This concise report presents excerpts from the two full reports of the 1992 Integrated Reading Performance Record (IRPR), which examined the reading habits and oral reading of a subgroup of fourth graders who participated in the 1992 National Assessment of Educational Progress (NAEP) study. The report presents major findings of the two full reports, including: (1) much can be learned and documented about important aspects of reading development through literacy interviews and by listening to them read aloud; (2) 55% of the subjects were considered to be fluent, but only 13% could be described as consistently reading with appropriate phrasing and with at least minimal expressiveness; (3) oral reading fluency demonstrated a significant relationship with reading comprehension; (4) an overwhelming majority of students reported reading storybooks or magazines, but significantly fewer of them reported reading information books; and (5) fluent reading appeared to be related to certain literacy activities. The brief report also discusses several activities warranting consideration by schools and families as they seek to support the literacy development of children, including the importance of broad reading experiences, reading outside of school, responding to reading, oral reading experience supported through shared reading activities, making books available to students, and talking to students about their literacy experiences. Contains six figures of data. (RS)
A Synthesis of Data from NAEP's 1992 Integrated Reading Performance Record at Grade 4
What is The Nation's Report Card?

THE NATION'S REPORT CARD, the National Assessment of Educational Progress (NAEP), is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, history/geography, and other fields. By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement is collected under this program. NAEP guarantees the privacy of individual students and their families.

NAEP is a congressionally mandated project of the National Center for Education Statistics, the U.S. Department of Education. The Commissioner of Education Statistics is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations. NAEP reports directly to the Commissioner, who is also responsible for providing continuing reviews, including validation studies and solicitation of public comment, on NAEP's conduct and usefulness.

In 1988, Congress created the National Assessment Governing Board (NAGB) to formulate policy guidelines for NAEP. The board is responsible for selecting the subject areas to be assessed, which may include adding to those specified by Congress; identifying appropriate achievement goals for each age and grade; developing assessment objectives; developing test specifications; designing the assessment methodology; developing guidelines and standards for data analysis and for reporting and disseminating results; developing standards and procedures for interstate, regional, and national comparisons; improving the form and use of the National Assessment; and ensuring that all items selected for use in the National Assessment are free from racial, cultural, gender, or regional bias.
Since 1971, the National Assessment of Educational Progress (NAEP) has reported on American students' reading proficiency, including trends over time. Seven national assessments of reading have illuminated students' reading comprehension, classroom and home supports for literacy, and teacher strategies for assisting students with their reading.

In 1992 a new dimension was added to NAEP's information about American students' reading. The Integrated Reading Performance Record (IRPR), a special study relying upon interviews with fourth grade students, examined in unprecedented detail the content and characteristics of students' reading activities. Moreover, the IRPR was designed to gather audiotaped samples of students reading aloud, and to report on their oral fluency.

The First Report: Interviewing Children About Their Literacy Experiences

Reading proficiency is an outgrowth of reading habits and the kinds of exposure that begin with efforts by thoughtful parents and continue with the challenges offered children by their teachers at school. From the first stories read to them, children begin to cherish the pleasures of literacy.

The interview portion of the IRPR resulted in NAEP's most in-depth survey of what — and how — students read. Interviewing fourth-grade children about their reading-related practices provides a unique perspective on how literacy develops, and helps to identify those students who may be missing out on important literacy activities. Parents and educators may be especially interested in how these activities relate to overall reading proficiency and what students have to say in reflecting upon their literacy experiences. It is generally agreed that developing into a lifelong reader entails acquiring an orientation to reading that demonstrates interest, motivation, and self-awareness related to literacy.\footnote{Anders, R. C., Hiebert, J. T., Scott, T. A., & Wilkinson, D. A. G. (1985) \textit{Becoming a Nation of Readers}. The Report of the Commission on Reading. U.S. Department of Education: The National Institute of Education}
The Second Report: Listening to Children Read Aloud

For many years, oral reading has been evaluated informally in classrooms, where teachers depend on the information they gain from these observations to determine the status of students' reading development — and individual needs. Grounded in well-established classroom practices and drawing on current research in reading fluency, the IRPR included a study of fourth graders' oral reading abilities.

This study represents NAEP's first, and one of the first ever, attempts to measure aspects of oral reading on a large-scale basis. In addition to examining fourth graders' reading rate and accuracy, the IRPR described oral reading fluency in terms of phrasing, adherence to the author's sentence structure, and expressiveness. The findings from these analyses are discussed with reference to students' overall reading proficiency and literacy experiences. As a result, the IRPR study of oral reading provides a national data base that can be used to inform educators, parents, and researchers about how fourth graders are developing and how their oral reading abilities relate to their overall reading achievement.

Major Findings:

Talking About Literacy and Describing Oral Reading Fluency. Perhaps one of the most significant findings from this study was how much can be learned about important aspects of reading development through literacy interviews and listening to children read aloud. Talking to children about their reading-related experiences can be revealing of their interests, involvement, and accomplishments in pursuing literacy activities. Listening to children read aloud may provide educators and parents with direct observation of children's fluency. The fluency scale developed for the IRPR to describe those aspects of oral reading that go beyond accuracy and rate may have wide applicability for reading educators.
Diversity of Reading Experiences. Another important finding from this study was that an overwhelming majority of fourth-grade students reported reading storybooks and magazines (97 and 90 percent); however, significantly fewer of them reported reading information books (77 percent). Diversity in reading experiences appeared to be related to reading comprehension as measured on the main NAEP reading assessment. Those students who reported reading all three types of materials — storybooks, magazines, and information books — had higher average proficiency than their peers with less diverse reading experiences. Furthermore, significantly more students who attended the top-third performing schools than students from the lower-third schools reported reading information books and magazines.

Students' Reading Proficiency by Number of Different Reading Materials

Fourth graders who read all three types of materials — storybooks, magazines, and information books — had the highest proficiency.
Fourth Graders’ Oral Reading Fluency. In reading a portion of one narrative text, 55 percent of fourth graders were considered to be fluent. However, only 13 percent could be described as consistently reading with appropriate phrasing and with at least some expressiveness — the highest degree of fluency rated. This was a passage they had read silently twice before. Those students who were rated as fluent in their oral reading demonstrated appropriate phrasing and adherence to the author’s sentence structure. Students who were not rated as fluent read primarily in two- or one-word phrases with little or no recognition of the text’s sentence structure.

Oral Reading Fluency and Reading Proficiency. Another major finding from this study was that oral reading fluency demonstrated a significant relationship with reading comprehension. Increasingly higher levels of fluency were associated with increasingly higher overall reading proficiency as measured on the main NAEP reading assessment.
**Average Proficiency of Nonfluent and Fluent Readers**

<table>
<thead>
<tr>
<th>Level</th>
<th>Nonfluent</th>
<th>Fluent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>42%</td>
<td>229</td>
</tr>
<tr>
<td>4</td>
<td>13%</td>
<td>249</td>
</tr>
</tbody>
</table>

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**NAEP’s Integrated Reading Performance Record**

**Oral Reading Fluency Scale**

- **Level 4** — Reads primarily in larger, meaningful phrase groups. Although some regressions, repetitions, and deviations from text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author’s syntax is consistent. Some or most of the story is read with expressive interpretation.

- **Level 3** — Reads primarily in three- or four-word phrase groups. Some smaller groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present.

- **Level 2** — Reads primarily in two-word phrases with some three- or four-word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to larger context of sentence or passage.

- **Level 1** — Reads primarily word-by-word. Occasional two-word or three-word phrases may occur — but these are infrequent and/or they do not preserve meaningful syntax.
Where Reading Takes Place. Fourth graders more frequently reported reading magazines, storybooks, and information books at home than at school or at the library. While 48 percent to 72 percent of fourth graders reported reading these materials at home, only 18 to 56 percent said they read them at school. More students in the top-third schools than in the lower-third schools reported reading information books at school.

Independent Reading. Another finding from this study, that may have been expected and yet provides important confirmation for educators and parents, was that fourth-grade students who said they spend time reading on their own had higher average reading proficiency than students who said they did not read on their own. Females (94 percent) were more likely to say they read books on their own time than were males (88 percent). The library was a major source for students in obtaining independent reading materials. Seventy-two percent said they got books from the library, 32 percent said they took books home from school, and 35 percent said they read books that were already at home.

**DATA FILE**

<table>
<thead>
<tr>
<th>Sources of Independent Reading Material</th>
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<tbody>
<tr>
<td>School</td>
</tr>
<tr>
<td>Library</td>
</tr>
<tr>
<td>Store</td>
</tr>
<tr>
<td>Home</td>
</tr>
<tr>
<td>Book Clubs</td>
</tr>
</tbody>
</table>

IQ
Oral Reading Fluency and Literacy Experiences. Fluent reading also appeared to be related to certain literacy activities. For example, having read at least one book outside of school in the previous month was associated with higher oral reading fluency. Making use of the library to find recreational reading materials was also related to reading fluently. In addition, the fluent readers were more likely to say they had daily opportunities in class to read books they had chosen. Interestingly, reading aloud in class as a part of instruction demonstrated little connection to oral reading fluency. This may be due to the wide variety of oral reading activities that teachers may use and the likelihood that some are more effective than others with individual students.

Discussing Reading with Others. A majority of students indicated having discussions with other people about the books they read on their own — 51 percent discussed books with teachers, 57 percent discussed books with classmates or friends, and 76 percent discussed books with family or people at home. More students from the top-third performing schools (80 percent) than the lower-third schools (70 percent) reported discussing their independent reading with family members.

Writing in Response to Reading. Many fourth graders reported writing journal entries (50 percent), or stories (67 percent), or book reports (72 percent) about things they had read in school. Those students who reported writing book reports had higher average reading proficiency than students who said they had not written book reports. Also, more students attending the top-third schools (79 percent) than students in the lower-third schools (61 percent) said they had written reports about books.
Types of Classroom Work in Reading. Students were asked to bring three samples of work they typically complete as a part of reading instruction in their classrooms. From the array of classroom reading work that students brought to the IRPR interviews, it appeared that fourth graders were involved in many different types of activities as a part of reading instruction — both skills-oriented and writing tasks, and both commercially and noncommercially prepared assignments.

Making Decisions About Work Samples. About half of students (52 percent) said that their teachers decided what work samples would be brought to the interview. Only 14 percent said they made their own decisions and 7 percent reported that they collaborated with their teacher in selecting work samples. Those students who selected work independently had higher average reading proficiency than students with teachers who solely made the decision.
Talking with Students About Their Classroom Work. Commercially prepared skills-oriented and short writing tasks were reported by fourth graders to be used more frequently in reading instruction than other types of work. In describing how they know if they have done a good job on their classroom work in reading, the majority of fourth graders (67 to 75 percent across five types of work) indicated an external source of evaluation, such as their teacher's comments or grades. Most students were able to describe some learning goal for their work samples. Across the five types of work, 49 to 64 percent identified a skill being taught or reinforced in the work they brought to the interview.

Oral Reading Accuracy. Two other aspects of oral reading — accuracy and rate — were measured in the IRPR oral reading study, in addition to describing overall fluency. The majority of students (57 percent) were at least 96 percent accurate in their oral reading of the passage presented to them. The relationship between reading accuracy and reading comprehension appeared to be dependent on the nature of students' deviations from the text. That is, the number of deviations students made in their oral reading that resulted in a meaning change was more directly related to their overall proficiency than was their total number of deviations. There was also some indication that students made fewer self-corrections of their deviations from text when no meaning change occurred.
Fourth Graders' Oral Reading Accuracy and its Relationship to Reading Proficiency

<table>
<thead>
<tr>
<th>Deviations</th>
<th>0 - 4</th>
<th>5 - 9</th>
<th>10 - 14</th>
<th>15 - 19</th>
<th>20 or More</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Accurate</td>
<td>99%</td>
<td>97%</td>
<td>96%</td>
<td>94%</td>
<td>less than 94%</td>
</tr>
</tbody>
</table>

Deviations from text that resulted in a meaning change appeared to have a more direct relationship with proficiency.

Oral Reading Rate. Sixty percent of fourth graders read the IRPR passage at a rate of at least 100 words per minute. A consistent pattern was apparent in the relationship between proficiency and rate — on average slower readers demonstrated lower reading proficiency.
Accuracy, Rate, and Fluency. Both accuracy and rate displayed some relationship to reading fluency. While not all fluent readers were among the most accurate or the fastest of their peers, those readers who read fluently were, on average, at least 96 percent accurate and read the passage at an average rate of at least 126 words per minute.
Summary

The IRPR oral reading data can be used in connection with current understandings about reading and reading instruction to help focus parents’ and teachers’ efforts in promoting students’ reading achievement. The results of this study underscore several activities warranting consideration by schools and families as they seek to support the literacy development of children.

- Young readers, especially those at risk, need many opportunities to read. Furthermore, reading experiences should be broad enough to include multiple forms of reading materials (e.g., information books, magazines, and storybooks.) IRPR data support a clear relationship between broad reading experiences and reading proficiency.

- Understanding the nature of fluent reading may help educators and parents provide ample reading opportunities in which students can experience success and enjoyment. Moreover, it appears that reading outside of school for enjoyment and reading self-selected books in school may be related to reading fluency.

- Responding to reading is an important part of reading development. Students can write about what they read and talk about their reading with peers, teachers, and family members. These activities appear to have some relationship to overall reading.

- Oral reading experience can be important in developing reading fluency; however, not all oral reading activities may be equally successful with all students. Young readers may need models and support through shared reading experiences.

- Making books available to students is a critical first step in encouraging reading habits. The library continues to play a central role in providing students with books to read for their own enjoyment.
Talking to students about their literacy experiences and listening to them read can reveal much about their literacy development. Interview assessment techniques and oral reading performances may have broad applicability as tools for observing students' progress and making students active participants in their own evaluation.
Acknowledgments

The work presented herein represents the efforts of the hundreds of individuals who are necessary to implement a complex special study of this size and scope. From the considerable expertise, energy, and dedication required to develop and conduct NAEP’s 1992 Integrated Reading Performance Record (IRPR) to that necessary to analyze and report it, many persons have made important and substantial contributions. Most importantly, NAEP is grateful to students and school staff who made the special study possible.

The special study was funded through NCES, in the Office of Educational Research and Improvement of the U.S. Department of Education. Emerson Elliott, Commissioner, provided consistent support and guidance. The staff—particularly Gary Phillips, Peggy Carr, Susan Ahmed, and Sheida White—worked closely and collegially with ETS, Westat, and NCS staff and played a crucial role in all aspects of the program.

The NAEP project at ETS resides in the Center for Assessment of Educational Progress (CAEP) managed by Archie Lapointe. Under the NAEP contract to ETS, Ina Mullis served as Project Director. Stephen Koffler managed test development activities. Jay Campbell and Mary Foertsch worked with the IRPR Instrument Development Committee to develop the special study. Jules Goodison managed the operational aspects together with John Olson, and sampling and data collection activities were carried out by Westat under the direction of Renee Slobasky, Nancy Caldwell, and Keith Rust. Additional support was provided by Sandy Rieder and Nancy Caldwell of Westat in the very important task of training IRPR administrators. Distribution, scoring and processing activities were conducted by NCS, under the supervision of John O’Neill, Judy Moyer, Diane Smrdel, Lavonne Mohn, Brad Thayer, and Andrew Latham.

Statistical and psychometric procedures were led by John Donoghue under the direction of Eugene Johnson and John Mazzeo. Laura Jenkins performed the IRPR data analysis, assisted by David Freund, Jay Campbell, Gay Sue Pinnell, Jack Pikulski, Barbara Kapinus, Karen Wixson, Philip Gough, and Alexandra Beatty wrote the IRPR reports with considerable...
editorial and production support from Kent Ashworth and Patricia Donahue. In addition, Sharon Jaspan contributed extensive research support. The *Report in Brief* was compiled and edited by Jay Campbell and Kent Ashworth. Many thanks are provided to the numerous reviewers, internal to ETS and NCES as well as external, who suggested improvements to successive drafts, and to the ETS Publications Division, which provided expert composition. Vickie Farber provided excellent word processing assistance essential to the project. A debt of gratitude is also owed to the publishers of *Highlights* magazine for their contribution of materials and permission to use the magazine as a part of the study.
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