

POLICY NOTES

News from the ETS Policy Information Center

Volume 18, Number 3

Policy Evaluation & Research Center

Fall 2010

A Look Inside the Fourth-Grade Reading Classroom

What happens behind classroom doors — the content, experiences, and interactions with teachers that students encounter — is the *sine qua non* of student classroom learning. But our inventory of instructional practices across different subjects and grades is limited; and the same can be said about our knowledge of what makes for good or effective instruction.¹ The National Assessment of Educational Progress (NAEP) can help fill this gap. Although better known for assessing subject-area achievement, NAEP collects information from students, teachers, and schools that provides important context for reporting student performance, as well as a rich set of data on the nation's classrooms and the instruction that goes on inside of them.

- Student questionnaires collect information on students' demographic characteristics, classroom experiences, and educational support (completed by students).
- Teacher questionnaires gather data on teacher training and instructional practices (completed by teachers at grades 4 and 8. NAEP typically does not collect teacher information for grade 12).
- School questionnaires gather information on school policies and characteristics (completed by the principal or assistant principal).²

Data from these questionnaires can open an important window into the nation's schools by providing a view of the classrooms of a nationally representative sample of students as they interact with their teachers.³ This view can help educators, researchers, and policymakers develop a better understanding of the relationship between what goes on in classrooms

THIS ISSUE

This issue of *ETS Policy Notes* provides data on the following aspects of the fourth-grade reading classroom:

- Teacher background and education
- Teacher professional development and training
- How teachers organize their classrooms and instruction for reading or language arts
- Classroom pedagogy
- Availability and use of technology in reading instruction
- Availability of resources and the effect of external influences or policies on teaching and learning in reading and language arts

¹ Eric M. Camburn and Seong Won Han, "What Do We Know About Instruction from Large-Scale National Surveys?" Wisconsin Center for Education Research, WCER Working Paper No. 2008-1, February 2008.

² These questionnaires can be viewed at <http://nces.ed.gov/nationsreportcard/bgquest.asp>.

³ NAEP is based on a nationally representative sample of students, not teachers. Thus, the information and data presented here pertain to the characteristics and practices of teachers of a representative sample of fourth-grade students, not teachers. Therefore, the percentages reported should be interpreted as the percentage of students whose teachers possess that characteristic or use that practice.

and the outcomes of those interactions. While this type of analysis begs the question of whether reading achievement is associated with particular teacher characteristics or practices, these data can serve as the basis for further exploration of the factors that may be related to student achievement using more sophisticated statistical methods.⁴

This issue of *ETS Policy Notes* provides an overview of some of the data collected for the 2009 reading assessment at the fourth grade. While we focus on describing data for the nation as a whole, we also note important and statistically significant differences that are revealed when the data are disaggregated by student race/ethnicity⁵. Readers who are interested in the reading assessment results for the nation and for individual states should see *The Nation's Report Card: Reading 2009*.⁶

Teacher Characteristics

This section will describe the characteristics of the teachers who provide reading instruction to fourth-grade students, in terms of their characteristics, experience, certification, education, and training.

The vast majority of students are taught by White female teachers.

- 86 percent of fourth-graders had teachers who are White
- 8 percent are Black or African American
- 2 percent are Asian/Pacific Islander
- 1 percent are American Indian or Alaska Native
- 4 percent are Mexican, Mexican American or Chicano

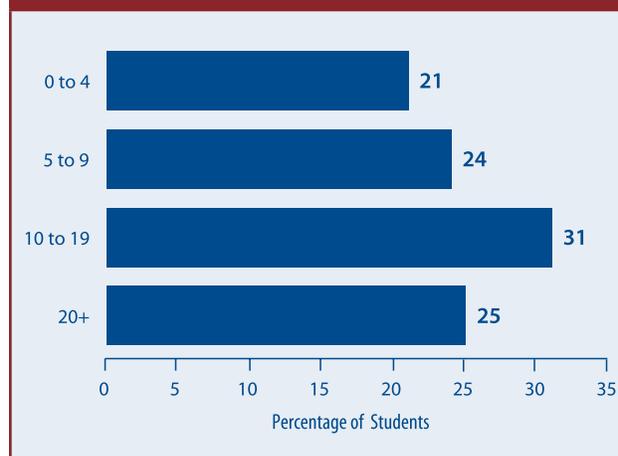
- 2 percent are other Hispanic or Latino
- 1 percent, each, described themselves as Cuban or Cuban American or Puerto Rican or Puerto Rican American

The gender of the teachers was not collected in 2009. In 1994, the last year for which data are available, 88 percent of the teachers were female.

Teaching Experience. Figure 1 shows the distribution of teaching experience, which is skewed somewhat toward higher levels of experience, overall. More than half of students are taught by teachers with more than 10 years of experience and one-quarter are taught by teachers with more than 20 years of experience.

Black and Hispanic students are more likely to have inexperienced teachers. For example, while 18 percent of White students have teachers with four years or less of experience, 25 percent of Hispanic and 24 percent of Black students have teachers with this level of experience.

FIGURE 1: YEARS OF TEACHING ELEMENTARY/ SECONDARY SCHOOL



⁴ See, for example, Henry Braun, Richard Coley, Yue Jia, and Catherine Trapani, *Exploring What Works in Science Instruction: A Look at the Eighth-Grade Science Classroom*, Policy Information Report, Policy Information Center, Educational Testing Service, Princeton, NJ, May 2009 (http://www.ets.org/research/policy_research_reports/pic-science).

⁵ All of the differences noted are statistically significant. Since NAEP is based on a large sample of students, some small differences may be statistically significant. Such differences (typically less than 5 percentage points) are not noted here. Readers are encouraged to explore and use the NAEP Data Explorer (<http://nces.ed.gov/nationsreportcard/naepdata/>) to examine the reading results for grade 8 as well as for assessments in other subjects and years.

⁶ National Center for Education Statistics, *The Nation's Report Card: Reading 2009* (NCES 2010-458), Institute of Education Sciences, U.S. Department of Education, Washington, D.C., 2009 (<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010458>).

Teacher Certification. Nearly all (90 percent) fourth-graders have teachers who hold a regular, standard, or advanced professional certificate. Only 2 percent hold no certification.

White students were more likely than Hispanic students to have a teacher holding regular or standard certification, although this difference was small (92 percent versus 88 percent).

Eighteen percent of students had a teacher who also indicated that they held regular certification from a state other than where they are currently teaching. Nine percent of fourth-graders have reading teachers who said that they were certified through an alternative certification program. This ranges from a high of 11 percent in the South to only 4 percent in the Midwest. Most students (88 percent) had teachers who identified themselves as Highly Qualified Teachers (HQTs) according to state requirements.

Teacher Education. Half of students have a teacher who holds a bachelor’s degree, 44 percent a master’s degree, and 5 percent hold an education specialist’s or professional diploma based on at least one year’s work

beyond a master’s degree. Nearly two-thirds of fourth-graders have a teacher with a major in education. Other majors include reading, language arts or literacy, English and other language arts. Sixteen percent of students have a teacher who reported an undergraduate minor or special emphasis in reading, language arts or literacy. Ten percent reported minors or special emphasis in English and education.

Teachers also were asked to specify their graduate major or special emphasis. Again, education was the most prevalent graduate major among these students’ teachers (42 percent). Eleven percent of students have a teacher who reported a graduate major in reading, language arts or literacy, and 11 percent reported a graduate minor or special emphasis in that area.

Teacher Professional Development and Training. The NAEP questionnaires provide four views on this topic — three on professional development and one on training. First, an item in the school questionnaire assessed the extent to which the professional development offered to teachers in the school over the past two years focused on four areas. Table 1 shows the

TABLE 1: FOCUS OF SCHOOL PROFESSIONAL DEVELOPMENT ACTIVITIES OVER THE PAST TWO YEARS (PERCENTAGE OF STUDENTS WHOSE SCHOOLS RESPONDED “MODERATE” OR “LARGE” EXTENT)

<p>Instructional strategies for teaching language arts</p> <p><i>Black (89 percent) and Hispanic students (90 percent) were more likely than White (83 percent) and American Indian/Alaska Native students (83 percent) to be in schools with this professional development focus.</i></p>	85%
<p>Understanding the process of reading or writing</p> <p><i>Black students (88 percent) were more likely than White (83 percent), Asian/Pacific Islander (81 percent), and American Indian/Alaska Native students (81 percent) ...</i></p>	84
<p>Use of language arts across the curriculum</p> <p><i>Black (77 percent) and Hispanic students (75 percent) were more likely than White (69 percent), and American Indian/Alaska Native students (69 percent) ...</i></p>	72
<p>Interpreting and analyzing literature</p> <p><i>Black students (53 percent) were more likely than White (42 percent), Hispanic (47 percent), and American Indian/Alaska Native students (38 percent) ...</i></p>	45

percentage of students whose schools estimated a focus to a “moderate” or “large” extent. The areas of greatest focus were language arts instructional strategies and understanding the process of reading and writing.

The teacher questionnaire contained two questions on professional development. First, teachers were asked to consider all of the professional development activities in which they participated over the past two years and estimate the extent to which they learned about a series of topics, shown in Table 2 below. The table shows the

percentage of students whose teachers estimated that they learned about the topic to a “moderate” or “large” extent. It appears that more than half of students had teachers who learned about these topics, with one exception. Less than half of students had teachers who learned about strategies for teaching reading to students from diverse backgrounds, including students who were English-language learners (ELLs).

The second professional development question asked teachers to indicate whether they participated in

TABLE 2: TOPICS LEARNED ABOUT IN PROFESSIONAL DEVELOPMENT ACTIVITIES OVER THE PAST TWO YEARS (PERCENTAGE OF STUDENTS WHOSE TEACHERS RESPONDED “MODERATE” OR “LARGE” EXTENT)

<p>Instructional methods for teaching reading</p> <p><i>Black (74 percent) and Hispanic students (74 percent) were more likely than White students (69 percent) to have teachers who learned about this topic to a “moderate” or “large” extent.</i></p>	70%
<p>Content standards in reading</p> <p><i>Black (73 percent), Hispanic (72 percent), and American Indian/Alaska Native students (70 percent) were more likely than White (65 percent) and Asian/Pacific Islander students (61 percent) ...</i></p>	68
<p>How students learn reading</p> <p><i>Black students (71 percent) were more likely than White (65 percent), Asian/Pacific Islander (65 percent), and American Indian/Alaska Native students (66 percent) ...</i></p>	66
<p>Methods for assessing students in reading</p> <p><i>Black (70 percent) and Hispanic students (68 percent) were more likely than White students (63 percent) ...</i></p>	65
<p>Curricular materials available in reading (units, texts)</p> <p><i>Black students (70 percent) were more likely than White (63 percent), Asian/Pacific Islander (62 percent), and American Indian/Alaska Native students (64 percent) ...</i></p>	64
<p>Preparation of students for district and state assessments</p> <p><i>Black (71 percent) and Hispanic students (69 percent) were more likely than White (61 percent) and Asian/Pacific Islander students (57 percent) ...</i></p>	63
<p>Strategies for teaching reading to students with diverse backgrounds (including ELLs)</p> <p><i>Hispanic students (61 percent) were more likely than White (36 percent), Black (49 percent), Asian/Pacific Islander (48 percent), and American Indian/Alaska Native students (45 percent) ... White students were less likely than all others ...</i></p>	44

various professional development activities related to teaching language arts within the past two years. The results are shown in Table 3. The most common of these activities was a workshop or training session and regular independent reading. Less common activities included regular discussion or study groups,

consultations with a subject specialist, committee participation, mentoring, and research. Teachers also were asked whether they led any of these activities, and 26 percent of students have a teacher who responded in the affirmative.

TABLE 3: TEACHER PROFESSIONAL DEVELOPMENT ACTIVITIES OVER THE PAST TWO YEARS RELATED TO TEACHING LANGUAGE ARTS (PERCENTAGE OF STUDENTS WHOSE TEACHERS REPORTED PARTICIPATION)

<p>Workshop or training session</p> <p><i>White (82 percent), Black (82 percent), Hispanic (83 percent), and Asian/Pacific Islander students (84 percent) were more likely than American Indian/Alaska Native students (77 percent) to have a teacher who participated in a workshop or training session related to language arts.</i></p>	83%
<p>Independent reading on a regular basis (e.g., educational journals, books, or the Internet)</p>	70
<p>Regularly scheduled discussion or a study group</p> <p><i>White (47 percent), Black (51 percent), Hispanic (51 percent), and Asian/Pacific Islander students (49 percent) were more likely than American Indian/Alaska Native students (43 percent) ...</i></p>	49
<p>Consultation with a subject specialist</p> <p><i>Black (51 percent), Hispanic (48 percent), and Asian/Pacific Islander students (49 percent) were more likely than American Indian/Alaska Native students (41 percent) ...</i></p> <p><i>Black students (51 percent) were more likely than White students (44 percent) ...</i></p>	46
<p>Committee or task force focusing on curriculum, instruction, or student assessment</p>	45
<p>Mentoring and/or peer observation and coaching as part of a formal arrangement</p> <p><i>Black (47 percent), Hispanic (49 percent), and Asian/Pacific Islander students (48 percent) were more likely than White (41 percent) and American Indian/Alaska Native students (40 percent) ...</i></p>	44
<p>Conference or professional association meeting</p>	43
<p>Individual or collaborative research</p>	39
<p>Co-teaching/team teaching</p> <p><i>White (37 percent), Black (42 percent), Hispanic (41 percent), and Asian/Pacific Islander students (38 percent) were more likely than American Indian/Alaska Native students (28 percent) ...</i></p>	38
<p>College course taken after your first certification</p>	38
<p>Observational visit to another school</p>	23
<p>Teacher collaborative or network (such as one organized by an outside agency or over the Internet)</p>	22

Finally, teachers were asked whether they received training from any source in several areas related to technology in the past two years. The results are shown in Table 4. Teachers were most likely to get training on integrating technology into instruction.

Classroom Organization

Teachers were asked a series of questions about the organization of reading or language arts instruction.

- 83 percent of the students have teachers who teach all or most subjects to the class, including reading; 10 percent team teach and have primary responsibility for reading; and 6 percent teach only reading.

- 41 percent of students have teachers who report a class size of 21 to 25 students; 29 percent report 26 or more; 24 percent report 16 to 20; and 7 percent report 15 students or fewer.

Hispanic (40 percent) and Asian/Pacific Islander students (43 percent) were more likely than White (25 percent), Black (25 percent), and American Indian/Alaska Native students (20 percent) to have classes of 26 or more students.

- In a typical week, 47 percent of students have teachers who spend 10 or more hours on language arts; 31 percent spend 7 to 10 hours; 14 percent, 5 to 7 hours; 7 percent, 3 to 5 hours; and 3 percent spend less than 3 hours per week.

TABLE 4: PERCENTAGE OF STUDENTS WHOSE TEACHERS REPORTED RECEIVING TECHNOLOGY-RELATED TRAINING DURING THE PAST TWO YEARS

<p>Integration of computer and other technology into classroom instruction</p> <p><i>White (65 percent) and Black students (64 percent) were more likely than Hispanic (59 percent) and American Indian/Alaska Native students (58 percent) to have teachers who received training in integrating technology into instruction.</i></p>	63%
<p>Software applications</p> <p><i>White (50 percent) and Asian/Pacific Islander students (51 percent) were more likely than Hispanic (44 percent) and American Indian/Alaska Native students (44 percent) ...</i></p>	48
<p>Use of other technology (satellite, wireless, interactive video, closed circuit TV, videoconferencing)</p> <p><i>White students (46 percent) were more likely than Hispanic (39 percent) and American Indian/Alaska Native students (40 percent) ...</i></p>	44
<p>Basic computer training</p>	37
<p>Use of the Internet</p>	34

Hispanic students (55 percent) were more likely than White (44 percent), Black (47 percent), Asian/Pacific Islander (50 percent), and American Indian/Alaska Native students (45 percent) to get 10 hours or more. Asian/Pacific Islander students were more likely than White students to get 10 hours or more.

- 78 percent of students have teachers who report that some language arts instruction is integrated with other subjects and some is presented as a discrete subject; 14 percent indicated that language arts lessons are primarily integrated with instruction in other subjects; and 8 percent said that language arts was taught as a discrete subject.

Black students (19 percent) were more likely than White (11 percent), Asian/Pacific Islander (14 percent), and American Indian/Alaska Native students (14 percent) to have language arts instruction that is primarily integrated with other subjects.

- 9 percent of students have teachers who report that they do not create instructional groups for reading; 68 percent of teachers group students on the basis of interest; 14 percent on the basis of ability; 7 percent on some other basis; and 3 percent on the basis of diversity.

Reading Instruction

Figure 2 provides a display of the extent to which teachers provide instruction in various topics in their reading and language arts classes. First, teachers were asked to indicate the extent to which they provided instruction this year in several areas. As shown in the first set of bars, teachers are much more likely to focus to a “moderate” or “large” extent on literary texts (fiction and literary nonfiction) in their teaching than they are on poetry and more expository forms

of reading. Only about one-third of students have teachers who devote a “moderate” or “large” amount of instruction to procedural texts and documents, poetry, or argumentative or persuasive reading.

Black students (40 percent) were more likely than White (33 percent), Hispanic (29 percent), Asian/Pacific Islander (34 percent), and American Indian/Alaska Native students (33 percent) to have teachers who provided instruction in poetry.

Black students (37 percent) also were more likely than White (29 percent), Hispanic (30 percent), Asian/Pacific Islander (27 percent), and American Indian/Alaska Native students (30 percent) to have teachers who provided instruction in argumentation and persuasion.

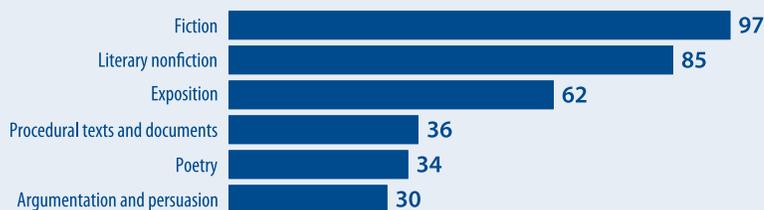
Black students (43 percent) also were more likely than White (33 percent), Hispanic (37 percent), Asian/Pacific Islander (35 percent), and American Indian/Alaska Native students (35 percent) to have teachers who provided instruction in procedural texts and documents.

Second, teachers were asked about instruction when reading a story. Here, in the second set of bars, teachers were consistent in reporting an emphasis on interpretation, identification of themes and characters’ motivations, and summarization. In addition, most students have teachers who focused on having students relate the reading to their own lives. Eighty percent or more of students have teachers who said that they often or always asked students to focus on these aspects of reading.

As shown in the third set of bars, teachers reported that, when students write, they focused most heavily on having students plan their writing and on mechanics like spelling and punctuation. There was less focus on having students make preliminary outlines or define the purpose of and audience for their writing.

FIGURE 2: FOCUS OF CLASSROOM READING INSTRUCTIONAL ACTIVITIES

**To what extent have you provided instruction in the following?
(Percent reporting “moderate” or “large” extent)**



**When reading a story, how often do you ask students to do the following?
(Percent reporting “often” or “always/almost always”)**



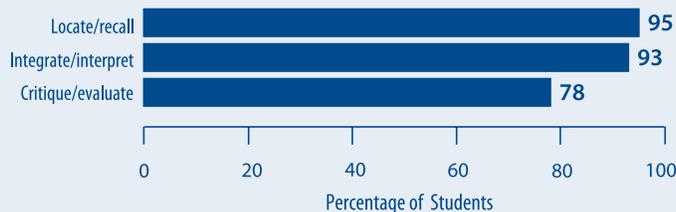
**How often do you ask students to do the following when they write?
(Percent reporting “often”)**



**How often do you do the following as part of reading instruction?
(Percent reporting “once or twice a week” or “almost every day”)**



**To what extent have you emphasized these cognitive processes when reading?
(Percent reporting “moderate” or “large” extent)**



White (87 percent), Black (87 percent), Hispanic (90 percent), and Asian/Pacific Islander students (90 percent) were more likely than American Indian/Alaska Native students (76 percent) to have teachers who “often” ask them to plan their writing.

In addition, White (53 percent), Black (55 percent), Hispanic (54 percent), and Asian/Pacific Islander students (50 percent) were more likely than American Indian/Alaska Native students (44 percent) to have teachers who “often” ask them to define their purpose and audience.

The fourth set of bars shows the percentage of students whose teachers report using a variety of techniques frequently (“once or twice a week” or “almost every day”). The following activities were a frequent aspect of reading instruction: asking students to read aloud, or make predictions, allowing students to read books of their own choosing, and asking them to explain and support their understanding of what they have read. Teachers report much less focus on group activities and videos and movies.

White (85 percent), Black (88 percent), Hispanic (87 percent), and Asian/Pacific Islander students (90 percent) were more likely than American Indian/Alaska Native students (80 percent) to have teachers who ask them to write about something they have read.

In addition, Black (37 percent) and Hispanic students (34 percent) were more likely than White (30 percent) and Asian/Pacific Islander students (28 percent) to watch movies or videos and listen to music as part of reading instruction.

The final set of bars shows the extent to which teachers report emphasizing certain cognitive processes used in reading. Teachers reported the most focus on locating

and recalling and on integrating and interpreting. Less focus was reported on critiquing and evaluating, although 78 percent of students have teachers who report at least a “moderate” focus on these processes.

White (77 percent), Black (80 percent), Hispanic (79 percent), and Asian/Pacific Islander students (79 percent) were more likely than American Indian/Alaska Native students (71 percent) to have teachers that emphasize critique and evaluation.

Teachers were surveyed about how they differentiate instruction for students and how they evaluate students. The data in Table 5 show the percentages of students who have teachers who use different methods of instruction to either a “moderate” or “large” extent. A large proportion of students have teachers who report differentiation of instruction. More than three-quarters of students have teachers who report using different methods, supplementing the curriculum, and pacing their teaching differently for some students.

Teachers indicated that they meet with students one-on-one to review their work and to evaluate their progress with different levels of frequency:

- 12 percent meet every day
- 37 percent meet once or twice a week
- 32 percent meet once or twice a month
- 16 percent meet a few times a year
- 3 percent meet never or hardly ever

Finally, teachers were asked to specify the frequency with which they interact with students in various ways to evaluate their progress. Table 6 shows the percentage of students who have teachers who engage in each activity “once or twice a week” or “every day or almost every day.”

TABLE 5: PERCENTAGE OF STUDENTS WHOSE TEACHERS REPORT DIFFERENTIATION OF INSTRUCTION

Use different methods in teaching some students	80%
Supplement the regular curriculum with additional material for some students	78
Pace teaching differently for some students <i>Black students (80 percent) were more likely than White (74 percent), Asian/Pacific Islander (76 percent), and American Indian/Alaska Native students (72 percent) to have teachers who pace teaching differently for some students.</i>	76
Have some students engage in different activities <i>Black students (75 percent) were more likely than White (66 percent), Hispanic (69 percent), Asian/Pacific Islander (70 percent), and American Indian/Alaska Native students (59 percent) ... American Indian/Alaska Native students were less likely than all other groups ...</i>	68
Set different achievement standards for some students <i>Black students (65 percent) were more likely than White (59 percent), Hispanic (60 percent), Asian/Pacific Islander (61 percent), and American Indian/Alaska Native (56 percent) students ...</i>	60

TABLE 6: PERCENTAGE OF STUDENTS WHOSE TEACHERS REPORT FREQUENT INTERACTIONS WITH STUDENTS TO EVALUATE PROGRESS

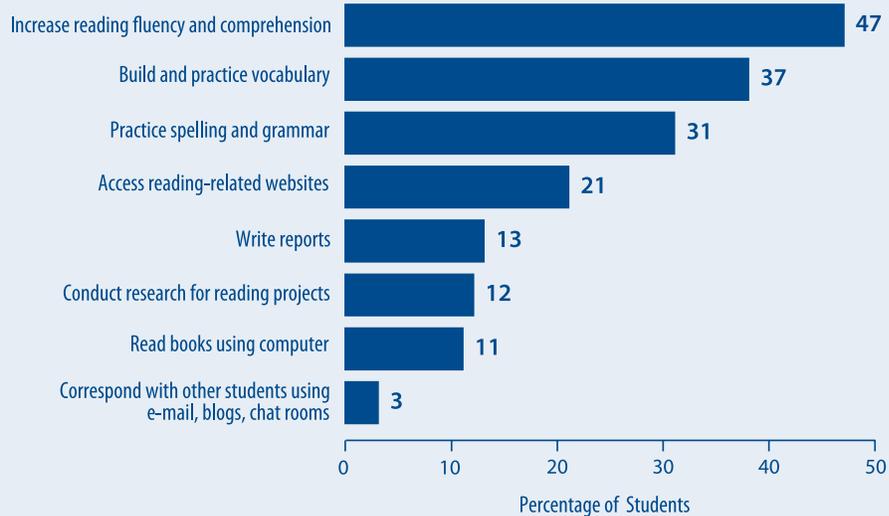
Determine how to adjust teaching strategies to meet student’s current learning needs and to reflect student’s future goals <i>Black students (56 percent) were more likely than White (47 percent), Asian/Pacific Islander (50 percent), and American Indian/Alaska Native students (50 percent) to have teachers who determine how to adjust teaching strategies to meet student goals.</i>	50%
Discuss student’s current level of performance <i>Black students (41 percent) were more likely than White (30 percent), Hispanic (37 percent), Asian/Pacific Islander (29 percent), and American Indian/Alaska Native students (35 percent) ...</i>	33
Discuss progress student has made toward goals previously set <i>Black students (32 percent) were more likely than White (22 percent), Hispanic (28 percent), and Asian/Pacific Islander students (21 percent) ...</i>	25
Set goals for specific progress the student would like to make <i>Black students (31 percent) were more likely than White (20 percent), Hispanic (26 percent), Asian/Pacific Islander (20 percent), and American Indian/Alaska Native students (24 percent) ...</i>	23

Technology Use

Teachers were asked a number of questions related to the use of technology in their teaching. Ninety percent of students have teachers who said that computers were available to both them and their students, while 9 percent responded that they had access to computers but their students did not. Teachers also were presented with a number of reading/language arts instructional activities and then asked to indicate the frequency with which students used a computer for each activity. These activities, along with their frequencies, are shown in Figure 3.

Overall, these data show a relatively modest use of technology in the fourth-grade reading classroom. The percentages shown in Figure 3 represent computer use characterized as “once or twice a week” or more. While between a third and half of students have teachers who report weekly or more frequent use of computers to increase fluency and comprehension and to build and practice vocabulary and grammar, similar proportions have teachers who report “never or hardly ever” using computers for these same purposes.

FIGURE 3: STUDENT COMPUTER USE IN READING CLASS (PERCENTAGE REPORTING “ONCE OR TWICE A WEEK” OR “EVERY DAY OR ALMOST EVERY DAY”)



There were some differences among racial/ethnic groups in classroom computer use:

Black students (48 percent) were more likely than White (34 percent), Hispanic (40 percent), Asian/Pacific Islander (31 percent), and American Indian/Alaska Native students (41 percent) to use computers frequently to build and practice vocabulary. In addition, Hispanic and American Indian/Alaska Native students were more likely to do so than White and Asian/Pacific Islander students.

Black students (57 percent) were more likely than White (43 percent), Hispanic (50 percent), Asian/Pacific Islander (30 percent), and American Indian/Alaska Native students (50 percent) to use computers to increase fluency and comprehension. In addition, Hispanic and American Indian/Alaska Native students were more likely to do so than White and Asian/Pacific Islander students.

Black students (40 percent) were more likely than White (30 percent), Hispanic (32 percent), Asian/Pacific Islander (25 percent), and American Indian/Alaska Native students (33 percent) to use computers to practice spelling and grammar. Asian/Pacific Islander students were less likely to do so than all other students.

Black (18 percent), Hispanic (14 percent), and American Indian/Alaska Native students (13 percent) were more likely than White (9 percent) and Asian/Pacific Islander students (7 percent) to read books using the computer in class.

Black students (27 percent) were more likely than White (20 percent), Hispanic (21 percent), Asian/Pacific Islander (21 percent), and American Indian/Alaska Native students (20 percent) to access reading-related websites in class.

Resources

Information was collected from schools on the availability of resources like a reading specialist or coach. The survey instrument also collected information on the influence of both internal and external resources on the school's reading program.

Forty-four percent of students attended a school where a full-time reading specialist or coach was available to fourth-graders; 21 percent of students had access to a part-time specialist or coach.

Black (52 percent) and Hispanic students (51 percent) were more likely than White (40 percent), Asian/Pacific Islander (42 percent), and American Indian/Alaska Native students (41 percent) to have a full-time reading specialist or coach available in their schools.

Table 7 shows the major responsibilities of the reading specialists/coaches (the percent shown is for the responses of "moderate extent" and "large extent"). These data suggest that the responsibilities of these coaches are focused on providing help to both teachers and students and minor attention to enrichment.

TABLE 7: RESPONSIBILITIES OF READING SPECIALISTS/COACHES (PERCENT RESPONDING “MODERATE” OR “LARGE” EXTENT)

<p>Provide technical assistance/support to individual teachers about reading content or teaching</p> <p><i>Black (83 percent) and Hispanic students (80 percent) were more likely than White (69 percent), Asian/Pacific Islander (75 percent), and American Indian/Alaska Native students (70 percent) to attend schools where the reading specialists/coaches were responsible for providing technical assistance/support to individual teachers about reading content or teaching.</i></p>	74%
<p>Provide reading instruction to students at various grade levels</p> <p><i>White students (70 percent) were more likely than Black (65 percent) and Hispanic students (62 percent) ...</i></p>	67
<p>Conduct professional development for groups of teachers about reading content or teaching</p> <p><i>Black (78 percent) and Hispanic students (75 percent) were more likely than White (56 percent), Asian/Pacific Islander (67 percent), and American Indian/Alaska Native students (58 percent) ...</i></p>	64
<p>Provide reading instruction to students on various topics</p> <p><i>White (62 percent), Black (61 percent), and Asian/Pacific Islander American students (63 percent) were more likely than Hispanic students (54 percent) ...</i></p>	60
<p>Provide reading enrichment to some student groups</p> <p><i>Black students (38 percent) were more likely than White students (31 percent) ...</i></p>	33

The school questionnaire also sought to identify the resources that influenced the schools’ reading programs. Figure 4 summarizes these resources. It appears that state and district curriculum standards have the most influence, followed closely by the results of school, district and state assessments.

Finally, teachers were asked how well the school system provided them with the materials and other resources needed for reading/language arts instruction. Most were satisfied:

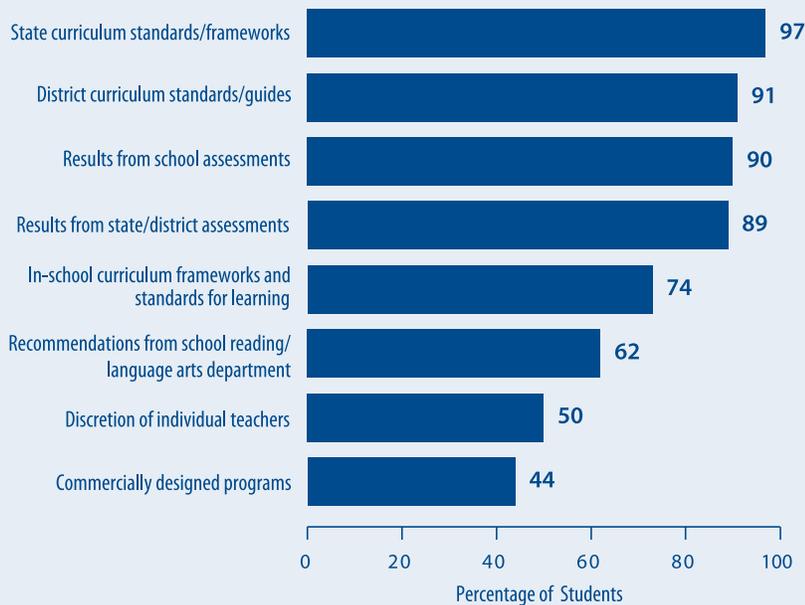
- 24 percent of students have teachers who said they have all the resources they need
- 55 percent said they have most

- 20 percent said they have some
- 2 percent said they do not have the resources they need

Assessment Preparation

Schools were asked to estimate the extent to which the reading curriculum focused on preparing for federal, state, district, and local assessments. Preparing for state and school assessments clearly had the most influence on curriculum. Eighty-seven and 81 percent, respectively, cited these to a “moderate” or “large” extent. Preparation for federally mandated assessments ranked lowest: 51 percent rated it as having a “moderate” or “large” effect on the focus of the school’s reading curriculum.

FIGURE 4: RESOURCES INFLUENCING SCHOOL READING PROGRAMS (PERCENTAGE RESPONDING “MODERATE” OR “LARGE” EXTENT)



Black (59 percent), Hispanic (57 percent), and American Indian/Alaska Native students (62 percent) were more likely than White (47 percent) and Asian/Pacific Islander students (48 percent) to attend schools where the curriculum focus was on preparing for federally mandated assessments to a “moderate” or “large” extent.

Black (92 percent), Hispanic (91 percent), and American Indian/Alaska Native students (91 percent) also were more likely than White (84 percent) and Asian/Pacific Islander students (84 percent) to attend schools where the curriculum focus was on preparing for state-mandated assessments.

Finally, Black (82 percent), Hispanic (85 percent), and American Indian/Alaska Native students (79 percent) were more likely than White (72 percent) and Asian/Pacific Islander students (72 percent) to

attend schools where the curriculum focus was on preparing for district assessments.

Summary

Below are some broad and general observations based on the data presented. Readers are encouraged to explore these data more fully, including differences identified among racial/ethnic groups.

- This population of teachers can be characterized as experienced, qualified (certified), and having high levels of education.
- The focus of professional development appears to be on instructional strategies for teaching reading and language arts and on understanding the process of reading or writing. Workshop and training sessions were the primary vehicle for this professional development, followed by regular independent reading.

- Most reading and language arts instruction is delivered in a classroom by a teacher who teaches all or most subjects, and some language arts instruction is typically integrated with other subjects.
- Reading instruction is focused on fiction and literary nonfiction and emphasizes interpreting meaning, relating the literature to students' own lives, and identifying themes. Students are frequently asked to plan their writing and to check grammar, spelling and punctuation.
- Teachers report that they adapt their instruction to the needs of students in a variety of ways. These include using different sets of methods and different curricula or material.
- Technology is widely available and is used moderately in reading class, most frequently to influence reading fluency and comprehension and to build and practice vocabulary, spelling and grammar.
- Nearly half of students attended a school where a full-time reading coach was available and another quarter attended a school where this resource was available part-time. These coaches provided support and professional development to teachers and also provided instruction to students.
- Major influences on the school reading program were state and district curriculum standards and results from assessments.
- Preparation for assessments had a large effect on the school reading curriculum.
- Three-quarters of students attended schools where the teacher indicated that they had all or most of the resources they need.

When the data are disaggregated by the race/ethnicity of the students, a variety of differences are apparent. Here are some highlights; more complete descriptions are provided above.

- *Black and Hispanic students were more likely to attend schools that focus professional development on instructional strategies, methods for teaching reading, and use of language arts across the curriculum.*
- *American Indian/Alaska Native students were less likely than other students to have teachers who participated in workshops or training sessions, participated in discussion or study groups, or participated in co-teaching or team teaching related to language arts.*
- *Hispanic and Asian/Pacific Islander students were more likely to be in large classes. But these students also were more likely to receive the highest number of hours of language arts instruction.*
- *Black students were more likely to have language arts instruction integrated with other subjects.*
- *American Indian/Alaska Native students were less likely to have teachers who often ask them to plan their writing, to define their purpose and audience, and to write about something they have read.*
- *Black students are more likely to have teachers who report that they differentiate instruction — i.e., pace teaching differently for some students, have some students engage in different activities, and set different achievement standards for some students.*

- *Black students were most likely to frequently interact with their teachers for evaluation purposes.*
- *Black students were more likely to use computers in reading classes to develop vocabulary and practice spelling and grammar.*
- *Black and Hispanic students were more likely to have a reading specialist or coach available in their schools.*
- *Black, Hispanic, and American Indian/Alaska Native students were most likely to attend schools where the school curriculum was focused on preparing for assessments.*

While the data presented here can be informative in describing the fourth-grade reading classroom, they beg the question of whether reading achievement is associated with particular teacher practices or characteristics. Answering this question could help focus our resources more effectively. NAEP data provide a “snapshot” of schooling and are limited in what they can tell us. However, when probed with more sophisticated statistical tools, NAEP data can help us better understand the relationship between student achievement and teacher practices. The results of analyses such as these can serve as the basis for further exploration of the factors that may be related to student achievement.

ETS Policy Notes is published by the ETS Policy Information Center Educational Testing Service Rosedale Road, MS 19-R Princeton, NJ 08541-0001 (609) 734-5212

e-mail: pic@ets.org

www.ets.org/research/pic

Director: Richard J. Coley

This article was written by Richard J. Coley.

Copyright © 2010 by Educational Testing Service. All rights reserved.

Educational Testing Service is an Affirmative Action/Equal Opportunity Employer.

ETS, the ETS logo and LISTENING. LEARNING. LEADING. are registered trademarks of Educational Testing Service (ETS). 15144

NON-PROFIT
ORGANIZATION
US POSTAGE
PAID
EDUCATIONAL
TESTING SERVICE



Listening. Learning. Leading.®

www.ets.org