

Scott Baker, Ph.D. Jeanie Mercier Smith, Ph.D. Hank Fien, Ph.D. Janet Otterstedt, M.S. Rachell Katz, Ph.D. Doris Luft Baker, Ph.D. Carrie Thomas Beck, Ph.D.

For

The Oregon Department of Education and The Literacy Leadership State Steering Committee

June, 2007

Executive Summary

Background

Oregon Reading First is part of the largest federal reading initiative ever undertaken. Although the scope of Reading First is vast, the goal of the initiative is transparent: *To ensure that every child reads at grade level or above by the end of third grade*. This report summarizes the impact of Oregon Reading First after three years of implementation. The primary focus is on student reading achievement.

Oregon Reading First has been implemented in 50 schools. In this report, we focus on two cohorts of Oregon Reading First schools, *Cohort A* (33 schools) and *Cohort B* (17 schools) and a cohort of non-Reading First comparison schools, *Cohort C* (6 schools). The percentages of English learners, minority students, and students eligible for free or reduced lunch prices are similar among the schools.

In Oregon, the *Schoolwide Beginning Reading Model¹* is used to implement Reading First. This model prioritizes seven essential dimensions of reading instruction: (a) A schoolwide focus on essential reading content; (b) Regular use of reliable and valid assessments to inform instruction; (c) Protected and sufficient time allocated to reading instruction; (d) Data-based leadership devoted to sustained effective implementation and outcomes; (e) High-quality professional development that drives continuous improvement in the quality of reading instruction; (f) Research-based instructional programs and materials; (g) Differentiated instruction to optimize learning for all students.

A range of measures was used to estimate impact. DIBELS measures, used by Reading First schools to screen students for reading problems and monitor reading progress over time, were used to estimate the degree to which students met benchmark reading goals. Performance on two DIBELS measures was examined—Nonsense Word Fluency at the end of kindergarten, and Oral Reading Fluency at the end of grades 1, 2, and 3. These two measures were selected because they represent the most important DIBELS benchmarks that predict student performance on the Oregon Statewide Reading Assessment in third grade.

To determine grade level reading performance in kindergarten, first, and second grade, all Oregon Reading First students were administered the reading portion of the Stanford Achievement Test-10 (SAT-10) at the end of each year. Grade level performance on this *primary outcome measure* was defined as reading at the 40th percentile or above. Being at high risk for reading difficulties (i.e., well below grade level) was defined as reading below the 20th percentile.

Grade level reading on the primary outcome measure in third grade was determined by student performance on the Oregon Statewide Reading Assessment (OSRA). A score of 210 was used to define grade level reading on the OSRA rather than 201, which is defined as "meets proficiency," according to state criteria. A score of 210 was selected because it corresponded to

¹ Kame'enui, Simmons, & Coyne (2000); Simmons, Kame'enui, Harn, Cole, & Braun (2002)

the 40th percentile in the first year of Oregon Reading First, and thus was comparable to the SAT-10 standard. A score of 201, in contrast, corresponded to the 16th percentile. *Across these measures, the evaluation targeted (a) mean performance scores, (b) the percentage of students reading at or above benchmark and grade level goals, and (c) the percentage of students at high risk for reading difficulties.*

The following four questions are highlighted in the report:

- Are Cohort A schools getting increasingly better reading outcomes each year of implementation?
- Are experienced Oregon Reading First schools (Cohort A, after three years of implementation) getting better reading outcomes than inexperienced Oregon Reading First schools (Cohort B, after one year implementation)?
- Is the performance of students in Oregon Reading First (Cohort A) better than the performance of students in non-Reading First comparison schools that were eligible for Reading First (Cohort C)?
- Are the outcomes for students in Cohort A who received three years of Reading First (i.e., kindergarten, first, and second grade) better than the outcomes of other groups of students in Cohort A who received less Reading First instruction?

Research on large-scale reading reform was used to anchor interpretations regarding the magnitude of impact of Oregon Reading First. For example, after 1-3 years of implementation, an impact corresponding to an effect size of approximately 0.15 is typical, according to research by Borman and colleagues.² In the most strongly established comprehensive school reform approaches, an effect size of around 0.20 was typical. The Institute for Education Sciences uses effect sizes of 0.25 to indicate meaningful impact. Thus, in Oregon Reading First, an impact in the range of 0.15 to 0.25 and above was considered to be educationally meaningful.

Results

Are Cohort A schools getting increasingly better reading outcomes each year of implementation?

In terms of the performance of Cohort A schools across years, the data are clear. In each grade, and on every measure, mean performance scores have increased consistently each year. In kindergarten, for example, the average score of students on *Nonsense Word Fluency* has more than doubled during Reading First. All of the effect sizes comparing Year 3 to Year 1 suggest the impact has been educationally meaningful.

In addition, across all measures, the percentage of children reaching benchmark or grade level goals has *increased* each year, and the percentage of children remaining at a high level of reading risk has *decreased*. This indicates that Cohort A schools are accomplishing two of the most important Reading First objectives: (a) Cohort A schools are consistently increasing the percentage of children reading at grade level and (b) consistently decreasing the percentage of children at the highest levels of risk for reading difficulties.

The Cohort A analysis across years indicates that the impact of Reading First in all grades and on all measures has been moderate to large in magnitude thus far.

Are experienced Oregon Reading First schools (Cohort A) getting better reading outcomes than inexperienced Oregon Reading First schools (Cohort B)?

In comparing the performance of Cohort A to Cohort B, after one year of implementation, reading outcomes were highly similar. Effect sizes were close to 0.0 and the small differences that did exist sometimes favored Cohort A and sometimes Cohort B. However, after three years of implementation in Cohort A schools (i.e., performance in 2005-2006) and one year of implementation in Cohort B schools (i.e., 2005-2006), differences are pronounced and favor Cohort A across the board. Higher scores for Cohort A occurred in all grades on both DIBELS measures and primary outcome measures. Effect sizes are consistently moderate to large in magnitude. This pattern suggests that Oregon Reading First is having a moderate to large impact on the reading skills of students in K-3. *The comparison between Cohort A after 3 years of implementation with Cohort B after 1 year of implementation is the best evidence of the value added of Oregon Reading First after multiple years of implementation.*

In the comparison between Cohorts A and B, impact was largest in kindergarten. Although somewhat smaller in grades 1, 2, and 3, the impact was still meaningful and roughly

² Borman, Hewes, Overman, & Brown (2003)

comparable across grades. In terms of the impact Oregon Reading First has had on the percentage of children reading at grade level and the percentage of children remaining at the highest level of reading risk, the outcomes favor Cohort A versus Cohort B. In every comparison, a *higher* percentage of children in Cohort A than Cohort B were reading at benchmark and grade level, and a *lower* percentage of children were at the highest level of reading risk. *In most cases, the odds of reaching benchmark or grade level were 1.5 times greater in Cohort A than Cohort B, and the odds of being at high risk for reading difficulties were 1.5 times greater in Cohort B than Cohort A.*

Is the performance of students in Oregon Reading First (Cohort A) better than the performance of students in non-Reading First comparison schools that were eligible for Reading First (Cohort C)?

The level of complexity increases when Cohort C schools (non-Reading First schools that were eligible for Reading First) are included in the analysis. The primary challenge is that when the performance of students in Cohorts B and C is examined prior to any Reading First instruction being delivered to Cohort B students (i.e., the beginning of the 2005-2006 school year), there is a performance difference favoring Cohort C. This suggests that Cohort C schools may be slightly higher achieving schools generally than Cohort B schools. Thus, outcome comparisons are complicated by the pre-existing differences in the student populations in these two groups of schools prior to any intervention. Given that Cohort A and B schools are highly comparable in terms of student populations, the population differences between Cohorts B and C are also likely to be relevant in comparisons between Cohorts A and C.

Despite these differences, the performance of students in Cohort A after 3 years of participation in RF is higher than the performance of students in Cohort C (or Cohort B). This conclusion applies to all four grades, and includes analysis of the mean performance score, the percentage of students reaching benchmark goals, and the percentage of students remaining at high risk for reading difficulties.

Are the outcomes for students in Cohort A who received three years of Reading First (i.e., kindergarten, first, and second grade) better than the outcomes of other groups of students in Cohort A who received less Reading First instruction?

When the performance of Cohort A students who received 3 years of Reading First instruction was compared to the performance of Cohort A students receiving less than 3 years of Reading First instruction, there is a difference at the beginning of kindergarten, prior to Reading First instruction. Cohort A students who had 3 years of Reading First instruction performed higher on early reading measures than students who had less than 3 years of instruction. Consequently, analyses at the end of the year are complicated by potential differences prior to the onset of Reading First instruction.

Despite this consideration, the benefit of more Reading First instruction is supported by the data. On every measure, students with 3 years of Reading First instruction performed better than students with less Reading First instruction. Mean performance scores were higher, the percentages of students reaching benchmark goals and reading at grade level was higher, and the percentage of students at high risk for reading difficulties was lower.