



Policy Information Report

The Fourth-Grade Reading Classroom

Policy Evaluation
and Research
Center

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Preface

Teachers and classrooms are in the forefront as the nation continues to implement the No Child Left Behind Act and pursues the critical goal of closing the achievement gap among our children. Effective literacy and reading instruction are keys to achieving those objectives. The National Research Council has concluded that “quality classroom instruction in kindergarten and the primary grades is the single best weapon against reading failure.” This raises some critical questions, including the following three: What does reading instruction look like in our nation’s classrooms? How is that instruction different for students of various groups? And what are the characteristics of the teachers who deliver that instruction?

To answer these questions, Richard Coley and Ashaki Coleman take advantage of the unique capability of the National Assessment of Educational Progress (NAEP) to peer into the nation’s schools and draw a picture of fourth-grade reading classrooms. Their picture includes teacher training, certification, and experience; the climate and characteristics of the school environment like class size and time on task; and the kinds of instructional and assessment practices that teachers use in their classrooms. In addition to the overall picture, Coley and Coleman examine the fourth graders and the schools they attend through a variety

of lenses, including distinctions by students’ race/ethnicity and socioeconomic status, as well as by characteristics of the schools they attend.

The news that Coley and Coleman provide is mixed. On one hand, the overall health of fourth-grade reading instruction appears to be good. At least at the fourth-grade level, most teachers are fully certified and well experienced. The majority of teachers feel that they are provided with sufficient resources to teach their classes and are confident in their teaching abilities. And, most important, teachers appear to be matching their instruction to the needs of their students. On the other hand, not all students share equally in the resources. Some groups of students, for example, are more likely to attend schools with high teacher turnover or to be in large classes.

The view provided in this report gives us a sense of the status of reading instruction in the nation’s fourth-grade classrooms. If we are to succeed in reducing and eliminating the achievement gap among our students, we must ensure that all students are provided with the instructional resources that enable them to succeed in school. Databases like NAEP allow us to probe into the nation’s classrooms to see if all students share equally in the available resources and have equal chances for success. Our children, and our nation, deserve no less.

Michael T. Nettles
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Executive Summary

Effective reading and literacy instruction are keys to educational success and form a critical component in efforts to close the gaps in student achievement between social classes and between racial/ethnic groups. The National Research Council has concluded that “quality classroom instruction in kindergarten and the primary grades is the single best weapon against reading failure.”¹

This report draws on data from the National Assessment of Educational Progress (NAEP) to provide a picture of the fourth-grade reading classroom.² The picture includes views of teachers and their training, the climate and characteristics of the school environment, and the kinds of instructional and assessment practices that teachers use in reading instruction. In addition to describing the national picture, the report focuses on differences among different types of schools and among racial/ethnic groups of students.

The fourth-grade reading classroom seen through the lens of the data examined for this report presents a mixed picture. First and foremost, there is much good news. In most U.S. fourth-grade reading classrooms, the teachers appear to meet typical state teacher certification requirements. Nearly all hold a bachelor’s degree and many hold graduate degrees. Similarly, nearly all have standard or regular state certification and many teachers have attained advanced certification. Finally, this population of teachers is experienced: over half have taught for more than 10 years.

Most teachers feel that they are provided with adequate resources to teach, and class sizes, for the most part, are small. Most fourth graders have teachers who feel well prepared and confident to teach reading, and their teachers’ instructional practices seem to align fairly well with current notions of effective reading instruction, such as those recommended by the National Reading Panel. In addition, there appears to be some matching of the needs of particular students with the instruction that is provided to them. For example, Hispanic students are more likely than other students to have teachers who feel well prepared to teach limited-English-proficient students. Similarly, students attend-

ing Title I schools appear to be getting more reading instruction than other students.

There is also bad news. Not all students share equally in educational resources. Black students, for example, are more likely than White and Asian students to attend schools with high teacher turnover. And Hispanic fourth graders are more likely than Black and White fourth graders to be in larger classes. More differences among racial/ethnic groups of students and among students attending different types of schools are described in the report.

An overall summary is provided below.

The Teachers

- Fourth-grade reading teachers appear to have appropriate academic credentials: 58 percent have bachelor’s degrees and 36 percent have master’s degrees. Most undergraduate majors were in elementary education (79 percent); the most common graduate major was also elementary education (49 percent).
- Nearly all fourth graders are taught by teachers who have regular or standard certification; 13 percent have advanced or professional certification.
- Fourth-grade reading teachers are well experienced as a group. More than half have more than 10 years of experience, and 19 percent have 25 years or more.
- The majority of fourth graders had teachers who felt well prepared for classroom management and organization; for teaching spelling, grammar, and mechanics; for teaching content area reading; for literature-based instruction; for instruction combining reading and writing; and for teaching writing.
- Few students had teachers who felt well prepared for teaching limited-English-proficient students or for using software to teach reading or writing.

¹ Catherine E. Snow, M. Susan Burns, and Peg Griffin (Eds.), *Preventing Reading Difficulties in Young Children*, National Research Council, Washington, DC: National Academy Press, 1998.

² NAEP is a nationally representative and continuing assessment of what America’s students know and can do in various subjects.

The Schools

- Teacher attendance and attrition do not seem to be general problems: 70 percent or more of fourth graders attend schools where 2 percent or fewer teachers are absent on an average day and no teachers leave before the end of the school year.
- Most fourth graders' teachers reported that they received all or most of the resources needed to teach their classes.
- On average, fourth-grade students are in small classes. More than one-third of students were in classes with 20 or fewer students.
- Although most fourth-grade reading instruction is delivered in self-contained classrooms (53 percent), 39 percent of students are "regrouped" for instruction, and 8 percent have "departmentalized" instruction.
- More than half of the fourth graders receive between 45 and 90 minutes of reading instruction per day; 39 percent receive between 60 and 90 minutes.
- About one-third of fourth graders' teachers reported that students were grouped for reading by ability; another third said that students were not grouped at all.
- Ninety percent of fourth graders' teachers reported that some part of their class received remedial reading instruction; only 41 percent reported some remedial writing instruction.

Instructional Practices

- While 30 percent of fourth graders' teachers teach reading to the whole class as a group, 41 percent indicated they taught the whole class with flexible groups. About 20 percent break the class into more than two groups.
- More than half of the fourth graders' teachers use both basal and trade materials as the core of the reading program.
- Seventy percent of the fourth-grade students' teachers indicated that they used integrated reading and writing as a central part of their instruction. The rest use that method as a supplement. Forty-three percent indicated that writing about literature was a central part of their instruction, 50 percent said it was a supplemental part of instruction, and 7 percent did not use it at all.
- Fourth graders were more likely to have teachers who focus instruction on reading to gain information than on reading to perform a task.
- The most frequently used instructional practices were asking students to read silently and helping students to understand new words. About 80 percent of students' teachers reported using these techniques almost every day. Teachers report infrequently having students do projects about what they have read, giving quizzes or tests, or using children's newspapers and magazines.

Classroom Assessment Practices

- The most frequently used assessment practices were having students write paragraphs about what they had read, giving short-answer tests, and giving oral reading assessments.
- Few students had teachers who reported frequent use of reading portfolios, having students do extended writing, or having students do individual or group projects or presentations.

Introduction

Effective reading and literacy instruction are keys to educational success and form a critical component in efforts to close the gaps in student achievement between social classes and between racial/ethnic groups. The National Research Council has concluded that “quality classroom instruction in kindergarten and the primary grades is the single best weapon against reading failure.”³

In recognition of the importance of reading, there has been a renewed focus on trying to determine the best way or ways to teach it. For example, one of the most important efforts was undertaken in 1997 by the National Reading Panel (NRP). At the request of Congress, the panel spent two years examining research studies of various approaches to teaching reading. Following a series of regional hearings, the NRP settled on the following topics for study: alphabetic, including instruction in phonemic awareness and phonics; fluency; comprehension, including instruction in vocabulary and text comprehension, and teacher preparation and comprehension strategies and instruction; teacher education and reading instruction; and computer technology and reading instruction. Using an objective research review methodology, the NRP undertook a comprehensive, formal, evidence-based analysis of the experimental and quasi-experimental research literature relevant to the selected topics. Overall, the panel concluded that

- teaching children phonemic awareness significantly improves their reading achievement more than instruction that lacks any attention to phonemic awareness;

- systematic phonics instruction produces significant benefits for K-6 students having difficulty learning to read;
- guided oral reading has a significant and positive impact on word recognition, fluency, and comprehension across a range of grade levels;
- direct and indirect vocabulary instruction that is appropriate to the age and ability of the reader leads to gains in comprehension;
- and teaching a combination of reading comprehension techniques, such as question answering, question generation, and summarization is most effective.⁴

Against this backdrop, this report describes the features of fourth-grade reading classrooms in U.S. schools, based on data collected as part of the 2000 National Assessment of Educational Progress (NAEP).⁵ Since NAEP is a cross-sectional design, this report cannot make any causal link between these features and NAEP reading scores. Rather, the report capitalizes on NAEP’s unique capacity to peer into the nation’s classrooms to gather data about how reading is being taught. NAEP permits us to examine information about teachers’ qualifications and teachers’ experience, including the types of degrees and certification they hold and their perceptions of the adequacy of their preparation and training; information about the climate of the school, e.g., teacher attendance, class size, and the extent of remedial instruction that is provided; information about the assessment practices of classroom teachers; and a variety of data about how teachers teach reading, including how they organize their classrooms for instruction, the types of materials

³ Snow et al., 1998.

⁴ National Reading Panel, *Report of the National Reading Panel: Teaching Children to Read, An Evidence-Based Assessment of the Scientific Research Literature on Reading and its Impact for Reading Instruction*, Washington, DC: NIFL, NICHD, 2000.

⁵ Patricia L. Donahue, Robert J. Finnegan, Anthony D. Lutkus, Nancy L. Allen and Jay R. Campbell, *The Nation’s Report Card: Fourth-Grade Reading 2000*, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, NCES 2001-499, April 2001. The findings in this report apply to the fourth grade only. It is possible or even likely that at other grade levels, results would differ. For example, it is less likely at the fourth-grade level to find teachers teaching out-of-field, since most elementary school teachers are certified in elementary education.

they use in class, and the extent to which they use a variety of instructional approaches and techniques in their classrooms.⁶

The report provides not only a national portrait of the fourth-grade reading classroom, but also an assessment of how the view differs by type of school and by the race/ethnicity of students. For example, do teachers' qualifications or experience in public schools differ from those in private schools? Do teachers' instructional practices differ by the race/ethnicity of the student or by the location of the school?

The next section of this report provides a brief overview of fourth-grade reading achievement in the United States in 2002 and how it varies for groups defined by selected student demographic factors:

- race/ethnicity
- type of school attended (public, Catholic, or other private);
- eligible for Title I funding or not; and
- community type.⁷

Because reading achievement is uneven across these groups, the major focus of this report is to investigate whether there are statistically significant differences in the reading instruction provided to the different groups of students and what the differences may be.⁸

Following the summary of reading achievement, the next section focuses on teacher preparation and qualifications, including data on teachers' attitudes about the adequacy and quality of their preparation in several instructional areas. The following section examines several factors that are related to the overall climate of a school. Subsequent sections provide information on how reading instruction is delivered in fourth-grade classrooms and detail about assessment practices in the classroom. In each section the discussion moves from an overview of the national picture to a disaggregated view, focusing on how important subgroups of students fare.

⁶ As part of the 2000 NAEP Reading Assessment, information was collected from teachers and schools on instructional practices and other school factors. The choice of the factors studied reflects the perspectives of practitioners, educational researchers, and policy makers. There may be other school conditions and practices that foster instruction and learning, but these represent factors that have been widely discussed in the school effectiveness and improvement literature and that have been the subject of many research efforts. NAEP is based on a nationally representative sample of students, not teachers. Thus, the information and data provided in this report pertain to the characteristics and practices of teachers of a representative sample of fourth-grade students, not teachers. Consequently, the percentages reported throughout this report should be interpreted as the percentage of students whose teachers possess that characteristic or use that practice.

⁷ NAEP results are reported for students attending schools in three mutually exclusive location types: central city, urban fringe/large town, and rural/small town.

⁸ All differences discussed are statistically significant based on the False Discovery Rate (FDR) technique, a conservative approach for making comparisons across groups.

Overview of Fourth-Grade Reading Achievement

This section of the report provides an overview of the reading achievement of fourth-grade students as measured and reported by the National Assessment of Educational Progress (NAEP).⁹ In 2002, the average NAEP score for fourth graders was 219 (on a scale of 0 to 500), with girls scoring higher than boys (222 versus 215). This score was an improvement over the average scores in 1994, 1998, and 2000, but was not significantly different from the average score in 1992.

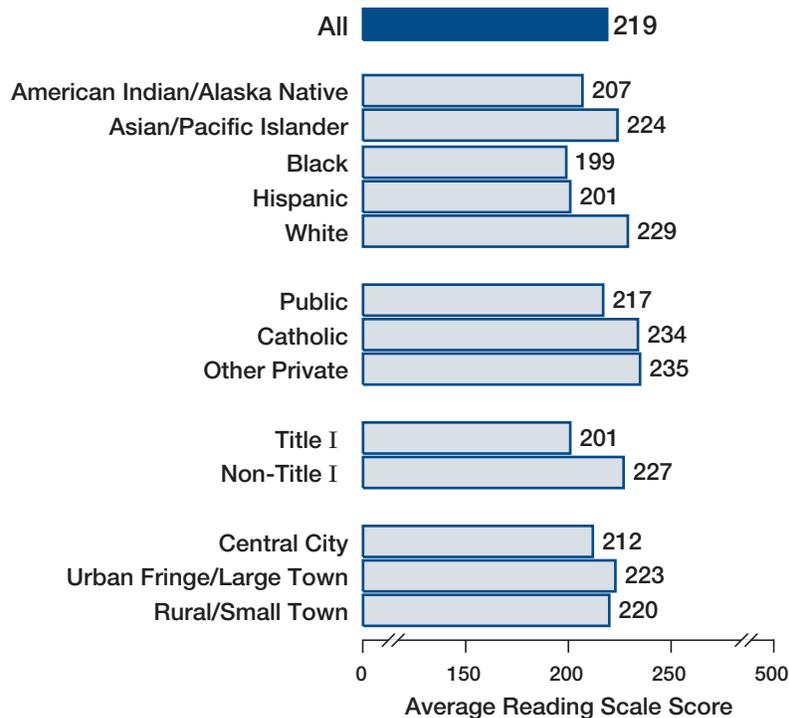
Figure 1 shows the average scores for selected subgroups of fourth graders.

White and Asian/Pacific Islander¹⁰ students scored higher than students in the other racial/ethnic groups,

and White students also scored higher than Asian/Pacific Islanders. American Indian/Alaska Native fourth graders had higher average scores than Black and Hispanic fourth graders.

There were also significant differences among students attending different types of schools. Students who attended non-public schools had higher average reading scores than their public school peers. Also, students attending schools that were not eligible for Title I funding had higher scores, on average, than students in schools eligible for that funding. Finally, students attending schools in urban fringe/large town areas outperformed students in schools in central city and rural areas.

Figure 1:
Average NAEP Reading Scores, Grade 4, 2002



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

⁹ All differences discussed here are statistically significant. For more complete results for 2002, see W.S. Grigg, M.C. Daane, Y. Jin, and J.R. Campbell, *The Nation's Report Card: Reading 2002*, Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, NCES 2003-521, June 2003.

¹⁰ For brevity, these students are referred to as "Asian" in this report.

NAEP also reports results in terms of the percentages of students who scored below, at, or above three levels of reading achievement: *Basic*, *Proficient*, and *Advanced*. These data are shown in Table 1.¹¹ As this table shows, more than half the Black and Hispanic fourth graders scored below the *Basic* level. The differences viewed in this way generally mirror the differences in average reading scale scores.

The achievement data discussed in this section of the report provide an important indicator of educational outcomes in reading. Teachers and schools are increasingly being held accountable for reading outcomes. Thus, the next section of this report provides and discusses data about fourth-grade reading teachers, their schools, their preparation, and their teaching.

Table 1:
Percentage of Students Scoring at or Below Each NAEP Reading Achievement Level, Grade 4, 2002

	Below Basic	At Basic	At Proficient	At Advanced
All	36	32	24	7
American Indian/Alaska Native	49	29	17	5
Asian/Pacific Islander	30	33	27	10
Black	60	28	11	2
Hispanic	56	29	13	2
White	25	35	31	10
Public	38	32	23	6
Catholic	20	33	34	13
Other Private	20	32	35	14
Title I	56	29	13	2
Non-Title I	26	34	30	10
Central City	45	30	20	6
Urban Fringe/Large Town	31	33	27	9
Rural/Small Town	34	35	25	6

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

¹¹ These student performance standards, or "achievement levels," are defined by the National Assessment Governing Board. The *Basic* level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade. For fourth graders, *Basic* is described as follows: "Fourth-grade students performing at this level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences, and extend the ideas in the text by making simple inferences."

The Teachers

Overall, fourth-grade reading teachers appear to meet typical state teacher certification requirements and have confidence in their abilities to teach. Nearly all have at least a bachelor's degree and many have earned a master's degree. Nearly all have standard teacher certification and many have attained advanced or professional certification. As a group, they have much teaching experience; many have 25 or more years of experience in the classroom. The majority of teachers feel that their teacher education programs and professional development activities were effective in preparing them in classroom management and organization and in several important aspects of teaching reading.

It is well recognized that the quality of teaching is a key determinant of student reading achievement.¹² One of the more significant requirements of the No Child Left Behind Act (NCLB) is that by the end of the 2005–2006 school year, all teachers of core academic subjects must be “highly qualified.” According to the law, to be highly qualified, teachers must hold at least a bachelor's degree from a four-year institution, must have full state certification, and must demonstrate competence in their subject area. Newly hired elementary school teachers working in core academic areas must pass a rigorous state test of subject knowledge and teaching skills in reading/language arts, writing, mathematics, and other areas of the basic elementary curriculum.¹³ Veteran elementary school teachers may show content knowledge by passing a test or by meeting special requirements set by each state within broad federal guidelines.¹⁴

NAEP asks teachers of assessed students a number of questions bearing on teacher qualifications. These data include the highest education degree attained, the subjects of their major and minor in undergraduate and graduate preparation, the type of certification they held in the main field of their assignment, and the number of years they had taught. The teachers were also asked to rate how well prepared they were, by their college or university courses or professional development workshops, in a number of aspects of instruction.

This section presents those data for the nation as a whole and also notes areas where differences in teachers' preparation, experience, and confidence exist based on students' race/ethnicity; whether they attend public, Catholic, or other private schools; whether or not their schools provide Title I services; and the type of community (central city, urban fringe/large town, or rural/small town) in which they attend school.

Highest Academic Degree

Most of these fourth-grade students had teachers who are well prepared academically, and thus would meet the academic requirements of NCLB for teachers. Ninety-four percent of the students' teachers held a bachelor's or master's degree; 58 percent of the teachers reported a bachelor's degree as their highest degree and 36 percent reported holding a master's degree. Five percent held a degree termed “education specialist.”

Public school students were more likely than students attending Catholic schools and other private schools to have teachers with master's degrees; 38 percent of public school students had teachers with a master's degree, compared to 21 and 19 percent of students in Catholic and other private schools, respectively. Conversely, students attending Catholic schools (74 percent) and other private schools (76 percent) were more likely than public school students (56 percent) to have teachers whose highest degree was a bachelor's.

¹² International Reading Association, *Prepared to Make a Difference*, National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction, 2003.

¹³ U.S. Department of Education, Office of Policy Planning and Innovation, *Meeting the Highly Qualified Teachers Challenge: The Secretary's Second Annual Report on Teacher Quality*, June 2003.

¹⁴ See “Rigor Disputed in Standard for Teachers,” *Education Week*, January 14, 2004. The Education Commission of the States (ECS) maintains a data base showing each state's efforts in developing a “high objective uniform state standard of evaluation,” or HOUSEE, as required by NCLB.

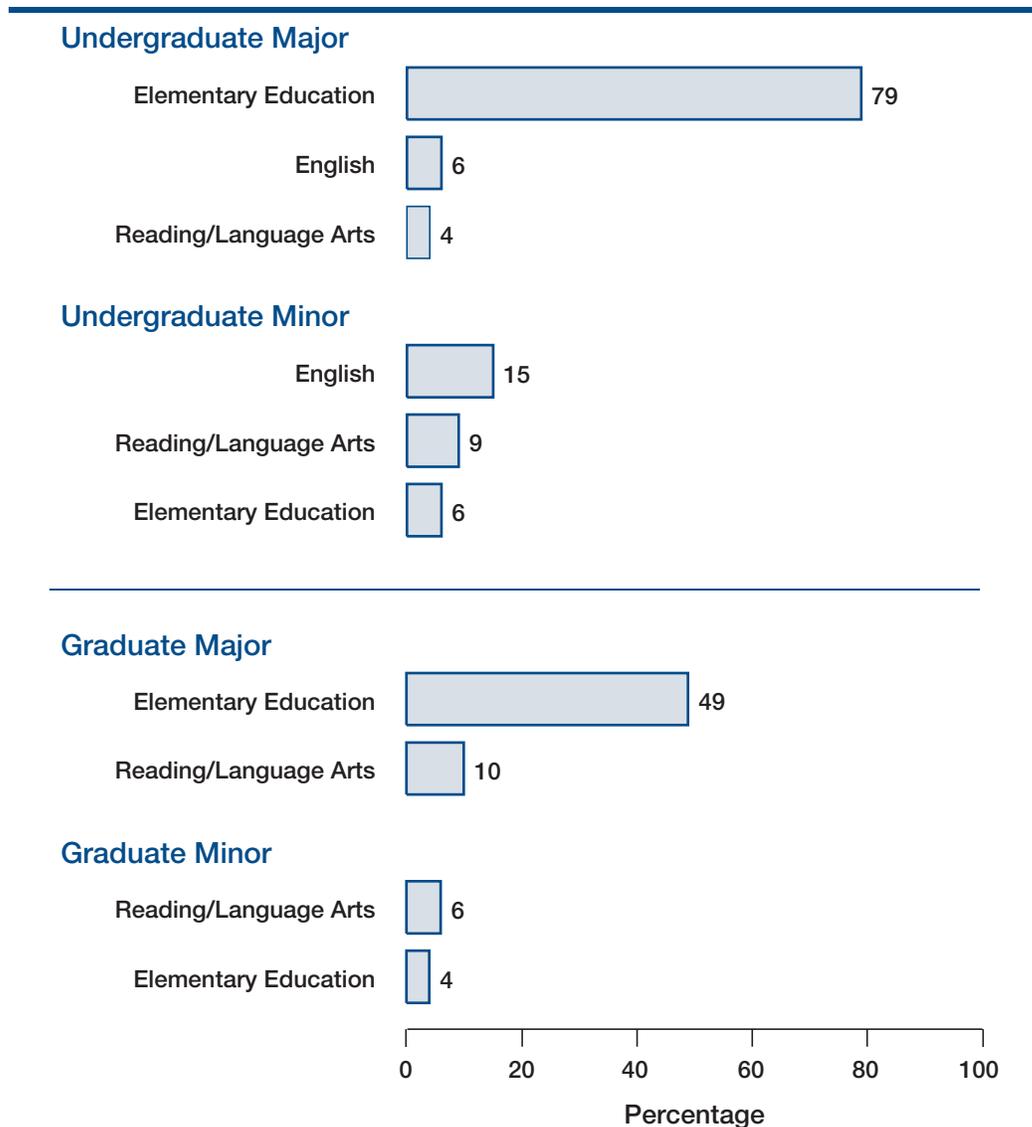
Majors and Minors

Most of the fourth graders (79 percent) were taught by teachers who had an undergraduate major in elementary education. An additional 6 percent of the students were taught by a teacher with an undergraduate minor in elementary education. Most of the other reading-related majors reported were in English and reading/

language arts (6 percent and 4 percent, respectively). These data are shown in Figure 2.¹⁵

Figure 2 also shows that at the graduate level, too, elementary education was the most common focus, with 49 percent of the students taught by a teacher with a graduate major in the subject. Ten percent of the students had reading teachers with a reading/language arts major in graduate school.

Figure 2:
Percentage of Students Taught by Teachers with Various Undergraduate and Graduate Majors and Minors



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

¹⁵ All of the data shown in Figures 2–16 are from the 2000 fourth-grade NAEP national reading assessment.

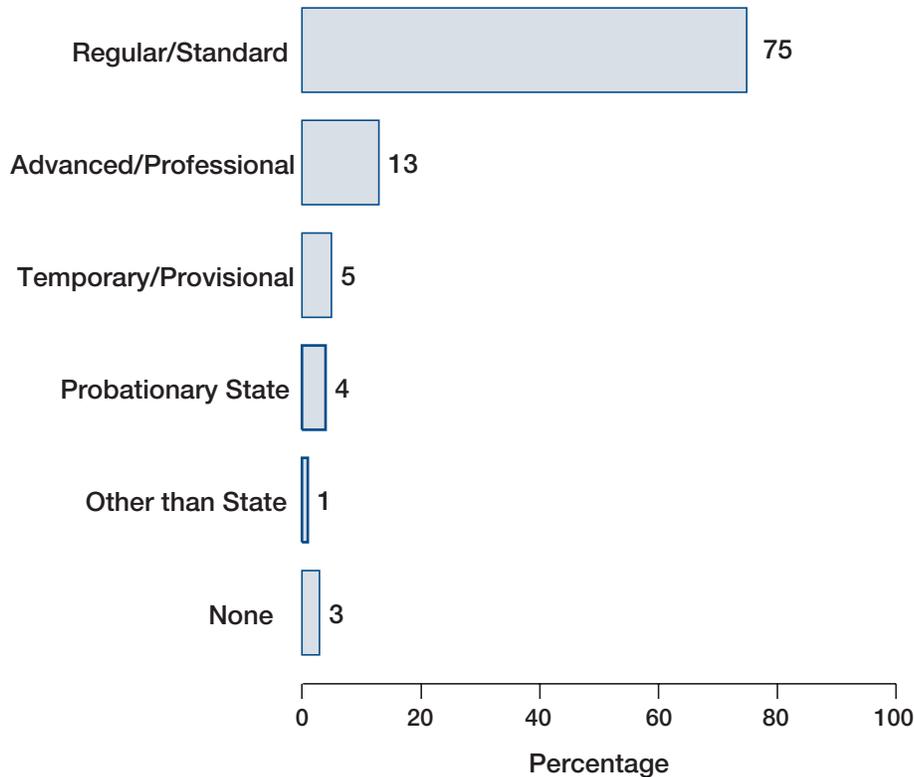
Teacher Certification

Almost 90 percent of these fourth graders had teachers who held at least regular or standard certification (75 percent reported regular/standard certification and 13 percent reported advanced/professional certification). Overall, only 3 percent of the nation's fourth graders were taught by uncertified teachers. These data are shown in Figure 3.

Students attending public school were more likely to have certified teachers. One percent of fourth graders attending public schools had uncertified teachers,

compared to 19 percent of students in Catholic schools and 21 percent of students in other private schools. Public school students were also more likely than students attending Catholic schools to have teachers with advanced certification (14 percent versus 5 percent) and more likely than students attending other private schools to have teachers with regular certification (77 percent versus 59 percent). Finally, students attending schools in central cities were more likely than students in rural/small town areas to have uncertified teachers (5 percent versus 1 percent).

Figure 3:
Percentage of Students by Teachers' Type of Certification in Main Assignment Field



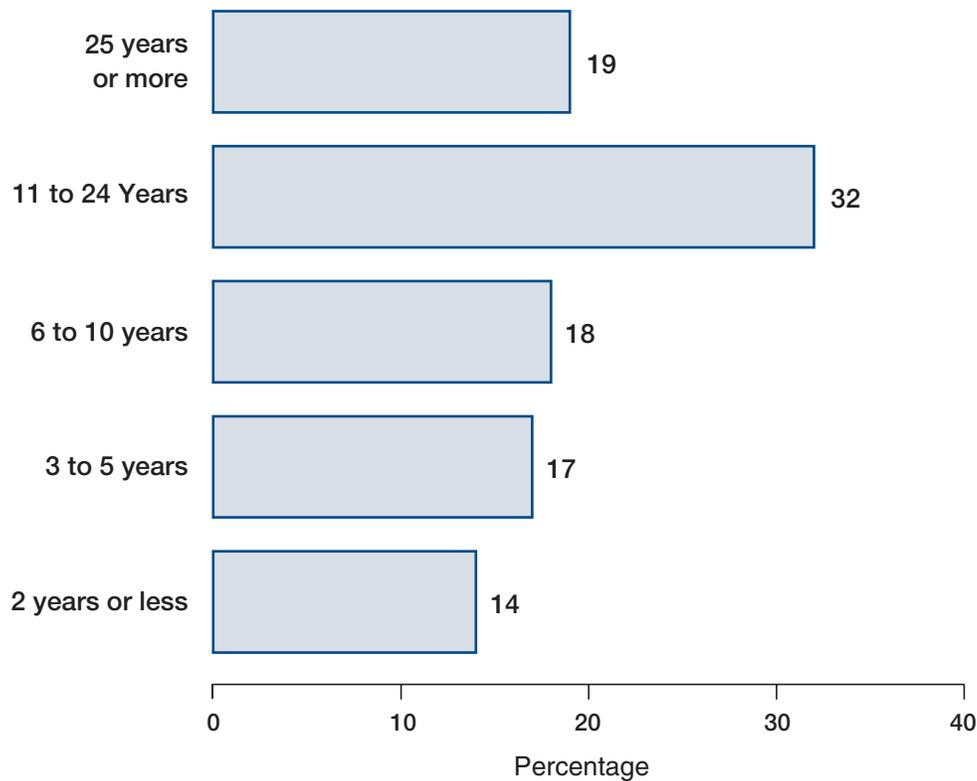
Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

Teaching Experience

Figure 4 shows the percentages of fourth graders taught by teachers with different amounts of experience in teaching reading. The teachers' years of service are broken into five categories.¹⁶ This population of teachers is well experienced: 19 percent reported

having 25 or more years of experience and another 32 percent reported between 11 and 24 years. Only 14 percent of fourth graders have teachers with two years experience or less. White students (21 percent) were more likely than Hispanic (13 percent) and Asian students (11 percent) to have teachers with 25 or more years of experience in teaching reading.

Figure 4:
Percentage of Students by Number of Years of Teacher Experience Teaching Reading



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

¹⁶ Years of experience include any permanent full-time or part-time assignments, but not substitute assignments.

Teachers' Attitudes About the Quality of Their Preparation

While the content of teacher education programs and the effectiveness of professional development programs are subjects of debate, one important gauge of the effectiveness of training is whether teachers consider themselves adequately prepared for various aspects of their work. The reading teachers of fourth graders were asked to rate how well their college or university courses or professional development workshops prepared them to provide a variety of aspects of instruction. Their responses are summarized in Figure 5, which shows for each of 14 of these aspects the percentage of students whose teachers reported that they were well prepared.

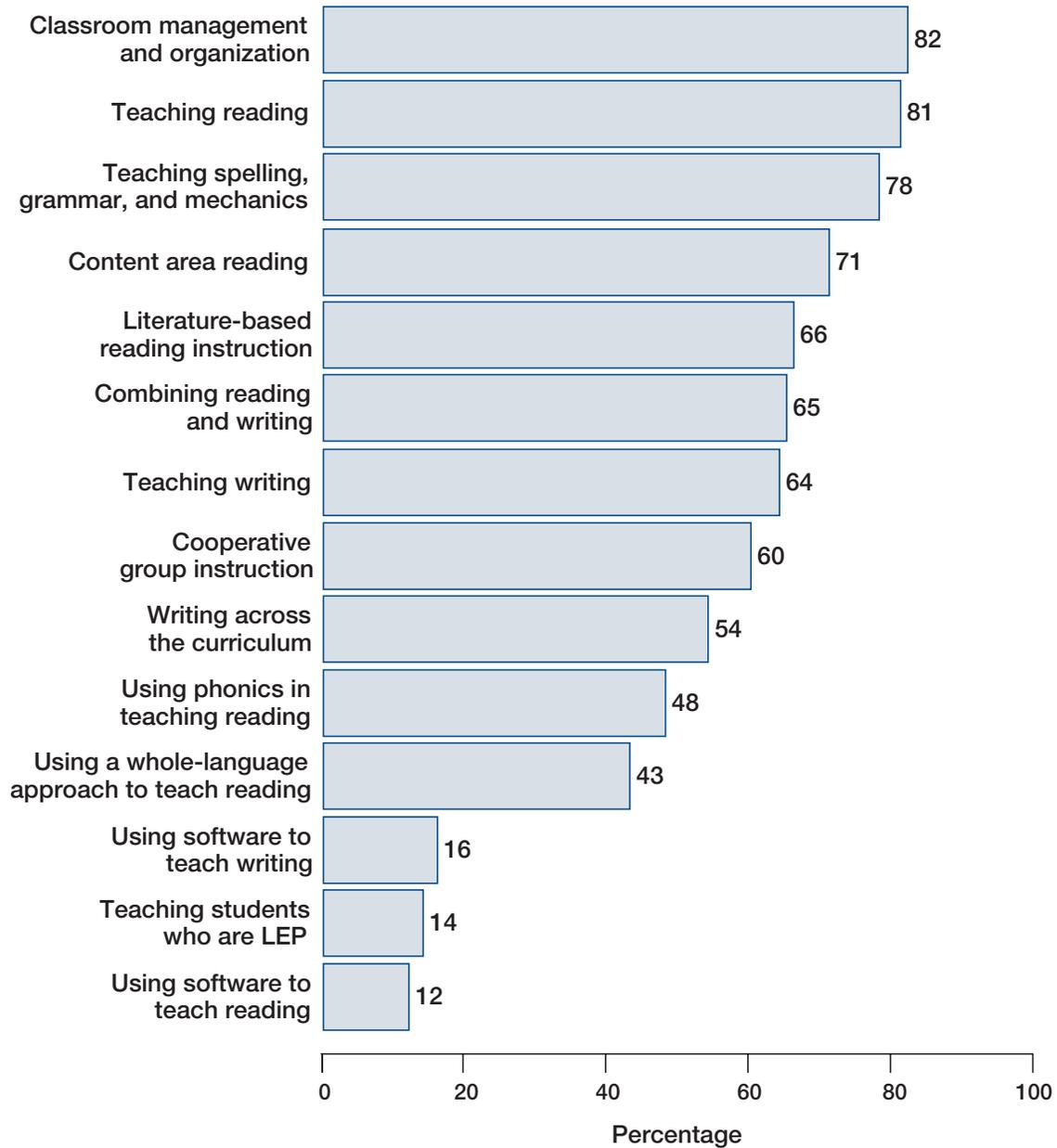
As shown, the majority of students had teachers who felt that they were well prepared in classroom management and organization, and in several key aspects of teaching reading, including teaching spelling, grammar, and mechanics; content area reading; literature-based reading instruction; instruction combining reading and writing; and teaching writing. Much smaller percentages of students had teachers who felt that they were well prepared to use software to teach reading and writing or to teach limited-English-proficient students (LEP).

While there were not many differences in teachers' self-reported preparation, some were found and are noted here.

- Students in Title I schools were less likely than students in non-Title I schools to have teachers who felt well prepared in classroom management and organization (77 percent versus 85 percent).
- Students in central cities (66 percent) and urban fringe/large town areas (71 percent) were more likely than students in rural areas (55 percent) to have teachers who felt well prepared to implement literature-based reading instruction.
- Students in central cities (59 percent) and urban fringe/large town areas (67 percent) were more likely than students attending rural schools (48 percent) to have teachers who felt well prepared in cooperative group instruction.
- Hispanic students (39 percent) were more likely than Asian (20 percent), Black (11 percent), and White students (10 percent) to have teachers who felt well prepared to teach LEP students. Students in central cities (19 percent) and urban fringe/large town areas (15 percent) were more likely to have teachers who felt well prepared in this area than students in rural schools (6 percent).
- Teachers of students in central cities (16 percent) and urban fringe/large town schools (18 percent) were more likely to feel well prepared to use software for teaching writing than teachers of students in rural areas (9 percent).
- Teachers of students in Title I schools (16 percent) were more likely to feel well prepared to use software to teach reading than teachers of students in non-Title I schools (10 percent).

Figure 5:

Percentage of Students Whose Teachers Report That They Are Well Prepared in Various Aspects of Instruction



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

The Schools

Generally, the climate of the schools attended by fourth graders appears to be healthy. Teacher attendance is high, teacher attrition is low, and most teachers report that they receive adequate resources to teach their classes. Class sizes are moderate for the most part. Most reading instruction is delivered in self-contained classrooms. Most teachers provide remedial reading instruction to some part of their class.

This section of the report examines data from the NAEP reading assessment about school and classroom climate, including teacher attendance, class size, how classroom reading instruction is managed, and the amount of remediation that is provided in both reading and writing instruction.

Teacher Attendance and Attrition

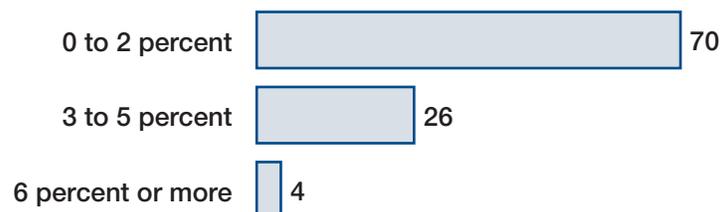
Figure 6 shows data on teacher attendance and attrition for the schools attended by these fourth graders. Seventy percent of these students attend schools where 2 percent of teachers or fewer are absent on an

average day; 26 percent attend schools where 3 to 5 percent are absent; and 4 percent attend schools where 6 percent of the teachers or more are absent daily. Students attending Catholic schools (91 percent) were more likely than students attending public schools (67 percent) to have only 2 percent or fewer of their teachers absent daily.

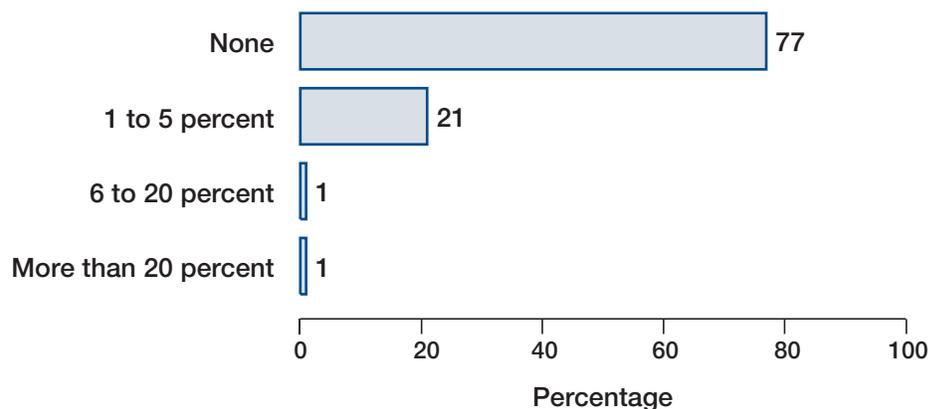
Figure 6 also shows data on teacher attrition during the school year. Seventy-seven percent of the fourth graders were in schools where none of the teachers left during the year and 21 percent were in

Figure 6:
Percentage of Students by Teacher Attendance and Attrition

Percentage of Teachers Absent on an Average Day



Percentage of Teachers Who Left Before the End of the School Year



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

schools where between 1 and 5 percent of the teachers left. Few attended schools where teacher attrition was higher. White (83 percent) and Asian fourth graders (84 percent) were more likely than Black fourth graders (65 percent) to be in schools where none of the teachers left during the year. Students attending Title I schools (68 percent) were less likely than non-Title I students (83 percent) to attend schools with no teacher attrition. Students attending central-city schools (67 percent) were less likely than students in urban fringe/large town schools (84 percent) to be in schools with no attrition.

Resources

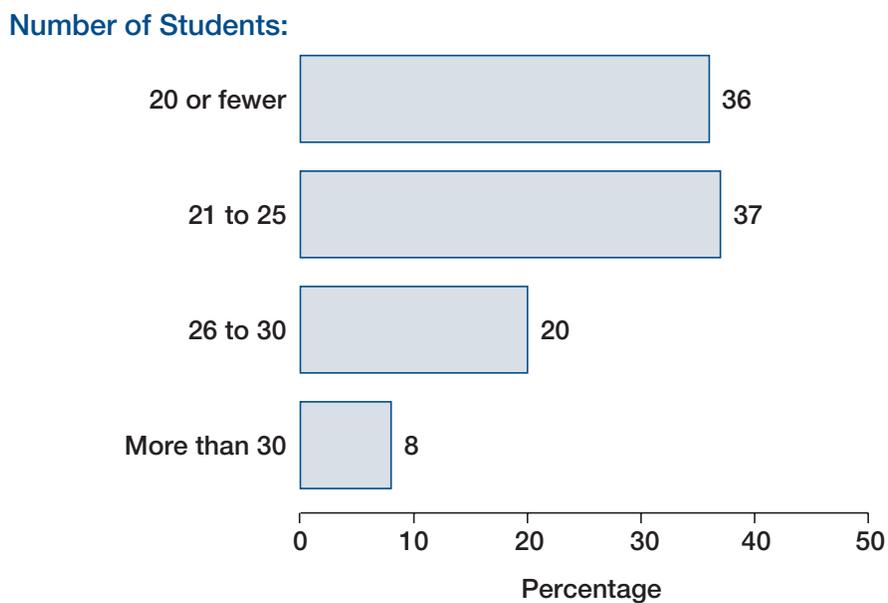
Teachers were asked to provide their judgment about the adequacy of the instructional materials and other resources that they received to teach their class. Overall, 17 percent of the students had teachers who indicated that they received all of the resources they need; 54 percent had teachers who said they got most of what they need; 28 percent had teachers who said that

they got some of the needed resources; and about 1 percent had teachers who said that they do not get the resources they need to teach their class. There were no statistically significant differences among teachers of groups of students defined by race/ethnicity, type of school, and school location.

Class Size

While the debate over the effects of class size on achievement continues, there is some agreement that smaller classes (say, of 20 or fewer students) are beneficial to student achievement, especially in the primary grades.¹⁷ Teachers of fourth-grade students in this reading assessment were asked to indicate the average size of their reading class. Their responses are shown in Figure 7. Overall, 36 percent of students were in reading classes of 20 students or fewer, 37 percent were in classes of 21 to 25 students, 20 percent were in classes of 26 to 30 students, and 8 percent were in classes of more than 30 students.

Figure 7:
Percentage of Students by Class Size



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

¹⁷ For one review of the research on this topic, see Bruce J. Biddle and David C. Berliner, *What Research Says About Small Classes and Their Effects*, Policy Perspectives, WestEd, 2002.

There were many differences in class size patterns, some of which are statistically significant. Hispanic students (19 percent) were more likely than White students (4 percent) and Black students (6 percent) to be in reading classes with more than 30 students. Asian students (20 percent) were less likely than White students (36 percent) and Black students (40 percent) to be in classes with 20 children or fewer. Also, White students (41 percent) were more likely than Hispanic students (24 percent) to be in reading classes with between 21 and 25 students.

Students attending urban fringe/large town schools (25 percent) were more likely than children attending schools in central cities (41 percent) and rural schools (49 percent) to be in classes smaller than 20 students. Children attending public schools and Catholic schools were more likely to have larger reading classes than children attending other private schools: 71 percent of children attending these other private schools were in classes of 20 students or fewer, compared to only about one-third of public and Catholic school students.

Instructional Organization

Teachers were asked how the fourth graders in their schools were organized for reading instruction. Teachers of 53 percent of the students reported that students were instructed in self-contained classrooms, teachers of 8 percent said that instruction was “departmentalized,” and teachers of 39 percent said that students were “regrouped” for instruction. Catholic school

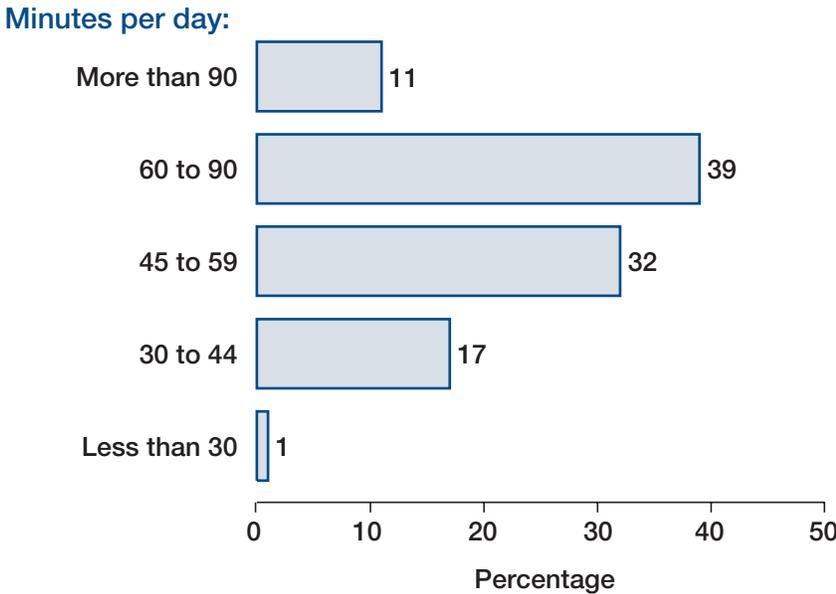
students (35 percent) were less likely than students attending other private schools (69 percent) to be in self-contained classrooms.

Time on Task

Teachers were asked to indicate how much time they spent on reading instruction in a typical day (see Figure 8). The largest group of students (39 percent) had teachers who responded that they spent 60 to 90 minutes per day on reading. Thirty-two percent of the students had teachers who said they spent 45 to 59 minutes per day. The next largest group (17 percent) had teachers who reported that they spent between 30 and 44 minutes per day on reading, and 11 percent had teachers who reported that they spent more than 90 minutes per day on reading instruction.

Hispanic fourth graders (20 percent) were more likely than White fourth graders (7 percent) to have teachers who reported more than 90 minutes of reading instruction on a typical day. Public school students (42 percent) were more likely than students attending Catholic schools (15 percent) and other private schools (19 percent) to receive 60 to 90 minutes of reading instruction on a typical day. Also, students attending Title I schools (16 percent) were more likely than students attending non-Title I schools (8 percent) to have teachers who reported more than 90 minutes of instruction. Finally, teachers in central city schools (16 percent) were more likely than teachers in rural schools (5 percent) to report more than 90 minutes of reading instruction daily.

Figure 8:
Percentage of Students by Minutes per Day of Reading Instruction



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

Grouping

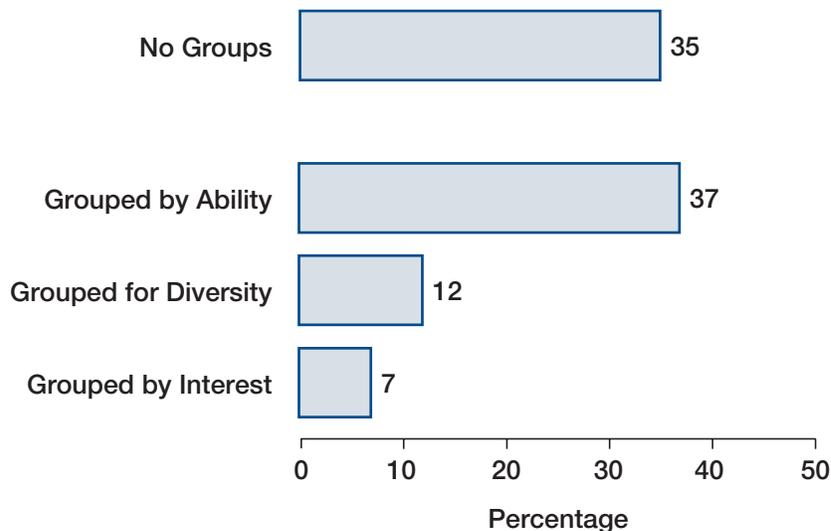
Teachers were asked two questions about grouping students. First, they were asked whether students were assigned to their class by ability. Twenty-four percent of the fourth graders had teachers who responded in the affirmative. Black and Hispanic fourth graders (33 percent) were more likely than White students (20 percent) to be assigned to the reading class based on ability. Students attending central city schools (37 percent) were more likely to be grouped by ability than students in rural and urban fringe/large town schools (18 percent).

On the second question, teachers were also asked to identify the basis on which they create instructional groups for reading in class. These data are shown in Figure 9. Thirty-five percent of the students had teachers who said that they did not create instructional groups in class. Of the students whose teachers reported assigning students to reading groups, 37 percent had teachers who did so based on ability, 12 percent

based on diversity, 7 percent based on interest, and 10 percent on the basis of some other factor. The data revealed several differences among groups of students:

- Hispanic students (46 percent) were more likely than White students (33 percent) to be grouped by ability.
- Black students (19 percent) were more likely than White students (10 percent) and Hispanic students (9 percent) to be grouped for diversity.
- Black students (75 percent) were more likely than White students (62 percent) to be grouped for reading.
- Public school students (68 percent) were more likely than Catholic school students (41 percent) to be grouped for reading.
- Students attending schools in central cities (46 percent) were more likely to be grouped by ability than students attending rural schools (25 percent).

Figure 9:
Basis for Creating Instructional Groups in Reading



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

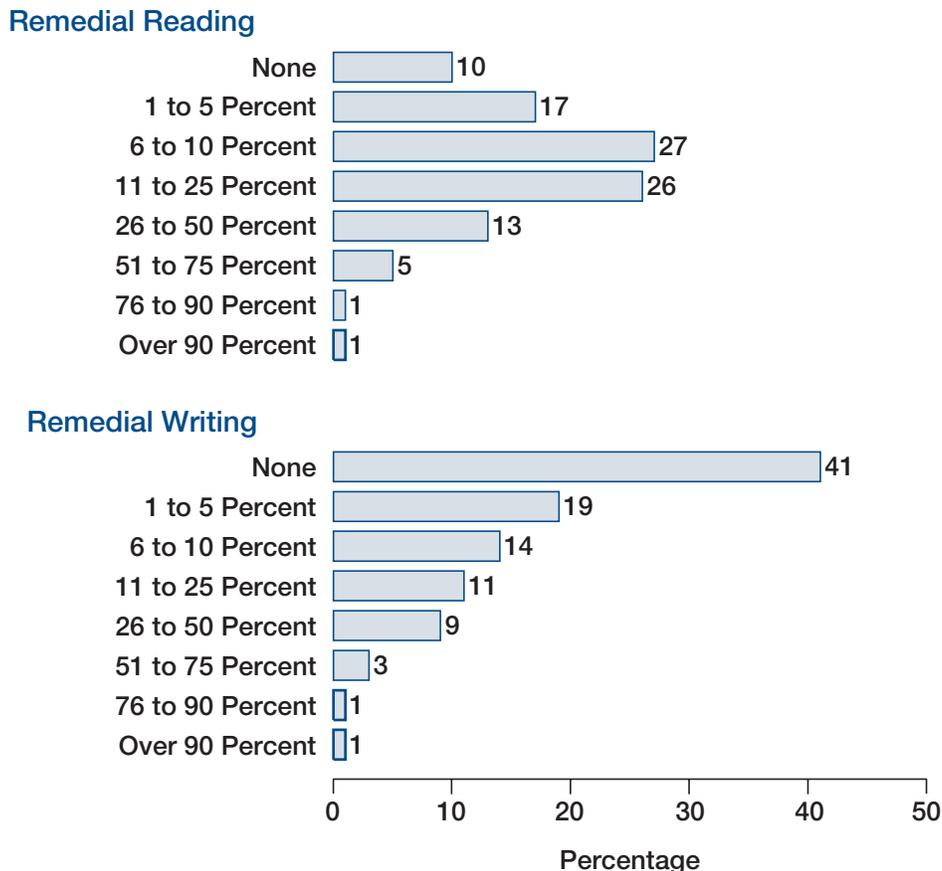
Remedial Instruction

Teachers were asked to indicate the percentage of students in their school who receive remedial reading and writing instruction. These data are detailed in Figure 10. Overall, 7 percent of the fourth graders had teachers who reported that more than half of the students received remedial reading instruction, 83 percent had teachers who said half or less received such instruction, and 10 percent had teachers who responded that no students received such instruction. Catholic school students (22 percent) and students attending other private schools (34 percent) were more likely than public school students (8 percent) to attend schools where no remedial reading was provided. As might be expected, remedial reading instruction was more prevalent in Title I schools. Students attending Title I schools were more likely to have teachers reporting that more than

half of the students receive remediation (14 percent of Title I students, compared to 2 percent of non-Title I students).

In writing, remedial instruction was less common—41 percent of fourth graders had teachers who reported that no remedial writing was provided. Fifty-three percent reported that half or less of their students receive remedial writing, and only 5 percent reported that more than half of the students receive remediation. Remedial writing was more prevalent in public and Catholic schools and, as might be expected, in Title I schools. Students in other private schools (63 percent) were more likely to attend schools where no remedial writing is provided than public school students (40 percent). Only 29 percent of students in Title I schools were in schools where no remedial writing was provided, compared to 49 percent of non-Title I students.

Figure 10:
Percentage of Students Receiving Remedial Reading and Writing Instruction



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

Reading Instruction

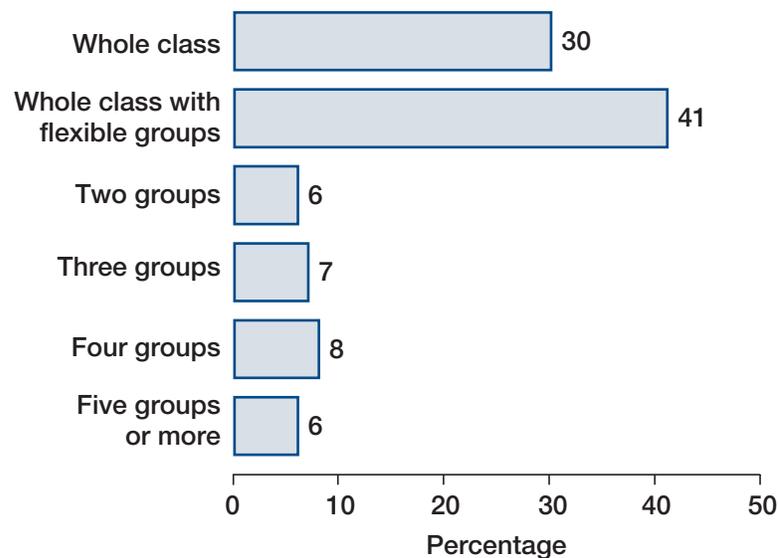
Fourth-grade reading is typically taught in groups within the classroom. Most teachers reported using integrated reading and writing as a central part of their instruction. Many teachers also use writing about literature as a central feature. The most frequently used instructional techniques were asking students to read silently and helping students to understand new words.

This section provides a description of the way fourth-grade reading teachers organize their classrooms for instruction, the types of materials they use in class, and the extent to which these teachers use a variety of instructional approaches and techniques in their classrooms.

With the NRP conclusions described in the Introduction to this report as background, we make no judgments here about “good” or “bad” practices; our purpose is simply to describe the reading classroom based on the information collected on the school and teacher questionnaires used in the NAEP assessment.¹⁸

Teachers were asked how they usually divided up the class when teaching reading. As shown in Figure 11, the majority of students had teachers who either teach to the whole class (30 percent) or to the whole class with flexible groups (41 percent). About 20 percent of the students had teachers who divided the class into more than two groups. Hispanic students (14 percent) were more likely than White students (5 percent) to have teachers who divided the class into five or more groups. In addition, students attending other private schools (55 percent) were more likely than public school students (27 percent) to have teachers who teach reading to the whole class.

Figure 11:
Percentage of Students Whose Teachers Report Dividing the Class into Various Groups When Teaching Reading



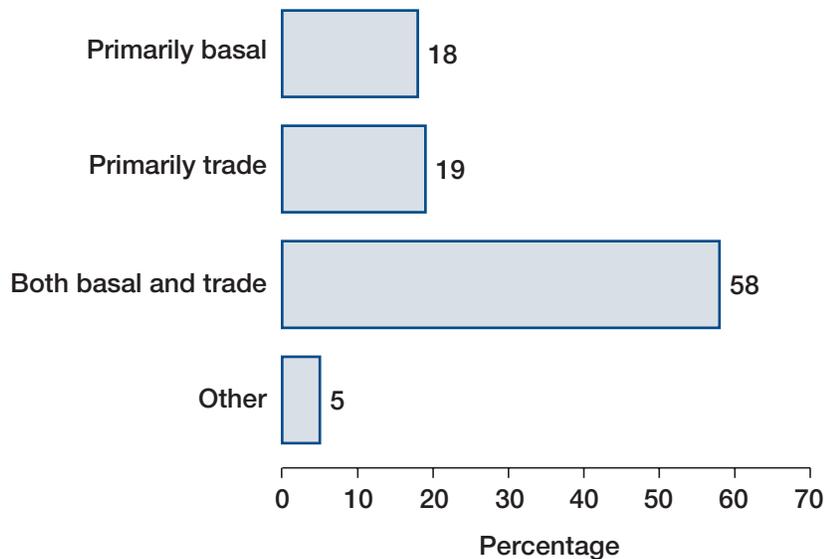
Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

¹⁸ As noted earlier, the content of the NAEP background questionnaires reflects the perspectives of educators and policy makers on factors believed to be related to effective instructional practice.

Teachers were also asked to identify the materials that form the core of their reading program. Fifty-eight percent of the students' teachers said that they used both basal readers and trade materials (see Figure 12). About a fifth responded that they used basal materials primarily and a similar proportion responded that they used trade materials primarily. White

students (23 percent) were more likely than Black students (8 percent) to have teachers who primarily used trade books in reading instruction. In addition, students attending public schools (20 percent) were more likely than Catholic school students (7 percent) to have teachers who said that trade books formed the core of their reading program.

Figure 12:
Type of Materials Forming the Core of the Reading Program



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

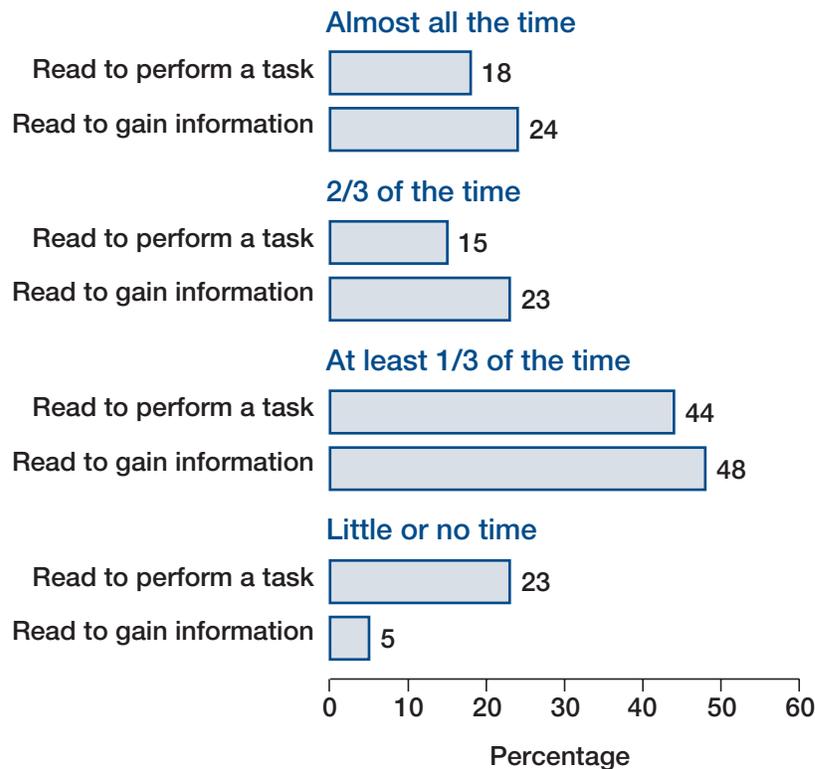
Teachers were asked whether they integrated reading and writing and whether they used writing about literature as instructional approaches. Seventy percent of students' teachers responded that they used integrating reading and writing as a central part of their instruction; the remaining 30 percent used it as a supplemental part. Teachers of Black (76 percent), Hispanic (77 percent), and Asian students (82 per-

cent) were more likely than teachers of White students (66 percent) to say that they used this technique as a central part of instruction. Students attending central city schools (73 percent) and urban fringe/large town schools (75 percent) were more likely than students attending rural schools (54 percent) to have teachers who report this technique as a central part of instruction.

Forty-three percent of the students' teachers reported that they used writing about literature as a central part of their instructional approach, 50 percent said it was a supplemental part, and 7 percent said they did not use it. Students attending public schools (45 percent) were more likely than Catholic school students (27 percent) to have teachers reporting this technique as a central part of instruction. In addition, 22 percent of Catholic school students had teachers who reported that they did not use writing about literature as an instructional approach, compared to only 6 percent of public school students.

Teachers were asked to estimate the proportion of their reading instructional time that is focused on having students read to perform a task (e.g., reading documents, forms, directions), and what proportion is focused on having students read to gain information (e.g., reading science articles, historical sources, textbook chapters, essays). These data are shown in Figure 13. Students were more likely to have teachers who focus instruction on reading to gain information than on reading to perform a task. Black students (22 percent) were more likely than White students (13 percent) to have teachers who reported that they focus on having students read to perform a task two-thirds of the time.

Figure 13:
Amount of Reading Instructional Time Focused on Having Students Read to Perform a Task and Read to Gain Information



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

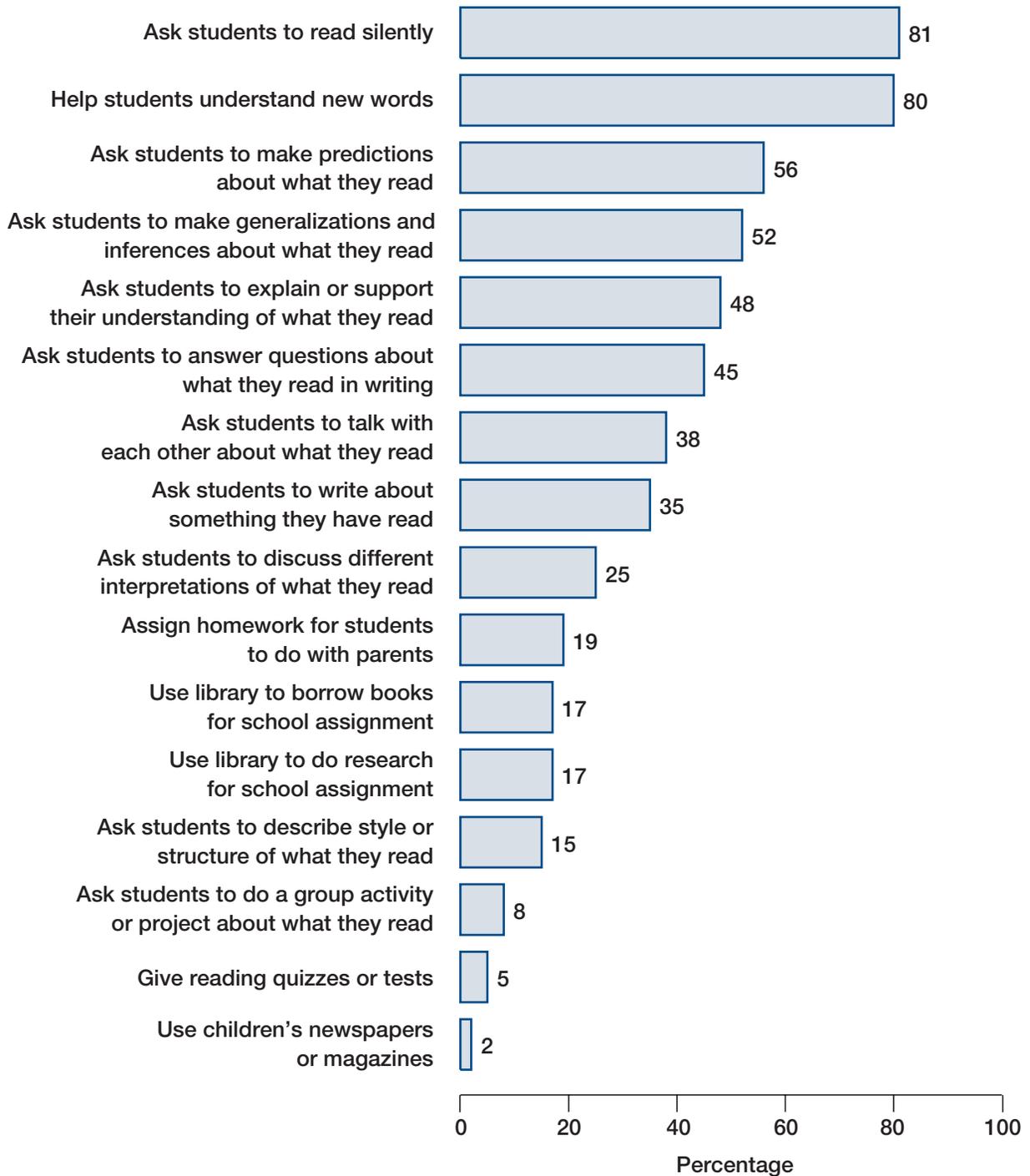
Teachers were also asked a series of questions about how often they use a variety of instructional techniques as part of their reading instruction. Figure 14 shows the percentage of students whose teachers report that they use each technique frequently, i.e. almost every day. As shown, a large majority of students have teachers who frequently ask them to read silently and who frequently help them to understand new words. Teachers also frequently ask students to discuss what they have read, including asking them to make generalizations, inferences, and predictions; asking students questions about what they have read; and asking them to explain or support their understanding of what they have read. On the other hand, few students had teachers who reported frequent use of reading quizzes or tests, or using children’s newspapers and magazines in class.

Some statistically significant differences among groups of fourth graders are highlighted below.

- Black (33 percent) and Hispanic students (25 percent) were more likely than White (15 percent) and Asian students (9 percent) to have teachers who assign homework for them to do with their parents almost every day. This was also the case for students attending Title I schools (27 percent versus 15 percent), and for students attending central city schools (25 percent compared to 15 percent for urban fringe/large town students, and 19 percent for students attending rural schools).
- Public school students (40 percent) were more likely than Catholic school students (24 percent) to have teachers who ask them to talk with each other about what they have read “almost daily.”
- Black (29 percent) and Hispanic students (25 percent) were more likely than White students (13 percent) to use the library for school assignments “almost daily.” Public school students (18 percent) also were more likely than Catholic school students (12 percent) and other private school students (6 percent) to use the library for school assignments “almost daily.” This was also the case for students attending Title 1 schools (25 percent versus 13 percent).
- Black students (22 percent) were more likely than White students (12 percent) to have teachers who ask them to describe the style or structure of what they have read “almost daily.” Public school students (16 percent) were also more likely than Catholic school students (5 percent) and other private school students (6 percent) to have teachers who did this.
- Public school students (59 percent) were more likely than Catholic school (32 percent) and other private school students (29 percent) to have teachers who asked them to make predictions about what they read as they are reading “almost daily.”
- Urban fringe/large town school students (9 percent) were more likely than rural school students (2 percent) to have teachers who asked them to do a group activity or project about what they had read “almost daily.”
- Black students (53 percent) were more likely than White students (41 percent) to have teachers who ask them to answer questions about what they have read “almost daily.” Central city students (53 percent) were also more likely to have teachers who do this than students attending rural schools (39 percent).
- Black (82 percent) and Hispanic students (83 percent) were more likely than Asian students (69 percent) to have teachers who help them understand new words “almost daily.” Public school students (82 percent) were more likely than Catholic school students (57 percent) to have teachers who help them understand new words “almost daily.” Title I students were also more likely to have teachers who do this (86 percent, versus 76 percent for non-Title I students).
- Students attending central city schools (39 percent) were more likely than students attending rural schools (22 percent) to have teachers who asked them to write about something they have read “almost daily.”
- Public school students (54 percent) were more likely than Catholic school students (28 percent) to have teachers who asked students to make generalizations and draw inferences on the basis of what they have read “almost daily.”

Figure 14:

Percentage of Students Whose Teachers Report the Use of Various Instructional Practices Almost Every Day



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

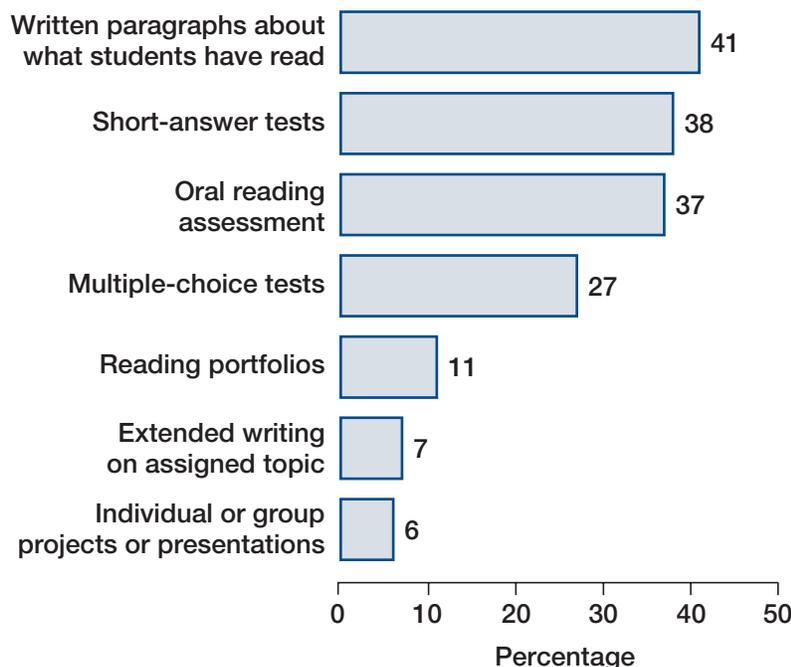
Classroom Assessment Practices

The most frequently used assessment practices included having students write paragraphs about what they have read, giving short-answer tests, and assessing oral reading. There was little use of portfolios, extended writing assignments, or projects and presentations.

While discussions of testing and assessment typically focus on standardized tests, students get most of the feedback about their learning from classroom assessments. Classroom assessment has been recently recognized as an important topic, and the role of classroom teachers is increasingly acknowledged in the current context of large-scale testing. The information available in the classroom is one of the greatest resources for teaching and learning.¹⁹

In NAEP, teachers were asked to indicate the frequency with which they used different assessment practices in reading instruction.²⁰ A range of assessment options was listed for teachers, from using multiple-choice and short-answer tests to assigning extended writing or group projects. Figure 15 shows the percentage of students whose teachers reported using each assessment practice at least once or twice a week. The most used practices included having students write

Figure 15:
Percentage of Students Whose Teachers Report the Use of Various Types of Assessment Once or Twice a Week



Source: Data from the 2000 National Assessment of Educational Progress analyzed by the ETS Policy Information Center.

¹⁹ Susan M. Brookhart, "Developing Measurement Theory for Classroom Assessment Purposes and Uses," *Educational Measurement: Issues and Practices*, Vol. 22, No. 4, Winter 2003. This special issue focuses on changing the way measurement theorists think about classroom assessment.

²⁰ Response options were: 1-2 times a week; 1-2 times a month; 1-2 times a year; and never or hardly ever.

paragraphs about what they have read, giving short-answer and multiple-choice tests, and giving oral reading assessments. Reading portfolios, extended writing, and group projects and presentations are much less likely to be used frequently. Forty-five percent of students had teachers who responded that they never or hardly ever used portfolios to assess reading.

Different groups of students differed somewhat in the types of assessments their teachers used. For example,

- Students attending Title I schools were more likely than non-Title I students to have teachers who assessed with extended essays and papers (10 percent versus 5 percent), used multiple-choice tests (37 percent versus 21 percent), assigned reading portfolios (16 percent versus 9 percent), and used short-answer tests at least once or twice a week (46 versus 33 percent);
- Students attending central city schools (10 percent) were more likely than students attending rural schools (4 percent) to have teachers who assessed student progress with extended essays and papers at least once or twice a week;
- Black students (50 percent) were more likely than White (35 percent), Hispanic (33 percent), and Asian students (29 percent) to have teachers who used short-answer tests at least once or twice a week.

Summary and Conclusion

Literacy is the currency of the information age and its importance is reflected in current education policy initiatives. Literacy for all Americans is one of our national education goals—one that has yet to be achieved. Recently, the No Child Left Behind Act and its Reading First initiative have focused significant attention on the literacy of America’s children. Our schools are experiencing significant pressure to perform. Even pre-kindergarten programs like Head Start are being held accountable for developing the literacy skills of their students.

Teachers and classrooms are the focus of attention. The National Research Council has concluded that “quality classroom instruction in kindergarten and the primary grades is the single best weapon against reading failure.”²¹ Across the nation, attention is turning to the qualifications of teachers and the use of scientifically-proven methods of teaching. The educational progress of states, school districts, and individual schools is being measured in unprecedented ways, including disaggregating performance data to examine the progress of specific groups of students defined by gender, race/ethnicity, and other characteristics. Progress will be determined, in large part, by what goes on in individual classrooms. By the 2005–2006 school year, NCLB requires that all teachers be “highly qualified.” States are now scrambling to develop and implement acceptable ways to determine what constitutes a highly qualified teacher.

To obtain a baseline of information, this report capitalizes on NAEP’s unique capacity to peer into the nation’s classrooms and gather information on how reading is taught in the fourth grade. Since NCLB examines not only overall performance, but the performance of specific groups, it is important that the view of the reading classroom also be one that allows the picture to capture differences (and commonalities) among different groups of students.

In summary, the climate of the fourth-grade reading classrooms examined in this report appears overall to be a healthy one. At the fourth-grade level, most teachers are certified, have bachelor’s degrees (many have graduate degrees), are well experienced, and are

confident in their ability to teach. Teacher attendance and attrition do not appear to be problems and most teachers report that they receive adequate resources to teach their classes. Teachers reported using a variety of instructional techniques and assessment practices. Most teachers use integrated reading and writing as a central part of their instruction. Common classroom assessment practices included having students write paragraphs about what they have read, giving short-answer tests, and giving oral reading assessments. Few teachers used reading portfolios, assigned extended writing, or assigned projects or presentations.

These results should not be generalized beyond the fourth-grade reading classroom. In other subjects and/or other grade levels, the findings would probably differ. For example, while most fourth-grade reading teachers hold degrees in elementary education, in eighth-grade mathematics we might be likely to find teachers without a degree in mathematics or mathematics education. Also, we might find that certain groups of students have differential access to teachers who may be considered to be well qualified. Further analyses of NAEP data can test that possibility.

While differences among groups of students and schools are described fully in the report; a few are highlighted below and organized by group.

Public School Students

- More likely than students attending other schools to have certified teachers and teachers with master’s degrees
- More likely than students in other schools to be in classrooms with higher levels of remedial reading and writing instruction.

Catholic School Students

- More likely than public school students to attend schools with the lowest level of teacher absences
- Less likely than public school students to be grouped for instruction and to have teachers who use writing about literature as a central part of instruction.

²¹ Snow et al., 1998.

Other Private School Students

- More likely than students attending other schools to be in small reading classes
- More likely than Catholic school students to get reading instruction in self-contained classrooms.

White Students

- More likely than Hispanic and Asian students to have teachers with 25 years or more experience
- Less likely than Asian, Black, and Hispanic students to have teachers who use integrated reading and writing as a central part of instruction.

Black Students

- Less likely than White and Asian students to attend schools where no teacher left during the year
- More likely than White students to be grouped by ability
- More likely than White, Asian, and Hispanic students to have teachers who use short-answer tests at least once or twice a week
- More likely than White students to have teachers who report that they frequently focus on having students read to perform a task
- More likely than White and Asian students to have teachers who assign homework for them to do with their parents almost every day.

Hispanic Students

- More likely than White and Black students to be in large classes
- More likely than White students to have more than 90 minutes of reading instruction per day
- More likely than White students to be grouped by ability
- More likely than other students to have teachers who feel well prepared to teach limited-English-proficient students

- More likely than White and Asian students to have teachers who assign homework for them to do with their parents almost every day
- More likely than White students to use the school library for school assignments almost daily.

Asian/Pacific Islander Students

- Less likely than White and Black students to be in classes with 20 students or less.

Title I Students

- Less likely than other students to attend schools where no teachers left during the year
- More likely than other students to receive 90 minutes or more of reading instruction per day
- More likely to be in schools with higher levels of remedial reading and writing than other students
- Less likely to have teachers who feel well prepared in classroom management and organization
- More likely to have teachers who assign homework for them to do with their parents almost every day
- More likely to have teachers who help them understand new words almost daily.

Students in Central City Schools

- Less likely than other students to attend schools where no teachers left during the year
- More likely than students in rural schools to attend schools that provide 90 minutes or more of reading per day
- More likely than rural school students to be grouped by ability
- More likely than other students to have teachers who assign homework for them to do with their parents almost every day.

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