



Professional Development for Early Reading Teachers

Research-based professional development for early reading teachers increased their knowledge of reading content and recommended instructional practices and their use of one of those practices (explicit instruction). But it did not improve student reading achievement.

Are teachers receiving the professional development they need? A recent national study of state and local No Child Left Behind activities indicated that 80 percent of elementary teachers reported participating in 24 hours or less of professional development on reading instruction during the 2003-2004 school year and summer. Reading and professional development experts are concerned that this is not intensive enough to be effective and that it does not focus enough on subject-matter knowledge.

The study

To help states and districts make informed decisions about professional development to improve reading instruction, the U.S. Department of Education commissioned the study of early reading professional development to examine the impact of two research-based interventions for reading instruction. One was an eight-day institute and seminar series that began in the summer of 2005 and continued through much of the 2005-06 school year. The second was the same institute series plus in-school coaching (see the box).

The study sought answers to two main research questions:

- What effects do professional development institutes with research-based content and follow-up seminars have on teacher's knowledge and instructional practices—and on their students' reading achievement?
- What effects do the addition of in-school coaching have on teacher's knowledge and instructional practices—and on their students' reading achievement?

The study used an experimental design to test the effectiveness of two professional development interventions in improving the knowledge and practice of teachers and the reading achievement of their students in high-poverty schools. It focused on grade 2 reading for two reasons. First, this is the earliest grade for which enough districts collect standardized reading assessment data. Second, later grades involve supplementary (pull out) instruction, which was outside the scope of the study.

The study was implemented in 90 schools in six districts (270 teachers and about 5,500 students), with equal numbers of schools randomly assigned in each district to the institute group, the institute-plus-coaching group, or the control group, which received the usual professional development offered by the district.

The institute and seminar series and the coaching

The eight institute and seminar days (planned to total 48 hours of professional development) focused on topics relevant to second grade reading instruction. They were delivered in the following order:

- Institute days 1–3, focusing on the challenges of learning to read, phonemic awareness, and phonics, with an introduction to analysis of student work samples, were delivered prior to the beginning of the school year.
- Seminar day 1, focusing on fluency and a discussion of analyzing student work samples, was held near the beginning of the school year.
- Institute day 4, focusing on vocabulary, was held soon after seminar day 1 (usually the following day).
- Seminar day 2, focusing on a review of phonics, phonemic awareness, analysis of student work samples, and an introduction to differentiated instruction, occurred in mid-fall to early winter.
- Institute day 5, focusing on comprehension, was held soon after seminar day 2 (usually the following day).
- Seminar day 3, focusing on a review of vocabulary, comprehension, analysis of student work samples, and differentiated instruction, was delivered in early to late winter.

Interspersing the seminar days among the institute days was intended to give teachers time after the institute days to practice what they had learned and then refresh their knowledge and deepen their understanding of the content in a seminar before moving on to new topics.

The study's coaching model was designed to provide teachers with ongoing practice and support for applying their new knowledge and implementing their core reading program effectively. It was expected that teachers would receive, on average, 60 hours of coaching during the school year. The coaches were selected by the participating districts and trained by a professional development provider selected for the study.

Participating districts used one of two commonly used scientifically based reading programs. Schools selected for the study were urban or urban fringe public elementary schools in which half or more of the students were eligible for a free or reduced price lunch and fewer than half the students were designated as English language learners. Schools were screened out if they were already receiving Reading First funding (and therefore might already be participating in intensive professional development) or if they planned to receive this funding during the first year of the study.

Student reading achievement was measured with regular district standardized tests. Teacher knowledge of early reading content and pedagogy was measured with a customized test. And teaching practices were measured through observations at two point in the school year.

The findings

Implementation of professional development

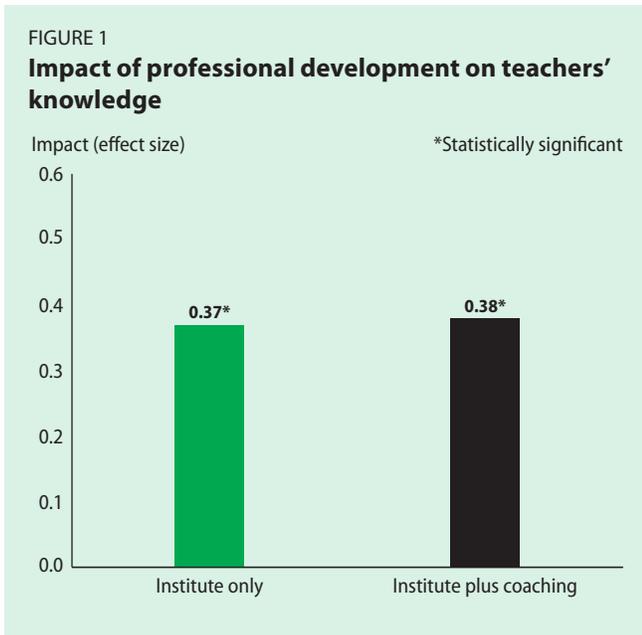
- On average, teachers in the institute schools reported 39 hours of reading institutes and seminars during the

implementation year – including professional development provided for the study and not for the study – and those in the institute-plus-coaching schools 47 hours, significantly more than the 13 hours for teachers in the control schools.

- On average, teachers in the institute-plus-coaching schools reported 71 hours of coaching in reading instruction, significantly more than the 4 hours for teachers in the institute schools and the 6 hours for those in the control schools.

Impacts on teacher knowledge of early reading content and pedagogy

- Teachers in schools randomly assigned to receive the study's professional development scored significantly higher on the teacher knowledge test than did teachers in control schools. On average, 57 percent of them gave a correct answer to a typical item on the assessment, compared with 51 percent of teachers in the control group (effect sizes of 0.37 for the institute series alone and 0.38 for the institute series plus coaching) (figure 1).



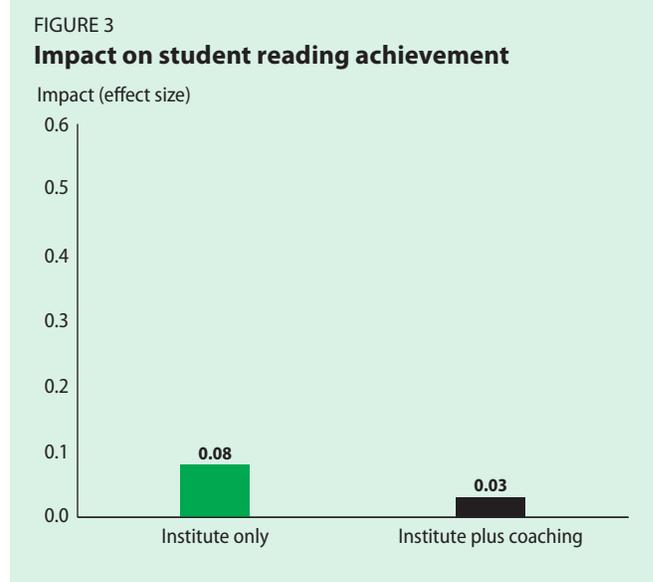
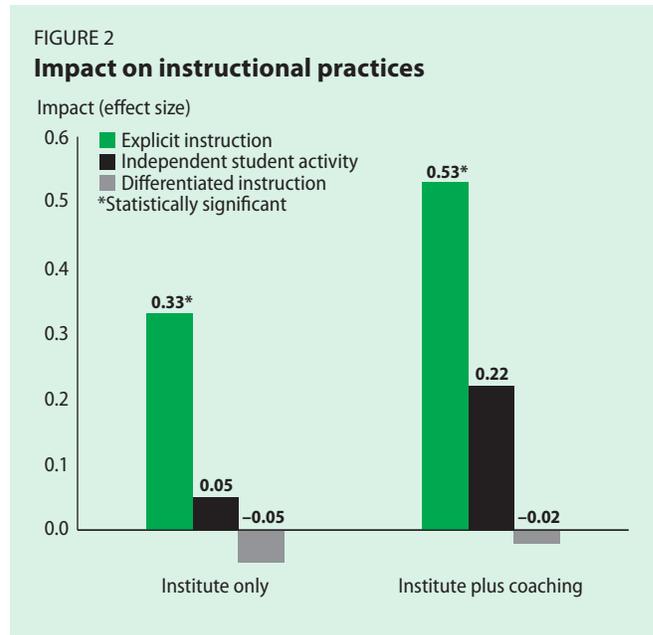
- The addition of coaching did not have significant effects over the institute series alone.

Impacts on instructional practices

- Teachers in the institute schools used significantly more explicit instruction during their reading instruction blocks than teachers in control schools. They used explicit instruction during 51 percent of the three-minute intervals observed, compared with 42 percent for teachers in the control group (an effect size of 0.33) (figure 2). Teachers in the institute-plus-coaching schools used explicit instruction during 57 percent of the intervals (an effect size of 0.53).
- There were no significant effects on the use of independent student activity or differentiated instruction.
- The addition of coaching did not have significant effects over the institute series alone.

Impacts on student reading achievement

There were no statistically significant differences in achievement between students in the institute schools, the institute-plus-coaching schools, and the control schools. The effect size for students in the institute-alone schools (0.08), though not significant, represented about 14 percent of the average annual growth for students in grade 2 (figure 3). The effect



size for students in the institute-plus-coaching schools (0.03), though not significant, represented about 5 percent of the average annual growth for students in grade 2. The addition of coaching did not have significant effects over the institute alone.

Impacts a year later

There were no statistically significant impacts on measured teacher or student outcomes in the year following the treatment.

For the full report, please visit:

[http://ies.ed.gov/pubsearch/pubsinfo.
asp?pubid=NCEE20084034](http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20084034)

Garet, Michael S., Cronen, Stephanie, Eaton, Marian, Kurki, Anja, Ludwig, Meredith, Jones, Wehmah, Uekawa, Kazuaki, Falk, Audrey, Bloom, Howard, Doolittle, Fred, Zhu Pei, and Szejnberg, Laura. (2008). *The Impact of Two Professional Development Interventions on Early Reading Instruction and Achievement* (NCEE 2008-4030). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

NCEE developed the Evaluation Briefs to offer short synopses of complex technical evaluation reports. This brief was not prepared by the study authors.

