National Geographic Learning's Reach for Reading Program: An Efficacy Study

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National Geographic Reach for Reading Report Executive Summary

Magnolia Consulting, LLC, an independent evaluation consulting firm, was contracted to conduct an efficacy study of National Geographic Learning's *Reach for Reading* program in the third grade. The study was conducted in seven schools with 28 teachers and 580 students during the 2012–2013 school year. The purpose of this study was to evaluate the efficacy of *Reach for Reading* in increasing third-grade students' reading and writing skills. This study also included an examination of teachers' implementation of *Reach for Reading* and comparison reading and writing curricula.

Reach for Reading

Reach for Reading is a comprehensive K–5 Common Core reading program. The program features authentic, multicultural literature paired with content from National Geographic and real-world accounts from the National Geographic Explorers. The program was built around Common Core State Standards (CCSS). It includes eight units, each with four weeks of instructional plans for whole group, small group, and independent reading time. The program offers materials for reading and writing with special emphasis on academic vocabulary and academic talk.

Study Design and Methods

Evaluators used a randomized control trial design in which teachers were randomly assigned to treatment and comparison groups. Student measures for the efficacy study included (a) the Gates-MacGinitie Reading Test, Fourth Edition (GMRT-4) as an assessment of reading vocabulary and comprehension (b) the DIBELS Next Oral Language Fluency test, and (c) the *Reach for Reading* Common Core benchmark assessment. Teacher measures included weekly implementation logs, classroom observations, and interviews.

Program Implementation

Key Question:

Did teachers implement the curriculum according to the implementation guidelines and with a high level of fidelity?

Reach for Reading teachers demonstrated a high level of fidelity in implementing the required program components with an overall fidelity rating of 94%. As part of their implementation, teachers differentiated instruction with small groups, engaged students in academic talk, and used vocabulary and reading teaching routines during every lesson or most lessons, on average.

Study Results

Key Question:

Did treatment students in *Reach for Reading* classrooms demonstrate significant learning gains in reading achievement scores after one year of implementation?

Overall, teachers thought *Reach for Reading* supported them in addressing the Common Core State Standards to a great extent, and particularly in the areas of emphasizing academic language vocabulary and using more informational text. Treatment teachers reported during interviews that students' scores on the Common Core benchmark assessments were lower than expected. In general, they attributed this to the high bar set by the CCSS for writing and reading informational text skills. Based on teacher interviews, the majority of students had not experienced the level of writing rigor and stamina reflected in the standards prior to *Reach for Reading*.

Average treatment student scores on all portions of the benchmark assessments ranged from 45% to 60% correct at pretest and 49% to 76% correct at posttest. Student gains from pretest to posttest on the benchmark Reading test were statistically significant, t(278) = 6.58, p < .001. A decrease in student scores on the benchmark Writing test also was statistically significant, t(278) = -3.78, p < .001. Caution is warranted when interpreting these results because of assessment validity issues.

Key Question:

Did the *Reach for Reading* program significantly impact treatment students' reading achievement compared to comparison students' achievement after one year of implementation?

There was a statistically significant difference in treatment and comparison students' scores on the GMRT-4 Vocabulary and Total Reading tests. The difference in scores on the Comprehension test was not statistically significant. Effect sizes were 0.20 for Vocabulary (see Figure 1), 0.12 for Comprehension, and 0.14 for Total Reading (see Figure 2), which translates to the average treatment student scoring eight, five, and six percentile points higher than the average comparison student, respectively.

There were no statistically significant differences in the number of treatment and comparison students demonstrating an oral reading fluency level at or above benchmark at the end of the study. The majority of students in each group met or exceeded the spring benchmark of reading 100 or more words correct per minute with 69% of treatment students and 60% of comparison students demonstrating fluency at this level. The odds of scoring at or above benchmark in spring were 1.41 times greater for *Reach for Reading* students than for comparison students. There were no statistically significant differences in oral reading fluency performance for subgroups of students qualifying for free- or reduced-price lunch (FRL) or Limited English Proficient (LEP) students.

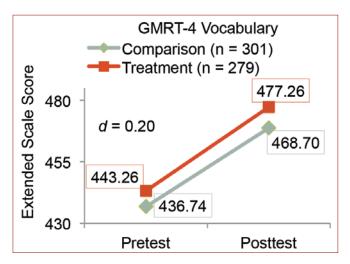


Figure 1. Pretest and posttest adjusted Vocabulary means by condition.

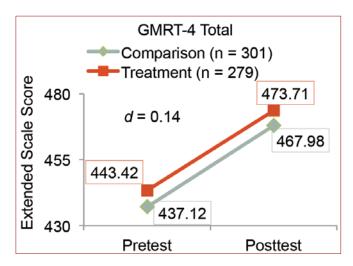


Figure 2. Pretest and posttest adjusted Total Reading means by condition.

Key Question:

Were there differential effects between treatment and comparison student subgroups?

Reach for Reading had a statistically significant and positive impact on FRL students' performances on the GMRT-4 Vocabulary test with an effect size of 0.28 and a percentile difference of 11 points between the average treatment student and the average comparison student (see Figure 3). Although not statistically significant, the effect size for FRL students on the Comprehension test was 0.15 and 0.20 on the Total Reading test, which are considered substantively important positive effects by the U.S. Department of Education's What Works Clearinghouse (What Works Clearinghouse, 2008).

For the LEP student subgroup, there were statistically significant differences in student performance on the GMRT-4 Vocabulary and Total Reading tests (see Figure 4 and Figure 5). Effect sizes for both of these tests were moderate with 0.57 for Vocabulary and 0.40 for Total Reading. Using an improvement index, this translates to the average LEP treatment student scoring 22 percentile points higher than the average comparison student on the Vocabulary test and 16 percentile points higher on the Total Reading test. The effect size of 0.23 on the Comprehension test is considered substantively important, although not statistically significant, and translates to a nine percentile-point difference between the average treatment and comparison student.

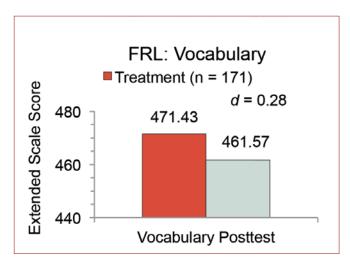


Figure 3. Posttest Vocabulary adjusted means for FRL students by condition.

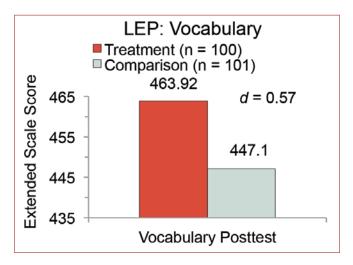


Figure 4. Posttest Vocabulary adjusted means for LEP students by condition.

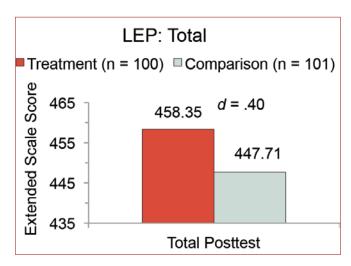


Figure 5. Posttest Total adjusted reading scores for LEP students by condition.

Overall

Through a rigorous, well-implemented randomized control trial, this study found that *Reach for Reading* has a statistically significant positive effect on student reading outcomes. This positive effect also is evident on reading outcomes for students with limited English proficiency. The program also positively impacts vocabulary outcomes for low-income students. Treatment students' oral reading fluency gains were comparable to those of comparison students.

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