

# TECHNICAL REPORT

## 2008-2 SUMMARY



### THE LONG-TERM IMPACT OF DIRECT INSTRUCTION ON READING ACHIEVEMENT: GROWTH FROM FIRST TO FIFTH GRADE

In the mid 1990s, in response to very low reading achievement scores, the Baltimore City Public School System (BCPSS) implemented curricular reforms. Sixteen schools used Direct Instruction. All the Direct Instruction schools used the *Reading Mastery Classic*, *Language for Learning*, *Language for Thinking*, and *Reasoning and Writing* curricula. While all of these schools initially received technical support from the National Institute for Direct Instruction, five eventually ceased this support and used an alternative provider. Beginning in 1998 schools in the district that were not using Direct Instruction adopted Open Court as a standard reading curriculum. Scores were available from the Comprehensive Test of Basic Skills (CTBS) for all first graders and all fifth graders in BCPSS in the spring of 6 school years: 1997-1998 through 2002-2003.

This report examines the achievement of two BCPSS cohorts of students who were enrolled in the Baltimore City Public School System in both first grade and fifth grade during this time: in first grade in 1997-98 and fifth grade in 2001-2003 or in first grade in 1998-99 and fifth grade in 2002-2003. Previous research has documented a substantial decline of standardized test scores of children from low-income backgrounds relative to more advantaged peers in later elementary grades, the so-called “fourth grade slump.” Almost 5,000 students who had data for both years were included in the analysis. The study compared students’ achievement in 1) schools with NIFDI support, 2) schools that implemented Direct Instruction without continual NIFDI support (other DI schools), and 3) schools without Direct Instruction (the Control schools). Schools in the three groups had similar demographic characteristics, although one of the Other DI schools had a markedly lower rate of poverty and a substantially lower rate of student turnover. Data for this low poverty DI school were also analyzed separately.

Key findings are listed below.

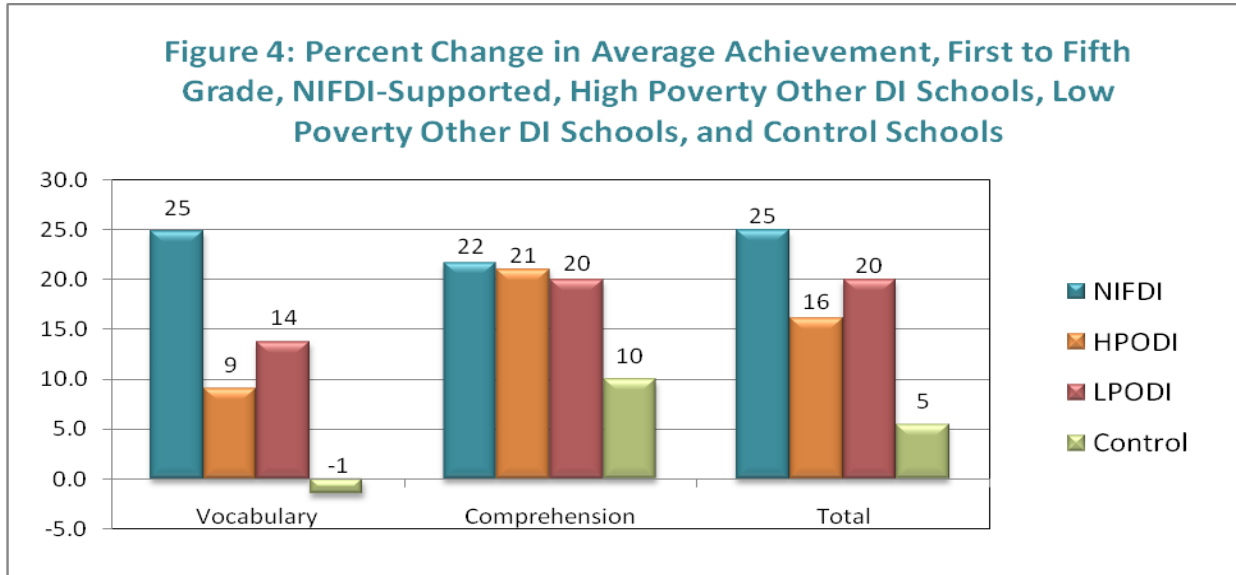
- Students who received Direct Instruction in first grade had significantly higher achievement scores in fifth grade than other students. The results were strongest with the measures of vocabulary and the composite score.
- While students in all schools had higher average achievement in fifth grade than in first grade, the increases were strongest for students in the NIFDI-supported schools and in the low-poverty Other DI school. On average, students in NIFDI-supported schools had a 25 percent gain in their composite reading achievement scores from first grade to fifth grade. Students in the control schools had a gain of only 5 percent.
- The magnitude of changes from first to fifth grade far surpassed the traditional criterion of educationally important effects for both the NIFDI-supported school and the low poverty school in the Other DI group.
- Direct Instruction can counter the fourth-grade slump often observed with students in high-poverty contexts.

For a full report see: *The Long-Term Impact of NIFDI-Supported Implementation of Direct Instruction on Reading Achievement: An Analysis of Fifth Graders in the Baltimore City Public School System*, Technical Report 2008-2, National Institute for Direct Instruction, <http://www.nifdi.org>

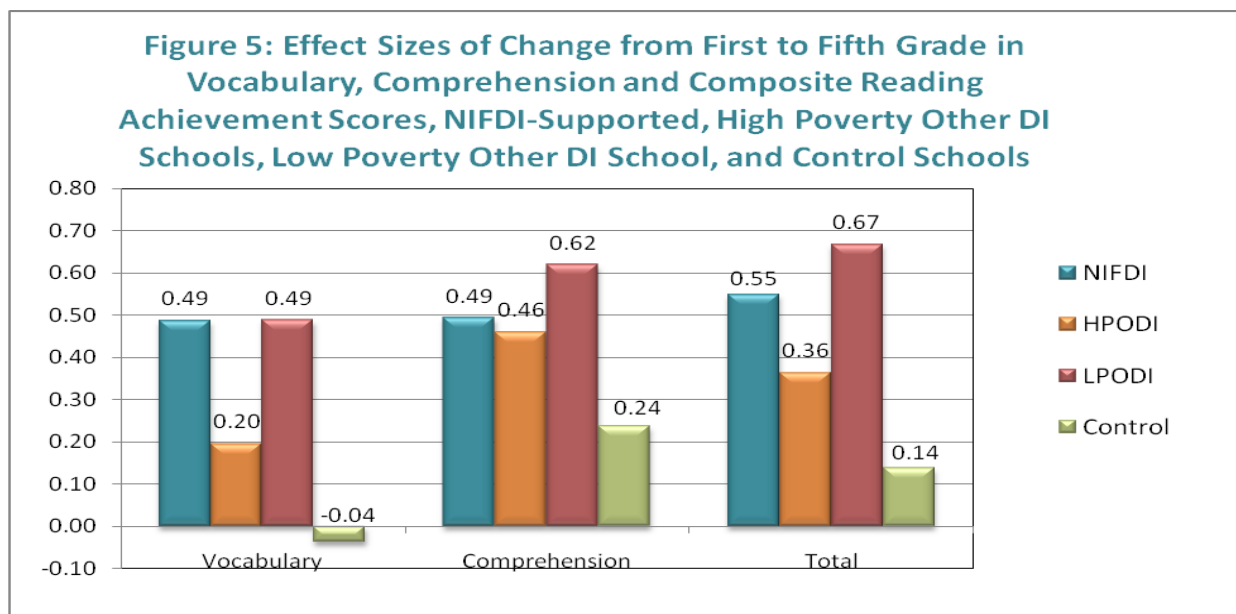


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Note: The percentage change values were calculated as the difference in average first and fifth grade scores divided by first grade scores. HPODI refers to the high poverty Other DI schools, LPODI refers to the low poverty Other DI school. Data are the CTBS vocabulary, comprehension and composite scores.



Note: These data show the effect sizes associated with changing achievement scores from first to fifth grade. HPODI refers to the high poverty Other DI schools, LPODI refers to the low poverty Other DI school. Effect sizes of .25 or greater are generally considered educationally significant.