

**Title:**

Findings from the National Study of the Implementation of Reading First

**Author(s):**

Beth Boulay, Ed.D., Abt Associates

**Background/context:**

The No Child Left Behind Act (NCLB) of 2001 (PL 107-110) established the Reading First Program (Title I, Part B, Subpart 1) to address the widespread problem of inadequate development of reading skills necessary for our students' success in school. Reading proficiency by the end of grade three establishes a necessary foundation for successful performance across a broad range of skills and competencies in later grades. The legislation, consequently, authorizes a substantial investment in classroom-based activities and instruction designed to improve reading achievement for students in grades K–3, with the ultimate goal of having all children reading at grade level by the end of third grade.

Reading First is predicated on research findings that high-quality reading instruction in the primary grades significantly reduces the number of students who might experience difficulties in later years (National Reading Panel, 2000). The program's overarching goal is to improve the quality of reading instruction and thereby improve the reading skills and achievement of children in the primary grades. The RF program provides resources at both the state and local levels: 1) to ensure that research-based reading programs and materials are used to teach students in kindergarten through third grade; 2) to increase access to and quality of professional development of all teachers who teach K–3 students, including special education teachers, to ensure that they have the skills necessary to teach these reading programs effectively; and 3) to help prepare classroom teachers to screen, identify, and overcome barriers to students' ability to read on grade level by the end of third grade. More specifically, the programs and the professional development provided to school staff must use reading instructional methods and materials that incorporate the five essential elements of effective primary-grade reading instruction, as specified in the legislation: 1) phonemic awareness; 2) decoding; 3) vocabulary development; 4) reading fluency, including oral reading skills; and 5) reading comprehension strategies.

**Purpose/objective/research question/focus of study:**

The primary objective of this study is to describe how reading programs are implemented in Reading First schools and in a group of schools serving similar populations of students. The surveys collected detailed information about reading programs from nationally representative samples of schools to illustrate how this billion dollar a year program is rolling out in schools and classrooms. The study asks several broad research questions, two of which are the focus of this particular paper: 1) How is the Reading First program implemented in districts and schools and 2) How does reading instruction differ between reading First schools and non-RF Title I schools?

**Setting:**

The setting for this study is low-performing and/or low-income schools serving K-3 students in the United States. Schools were selected for the study to represent four census regions of the country and a range of schools in terms of size and urbanicity. A more complete description of the study sample appears below.

**Population/Participants/Subjects:**

Three separate, nationally representative samples of schools were drawn for this study. The first sample included Reading First schools in their first year of implementation of the program in the 2004-05 school year (“newly-funded schools”), the second sample included Reading First schools beyond their first year of implementation (“mature schools”) in the 2004-05 school year, and the third sample included Title I School-Wide Project (SWP) schools. Table 1 summarizes the sample sizes and data collection schedule for the three samples of schools, K-3 teachers, principals, and reading coaches. (Insert Table 1 about here). The study fielded surveys in the spring of 2005 and again in the spring of 2007.

Tables 2, 3, and 4 summarize key features of the study schools (and their students), and illustrate that the Reading First and non-RF Title I schools are similar demographically, and differ primarily with respect to the presence of on-site reading coaches. Principals reported that special education services are provided to roughly the same proportion of students in RF and Title I schools. In RF schools principals reported that significantly more of their students receive ESL services, and instruction in a language other than English.

**Intervention/Program/Practice:**

The Reading First program’s overarching goal is to improve the quality of reading instruction—and thereby improve the reading skills and achievement of children in kindergarten through third grade—by implementing the use of research-based instruction and materials. Reading First aims to increase both the availability and quality of professional development for all K–3 teachers, including special education teachers, so that they have the necessary skills to teach research-based reading programs effectively. An important provision of the RF legislation is that professional development be available to staff in *all* schools, not only those with RF funding. Specifically, K–3 teachers are eligible to participate in professional development paid for by district RF funds, and K–12 Special Education teachers are eligible to participate in professional development paid for by state RF funds.

Reading programs and instruction methods should incorporate the five essential elements of effective primary grade reading instruction, specified in the legislation: 1) phonemic awareness; 2) phonics; 3) vocabulary development; 4) reading fluency, including oral reading skills; and 5) reading comprehension strategies. Reading First also emphasizes the use of assessments, both to monitor progress and to identify and address students’ reading problems early, by helping classroom teachers to screen for, identify, and overcome barriers to students’ ability to read at grade level by the end of third grade.

## **Research Design:**

This study uses stratified random sampling to select a sample of schools proportional to its representation in the population. The study sampled Reading First schools from the census of Reading First schools, and Title I SWP schools from the census of Title I SWP schools. In analysis, we use sampling weights to generate nationally representative estimates of program characteristics in RF and non-RF Title I SWP schools. The use of a nationally representative sample of both Reading First and non RF Title I schools means that the study can generalize its results to the larger Reading First and/or non-Reading First Title SWP school I populations from which the samples are drawn. The Title I schools provide an important context against which to view the description of reading programs in RF schools, and while differences between the two groups of schools cannot be attributed causally to RF, the study provides useful information about reading programs nationally in RF and non-RF schools.

## **Data Collection and Analysis:**

The findings are based on survey data collected by mail in Spring 2005 and again in spring 2007 from principals, reading coaches, and K-3 teachers. The analysis provides nationally representative estimates about a range of program characteristics as reported by survey respondents in RF and non-RF schools. In general, survey responses are in one of two forms: the proportion of respondents who reported a particular program feature or the mean response of respondents on a question using a likert-scale format (e.g., 1= “strongly agree” to 5= “strongly disagree”). To obtain nationally representative estimates of proportions of respondents or mean responses, each response is first multiplied by a sampling weight. The sampling weight reflects the sampling design, and accounts for the proportion of the schools represented by the stratum from which the school was sampled. The sampling frame was divided into 16 strata prior to sampling, to reflect the four census regions of the country and four categories of school size. Teacher responses were also assigned a teacher weight, to reflect the number of teachers in the same grade as the sampled teacher in the school. Both sets of weights are also adjusted for non-response. Findings are presented in terms of weighted means for RF and Title I schools, with appropriate t-tests to determine whether the differences between the means are statistically different from zero.

## **Findings/Results:**

The presentation will summarize findings from the study’s Final Report (U.S. Department of Education, 2008). The study had earlier released an Interim Report (U.S. Department of Education, 2006) that found consistent evidence that RF schools were implementing the program as intended by the legislation, and that there were significant differences in the practices reported by educational personnel in RF and non RF Title I schools. Broadly, the evidence from the Final Report suggests that Reading First schools are continuing to implement reading programs as intended by the legislation, and that the prevalence . Among the specific findings:

- 98 percent of RF and 77 percent of non-RF Title I schools report having uninterrupted reading blocks of 90 minutes or more. According to K-3 teachers, reading instruction occurred for about 103 minutes per day, compared to 81 minutes per day reported by teachers in non RF Title I schools.

- RF schools were significantly more likely than non RF Title I schools to have reading coaches, and to have coaches who spent more of their time as a reading coach (99 vs. 57 percent, and 75 vs. 19 percent, respectively).
- Teachers in RF schools were more likely to have reported participated in reading-related professional development than teachers in non RF Title I schools, and to have spent more time in such professional development activities (90 vs. 73 percent, 31 vs. 16 hours, respectively, for teachers in RF and non RF Title I schools).
- Teachers in RF schools were more likely to have reported receipt of ongoing direct support and feedback about their classroom instruction than were teachers in non RF Title I schools, about such aspects of instruction as interpretation of assessment data (91 vs. 70 percent), assistance from a reading coach or reading specialist for diagnosing individual students' needs (72 vs. 48 percent); and intervention services for individual students 73 vs. 52 percent).

### **Conclusions:**

Overall, we found that Reading First schools are continuing to implement the major elements of the program as intended by the legislation, such as providing scientifically based reading instruction in grades K-3, increased amounts of time for reading instruction, interventions for struggling readers, wider use of classroom-based reading assessments, and more professional development activities. Although reading programs in RF and non-RF Title I schools differ on multiple aspects of instruction, professional development, and other features, it is important to note that RF-like activities are increasingly occurring in non-RF Title I schools, which report greater prevalence of practices aligned with the principles of Reading First than was observed in the study's first wave of data collection.

The fact that the Reading First Implementation Study has nationally representative samples means that its results can appropriately be generalized to the broader populations of RF and non RF Title I schools. The study cannot demonstrate that the Reading First program *caused* the differences in reading programs reported by school personnel, yet it does provide evidence that the practices reported do differ across the two types of schools, and further, that some of the practices promoted by Reading First are in greater evidence in 2006-07 than they were in 2004-05. The spillover has clear implications for policy makers as they begin to consider whether to continue funding this program.

## Appendix A. References

No Child Left Behind Act. (2001). PL 107-110, Washington DC.

National Reading Panel (2000). *Report of the National Reading Panel: Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. Washington D.C.: National Institute of Child Health and Human Development, National Institutes of Health.

U.S. Department of Education. (2002). *Guidance for the Reading First Program*. Washington DC: Office of Elementary and Secondary Education.

U.S. Department of Education. (2006). *Reading First Implementation Evaluation: Interim Report*. Washington DC: Policy and Program Studies Service.

U.S. Department of Education. (2008). *Reading First Implementation Evaluation Final Report*. Washington DC: Policy and Program Studies Service.

## Appendix B (Tables)

**Table 1**

**Data Collection Methods, Samples, and Schedule**

Type of School	Number of Schools	Estimated Number of Respondents	Schedule	
			2004–05	2006–07
Newly funded Reading First schools	550	550 principals up to 550 reading coaches 2,200 teachers	✓	✓
Mature Reading First schools	550	550 principals up to 550 reading coaches 2,200 teachers	✓	
Non-RF Title I schools	550	550 principals up to 550 reading coaches 2,200 teachers	✓	✓

Exhibit reads: 550 newly funded RF schools were selected for inclusion in the study sample. The expected respondents included 2,200 teachers, 550 principals, and up to 550 reading coaches. There were two waves of data collection, one in spring 2005 and one in spring 2007.

Note: Four teachers per school were sampled by randomly selecting one teacher from each of grades K–3. One principal and one reading coach (if applicable) per school were surveyed.

**Table 2**

**School Enrollment and Urbanicity in RF and Non-RF Title I Schools, 2006–07 School Year**

	RF Schools	Non-RF Title I Schools
<b>School Size</b>		
Mean enrollment	484	454
	<b>Percent</b>	<b>Percent</b>
Very small (1–99)	4%	3%
Small (100–249)	13	16
Medium (250–499)	41	44
Large (500–749)	29	28
Very large (750+)	14*	9
<b>Urbanicity</b>		
Urban	40%	36%
Suburban	35	35
Rural	25	29

Exhibit reads: In 2006–07, about 4 percent of RF and 3 percent of non-RF Title I schools had very small enrollments (i.e., less than 100 students).

Note: The stars (\*) indicate that there is a statistically significant difference (i.e., p-value ≤ .05) between RF and non-RF Title I schools.

Weighted respondents: Principals in 1,536 RF schools and 12,802 in non-RF Title I schools.

Nonresponse rates across survey items: 0.8 to 6.0 percent.

**Table 3****Years of Experience for Staff in RF and Non-RF Title I Schools, 2006–07 School Year**

	RF Schools	Non-RF Title I Schools
	Mean	Mean
<b>Principals</b>		
Years experience as principal	7.2	8.2*
Years in this school	4.8	5.7*
<b>Teachers</b>		
Years experience	14.1	15.5*
Years in this school	9.3	10.9*
<b>Reading Coaches<sup>a</sup></b>		
Years experience	17.7	16.8
Years in this school	9.7	9.3
Years as reading coach in this school	3.3	4.5
	Percent	Percent
Schools with reading coaches	99*	57
Principals in this school three or fewer years	51*	44

Exhibit reads: In 2006–07, principals in RF schools have, on average, 7.7 years experience in that position, compared with 8.5 years for principals in non-RF Title I schools. This difference is statistically significant ( $p \leq .05$ ).

Note: The stars (\*) indicate that there is a statistically significant difference (i.e.,  $p$ -value  $\leq .05$ ) between RF and non-RF Title I respondents.

<sup>a</sup> Reading coaches in non-RF Title I schools were excluded from this analysis on the basis of survey responses that indicate they do not meet the definition of “reading coach” used in this evaluation.

Weighted respondents: 1,555 principals, 5,811 teachers and 1,533 reading coaches in RF schools; 12,909 principals, 45,731 teachers and 5,798 reading coaches in non-RF Title I schools.

Nonresponse rates across survey items and respondents: < 1 percent

**Table 4**  
**Student Characteristics in RF and Non-RF Title I Schools, 2006–07 School Year**

	<b>RF Schools</b>	<b>Non-RF Title I Schools</b>
	<b>Mean Percent</b>	<b>Mean Percent</b>
Receive Special Education Services	8	8
Receive ESL Instruction	18*	11
Instruction in language other than English	6	4
Reading at or above grade level	54	60*

Exhibit reads: In 2006–07, in RF schools and non-RF Title I schools, 6 percent of kindergarten students receive special education services.

Note: The stars (\*) indicate that there is a statistically significant difference (i.e., p-value  $\leq$  .05) between RF and non-RF Title I schools.

Weighted Respondents: Principals in 1,446 RF schools and 11,460 in non-RF Title schools.

Nonresponse rates across survey items and grades: 4.5 to 15.0 percent.