)	*** (***)
Arizona	56 (1.9)	222 (1.2)	4 (0.6)	201 (4.4)	29 (1.6)	198 (2.1)	1 (0.3)	*** (***)	10 (1.8)	185 (3.2)
Arkansas	70 (1.8)	221 (1.1)	21 (1.5)	191 (1.8)	7 (0.7)	188 (3.8)	1 (0.2)	*** (***)	2 (0.3)	207 (4.9)
California	46 (1.9)	219 (2.0)	7 (0.8)	185 (3.3)	35 (1.6)	183 (2.8)	11 (1.1)	213 (3.2)	2 (0.3)	*** (***)
Colorado	70 (1.3)	223 (1.1)	4 (0.9)	203 (3.4)!	21 (0.9)	203 (2.0)	2 (0.3)	225 (6.0)	2 (0.3)	204 (4.8)
Connecticut	73 (1.7)	232 (1.0)	11 (1.3)	197 (3.2)	13 (1.1)	194 (3.5)	2 (0.3)	*** (***)	1 (0.3)	*** (***)
Delaware*	64 (1.1)	224 (0.8)	25 (1.0)	196 (1.7)	8 (0.5)	188 (3.3)	2 (0.3)	*** (***)	2 (0.4)	*** (***)
Dist. Columbia	5 (0.3)	241 (3.2)	83 (0.6)	186 (0.8)	9 (0.5)	178 (2.9)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
Florida	57 (1.9)	220 (1.1)	21 (2.0)	186 (2.8)	18 (1.4)	202 (2.7)	2 (0.4)	*** (***)	2 (0.3)	*** (***)
Georgia	57 (1.9)	225 (1.4)	34 (1.8)	196 (2.3)	5 (0.5)	192 (5.0)	2 (0.3)	*** (***)	1 (0.2)	*** (***)
Hawaii	20 (1.5)	216 (2.7)	5 (0.6)	192 (4.8)	11 (0.9)	194 (2.9)	61 (2.3)	204 (1.9)	2 (0.3)	*** (***)
Idaho	84 (0.9)	224 (0.9)	1 (0.1)	*** (***)	11 (0.8)	202 (2.5)	1 (0.2)	*** (***)	3 (0.4)	206 (2.7)
Indiana	82 (1.4)	226 (1.2)	11 (1.4)	201 (2.4)	5 (0.6)	212 (3.7)	1 (0.1)	*** (***)	1 (0.3)	*** (***)
Iowa	88 (0.9)	228 (1.0)	3 (0.6)	211 (3.1)	6 (0.5)	212 (3.1)	2 (0.2)	*** (***)	1 (0.3)	*** (***)
Kentucky	86 (1.1)	216 (1.3)	9 (1.0)	197 (3.4)	3 (0.4)	196 (5.2)	0 (0.2)	*** (***)	1 (0.2)	*** (***)
Louisiana	51 (1.9)	217 (1.2)	41 (1.9)	191 (1.5)	5 (0.5)	188 (4.5)	1 (0.7)	*** (***)	1 (0.3)	*** (***)
Maine*	92 (0.6)	229 (1.1)	0 (0.1)	*** (***)	4 (0.7)	210 (3.2)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
Maryland	60 (1.7)	222 (1.6)	29 (1.3)	193 (2.6)	6 (0.6)	198 (3.1)	3 (0.5)	220 (4.2)	1 (0.3)	*** (***)
Massachusetts	81 (1.2)	232 (0.9)	7 (0.6)	206 (2.8)	7 (0.6)	202 (2.2)	3 (0.7)	219 (6.5)!	1 (0.2)	*** (***)
Michigan	74 (1.6)	224 (1.5)	13 (1.6)	189 (3.1)	8 (0.8)	199 (2.9)	2 (0.3)	*** (***)	2 (0.3)	*** (***)
Minnesota	87 (1.2)	225 (1.2)	3 (0.5)	191 (6.1)	6 (0.6)	203 (3.6)	2 (0.5)	*** (***)	2 (0.2)	*** (***)
Mississippi	41 (2.0)	218 (1.5)	52 (2.2)	187 (1.6)	5 (1.0)	186 (3.8)	0 (0.1)	*** (***)	1 (0.3)	*** (***)
Missouri	77 (1.7)	227 (1.1)	14 (1.7)	197 (3.2)	5 (0.7)	203 (3.2)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
Nebraska*	83 (1.2)	226 (1.2)	6 (0.6)	198 (3.2)	8 (1.1)	206 (3.0)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
New Hampshire*	90 (1.0)	230 (1.2)	1 (0.2)	*** (***)	5 (0.6)	216 (3.2)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
New Jersey*	67 (2.2)	234 (1.4)	14 (1.6)	201 (2.7)	13 (1.4)	199 (2.8)	5 (0.8)	235 (2.9)	1 (0.2)	*** (***)
New Mexico	45 (2.0)	224 (1.9)	3 (0.4)	202 (5.7)	46 (1.7)	201 (1.6)	1 (0.3)	*** (***)	5 (1.2)	201 (3.9)!
New York*	61 (2.0)	228 (1.2)	14 (1.8)	203 (2.8)	20 (1.8)	188 (4.1)	4 (1.0)	226 (4.3)!	2 (0.3)	*** (***)
North Carolina	63 (2.0)	222 (1.3)	28 (1.6)	195 (2.2)	5 (0.6)	193 (3.5)	1 (0.2)	*** (***)	3 (1.2)	204 (6.3)!
North Dakota	93 (1.1)	228 (1.1)	0 (0.1)	*** (***)	3 (0.5)	222 (4.9)	0 (0.2)	*** (***)	3 (0.8)	212 (4.8)!
Ohio	81 (1.5)	222 (1.3)	12 (1.3)	199 (2.0)	5 (0.6)	203 (4.6)	1 (0.2)	*** (***)	1 (0.2)	*** (***)
Oklahoma	72 (1.3)	225 (1.1)	8 (0.9)	202 (2.1)	8 (0.8)	209 (2.2)	1 (0.2)	*** (***)	10 (0.8)	218 (2.4)
Pennsylvania	79 (1.7)	229 (1.2)	11 (1.6)	191 (2.5)	8 (1.0)	201 (3.9)	1 (0.3)	*** (***)	1 (0.2)	*** (***)
Rhode Island	76 (2.2)	225 (1.3)	6 (1.0)	188 (3.8)	12 (1.3)	192 (4.4)	4 (0.6)	197 (4.6)	2 (0.3)	*** (***)
South Carolina	55 (1.9)	223 (1.5)	38 (2.0)	195 (1.7)	5 (0.7)	196 (2.5)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
Tennessee	71 (1.8)	220 (1.4)	21 (1.6)	194 (2.3)	5 (0.7)	196 (4.5)	1 (0.3)	*** (***)	2 (0.3)	*** (***)
Texas	49 (2.1)	225 (2.1)	14 (1.7)	201 (2.6)	34 (2.3)	201 (1.8)	2 (0.3)	*** (***)	1 (0.2)	*** (***)
Utah	86 (1.1)	224 (1.0)	1 (0.1)	*** (***)	10 (0.9)	205 (2.4)	2 (0.3)	*** (***)	2 (0.5)	*** (***)
Virginia	67 (1.6)	230 (1.5)	24 (1.3)	204 (2.1)	5 (0.5)	203 (4.4)	2 (0.5)	228 (5.6)	2 (0.3)	*** (***)
West Virginia	91 (0.7)	218 (1.2)	2 (0.4)	204 (6.6)	4 (0.5)	197 (7.0)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
Wisconsin	83 (1.4)	229 (1.0)	6 (0.8)	201 (2.5)	8 (0.9)	211 (3.4)	1 (0.3)	*** (***)	2 (0.8)	207 (5.1)!
Wyoming	83 (1.3)	227 (1.1)	1 (0.1)	*** (***)	12 (0.9)	210 (2.6)	1 (0.2)	*** (***)	4 (0.9)	212 (4.7)!
TERRITORY										
Guam	12 (0.8)	196 (3.1)	4 (0.4)	166 (5.6)	18 (0.8)	165 (3.0)	64 (0.9)	186 (1.4)	1 (0.3)	*** (***)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error or because some students categorized themselves as "others." When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.***Sample size insufficient to permit reliable estimate. There were fewer than 62 students. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 7 | **Average Reading Proficiency by Gender, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Male		Female	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	51 (0.7)	212 (1.4)	49 (0.7)	220 (1.1)
Northeast	50 (2.0)	218 (4.7)	50 (2.0)	224 (3.6)
Southeast	49 (1.3)	205 (3.0)	51 (1.3)	217 (2.6)
Central	54 (1.1)	217 (1.6)	46 (1.1)	221 (2.4)
West	52 (1.4)	208 (2.6)	48 (1.4)	218 (1.4)
STATES				
Alabama	52 (1.1)	205 (1.7)	48 (1.1)	212 (2.0)
Arizona	48 (1.0)	206 (1.5)	52 (1.0)	214 (1.4)
Arkansas	50 (1.0)	209 (1.6)	50 (1.0)	215 (1.4)
California	49 (1.1)	198 (2.4)	51 (1.1)	208 (2.2)
Colorado	51 (1.0)	215 (1.3)	49 (1.0)	221 (1.5)
Connecticut	51 (1.3)	220 (1.5)	49 (1.3)	226 (1.6)
Delaware*	50 (1.1)	210 (1.2)	50 (1.1)	218 (1.0)
Dist. Columbia	50 (1.0)	186 (1.3)	50 (1.0)	191 (1.0)
Florida	51 (0.9)	206 (1.5)	49 (0.9)	212 (1.4)
Georgia	51 (1.1)	211 (1.8)	49 (1.1)	216 (1.7)
Hawaii	51 (0.9)	199 (2.1)	49 (0.9)	210 (1.8)
Idaho	50 (1.1)	218 (1.1)	50 (1.1)	223 (1.2)
Indiana	50 (1.2)	220 (1.5)	50 (1.2)	225 (1.5)
Iowa	50 (0.8)	223 (1.4)	50 (0.8)	230 (1.1)
Kentucky	53 (1.0)	210 (1.6)	47 (1.0)	217 (1.4)
Louisiana	50 (0.9)	201 (1.5)	50 (0.9)	208 (1.3)
Maine*	48 (1.4)	226 (1.2)	52 (1.4)	230 (1.5)
Maryland	49 (1.0)	208 (1.9)	51 (1.0)	216 (1.8)
Massachusetts	50 (0.9)	226 (1.2)	50 (0.9)	229 (1.1)
Michigan	50 (1.1)	215 (1.9)	50 (1.1)	219 (1.6)
Minnesota	51 (1.3)	219 (1.5)	49 (1.3)	226 (1.4)
Mississippi	52 (1.0)	197 (1.8)	48 (1.0)	203 (1.3)
Missouri	50 (0.9)	219 (1.4)	50 (0.9)	224 (1.5)
Nebraska*	52 (1.3)	219 (1.4)	48 (1.3)	226 (1.3)
New Hampshire*	51 (1.0)	226 (1.5)	49 (1.0)	233 (1.2)
New Jersey*	50 (1.1)	222 (1.7)	50 (1.1)	227 (1.8)
New Mexico	50 (0.8)	209 (1.6)	50 (0.8)	214 (1.8)
New York*	52 (1.1)	213 (1.9)	48 (1.1)	219 (1.7)
North Carolina	51 (0.9)	210 (1.4)	49 (0.9)	216 (1.4)
North Dakota	51 (1.2)	225 (1.4)	49 (1.2)	228 (1.4)
Ohio	50 (1.0)	215 (1.7)	50 (1.0)	222 (1.5)
Oklahoma	49 (1.0)	219 (1.2)	51 (1.0)	224 (1.1)
Pennsylvania	48 (1.2)	219 (1.6)	52 (1.2)	225 (1.5)
Rhode Island	51 (1.3)	216 (2.1)	49 (1.3)	220 (2.0)
South Carolina	48 (0.9)	207 (1.5)	52 (0.9)	214 (1.6)
Tennessee	50 (1.1)	210 (1.6)	50 (1.1)	216 (1.6)
Texas	52 (1.2)	210 (1.7)	48 (1.2)	217 (1.9)
Utah	48 (1.0)	218 (1.5)	52 (1.0)	225 (1.2)
Virginia	51 (0.9)	218 (1.8)	49 (0.9)	226 (1.4)
West Virginia	51 (0.8)	212 (1.4)	49 (0.8)	221 (1.6)
Wisconsin	50 (0.9)	222 (1.2)	50 (0.9)	228 (1.2)
Wyoming	51 (0.9)	221 (1.6)	49 (0.9)	227 (1.0)
TERRITORY				
Guam	52 (1.2)	175 (1.9)	48 (1.2)	190 (1.5)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 8 | Average Reading Proficiency by Type of Community, Grade 4, 1992 Reading Assessment

PUBLIC SCHOOLS	Advantaged Urban		Disadvantaged Urban		Extreme Rural		Other	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	7 (2.1)	239 (4.8)!	10 (1.3)	188 (2.8)	13 (2.4)	219 (3.0)	70 (3.2)	217 (1.2)
Northeast	14 (7.2)	248 (6.6)!	14 (4.1)	199 (4.7)!	2 (2.5)	*** (***)	69 (8.1)	220 (3.5)
Southeast	5 (3.3)	240 (3.6)!	14 (3.4)	187 (3.1)!	19 (6.9)	213 (5.2)!	62 (7.5)	214 (3.1)
Central	3 (2.3)	*** (***)	9 (2.2)	183 (4.6)!	15 (3.4)	228 (4.1)!	73 (4.8)	221 (2.0)
West	7 (3.7)	226 (4.2)!	5 (1.4)	170(10.8)!	14 (4.5)	216 (4.0)!	74 (5.4)	214 (2.1)
STATES								
Alabama	11 (3.1)	229 (3.1)!	13 (3.2)	189 (4.9)!	16 (4.1)	212 (3.0)!	61 (5.7)	209 (2.7)
Arizona	12 (3.7)	224 (3.2)!	11 (3.2)	205 (4.4)!	8 (3.1)	202 (8.9)!	70 (5.2)	209 (2.2)
Arkansas	1 (1.2)	*** (***)	6 (1.5)	198 (5.7)!	25 (4.0)	212 (2.9)	68 (4.2)	212 (1.8)
California	13 (2.8)	232 (3.1)!	22 (3.7)	179 (4.7)	0 (0.1)	*** (***)	65 (4.7)	206 (2.6)
Colorado	18 (3.2)	223 (1.8)	13 (2.7)	202 (2.2)!	12 (2.7)	219 (3.6)!	57 (5.0)	220 (1.8)
Connecticut	19 (4.4)	234 (3.0)!	16 (3.1)	191 (4.1)!	0 (0.0)	*** (***)	65 (5.1)	229 (1.3)
Delaware*	10 (0.1)	213 (3.5)	8 (0.2)	209 (3.6)	23 (0.2)	215 (1.0)	58 (0.2)	215 (1.0)
Dist. Columbia	20 (0.2)	216 (1.8)	60 (0.2)	181 (1.1)	0 (0.0)	*** (***)	19 (0.2)	191 (2.0)
Florida	16 (3.1)	226 (2.7)!	21 (3.6)	189 (3.6)	4 (1.6)	215 (4.6)!	59 (4.5)	212 (1.3)
Georgia	11 (3.5)	233 (4.2)!	12 (3.5)	190 (3.9)!	12 (3.8)	214 (3.4)!	65 (6.0)	214 (1.9)
Hawaii	12 (3.6)	223 (3.1)!	9 (1.8)	180 (6.4)	5 (2.1)	202 (3.9)!	74 (4.4)	206 (2.2)
Idaho	10 (2.7)	232 (2.7)!	1 (0.9)	*** (***)	33 (4.9)	218 (1.9)	56 (5.4)	221 (1.4)
Indiana	8 (2.7)	240 (3.2)!	10 (2.9)	205 (3.5)!	15 (3.3)	225 (3.1)!	67 (5.0)	223 (1.5)
Iowa	7 (3.0)	241 (3.2)!	6 (2.6)	217 (4.9)!	39 (3.5)	227 (1.7)	48 (4.6)	228 (1.5)
Kentucky	6 (2.7)	238 (4.1)!	11 (2.8)	201 (3.9)!	23 (3.9)	214 (2.5)	61 (4.4)	213 (1.6)
Louisiana	5 (2.2)	227 (6.1)!	18 (2.6)	187 (3.7)	10 (2.4)	208 (4.5)!	67 (3.8)	207 (1.4)
Maine*	2 (1.5)	*** (***)	2 (1.1)	*** (***)	23 (5.3)	227 (2.7)!	73 (5.3)	229 (1.4)
Maryland	20 (3.9)	224 (4.3)!	15 (3.8)	185 (7.6)!	5 (2.0)	211 (4.0)!	60 (5.1)	214 (2.0)
Massachusetts	17 (3.4)	237 (2.2)!	14 (2.6)	202 (2.6)	2 (1.0)	*** (***)	67 (4.3)	231 (1.3)
Michigan	10 (3.0)	240 (4.3)!	14 (3.7)	193 (4.5)!	11 (3.6)	225 (3.2)!	65 (5.2)	221 (1.6)
Minnesota	13 (3.8)	228 (3.0)!	3 (2.0)	*** (***)	27 (4.0)	219 (2.3)	58 (5.3)	222 (2.0)
Mississippi	1 (1.2)	*** (***)	5 (1.8)	189 (5.2)!	11 (2.3)	206 (4.7)!	82 (3.2)	199 (1.6)
Missouri	9 (3.0)	238 (4.8)!	10 (2.9)	191 (5.4)!	27 (4.0)	225 (1.8)	54 (5.3)	223 (1.6)
Nebraska*	8 (2.6)	236 (3.2)!	6 (1.6)	206 (2.4)!	27 (3.8)	226 (1.9)	59 (4.7)	220 (1.7)
New Hampshire*	8 (3.5)	235 (3.2)!	1 (1.2)	*** (***)	5 (2.2)	231 (3.1)!	85 (4.1)	230 (1.6)
New Jersey*	30 (4.3)	238 (2.4)	17 (3.2)	195 (3.1)!	0 (0.0)	*** (***)	53 (4.9)	227 (2.2)
New Mexico	6 (3.0)	234 (4.3)!	9 (3.0)	203 (5.3)!	3 (1.9)	203 (7.1)!	81 (4.6)	212 (1.9)
New York*	15 (3.4)	231 (2.7)!	23 (3.7)	193 (4.3)	3 (1.6)	222 (3.5)!	60 (4.6)	222 (3.0)
North Carolina	5 (1.7)	232 (4.9)!	4 (2.0)	204 (3.2)!	21 (4.2)	210 (2.5)!	70 (4.9)	212 (1.6)
North Dakota	10 (3.2)	234 (3.5)!	2 (1.6)	*** (***)	40 (3.8)	226 (2.3)	48 (4.6)	226 (1.5)
Ohio	10 (2.7)	236 (3.6)!	17 (2.6)	198 (3.1)	17 (3.9)	220 (3.0)!	56 (5.1)	222 (2.1)
Oklahoma	9 (3.1)	231 (3.1)!	11 (3.0)	213 (4.9)!	20 (3.7)	223 (2.6)	60 (4.4)	223 (1.5)
Pennsylvania	14 (4.5)	232 (4.0)!	17 (3.2)	195 (4.7)	15 (4.1)	229 (2.3)!	54 (5.6)	226 (1.5)
Rhode Island	12 (4.0)	236 (3.7)!	24 (4.8)	191 (4.6)!	0 (0.0)	*** (***)	63 (5.6)	224 (1.9)
South Carolina	7 (2.5)	230 (5.9)!	6 (1.5)	192 (3.5)!	13 (3.0)	201 (3.4)!	74 (4.0)	212 (1.6)
Tennessee	6 (2.8)	235 (4.3)!	13 (3.5)	192 (4.5)!	10 (2.7)	210 (3.2)!	71 (4.6)	215 (1.6)
Texas	10 (2.9)	245 (3.0)!	21 (5.1)	205 (4.2)!	11 (3.3)	215 (8.6)!	57 (5.7)	212 (2.0)
Utah	19 (3.7)	230 (2.7)	4 (1.8)	200(10.6)!	7 (2.7)	220 (3.2)!	70 (4.4)	221 (1.2)
Virginia	12 (3.1)	243 (3.9)!	14 (3.1)	206 (3.5)!	14 (3.0)	220 (3.4)!	59 (4.8)	220 (2.3)
West Virginia	1 (1.2)	*** (***)	8 (2.4)	212 (5.1)!	16 (3.7)	218 (2.4)!	75 (4.7)	217 (1.7)
Wisconsin	9 (2.7)	236 (3.3)!	6 (2.1)	208 (6.3)!	26 (5.2)	226 (2.4)	60 (5.4)	226 (1.4)
Wyoming	6 (2.0)	235 (4.4)!	4 (1.7)	209 (3.9)!	22 (3.3)	229 (1.6)	68 (4.2)	223 (1.6)
TERRITORY								
Guam	0 (0.0)	*** (***)	0 (0.0)	*** (***)	23 (0.2)	179 (2.2)	77 (0.2)	187 (1.8)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. ***Sample size insufficient to permit reliable estimate. There were fewer than 62 students. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 9 | **Average Reading Proficiency by Parents' Highest Level of Education, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Graduated College		Some Education After High School		Graduated High School		Did Not Finish High School		I Don't Know	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	37 (1.1)	224 (1.6)	9 (0.6)	223 (2.4)	13 (0.6)	212 (1.8)	4 (0.4)	198 (2.8)	37 (1.1)	210 (1.3)
Northeast	40 (3.3)	233 (5.3)	7 (0.8)	223 (9.4)	12 (1.8)	213 (3.5)	3 (0.5)	*** (***)	37 (2.8)	213 (3.7)
Southeast	36 (2.2)	220 (2.9)	8 (0.9)	217 (4.8)	16 (1.2)	208 (4.4)	5 (0.7)	198 (3.7)	35 (2.0)	206 (2.6)
Central	38 (2.1)	225 (2.7)	13 (1.5)	225 (4.1)	13 (1.0)	215 (3.8)	3 (0.7)	*** (***)	34 (2.1)	214 (2.2)
West	35 (1.9)	221 (2.8)	7 (1.0)	224 (3.7)	10 (1.1)	211 (4.2)	6 (1.0)	196 (5.6)	41 (1.8)	208 (1.6)
STATES										
Alabama	36 (1.4)	216 (2.2)	8 (0.7)	218 (3.0)	20 (1.0)	208 (2.4)	9 (0.7)	198 (2.7)	27 (1.2)	200 (2.2)
Arizona	34 (1.4)	219 (1.5)	8 (0.6)	217 (2.8)	9 (0.6)	205 (2.5)	5 (0.4)	196 (3.6)	43 (1.5)	205 (1.7)
Arkansas	32 (1.3)	218 (2.0)	10 (0.7)	224 (2.1)	20 (0.9)	212 (1.9)	9 (0.6)	203 (2.7)	30 (1.0)	204 (1.6)
California	37 (1.5)	217 (2.6)	7 (0.6)	207 (4.2)	8 (0.7)	199 (4.3)	5 (0.5)	178 (4.3)	43 (1.2)	194 (2.5)
Colorado	40 (1.1)	226 (1.3)	11 (0.6)	225 (2.3)	12 (0.7)	211 (2.3)	4 (0.3)	203 (3.3)	34 (1.2)	210 (1.6)
Connecticut	43 (1.2)	234 (1.5)	9 (0.7)	231 (2.9)	11 (0.6)	214 (2.7)	3 (0.3)	202 (3.6)	34 (1.3)	211 (1.7)
Delaware*	38 (0.7)	221 (1.5)	7 (0.6)	222 (2.3)	14 (0.7)	206 (2.2)	4 (0.4)	198 (4.6)	37 (0.8)	210 (1.7)
Dist. Columbia	42 (0.9)	195 (1.5)	7 (0.6)	197 (3.2)	15 (0.7)	188 (2.1)	5 (0.4)	179 (3.5)	31 (0.8)	180 (1.7)
Florida	36 (1.3)	214 (1.5)	9 (0.6)	217 (2.8)	13 (0.7)	207 (2.7)	5 (0.5)	200 (3.5)	36 (1.4)	205 (1.6)
Georgia	38 (1.3)	222 (2.3)	8 (0.5)	220 (3.2)	17 (0.8)	207 (2.2)	6 (0.5)	201 (3.3)	31 (1.2)	207 (1.4)
Hawaii	38 (1.3)	210 (2.0)	7 (0.5)	209 (3.8)	13 (0.8)	196 (2.6)	3 (0.3)	199 (4.5)	38 (1.2)	201 (2.0)
Idaho	38 (1.1)	229 (1.2)	9 (0.7)	229 (2.0)	11 (0.6)	215 (2.4)	4 (0.5)	206 (4.4)	38 (1.0)	213 (1.2)
Indiana	35 (1.4)	228 (1.7)	10 (0.7)	231 (2.5)	16 (1.0)	219 (2.0)	6 (0.6)	212 (3.8)	33 (1.4)	217 (1.6)
Iowa	41 (1.5)	235 (1.3)	10 (0.5)	232 (1.8)	15 (0.8)	223 (1.7)	3 (0.4)	207 (3.5)	32 (1.1)	218 (1.4)
Kentucky	30 (1.7)	221 (2.1)	10 (0.7)	223 (2.5)	20 (0.9)	215 (1.9)	10 (0.7)	201 (2.2)	31 (1.3)	207 (1.5)
Louisiana	33 (1.3)	207 (2.1)	9 (0.6)	216 (2.4)	18 (0.9)	202 (1.9)	8 (0.6)	197 (2.3)	33 (1.4)	202 (1.3)
Maine*	41 (1.7)	236 (1.4)	9 (0.8)	236 (2.3)	17 (1.2)	225 (1.8)	3 (0.4)	214 (4.0)	30 (1.4)	219 (1.7)
Maryland	44 (1.4)	219 (1.9)	8 (0.6)	219 (2.3)	12 (0.7)	208 (2.8)	4 (0.4)	197 (5.0)	32 (1.2)	205 (2.1)
Massachusetts	46 (1.5)	236 (1.1)	8 (0.6)	234 (2.2)	11 (0.6)	223 (2.5)	3 (0.4)	206 (3.6)	33 (1.4)	217 (1.9)
Michigan	37 (1.8)	224 (2.2)	10 (0.7)	225 (2.4)	14 (0.8)	213 (2.3)	5 (0.5)	205 (3.7)	34 (1.4)	211 (1.7)
Minnesota	40 (1.5)	228 (1.7)	9 (0.7)	232 (2.8)	13 (0.9)	219 (2.3)	2 (0.3)	*** (***)	36 (1.3)	215 (1.6)
Mississippi	34 (1.5)	205 (1.7)	7 (0.5)	210 (2.8)	16 (1.0)	198 (2.4)	8 (0.7)	189 (2.7)	35 (1.4)	196 (2.0)
Missouri	36 (1.3)	229 (1.9)	10 (0.7)	228 (2.5)	17 (0.9)	216 (2.0)	6 (0.5)	212 (2.7)	32 (1.2)	214 (1.4)
Nebraska*	44 (1.2)	229 (1.6)	10 (0.8)	232 (3.2)	12 (0.7)	218 (2.3)	3 (0.4)	*** (***)	31 (1.3)	212 (1.5)
New Hampshire*	43 (1.7)	236 (1.6)	9 (0.7)	236 (2.5)	14 (1.0)	222 (2.4)	4 (0.4)	213 (3.6)	30 (1.2)	223 (1.8)
New Jersey*	45 (1.8)	234 (1.8)	8 (0.7)	231 (2.8)	10 (0.7)	217 (2.6)	4 (0.4)	206 (4.3)	33 (1.6)	214 (1.8)
New Mexico	31 (1.8)	223 (2.0)	10 (0.9)	220 (2.8)	16 (1.1)	211 (2.1)	6 (0.7)	194 (3.3)	37 (1.7)	204 (2.2)
New York*	39 (1.5)	228 (1.4)	8 (0.8)	222 (2.4)	13 (0.7)	210 (2.3)	4 (0.5)	198 (3.8)	36 (1.5)	208 (1.8)
North Carolina	39 (1.3)	221 (1.7)	8 (0.6)	220 (2.6)	16 (0.8)	207 (2.2)	7 (0.5)	197 (2.6)	29 (0.9)	206 (1.6)
North Dakota	47 (1.5)	234 (1.2)	9 (0.7)	231 (2.7)	11 (0.8)	225 (2.2)	3 (0.4)	*** (***)	30 (1.3)	217 (1.4)
Ohio	36 (1.1)	224 (1.6)	10 (0.7)	225 (2.8)	15 (1.0)	216 (2.1)	5 (0.6)	208 (4.1)	33 (1.0)	213 (1.6)
Oklahoma	35 (1.6)	227 (1.6)	12 (0.8)	230 (2.3)	14 (0.9)	218 (2.1)	6 (0.5)	211 (3.1)	33 (1.3)	217 (1.1)
Pennsylvania	38 (1.7)	230 (1.7)	8 (0.6)	233 (2.3)	15 (0.8)	217 (1.9)	4 (0.4)	210 (2.8)	34 (1.1)	214 (1.6)
Rhode Island	36 (1.8)	227 (2.4)	8 (0.7)	229 (2.6)	11 (0.8)	210 (2.6)	5 (0.5)	204 (4.9)	40 (1.6)	210 (2.2)
South Carolina	37 (1.5)	219 (1.6)	8 (0.6)	223 (3.0)	19 (1.0)	201 (2.0)	5 (0.6)	198 (2.8)	31 (1.2)	206 (1.7)
Tennessee	34 (1.8)	221 (2.3)	9 (0.5)	223 (3.9)	19 (1.1)	211 (2.5)	8 (0.6)	203 (2.6)	30 (1.3)	205 (1.4)
Texas	34 (1.6)	223 (2.3)	9 (0.8)	220 (2.8)	14 (0.9)	209 (2.2)	7 (0.8)	201 (2.9)	35 (1.4)	208 (1.6)
Utah	40 (1.4)	228 (1.4)	9 (0.6)	230 (2.6)	10 (0.6)	216 (2.0)	3 (0.4)	209 (4.6)	39 (1.3)	215 (1.6)
Virginia	42 (1.8)	230 (2.0)	9 (0.7)	227 (2.8)	14 (0.7)	216 (1.8)	6 (0.6)	208 (2.8)	29 (1.1)	214 (1.6)
West Virginia	33 (1.4)	226 (1.6)	10 (0.6)	225 (2.1)	20 (0.8)	213 (1.9)	8 (0.6)	204 (2.7)	29 (1.0)	208 (1.9)
Wisconsin	35 (1.2)	233 (1.6)	11 (0.6)	234 (2.0)	16 (1.0)	221 (1.5)	3 (0.3)	213 (3.9)	36 (1.2)	218 (1.5)
Wyoming	39 (1.2)	232 (1.3)	11 (0.7)	232 (2.3)	13 (0.7)	219 (2.4)	4 (0.3)	211 (4.3)	33 (1.1)	217 (1.6)
TERRITORY										
Guam	32 (1.2)	183 (2.2)	6 (0.5)	193 (5.0)	14 (0.8)	182 (3.3)	5 (0.4)	176 (5.6)	44 (1.2)	182 (2.0)

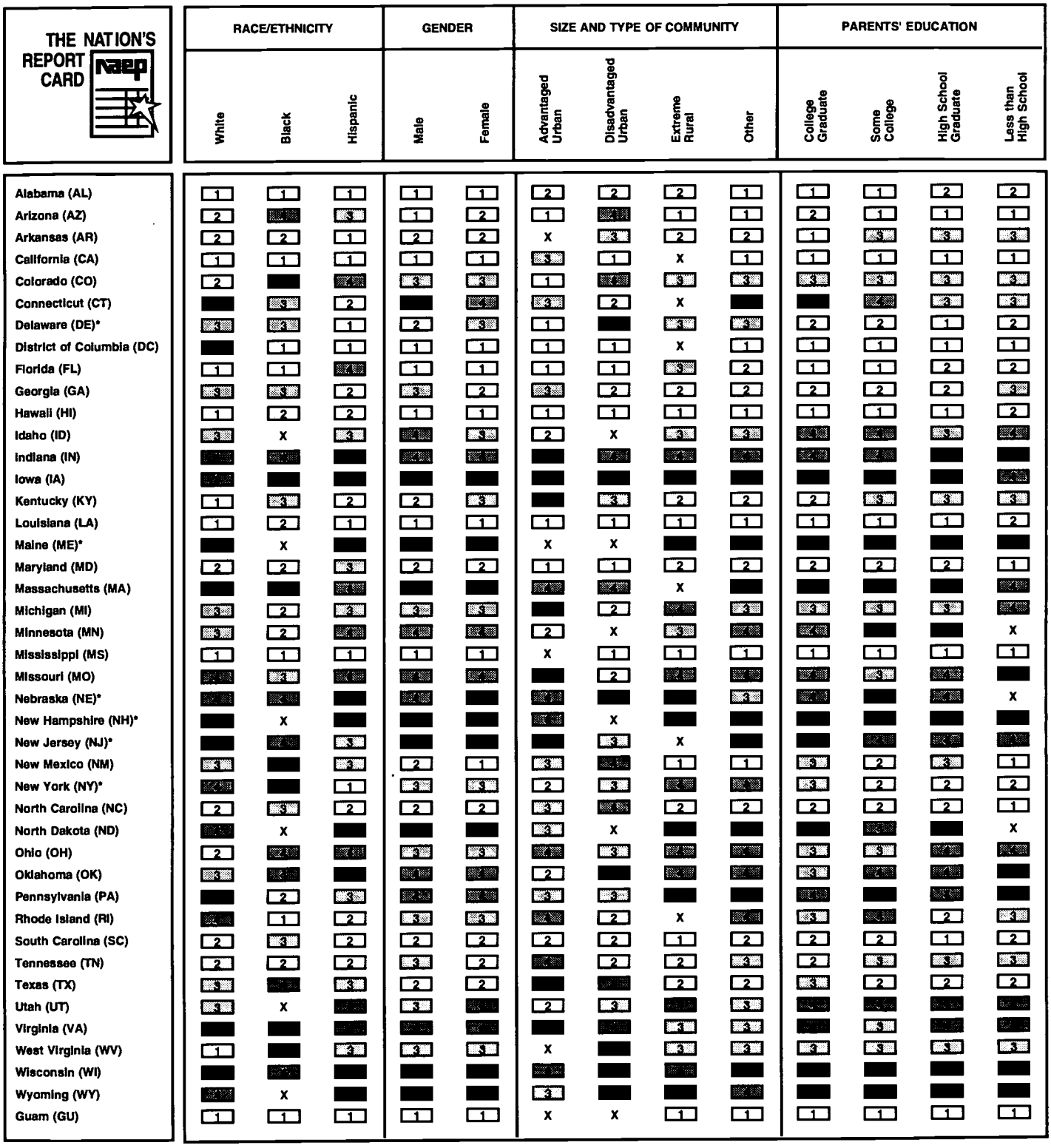
*Did not satisfy one or more of the guidelines for school sample participation rates (see Appendix B for details).

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. ***Sample size insufficient to permit reliable estimate. There were fewer than 62 students.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

FIGURE 3.1

Average Overall Reading Proficiency by Selected Demographics for Five Performance Bands (Quintiles) 1992 Grade 4



Quintiles of Performance

bottom 20 percent — top 20 percent

1st 2nd 3rd 4th 5th

lower ← proficiency → higher

States categorized in the bottom 20 percent of performance have average reading proficiencies in the lowest fifth of the average reading proficiency distribution of all states and are indicated by the number 1 (first quintile). States with average proficiencies in the top 20 percent of the distribution are indicated by the number 5 (fifth quintile). The numbers 2, 3, and 4 indicate states with average proficiencies in the second, third, and fourth fifths of the distribution.

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

x Sample size too small (fewer than 62 students) to permit reliable reporting of performance bands (quintiles).

The Instructional Emphasis in Fourth Grade Classrooms

Teachers of the fourth graders in the national and state assessments were asked to characterize their reading instruction by describing the amount of emphasis they placed on various approaches to teaching reading -- literature-based reading, integration of reading and writing, whole language, and phonics. There has been considerable research about these methods, and the various studies indicate benefits for each approach depending upon the students and their skills. As shown in TABLE 10, with the exception of phonics, about half the fourth graders (from 40 to 54 percent) were receiving heavy instructional emphasis in each of these approaches. Both the comparatively small percentage of fourth graders receiving heavy emphasis in phonics (11 percent), and their lower average proficiency compared to fourth graders receiving little or no such emphasis, indicate that the tendency to use the phonics approach with young readers may carry over into remedial situations with less proficient fourth graders. The state-by-state results shown in TABLES 11 through 14 reflect the national patterns.

TABLE 10 **Teachers' Reports on Instructional Emphases, Grade 4, 1992 Reading Assessment**

	Heavy Emphasis		Moderate Emphasis		Little or No Emphasis	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Literature-Based Reading	49 (3.0)	221 (1.9)	39 (3.2)	218 (1.8)	12 (1.9)	212 (2.9)
Top One-Third	58 (4.0)	238 (1.8)	33 (4.4)	235 (2.3)	9 (2.4)	231 (4.6)
Bottom One-Third	46 (5.3)	194 (2.5)	39 (4.6)	200 (2.2)	15 (4.0)	198 (3.8)
Integration of Reading and Writing	54 (2.6)	220 (2.1)	44 (2.5)	217 (1.6)	3 (0.8)	212 (5.0)
Top One-Third	58 (4.4)	238 (1.7)	39 (4.2)	234 (2.5)	3 (1.7)	229 (3.6)
Bottom One-Third	49 (4.2)	221 (1.6)	49 (4.1)	216 (1.8)	2 (0.9)	208 (8.3)
Whole Language	40 (2.5)	220 (2.5)	42 (2.5)	218 (1.2)	19 (1.5)	218 (2.0)
Top One-Third	46 (4.2)	240 (2.2)	39 (4.4)	234 (1.7)	15 (3.0)	233 (2.0)
Bottom One-Third	42 (4.0)	194 (2.3)	36 (3.7)	196 (2.4)	22 (2.8)	205 (3.3)
Phonics	11 (1.4)	208 (3.1)	50 (3.0)	218 (1.2)	39 (2.2)	222 (2.3)
Top One-Third	6 (2.2)	233 (4.9)	46 (4.4)	235 (1.4)	48 (4.6)	237 (2.3)
Bottom One-Third	17 (2.3)	190 (3.0)	50 (4.5)	197 (2.1)	33 (4.3)	200 (3.5)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 11 | **Teachers' Reports on the Instructional Emphasis Placed on Literature-Based Reading, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Heavy Emphasis		Moderate Emphasis		Little or No Emphasis	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	50 (3.1)	220 (2.0)	38 (3.3)	217 (1.9)	11 (1.9)	208 (3.2)
Northeast	51 (8.9)	223 (5.0)	38 (7.6)	221 (5.2)!	10 (3.5)	204 (7.3)!
Southeast	43 (4.9)	215 (6.2)	39 (5.9)	215 (3.3)	18 (5.1)	205 (2.4)!
Central	55 (5.3)	224 (2.0)	36 (5.8)	217 (3.8)	9 (3.5)	219 (5.8)!
West	52 (6.0)	217 (4.2)	40 (7.4)	214 (3.3)!	8 (2.2)	203 (6.6)!
STATES						
Alabama	32 (3.2)	212 (2.9)	55 (3.8)	207 (2.3)	14 (2.6)	205 (4.4)!
Arizona	48 (3.3)	214 (1.5)	37 (2.8)	207 (1.9)	15 (2.7)	209 (5.6)
Arkansas	24 (2.4)	212 (2.6)	56 (3.4)	213 (1.9)	20 (2.9)	210 (2.4)
California	87 (2.5)	206 (2.4)	12 (2.3)	186 (6.1)	2 (0.9)	*** (***)
Colorado	73 (3.5)	220 (1.4)	22 (3.0)	214 (2.6)	5 (1.6)	217 (4.1)!
Connecticut	62 (3.7)	229 (1.5)	30 (3.6)	217 (3.4)	8 (1.9)	215 (7.5)!
Delaware*	44 (1.3)	217 (1.4)	40 (1.4)	214 (1.1)	16 (0.7)	209 (1.7)
Dist. Columbia	37 (1.3)	191 (1.7)	51 (1.6)	186 (1.4)	12 (0.8)	184 (3.1)
Florida	52 (3.5)	211 (2.0)	42 (3.4)	209 (1.9)	6 (1.1)	195 (5.4)
Georgia	65 (3.9)	215 (2.2)	29 (3.4)	212 (2.5)	6 (1.5)	198 (5.4)!
Hawaii	49 (3.3)	203 (2.5)	41 (3.0)	204 (1.9)	9 (1.7)	203 (4.7)
Idaho	44 (3.5)	222 (1.6)	48 (3.5)	220 (1.3)	8 (1.7)	215 (3.9)!
Indiana	37 (3.3)	225 (2.2)	50 (3.1)	221 (1.4)	13 (2.3)	221 (3.8)
Iowa	52 (3.8)	227 (1.4)	41 (4.0)	226 (1.7)	7 (2.0)	224 (3.1)!
Kentucky	35 (3.8)	213 (2.4)	43 (3.8)	214 (1.8)	22 (3.5)	214 (2.3)
Louisiana	28 (3.1)	206 (3.0)	55 (2.9)	204 (1.8)	17 (2.7)	207 (3.3)
Maine*	62 (4.1)	229 (1.7)	34 (3.8)	227 (1.7)	4 (1.4)	229 (5.8)!
Maryland	66 (3.0)	215 (2.0)	30 (2.9)	209 (2.3)	4 (1.1)	189 (5.4)!
Massachusetts	51 (4.4)	231 (1.9)	42 (4.3)	225 (1.6)	8 (1.7)	222 (3.7)!
Michigan	46 (3.9)	220 (2.1)	45 (3.6)	217 (2.4)	10 (1.9)	211 (6.8)!
Minnesota	41 (3.3)	224 (2.0)	49 (3.4)	222 (2.0)	11 (1.8)	211 (4.7)
Mississippi	28 (3.5)	199 (2.3)	60 (3.7)	201 (2.1)	12 (2.3)	202 (3.6)
Missouri	46 (3.9)	222 (2.6)	40 (3.4)	221 (2.1)	15 (2.5)	221 (2.9)
Nebraska*	49 (4.0)	224 (1.8)	39 (3.8)	222 (1.7)	13 (2.9)	222 (4.2)!
New Hampshire*	59 (3.5)	230 (1.5)	38 (3.2)	230 (2.1)	3 (1.0)	224 (6.8)!
New Jersey*	36 (3.7)	228 (3.1)	46 (4.2)	226 (2.2)	18 (2.6)	215 (3.8)
New Mexico	50 (4.2)	215 (2.1)	43 (4.2)	209 (2.8)	7 (1.7)	203 (8.3)!
New York*	57 (3.8)	218 (2.0)	37 (3.7)	213 (3.6)	6 (1.3)	220 (3.8)!
North Carolina	60 (3.6)	215 (1.7)	35 (3.2)	210 (2.3)	5 (1.4)	200 (4.4)!
North Dakota	24 (3.2)	228 (2.2)	56 (3.7)	227 (1.4)	19 (3.5)	226 (2.9)!
Ohio	49 (4.3)	223 (1.9)	37 (3.4)	214 (2.3)	15 (3.3)	218 (4.7)!
Oklahoma	40 (3.4)	227 (1.5)	51 (3.5)	219 (1.4)	8 (2.1)	222 (3.1)!
Pennsylvania	40 (3.4)	225 (2.7)	43 (3.6)	222 (1.9)	17 (3.5)	214 (3.0)!
Rhode Island	49 (3.6)	222 (2.4)	46 (3.3)	215 (3.1)	5 (1.5)	206 (6.4)!
South Carolina	45 (3.9)	211 (2.0)	43 (3.6)	210 (2.0)	12 (2.2)	213 (4.5)!
Tennessee	28 (2.9)	214 (2.6)	58 (2.9)	213 (1.9)	13 (1.9)	209 (3.7)
Texas	53 (4.0)	220 (2.3)	38 (3.5)	211 (2.9)	10 (2.3)	208 (4.6)!
Utah	47 (3.5)	223 (1.7)	44 (3.4)	220 (1.4)	9 (1.7)	216 (2.7)!
Virginia	58 (3.4)	227 (2.0)	35 (3.2)	217 (2.1)	7 (1.5)	222 (4.9)!
West Virginia	24 (2.7)	217 (3.6)	57 (3.6)	218 (1.9)	19 (2.9)	210 (3.5)
Wisconsin	49 (4.9)	228 (1.7)	40 (4.4)	223 (1.7)	11 (2.2)	220 (4.0)
Wyoming	55 (3.4)	226 (1.6)	38 (3.1)	224 (1.9)	7 (1.5)	218 (4.7)!
TERRITORY						
Guam	39 (0.9)	180 (2.2)	45 (0.9)	185 (2.0)	15 (0.8)	177 (3.5)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. ***Sample size insufficient to permit reliable estimate. There were fewer than 62 students. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 12 | **Teachers' Reports on the Instructional Emphasis Placed on Integrating Reading and Writing, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Heavy Emphasis		Moderate Emphasis		Little or No Emphasis	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	55 (2.7)	220 (2.2)	42 (2.6)	215 (1.7)	3 (0.9)	211 (5.4)!
Northeast	58 (6.1)	222 (5.5)	40 (5.5)	218 (3.4)	2 (1.7)	*** (***)
Southeast	49 (4.9)	214 (5.1)	50 (5.1)	213 (3.7)	1 (0.7)	*** (***)
Central	56 (5.6)	223 (2.8)	42 (5.3)	218 (3.0)	2 (1.0)	*** (***)
West	56 (5.0)	218 (4.5)	38 (4.4)	210 (2.4)	6 (3.3)	213 (6.2)!
STATES						
Alabama	47 (3.2)	205 (2.7)	50 (3.1)	211 (2.4)	2 (1.0)	*** (***)
Arizona	56 (3.1)	210 (1.6)	41 (2.8)	211 (1.8)	3 (0.8)	215 (8.9)!
Arkansas	31 (3.0)	213 (2.1)	55 (3.1)	213 (1.8)	13 (2.6)	205 (2.9)!
California	80 (2.7)	205 (2.7)	19 (2.7)	198 (4.4)	0 (0.4)	*** (***)
Colorado	70 (2.8)	220 (1.3)	29 (2.7)	214 (2.5)	1 (0.6)	*** (***)
Connecticut	72 (3.2)	227 (1.5)	27 (3.1)	219 (3.8)	1 (0.6)	*** (***)
Delaware*	49 (1.4)	220 (1.3)	46 (1.5)	210 (1.0)	5 (0.4)	200 (2.5)
Dist. Columbia	76 (1.3)	189 (1.0)	23 (1.3)	181 (2.2)	1 (0.1)	*** (***)
Florida	65 (3.4)	209 (1.8)	35 (3.4)	210 (1.6)	0 (0.3)	*** (***)
Georgia	68 (2.9)	213 (2.1)	30 (2.9)	212 (2.6)	2 (0.8)	*** (***)
Hawaii	69 (3.4)	205 (2.0)	30 (3.2)	200 (2.5)	2 (0.7)	*** (***)
Idaho	50 (3.5)	221 (1.4)	48 (3.4)	221 (1.3)	2 (0.9)	*** (***)
Indiana	41 (3.9)	224 (2.1)	53 (3.7)	221 (1.6)	6 (1.8)	224 (4.9)!
Iowa	59 (4.0)	226 (1.5)	39 (4.2)	228 (1.5)	2 (1.2)	*** (***)
Kentucky	52 (3.7)	213 (1.8)	46 (3.7)	215 (1.7)	3 (1.3)	208 (8.0)!
Louisiana	45 (3.3)	203 (2.1)	47 (3.6)	206 (1.6)	8 (2.0)	210 (4.5)!
Maine*	61 (3.8)	228 (1.8)	37 (3.8)	229 (1.7)	3 (1.0)	*** (***)
Maryland	78 (2.8)	214 (1.8)	21 (2.7)	208 (3.6)	1 (0.7)	*** (***)
Massachusetts	58 (3.6)	230 (1.4)	36 (2.9)	226 (1.9)	6 (1.6)	219 (3.7)!
Michigan	49 (3.7)	217 (2.3)	48 (3.8)	218 (2.2)	3 (1.0)	*** (***)
Minnesota	45 (4.1)	225 (1.7)	52 (4.1)	219 (2.6)	3 (1.2)	218 (4.3)!
Mississippi	44 (3.2)	200 (2.2)	50 (3.5)	201 (2.0)	6 (1.7)	191 (4.1)!
Missouri	52 (3.5)	221 (2.2)	44 (3.4)	223 (1.6)	4 (1.1)	219 (8.7)!
Nebraska*	56 (3.8)	224 (1.6)	42 (3.7)	220 (2.0)	2 (0.9)	*** (***)
New Hampshire*	63 (3.1)	231 (1.5)	34 (3.1)	228 (1.8)	3 (0.8)	*** (***)
New Jersey*	60 (4.0)	227 (2.2)	37 (4.2)	221 (2.6)	4 (1.3)	221 (7.7)!
New Mexico	66 (3.8)	213 (2.5)	33 (3.9)	211 (2.1)	1 (0.8)	*** (***)
New York*	67 (2.9)	218 (1.7)	31 (2.8)	213 (2.9)	1 (0.7)	*** (***)
North Carolina	62 (3.1)	212 (1.8)	37 (3.1)	214 (1.8)	1 (0.7)	*** (***)
North Dakota	38 (3.8)	227 (2.0)	58 (3.7)	226 (1.4)	4 (1.7)	229 (3.4)!
Ohio	52 (4.1)	221 (1.9)	45 (3.7)	217 (1.8)	3 (1.3)	202 (9.3)!
Oklahoma	44 (3.7)	223 (1.6)	52 (3.7)	222 (1.4)	4 (1.2)	222 (5.7)!
Pennsylvania	50 (3.9)	221 (2.4)	46 (3.7)	222 (1.8)	4 (1.2)	217 (6.5)!
Rhode Island	54 (3.3)	221 (2.1)	44 (3.3)	216 (3.3)	2 (0.7)	*** (***)
South Carolina	55 (3.7)	210 (1.9)	42 (3.6)	210 (2.3)	3 (1.1)	221 (7.9)!
Tennessee	47 (2.9)	214 (2.4)	47 (2.7)	212 (2.1)	6 (1.4)	205 (3.5)!
Texas	58 (3.3)	214 (2.6)	38 (3.1)	217 (2.4)	5 (1.6)	215 (4.7)!
Utah	45 (3.0)	224 (1.8)	51 (3.0)	220 (1.5)	4 (1.2)	217 (4.0)!
Virginia	72 (3.0)	225 (1.9)	27 (2.8)	218 (2.0)	1 (0.8)	*** (***)
West Virginia	36 (3.5)	221 (2.0)	59 (3.5)	215 (1.7)	4 (1.2)	197 (8.4)!
Wisconsin	54 (3.2)	225 (1.6)	42 (3.3)	225 (1.5)	4 (1.5)	219 (7.2)!
Wyoming	50 (3.7)	226 (1.8)	46 (3.7)	224 (1.6)	4 (1.2)	212 (6.1)!
TERRITORY						
Guam	51 (1.1)	181 (1.9)	47 (1.0)	182 (1.6)	2 (0.4)	*** (***)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.***Sample size insufficient to permit reliable estimate. There were fewer than 62 students. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 13 | **Teachers' Reports on the Instructional Emphasis Placed on Whole Language, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Heavy Emphasis		Moderate Emphasis		Little or No Emphasis	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	42 (3.0)	219 (2.6)	41 (2.7)	217 (1.4)	18 (1.8)	215 (2.0)
Northeast	50 (5.0)	227 (5.9)	36 (3.6)	217 (3.8)	13 (3.2)	207 (5.8)!
Southeast	39 (5.7)	211 (6.0)	37 (4.8)	214 (2.7)	24 (4.3)	216 (3.0)!
Central	34 (7.2)	225 (4.1)!	47 (6.9)	218 (2.4)	19 (3.7)	221 (4.0)
West	45 (3.9)	215 (4.7)	41 (4.2)	217 (3.4)	14 (2.1)	211 (4.2)
STATES						
Alabama	30 (2.8)	205 (3.8)	51 (3.3)	210 (2.2)	19 (2.3)	211 (4.2)
Arizona	30 (2.7)	207 (2.8)	44 (2.7)	212 (1.6)	26 (2.5)	211 (3.4)
Arkansas	21 (3.3)	207 (3.2)	50 (3.8)	212 (2.1)	29 (3.3)	215 (1.9)
California	69 (3.0)	205 (2.7)	28 (3.1)	200 (4.3)	4 (1.1)	203 (7.7)!
Colorado	57 (3.2)	220 (1.4)	35 (2.8)	215 (2.1)	8 (1.8)	222 (4.2)!
Connecticut	48 (3.8)	226 (2.1)	41 (3.5)	224 (2.3)	11 (2.4)	220 (4.7)!
Delaware*	33 (1.0)	218 (1.8)	48 (1.2)	213 (1.1)	19 (0.7)	213 (1.3)
Dist. Columbia	42 (1.5)	188 (1.7)	47 (1.5)	186 (1.5)	11 (0.7)	190 (3.2)
Florida	51 (4.1)	208 (2.2)	40 (3.7)	210 (1.8)	9 (1.5)	214 (3.3)
Georgia	61 (3.3)	214 (2.2)	30 (3.0)	215 (2.2)	9 (1.6)	201 (4.1)
Hawaii	38 (3.3)	200 (2.8)	44 (3.2)	206 (1.9)	18 (2.2)	206 (3.5)
Idaho	35 (3.5)	222 (1.4)	46 (3.3)	221 (1.5)	19 (2.8)	218 (2.3)
Indiana	33 (3.7)	222 (2.3)	50 (3.8)	224 (1.6)	18 (2.4)	221 (2.7)
Iowa	47 (4.1)	228 (1.5)	40 (3.7)	226 (1.7)	13 (2.3)	223 (2.6)
Kentucky	28 (3.3)	209 (2.2)	49 (3.6)	216 (2.2)	23 (3.2)	214 (1.6)
Louisiana	34 (3.4)	198 (2.5)	36 (3.1)	207 (2.1)	30 (3.5)	211 (2.1)
Maine*	35 (4.1)	228 (2.4)	46 (4.1)	229 (1.6)	19 (3.2)	228 (2.8)
Maryland	59 (3.2)	214 (2.1)	32 (2.8)	211 (3.0)	9 (1.9)	209 (4.0)!
Massachusetts	33 (3.8)	229 (2.5)	48 (4.1)	229 (1.7)	19 (2.7)	221 (2.4)
Michigan	41 (3.4)	219 (3.1)	44 (3.3)	217 (1.7)	15 (2.3)	214 (3.5)
Minnesota	28 (3.2)	224 (2.1)	47 (3.8)	224 (2.0)	26 (3.4)	214 (3.3)
Mississippi	31 (3.6)	199 (2.5)	44 (3.3)	198 (2.4)	25 (3.2)	205 (2.5)
Missouri	32 (3.3)	219 (2.8)	48 (3.2)	223 (1.5)	20 (2.9)	224 (2.4)
Nebraska*	26 (3.8)	222 (2.5)	50 (4.9)	222 (1.5)	23 (4.2)	225 (2.8)
New Hampshire*	37 (3.5)	231 (2.1)	47 (3.2)	228 (1.6)	16 (2.3)	231 (3.2)
New Jersey*	43 (3.6)	225 (2.4)	39 (3.4)	224 (2.5)	18 (3.0)	225 (3.8)
New Mexico	35 (3.7)	214 (3.0)	45 (4.0)	212 (2.7)	21 (3.5)	206 (3.4)
New York*	49 (3.1)	214 (2.0)	40 (3.1)	217 (2.9)	11 (1.9)	220 (5.7)
North Carolina	49 (3.5)	212 (2.3)	44 (3.2)	213 (1.7)	8 (1.4)	217 (3.6)
North Dakota	19 (3.1)	225 (2.4)	45 (4.7)	225 (1.9)	36 (4.6)	231 (2.0)
Ohio	31 (4.2)	219 (2.4)	48 (3.9)	218 (2.1)	21 (3.1)	221 (3.2)
Oklahoma	24 (3.0)	223 (2.0)	58 (3.2)	222 (1.5)	18 (2.5)	220 (1.6)
Pennsylvania	34 (3.4)	223 (2.5)	42 (3.4)	220 (2.0)	23 (3.6)	222 (2.9)
Rhode Island	30 (3.3)	222 (2.8)	48 (3.4)	217 (2.8)	23 (2.8)	217 (3.8)
South Carolina	42 (3.9)	209 (2.1)	41 (3.3)	213 (2.3)	17 (2.7)	210 (3.6)
Tennessee	27 (3.0)	209 (2.9)	49 (3.7)	215 (2.0)	24 (2.6)	211 (2.3)
Texas	42 (3.0)	212 (2.8)	41 (3.5)	217 (2.5)	17 (2.6)	217 (2.6)
Utah	34 (2.9)	224 (2.2)	52 (2.7)	221 (1.4)	14 (2.2)	215 (2.4)
Virginia	48 (4.2)	225 (2.2)	41 (3.5)	221 (2.2)	12 (2.2)	221 (3.3)
West Virginia	26 (3.5)	220 (2.7)	50 (4.1)	214 (2.1)	24 (3.2)	216 (2.3)
Wisconsin	35 (3.6)	225 (1.9)	50 (3.7)	224 (1.3)	15 (2.8)	228 (3.5)
Wyoming	37 (3.1)	226 (1.9)	47 (2.9)	224 (1.6)	16 (3.1)	225 (2.4)
TERRITORY						
Guam	40 (0.9)	179 (1.9)	42 (1.1)	183 (2.1)	18 (0.9)	186 (2.9)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 14 | **Teachers' Reports on the Instructional Emphasis Placed on Phonics, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Heavy Emphasis		Moderate Emphasis		Little or No Emphasis	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	11 (1.4)	206 (2.9)	48 (3.2)	217 (1.3)	40 (2.4)	221 (2.4)
Northeast	9 (2.6)	204 (7.4)!	44 (6.6)	216 (2.8)	47 (5.6)	227 (6.1)
Southeast	14 (2.0)	207 (4.6)	53 (4.4)	214 (3.2)	33 (3.9)	215 (5.8)
Central	8 (3.5)	207 (8.4)!	54 (6.7)	222 (2.1)	38 (3.8)	223 (3.6)
West	14 (3.0)	204 (5.7)!	40 (7.5)	211 (3.5)!	45 (6.5)	220 (4.9)
STATES						
Alabama	18 (2.3)	199 (3.9)	60 (3.0)	211 (1.8)	22 (2.8)	209 (3.5)
Arizona	8 (1.3)	204 (4.4)	52 (3.2)	209 (1.8)	39 (3.3)	214 (1.7)
Arkansas	15 (2.7)	204 (4.3)	62 (3.2)	212 (1.5)	22 (2.8)	218 (2.0)
California	8 (1.5)	196 (6.6)	40 (2.7)	203 (3.2)	52 (3.2)	205 (3.0)
Colorado	8 (1.8)	213 (3.0)!	54 (3.3)	218 (1.5)	38 (3.0)	220 (2.0)
Connecticut	6 (1.2)	205 (8.0)!	49 (3.1)	220 (2.1)	45 (3.2)	232 (1.7)
Delaware*	18 (0.8)	204 (1.6)	52 (1.1)	214 (0.8)	30 (1.0)	222 (1.6)
Dist. Columbia	40 (1.5)	182 (1.6)	54 (1.5)	189 (1.6)	5 (0.6)	213 (5.6)
Florida	12 (1.7)	197 (4.6)	59 (2.5)	210 (1.6)	29 (2.3)	214 (1.9)
Georgia	19 (2.7)	204 (4.3)	51 (2.8)	214 (2.0)	30 (3.4)	216 (3.0)
Hawaii	9 (1.5)	194 (5.1)	61 (3.1)	204 (2.0)	30 (2.9)	205 (2.8)
Idaho	11 (2.3)	216 (2.5)!	51 (3.4)	220 (1.1)	38 (3.4)	223 (1.7)
Indiana	6 (1.7)	204 (4.4)!	58 (3.9)	223 (1.6)	36 (3.4)	225 (2.1)
Iowa	8 (2.0)	218 (3.3)!	49 (3.2)	228 (1.5)	43 (3.2)	226 (1.6)
Kentucky	14 (2.4)	208 (2.9)	66 (3.5)	214 (1.6)	20 (3.3)	215 (2.9)
Louisiana	22 (2.9)	198 (2.2)	54 (3.0)	207 (1.8)	23 (3.1)	206 (2.4)
Maine*	11 (2.4)	225 (3.4)!	50 (4.0)	228 (1.7)	39 (3.9)	230 (1.8)
Maryland	7 (1.6)	191 (7.3)!	45 (3.3)	207 (2.3)	48 (3.4)	220 (1.8)
Massachusetts	14 (2.4)	215 (2.5)	49 (3.2)	227 (1.8)	36 (3.4)	234 (1.8)
Michigan	9 (1.8)	204 (4.6)	49 (3.5)	215 (2.2)	42 (3.1)	223 (2.0)
Minnesota	10 (2.4)	213 (3.7)!	50 (3.1)	222 (1.8)	39 (3.2)	223 (2.5)
Mississippi	22 (3.0)	195 (3.6)	65 (3.0)	201 (1.6)	13 (2.2)	203 (4.0)
Missouri	13 (2.3)	212 (4.2)	54 (3.5)	220 (1.7)	33 (3.6)	228 (2.4)
Nebraska*	17 (3.3)	224 (3.1)!	50 (4.0)	223 (1.7)	33 (3.5)	221 (2.4)
New Hampshire*	10 (1.7)	221 (3.1)	56 (3.2)	230 (1.6)	34 (3.5)	232 (2.0)
New Jersey*	12 (2.0)	210 (3.9)	58 (3.4)	222 (1.6)	30 (3.0)	236 (2.9)
New Mexico	18 (2.9)	207 (3.8)	58 (4.2)	214 (2.2)	24 (3.7)	211 (3.5)
New York*	16 (2.5)	205 (5.6)	49 (3.6)	214 (2.2)	35 (3.7)	224 (2.5)
North Carolina	15 (2.6)	210 (3.2)	52 (3.2)	209 (1.7)	33 (3.3)	220 (2.1)
North Dakota	17 (3.2)	229 (2.9)	55 (4.8)	225 (1.6)	29 (3.8)	228 (2.3)
Ohio	12 (2.4)	215 (3.9)	55 (3.8)	218 (1.9)	33 (3.9)	221 (2.7)
Oklahoma	16 (2.3)	217 (2.9)	57 (3.7)	221 (1.1)	27 (3.5)	228 (2.1)
Pennsylvania	13 (2.0)	205 (3.5)	49 (3.9)	221 (1.9)	39 (4.1)	228 (2.0)
Rhode Island	9 (1.9)	209 (5.1)!	55 (3.4)	215 (2.9)	36 (3.2)	226 (2.5)
South Carolina	15 (2.3)	204 (3.0)	55 (2.9)	210 (1.8)	30 (3.0)	215 (2.3)
Tennessee	16 (2.3)	202 (3.3)	62 (2.8)	212 (1.9)	21 (2.6)	222 (2.4)
Texas	14 (1.7)	198 (3.7)	52 (2.9)	215 (2.3)	34 (3.3)	222 (2.4)
Utah	13 (2.1)	217 (3.1)	50 (3.2)	221 (1.6)	37 (3.3)	223 (1.9)
Virginia	9 (1.6)	209 (3.9)	49 (2.8)	224 (1.8)	42 (3.4)	225 (2.1)
West Virginia	16 (2.5)	210 (3.9)	64 (3.4)	218 (1.4)	20 (2.9)	216 (3.0)
Wisconsin	6 (1.6)	217 (4.7)!	51 (3.8)	226 (1.6)	43 (4.1)	226 (1.5)
Wyoming	8 (1.8)	221 (3.5)!	54 (3.2)	224 (1.4)	39 (3.3)	227 (2.3)
TERRITORY						
Guam	29 (1.0)	179 (1.8)	56 (1.0)	181 (1.8)	15 (0.6)	189 (3.3)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

Reading as Part of Reading Instruction

Although it makes sense that learning to read would involve extensive and varied reading experiences, some researchers have found that too little instructional time actually involves the act of reading. As part of the 1992 assessment, NAEP asked both teachers and students how much time was devoted to having students read books of their own choosing. As presented in TABLE 15, the teachers reported more emphasis on this activity than did students. Also, students reported sharp decreases in this activity as they progressed through school. Eighty-seven percent of the twelfth graders reported reading books of their own choosing on less than a weekly basis. The state-by-state results at grade 4 tend to correspond to the national findings (see TABLES 16 and 17). For the nation and in a number of states, fourth graders who reported reading books of their own choosing almost every day had higher average reading proficiency than those who reported this type of reading less frequently, although this pattern is reversed at grade 12.

TABLE 15 **Teachers' and Students' Reports on the Frequency with Which Students Are Provided Time for Reading Books of Their Own Choosing, Grade 4, 1992 Reading Assessment**

	Teachers Reports: Students Are Provided Time for Reading Books of Their Own Choosing					
	Almost Every Day		At Least Once a Week		Less Than Weekly	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Grade 4	67 (2.5)	221 (1.5)	25 (2.2)	215 (2.0)	8 (1.3)	211 (4.5)
	Students Reports: Students Are Provided Time For Reading Books of Their Own Choosing					
	Almost Every Day		At Least Once a Week		Less Than Weekly	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Grade 4	55 (1.3)	225 (1.2)	27 (1.0)	217 (1.5)	18 (0.8)	206 (1.4)
Grade 8	15 (0.9)	261 (1.4)	25 (1.0)	260 (1.3)	60 (1.3)	261 (1.2)
Grade 12	4 (0.3)	278 (2.5)	9 (0.4)	275 (1.6)	87 (0.5)	294 (0.6)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 16

Teachers' Reports on the Frequency with Which Students Are Provided Time for Reading Books of Their Own Choosing, Grade 4, 1992 Reading Assessment

PUBLIC SCHOOLS	Almost Every Day		At Least Once a Week		Less Than Weekly	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	68 (2.7)	220 (1.7)	25 (2.3)	213 (2.2)	8 (1.2)	207 (5.1)
Northeast	71 (7.7)	222 (5.0)	19 (6.3)	217 (3.2)!	10 (3.0)	214(15.2)!
Southeast	61 (4.3)	214 (3.3)	31 (4.3)	213 (3.9)	8 (1.3)	209 (4.9)!
Central	71 (4.2)	225 (2.4)	21 (3.1)	216 (4.8)	8 (2.9)	205 (5.8)!
West	69 (5.4)	217 (2.9)	27 (4.7)	208 (5.3)!	4 (0.9)	*** (***)
STATES						
Alabama	50 (3.4)	210 (2.5)	35 (3.4)	208 (2.2)	15 (2.6)	202 (5.0)
Arizona	72 (3.0)	213 (1.3)	22 (2.7)	207 (2.8)	6 (1.5)	201 (7.2)!
Arkansas	54 (3.5)	213 (1.8)	31 (2.8)	209 (2.5)	16 (2.9)	212 (2.3)
California	82 (2.5)	204 (2.7)	16 (2.2)	204 (4.2)	2 (0.9)	*** (***)
Colorado	77 (2.6)	219 (1.4)	17 (2.2)	214 (2.6)	6 (1.7)	219 (4.9)!
Connecticut	77 (2.2)	227 (1.6)	18 (2.1)	216 (4.1)	5 (1.5)	216 (5.1)!
Delaware*	60 (1.3)	216 (0.9)	24 (1.1)	216 (1.7)	16 (0.8)	208 (2.1)
Dist. Columbia	47 (1.3)	188 (1.2)	41 (1.5)	183 (1.7)	12 (0.5)	198 (2.5)
Florida	71 (3.1)	210 (1.8)	25 (2.9)	210 (2.3)	4 (1.0)	201 (6.8)!
Georgia	73 (3.0)	214 (1.9)	21 (2.8)	212 (3.3)	6 (1.2)	197 (5.4)!
Hawaii	68 (3.3)	206 (1.9)	22 (2.3)	199 (3.2)	10 (2.2)	198 (4.3)!
Idaho	76 (2.9)	222 (1.2)	19 (2.6)	218 (2.2)	5 (1.6)	214 (3.1)!
Indiana	60 (4.2)	222 (1.8)	32 (4.1)	223 (1.9)	8 (1.5)	227 (4.4)
Iowa	84 (3.2)	227 (1.1)	10 (2.2)	225 (3.3)!	7 (2.2)	222 (4.0)!
Kentucky	44 (4.3)	213 (1.9)	35 (4.0)	214 (2.1)	21 (3.3)	213 (2.6)
Louisiana	44 (3.7)	208 (1.9)	39 (3.6)	205 (2.3)	17 (2.6)	197 (3.9)
Maine*	77 (3.5)	229 (1.4)	19 (3.1)	228 (2.9)	5 (1.5)	221 (4.0)!
Maryland	68 (3.1)	215 (2.0)	25 (2.9)	204 (3.7)	7 (1.8)	211 (6.6)!
Massachusetts	68 (3.5)	229 (1.4)	27 (3.1)	229 (2.0)	5 (1.4)	205 (5.9)!
Michigan	70 (3.5)	219 (2.0)	23 (3.1)	213 (3.6)	8 (2.1)	214 (3.8)!
Minnesota	68 (4.0)	223 (1.8)	25 (3.5)	217 (2.8)	6 (1.6)	223 (6.2)!
Mississippi	39 (3.4)	206 (2.1)	46 (3.0)	196 (2.3)	15 (2.6)	198 (4.2)
Missouri	68 (3.6)	223 (1.7)	24 (3.3)	218 (2.0)	8 (2.0)	220 (4.8)!
Nebraska*	76 (3.2)	223 (1.2)	20 (3.2)	222 (3.6)	4 (1.5)	*** (***)
New Hampshire*	73 (2.9)	231 (1.6)	25 (2.7)	228 (2.4)	2 (0.9)	*** (***)
New Jersey*	45 (4.4)	226 (2.0)	32 (4.0)	224 (3.3)	23 (3.4)	223 (4.1)
New Mexico	57 (4.0)	214 (1.8)	33 (3.7)	211 (4.5)	9 (2.1)	204 (7.0)!
New York*	72 (3.1)	217 (1.5)	18 (2.3)	214 (4.4)	9 (2.1)	210(10.7)!
North Carolina	68 (3.2)	213 (1.8)	22 (2.3)	212 (2.0)	10 (2.0)	208 (4.1)!
North Dakota	68 (4.6)	227 (1.4)	23 (3.4)	227 (2.5)	9 (3.3)	224 (9.0)!
Ohio	66 (3.7)	219 (1.8)	28 (3.3)	220 (2.2)	7 (2.0)	213 (9.8)!
Oklahoma	57 (4.0)	224 (1.2)	36 (3.7)	221 (1.6)	7 (2.0)	210 (3.3)!
Pennsylvania	60 (4.0)	225 (2.1)	26 (2.9)	217 (2.2)	14 (2.7)	215 (4.0)
Rhode Island	68 (3.5)	221 (2.0)	24 (3.3)	214 (3.9)	8 (2.0)	212 (5.7)!
South Carolina	67 (3.5)	212 (1.6)	24 (2.8)	211 (2.7)	8 (1.8)	203 (4.7)!
Tennessee	42 (3.2)	213 (2.5)	43 (3.1)	214 (1.8)	15 (2.3)	207 (5.1)
Texas	64 (2.8)	218 (1.8)	29 (2.6)	212 (2.9)	7 (1.6)	204 (8.2)!
Utah	78 (3.0)	222 (1.2)	14 (2.5)	222 (2.6)	8 (1.5)	214 (3.9)
Virginia	68 (3.4)	225 (1.9)	24 (2.7)	217 (2.1)	8 (1.6)	217 (3.6)
West Virginia	51 (3.9)	219 (1.9)	29 (3.2)	214 (2.5)	20 (3.0)	212 (3.2)
Wisconsin	72 (3.7)	226 (1.0)	24 (3.4)	223 (2.5)	4 (1.2)	221 (8.1)!
Wyoming	71 (3.0)	226 (1.3)	23 (2.7)	219 (2.6)	5 (1.8)	228 (6.5)!
TERRITORY						
Guam	69 (1.0)	182 (1.6)	23 (0.9)	177 (3.0)	8 (0.5)	188 (4.2)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error. ***Sample size insufficient to permit reliable estimate. There were fewer than 62 students. !Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 17 **Students' Reports on the Frequency with Which They Are Provided Time for Reading Books of Their Own Choosing, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Almost Every Day		At Least Once a Week		Less Than Weekly	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	55 (1.5)	223 (1.3)	27 (1.1)	215 (1.7)	18 (0.8)	203 (1.4)
Northeast	55 (5.5)	229 (4.8)	27 (3.6)	216 (3.3)	18 (2.5)	211 (3.9)
Southeast	53 (2.6)	218 (3.3)	26 (1.6)	212 (2.5)	21 (1.6)	201 (3.1)
Central	57 (1.9)	224 (1.9)	28 (2.2)	220 (3.4)	15 (1.5)	203 (3.4)
West	55 (1.8)	222 (1.5)	28 (1.3)	212 (3.7)	18 (1.1)	198 (3.0)
STATES						
Alabama	43 (1.5)	213 (2.2)	32 (1.0)	208 (1.9)	25 (1.1)	203 (2.0)
Arizona	54 (1.2)	217 (1.3)	28 (1.1)	207 (2.3)	19 (0.9)	200 (2.1)
Arkansas	50 (1.7)	216 (1.9)	31 (1.2)	211 (1.9)	20 (1.1)	203 (2.0)
California	57 (1.4)	214 (2.0)	25 (1.1)	201 (2.8)	18 (0.8)	187 (3.0)
Colorado	57 (1.5)	224 (1.2)	27 (1.2)	216 (1.6)	16 (1.0)	204 (2.3)
Connecticut	54 (1.5)	229 (1.3)	27 (1.2)	223 (2.1)	19 (0.8)	211 (2.4)
Delaware*	53 (1.0)	219 (0.9)	25 (0.9)	214 (1.8)	22 (1.1)	206 (2.7)
Dist. Columbia	50 (1.0)	193 (1.2)	29 (0.8)	192 (1.6)	21 (0.9)	188 (1.6)
Florida	50 (1.5)	215 (1.4)	29 (1.0)	210 (2.1)	21 (0.9)	201 (2.2)
Georgia	55 (1.2)	220 (1.6)	29 (1.0)	211 (2.0)	16 (0.8)	202 (2.5)
Hawaii	53 (1.3)	211 (1.8)	28 (1.0)	202 (2.1)	19 (0.9)	194 (2.1)
Idaho	60 (1.7)	226 (1.1)	24 (1.1)	218 (1.5)	16 (1.0)	209 (2.4)
Indiana	52 (1.7)	225 (1.4)	29 (1.2)	222 (1.9)	18 (1.1)	217 (2.3)
Iowa	69 (1.4)	232 (1.0)	20 (1.0)	223 (1.8)	11 (0.7)	208 (2.3)
Kentucky	44 (1.9)	219 (1.6)	31 (1.1)	212 (1.8)	25 (1.5)	209 (2.1)
Louisiana	42 (1.4)	207 (1.5)	33 (1.1)	206 (1.6)	25 (1.1)	202 (1.9)
Maine*	59 (1.9)	231 (1.3)	24 (1.3)	227 (1.9)	17 (1.3)	222 (2.2)
Maryland	51 (1.5)	219 (1.7)	29 (1.2)	211 (2.2)	21 (1.1)	205 (2.3)
Massachusetts	56 (1.7)	232 (1.0)	28 (1.3)	224 (1.6)	16 (0.9)	223 (2.2)
Michigan	55 (1.4)	224 (1.8)	27 (1.1)	214 (1.4)	18 (0.9)	206 (2.9)
Minnesota	56 (1.7)	227 (1.2)	31 (1.4)	222 (1.6)	13 (0.8)	205 (2.5)
Mississippi	41 (1.6)	203 (1.7)	32 (1.2)	202 (2.0)	26 (1.2)	196 (2.1)
Missouri	59 (1.5)	227 (1.2)	25 (1.3)	219 (2.0)	15 (1.0)	207 (2.3)
Nebraska*	64 (1.7)	227 (1.3)	22 (1.2)	217 (1.7)	14 (1.2)	215 (3.1)
New Hampshire*	64 (1.6)	234 (1.2)	23 (1.3)	225 (2.0)	13 (1.2)	219 (2.2)
New Jersey*	41 (2.1)	227 (1.6)	33 (1.3)	224 (1.9)	26 (1.8)	223 (3.1)
New Mexico	47 (1.6)	215 (1.9)	32 (1.5)	212 (2.4)	21 (1.0)	210 (2.5)
New York*	54 (1.4)	220 (1.4)	27 (1.1)	215 (2.2)	19 (1.1)	209 (3.9)
North Carolina	54 (1.7)	218 (1.3)	28 (1.1)	213 (1.8)	18 (0.9)	202 (2.6)
North Dakota	57 (1.7)	231 (1.3)	27 (1.3)	227 (1.6)	16 (1.1)	217 (2.6)
Ohio	54 (1.8)	222 (1.4)	29 (1.3)	219 (2.1)	17 (1.0)	212 (2.4)
Oklahoma	51 (1.6)	225 (1.3)	31 (1.5)	222 (1.3)	18 (0.9)	215 (2.2)
Pennsylvania	54 (1.9)	226 (1.5)	29 (1.3)	220 (1.8)	17 (1.0)	215 (2.1)
Rhode Island	53 (1.7)	223 (2.0)	28 (1.2)	217 (2.2)	19 (1.1)	212 (3.2)
South Carolina	51 (1.5)	215 (1.4)	30 (1.1)	212 (1.9)	19 (1.1)	204 (2.1)
Tennessee	46 (1.4)	216 (1.7)	33 (1.3)	215 (2.0)	21 (1.0)	207 (2.1)
Texas	50 (1.9)	219 (1.8)	31 (1.5)	214 (2.0)	19 (1.0)	205 (2.2)
Utah	60 (1.5)	228 (1.2)	25 (1.2)	217 (1.7)	15 (0.9)	209 (2.4)
Virginia	54 (1.8)	226 (1.7)	29 (1.1)	220 (1.9)	17 (1.1)	217 (2.4)
West Virginia	45 (1.3)	222 (1.6)	30 (1.0)	218 (1.7)	25 (1.0)	210 (1.9)
Wisconsin	58 (1.6)	230 (1.1)	28 (1.2)	222 (1.6)	14 (0.9)	212 (2.8)
Wyoming	59 (1.5)	228 (1.3)	25 (1.1)	223 (1.7)	16 (1.1)	219 (2.1)
TERRITORY						
Guam	42 (1.0)	186 (1.9)	32 (1.2)	191 (1.7)	26 (1.0)	171 (2.7)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

Reading for Fun Outside Of School

The relationship between the amount of reading done outside of school and reading achievement has been well documented by NAEP and other studies. As part of the 1992 reading assessment, NAEP asked students in grades 4, 8, and 12 to report on the frequency with which they read for fun on their own time. The results are shown in TABLE 18. At all three grades, students who reported reading more frequently for fun on their own time had successively higher average reading proficiency than those who reported reading less frequently. However, 13 percent of the students at grade 4 and one-fourth of those at grades 8 and 12 reported that they never or hardly ever read for fun.

The corresponding results for fourth graders participating in the Trial State Assessment Program are presented in TABLE 19. The national pattern is clearly reflected in these data. In general, students who reported more frequent leisure reading had higher average reading proficiency. In particular, those who reported never or hardly ever engaging in such reading had significantly lower proficiency than students who reported such reading on at least a weekly basis. Across participating jurisdictions, from 9 to 17 percent of the fourth graders reported that they never read for fun.

TABLE 18 Students' Reports on Frequency of Reading for Fun on Their Own Time, Grades 4, 8, and 12, 1992 Reading Assessment

	Almost Every Day		Once or Twice a Week		Once or Twice a Month		Never or Hardly Ever	
	Percentage of Students	Average Proficiency	Percentage of Stndents	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Grade 4	44(0.9)	225(1.2)	32(0.8)	220(1.2)	12(0.4)	211(1.6)	13(0.5)	200(1.9)
Grade 8	22(0.5)	277(1.1)	28(0.6)	263(1.0)	25(0.5)	258(1.2)	25(0.7)	246(1.4)
Grade 12	23(0.6)	303(0.9)	28(0.7)	295(0.7)	26(0.5)	289(0.9)	24(0.6)	277(1.0)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

TABLE 19 | **Students' Reports on Frequency of Reading for Fun on Their Own Time, Grade 4, 1992 Reading Assessment**

PUBLIC SCHOOLS	Almost Every Day		Once or Twice a Week		Once or Twice a Month		Never or Hardly Ever	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	43 (1.0)	223 (1.3)	32 (0.9)	218 (1.3)	12 (0.5)	209 (1.8)	13 (0.6)	199 (2.0)
Northeast	43 (2.6)	231 (4.5)	35 (2.4)	220 (3.8)	12 (1.1)	211 (5.3)	10 (1.2)	200 (4.8)
Southeast	40 (1.8)	216 (3.0)	32 (1.6)	214 (2.8)	14 (0.8)	208 (3.6)	14 (1.6)	201 (3.4)
Central	42 (1.7)	227 (1.8)	33 (1.6)	220 (2.3)	11 (0.9)	211 (3.7)	14 (1.2)	204 (3.5)
West	48 (2.2)	219 (2.0)	28 (2.0)	218 (2.2)	11 (1.0)	206 (2.9)	14 (1.0)	191 (4.0)
STATES								
Alabama	38 (1.2)	212 (2.4)	34 (1.1)	210 (1.9)	12 (0.7)	205 (2.6)	16 (0.7)	197 (2.2)
Arizona	40 (1.1)	217 (1.4)	33 (1.0)	211 (1.7)	11 (0.7)	203 (2.3)	16 (0.9)	199 (2.1)
Arkansas	39 (1.2)	217 (1.9)	34 (1.0)	213 (1.3)	12 (0.8)	206 (2.7)	16 (0.8)	199 (2.1)
California	45 (1.1)	212 (2.2)	32 (1.0)	200 (2.5)	11 (0.7)	196 (3.2)	12 (0.8)	190 (3.3)
Colorado	44 (1.0)	225 (1.3)	34 (0.9)	216 (1.4)	11 (0.6)	215 (2.2)	11 (0.6)	202 (1.9)
Connecticut	46 (1.1)	230 (1.7)	32 (0.8)	220 (1.6)	12 (0.7)	219 (2.5)	11 (0.6)	207 (2.7)
Delaware*	41 (1.2)	220 (1.4)	33 (1.1)	215 (1.6)	11 (0.8)	210 (2.7)	14 (0.8)	197 (2.1)
Dist. Columbia	44 (1.0)	192 (1.2)	37 (0.9)	190 (1.2)	9 (0.6)	184 (2.9)	10 (0.7)	178 (2.8)
Florida	38 (1.2)	214 (1.6)	34 (1.1)	212 (1.9)	13 (0.7)	206 (2.0)	15 (0.9)	195 (2.3)
Georgia	44 (1.4)	219 (1.9)	32 (1.0)	215 (1.8)	11 (0.7)	206 (2.9)	13 (0.7)	198 (2.4)
Hawaii	42 (1.2)	210 (2.0)	35 (1.1)	203 (2.0)	11 (0.7)	202 (2.9)	12 (0.6)	192 (2.7)
Idaho	45 (1.2)	226 (1.3)	31 (0.8)	220 (1.1)	11 (0.8)	217 (1.9)	13 (0.7)	205 (2.4)
Indiana	41 (1.3)	229 (1.7)	32 (1.1)	222 (1.3)	14 (0.6)	221 (2.3)	14 (0.7)	206 (2.1)
Iowa	50 (1.2)	233 (1.3)	30 (1.0)	225 (1.3)	10 (0.6)	218 (2.0)	10 (0.7)	210 (2.1)
Kentucky	38 (1.1)	219 (1.9)	33 (0.9)	215 (1.4)	13 (0.8)	214 (2.9)	17 (0.8)	201 (2.0)
Louisiana	38 (1.1)	208 (1.4)	35 (0.9)	206 (1.5)	11 (0.6)	206 (2.3)	15 (0.9)	194 (2.5)
Maine*	43 (1.5)	234 (1.4)	33 (1.2)	227 (1.3)	12 (0.7)	224 (1.9)	11 (1.0)	213 (2.1)
Maryland	42 (1.1)	221 (1.9)	35 (1.0)	211 (1.7)	12 (0.6)	207 (2.5)	11 (0.7)	194 (3.3)
Massachusetts	46 (1.2)	234 (1.2)	34 (1.1)	225 (1.0)	12 (0.7)	223 (2.4)	9 (0.7)	211 (2.2)
Michigan	44 (1.2)	224 (1.9)	34 (1.1)	216 (1.6)	12 (0.7)	209 (2.4)	10 (0.6)	207 (3.0)
Minnesota	47 (1.3)	230 (1.2)	33 (1.1)	221 (1.5)	10 (0.6)	212 (2.9)	10 (0.8)	204 (2.7)
Mississippi	41 (1.1)	202 (1.7)	32 (0.9)	202 (2.0)	10 (0.6)	200 (2.5)	17 (1.0)	192 (2.3)
Missouri	43 (1.0)	227 (1.7)	32 (0.9)	222 (1.5)	11 (0.7)	220 (2.6)	13 (0.8)	205 (1.9)
Nebraska*	45 (1.1)	228 (1.5)	32 (0.9)	223 (1.4)	11 (0.8)	221 (2.1)	12 (0.8)	203 (2.7)
New Hampshire*	48 (1.6)	236 (1.2)	31 (1.2)	228 (1.5)	11 (0.7)	224 (2.6)	10 (0.8)	210 (2.6)
New Jersey*	39 (1.4)	232 (1.8)	36 (0.9)	225 (1.6)	14 (0.8)	220 (2.0)	11 (1.0)	203 (2.9)
New Mexico	41 (1.5)	218 (1.6)	33 (1.0)	212 (2.4)	11 (0.6)	214 (2.8)	15 (0.8)	194 (2.8)
New York*	44 (1.1)	221 (1.9)	34 (1.0)	216 (1.7)	13 (0.8)	214 (1.9)	10 (0.6)	201 (3.3)
North Carolina	46 (1.3)	219 (1.5)	31 (1.0)	212 (1.4)	10 (0.6)	207 (3.2)	13 (0.7)	198 (2.5)
North Dakota	43 (1.3)	234 (1.4)	33 (1.0)	226 (1.3)	13 (0.7)	222 (2.2)	11 (0.8)	212 (2.5)
Ohio	41 (1.2)	226 (1.6)	35 (1.0)	217 (1.7)	12 (0.7)	214 (2.6)	12 (0.7)	204 (2.8)
Oklahoma	40 (1.1)	225 (1.3)	32 (1.0)	225 (1.9)	12 (0.7)	221 (2.1)	16 (0.9)	207 (2.0)
Pennsylvania	43 (1.0)	227 (1.8)	35 (1.0)	221 (1.3)	12 (0.6)	221 (2.5)	9 (0.6)	206 (3.0)
Rhode Island	47 (1.3)	223 (2.4)	32 (1.1)	217 (1.7)	11 (0.8)	216 (2.7)	10 (0.7)	197 (3.3)
South Carolina	42 (1.1)	216 (1.7)	34 (0.9)	211 (1.6)	11 (0.6)	210 (2.6)	14 (0.8)	196 (2.0)
Tennessee	38 (1.1)	219 (1.9)	37 (1.1)	213 (1.7)	13 (0.8)	208 (2.8)	12 (0.9)	201 (2.5)
Texas	43 (1.1)	218 (2.0)	32 (1.1)	215 (1.7)	10 (0.6)	212 (2.6)	15 (0.9)	202 (2.0)
Utah	46 (1.1)	228 (1.4)	30 (0.7)	222 (1.5)	10 (0.7)	214 (2.2)	13 (0.7)	207 (2.1)
Virginia	46 (1.2)	228 (1.6)	31 (1.0)	223 (1.9)	12 (0.7)	216 (2.4)	11 (0.8)	204 (2.3)
West Virginia	38 (1.1)	224 (1.9)	35 (1.0)	218 (1.5)	12 (0.7)	212 (2.1)	16 (0.9)	201 (1.9)
Wisconsin	46 (1.1)	233 (1.3)	34 (1.0)	222 (1.4)	10 (0.6)	217 (2.4)	10 (0.5)	206 (2.8)
Wyoming	49 (1.1)	230 (1.1)	30 (0.9)	224 (1.8)	9 (0.6)	217 (2.0)	12 (0.6)	207 (2.1)
TERRITORY								
Guam	39 (1.0)	187 (1.8)	35 (1.0)	186 (1.7)	10 (0.6)	175 (3.2)	16 (0.8)	174 (3.4)

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

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment.

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The work presented herein represents the efforts of the thousands of individuals who are necessary to implement a project of this size and scope. From the considerable expertise, energy, and dedication required to develop and conduct NAEP's 1992 reading assessment to that necessary to analyze and report it, many persons have made important and substantial contributions. Most importantly, NAEP is grateful to students and school staff who made the assessment possible.

NAEP's 1992 reading assessment, including the Trial State Assessment Program, was truly a collaborative effort among staff from State Education Agencies, the National Center for Education Statistics (NCES), the National Assessment Governing Board (NAGB), Educational Testing Service (ETS), Westat, and National Computer Systems (NCS). The program benefited from the contributions of hundreds of individuals at the state and local levels -- Governors, Chief State School Officers, State and District Test Directors, State Coordinators, and district administrators -- who tirelessly provided their wisdom, experience, and hard work.

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The NAEP project at ETS resides in the Center for the Assessment of Educational Progress (CAEP) managed by Archie Lapointe. Under the NAEP contract to ETS, Ina Mullis served as the Project Director. Stephen Koffler managed test development activities, and he and John Olson coordinated state services. Jay Campbell and Mary Foertsch 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 Renee Slobasky, Nancy Caldwell, and Keith Rust. Printing, distribution, scoring, and processing activities were conducted by NCS, under the supervision of John O'Neill, Judy Moyer, Diane Smrdel, Lavonne Mohn, Brad Thayer, and Mathilde Kennel.

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