RESEARCH INTEGRATION REPORT

Early Evidence Establishing the Efficacy of Lexia Programs



Lexia has a rich history of assessing the efficacy of its programs, with research studies dating back to 2006. These early studies examined the impact of products that were precursors to Lexia Core5 Reading and Lexia PowerUp Literacy. Precursor products included Early Reading, Phonics Based Reading, Primary Reading, and Strategies for Older Students. Early Reading designed for preschool was kindergarten students to build emerging literacy skills. Phonics Based Reading and Primary Reading supported learning and application of phonics wordattack strategies in early elementary grades. Strategies for Older Students supported the development of related literacy skills at higher grade levels.

Lexia's highquality peerreviewed research studies dates back to 2006.





This Research Integration Report provides an overview of the evidence establishing the efficacy of these early Lexia programs. The studies reviewed here examined benefits of Lexia programs for three types of students – those in preschool and kindergarten, low performers, and English Learners. These students were targeted for various reasons – younger students could benefit from an early boost in emerging literacy skills, while lower performers and English Learners need the extra support the program(s) provided.

The studies reviewed in this report were conducted by Lexia researchers, as well as external researchers. Most employed randomization methods comparing treatment and control conditions. Because these studies demonstrate a rationale that *Core5* and *PowerUp* will be effective, we consider these studies on precursor products to provide Tier 4 (Demonstrates a Rationale) evidence according to the *Every Students Succeeds Act* (ESSA).

Preschool and Kindergarten Students

Two separate studies examined the benefits of *Early Reading* for preschoolers (Macaruso & Rodman, 2011b) and kindergarteners (Macaruso & Walker, 2008). Both studies compared morning and afternoon classes taught by the same preschool or kindergarten teacher, where one class was randomly assigned to use *Early Reading* and the other served as a control class. Preschool students were assessed using the *Group Reading Assessment and Diagnostic Evaluation (GRADE)*. Kindergarteners were assessed using *DIBELS* and the *Gates-MacGinitie Reading Test (GMRT)*.

In the preschool study, students in both treatment (n=19) and control (n=19) classes showed gains on *GRADE*. However, preschoolers in the treatment condition made significantly greater gains than control students (3.8 points), particularly in the Phonological Awareness domain. In the kindergarten study, treatment (n=26) and control classes (n=45) did not differ at pretest on *DIBELS*. However, at posttest, students in the treatment class earned significantly higher scores (7.8 points) on the *GMRT* than students in the control class.





Students Identified as Low Performers

Two studies conducted by Lexia researchers examined the benefits of Lexia programs for low-performing first grade students receiving Title 1 services (Macaruso, Hook, & McCabe, 2006) and low performers in kindergarten (Macaruso & Rodman, 2011b). In the first study, ten first grade classrooms were randomly assigned into treatment (n=83) and control conditions (n=84). Students in the treatment classes used *Phonics Based Reading* and *Strategies for Older Students*, while students in control classes did not use Lexia programs. In the second study, kindergarteners who scored below the 16th percentile on the *GRADE* at pretest were identified as low performers. Kindergarten students in the treatment group (n=47) used *Early Reading* and *Primary Reading* while control students (n=19) did not use Lexia programs.

Early versions of
Core5 and
PowerUp were
tested for
effectiveness
with struggling
students.

In both studies, students in the treatment and control conditions made significant gains on the outcomes of interest. However, when analyses were restricted to students identified as low performers, larger differences were observed. In the first study, low-performing first grader students eligible for Title 1 services in the treatment group had significantly higher post-test *GMRT* scores than similar students in the control group (7.8 points). In the second study, low-performing kindergartners in treatment classes showed significantly greater gains on the GRADE (5.0 points) and on a separate Word Reading subtest (1.9 points) than low-performing kindergartners in control classes.

An independent researcher in the United Kingdom investigated the benefits of Lexia programs for 6- to 7-year-old children eligible for reading intervention (McMurray, 2012). Children were considered eligible for intervention if they obtained low scores on the *Group Reading Test* and/or demonstrated a pattern of literacy difficulties on a





dyslexic screening tool. The performance of students who used Lexia programs (n=53) was compared with the performance of control students (n=53) not given access to the program. Students who used Lexia programs showed significantly greater gains on the *Group Reading Test* than control students (5.4 points).

Another study investigated how well Lexia programs could benefit struggling readers in middle school (Macaruso & Rodman, 2009). Sixth and seventh grade students were enrolled in one of three remedial classes. Two classes were randomly assigned to use Strategies for Older Students (n=27) and the third served as a control class (n=15). Students using the Lexia program displayed significantly greater gains on the Word Attack subtest from the Woodcock-Johnson III Tests of Achievement than control students (6.6 points).

English Learners

Lexia researchers have also explored whether English Learners in bilingual kindergarten classes could benefit from Lexia programs (Macaruso & Rodman, 2011a). Classes were randomly assigned to treatment (n=29) and control conditions (n=37). Treatment classes used Early Reading and Primary Reading, while control classes did not use Lexia programs. Results showed that students in treatment classes made significantly greater gains than students in control classes on the GRADE (6.0 points).

External researchers investigated whether native language support offered in Lexia programs would benefit Spanish-speaking first graders (<u>Draper Rodriguez, Filler, & Higgins, 2012</u>). The performance of English Learners who used *Primary Reading* with Spanish instructions (n=14) was compared with the performance of English Learners who used *Primary Reading* with traditional, English instructions (n=14). Both groups of students produced significant gains on *DIBELS* and the *Woodcock Munoz Language Survey*. However, Spanish-speaking English Learners who received native language support earned significantly higher scores in reading comprehension.





Summary

The studies reviewed here demonstrate the efficacy of Lexia programs that were the precursors of *Core5* and *PowerUp*. Positive outcomes were demonstrated across multiple studies for various student subgroups, including students in preschool through first grade, students identified as low performers, and English Learners. Many of these studies employed random assignment into treatment and control conditions consistent with ESSA Tier 1 guidelines. Together, these findings point to the strong evidence base upon which *Core5* and *PowerUp* were built.

Want to Learn More?

For additional information or updates on research, please contact <u>research@lexialearning.com</u>.

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