RESEARCH BRIEF

Dual Impact of Lexia English™ and Core5® on the Language and Literacy Achievement of Emergent Bilingual Students

Key Findings

- Emergent Bilingual students who used Lexia English and Core5 together scored significantly higher on all domains of the Texas English Language Proficiency Assessment System (TELPAS) than students who did not use either program, with effect sizes ranging from 0.19 to 0.42.
- Emergent Bilingual students who used Lexia English and Core5 together scored significantly higher on their end-of-year English literacy assessment (STAAR Reading Language Arts) than non-Lexia students, with an effect size of 0.33.

Introduction

Lexia® English Language Development™ (Lexia English) is a blended learning program that supports the development of English language proficiency for students in grades K-6. The program helps accelerate student learning by providing targeted speaking and listening practice alongside explicit language instruction. A growing body of research suggests that Lexia English has a positive impact on learning outcomes for emergent bilingual students. Studies have found that students who used Lexia English scored higher and grew more on tests of English language proficiency than students who did not use the program (Feroce et al., 2025; Lexia, 2022, 2024). Studies have also reported that students who use Lexia English have obtained higher general literacy achievement on standardized measures of English language arts compared to their peers (Lexia, 2023).

Recently, Lexia has begun to investigate the extent to which Lexia English learning outcomes can be enhanced through the use of other Lexia programs. For example, one study examined the impact of Lexia English in California when it was used alongside Lexia Core5® Reading (Core5). Like Lexia English, Core5 is an adaptive, blended learning program that includes an online student-facing component, offline teacher-led lessons, and continuous progress monitoring based on student performance. Core5 is designed to support the literacy development of PreK-5 students, including emergent bilingual students still developing English proficiency, by providing explicit instruction and practice in phonological awareness, phonics, structural analysis, automaticity, vocabulary, and comprehension. The study found that students who used both Lexia English and Core5 scored significantly higher than non-Lexia students on the English Language Proficiency Assessment for California and higher than Core5 students on SBAC English Language Arts assessment.

Given the complementary nature of Lexia English and Core5 and positive initial results, Lexia aimed to further investigate how using the two programs alone and in combination impacts learning outcomes on standardized English language and literacy assessments. In the 2023-24 school year, Lexia partnered with 4 school districts in Texas to conduct a study on the impact of Lexia English and Core5 on the 2024 Texas English Language Proficiency Assessment System (TELPAS) and the 2024 State of Texas Assessments of Academic Readiness in Reading Language Arts (STAAR RLA) for emergent bilingual students in grades 3-5. To this end, Lexia researchers matched Lexia English users to non-users while controlling for differences in baseline English abilities and demographic factors. The study therefore presents Tier 2 (Moderate) evidence of effectiveness according to federal guidelines under ESSA.

Study Design

The sample pool consisted of 8892 emergent bilingual students across 89 schools in 4 school districts across Texas. All students were in grades 3-5 in the 2023-24 school year. Students were considered a user of Lexia English or Core5 if they completed at least 1 unit in the respective program, the smallest unit of meaningful program usage.[1] Using this criterion, 127 students used both Lexia English and Core5, 225 students used Lexia English but not Core5, 3902 used Core5 but not Lexia English, and 4638 did not use either Lexia English or Core5.

Outcomes were analyzed based on grade-standardized scale scores for TELPAS domains and the overall STAAR RLA. TELPAS scale scores are reported for reading, writing, listening, and speaking components, and a composite score (1 to 4) which averages student domain performance (1 - Beginning, 2 - Intermediate, 3 - Advanced, 4 - Advanced High) is also reported. STAAR RLA contains reading and writing components, and scale scores are reported for the overall test. Based on students' prior year (2023) TELPAS, the sample consisted largely of students at lower levels of English proficiency. Specifically, 85% of students were at the Beginning and Intermediate levels on the 2023 composite TELPAS.

To measure the impact of different program usage patterns on language and literacy achievement, Lexia researchers matched Lexia English users and non-users who were similar in prior year (2023) TELPAS scores (composite rating), grade, district, special education status, economic disadvantaged status, district newcomer status,[2] and language program[3] enrollment during the 2023-24 school year. Students were then categorized into 4 groups: Lexia English only, Core5 only, Lexia English and Core5, and non-Lexia students (i.e. students with no records of Lexia English or Core5 usage data). All TELPAS pre-test scores differed by less than 0.25 standard deviations between all user groups and non-Lexia students. The final analytic sample after matching included 463 students, and demographic information is provided in the table.

[1] Pre-TELPAS average program usage: Dual (Lexia English: 7 weeks, 55 units; Core5: 10 weeks, 82 units), Lexia English-only (9 weeks, 69 units), Core5-only (11 weeks, 81 units). Pre-STAAR average program usage: Dual (Lexia English: 8 weeks, 58 units; Core5: 12 weeks, 108 units), Lexia English-only (11 weeks, 78 units), Core5-only (14 weeks, 106 units).

[2] District newcomer status was based on whether a student had been enrolled in the district for 3 years or less.

[3] Language programs included English as a Second Language, Transitional Bilingual, Dual Language, and None.

463 Students | 81 Schools | 4 Districts | Grades 3-5

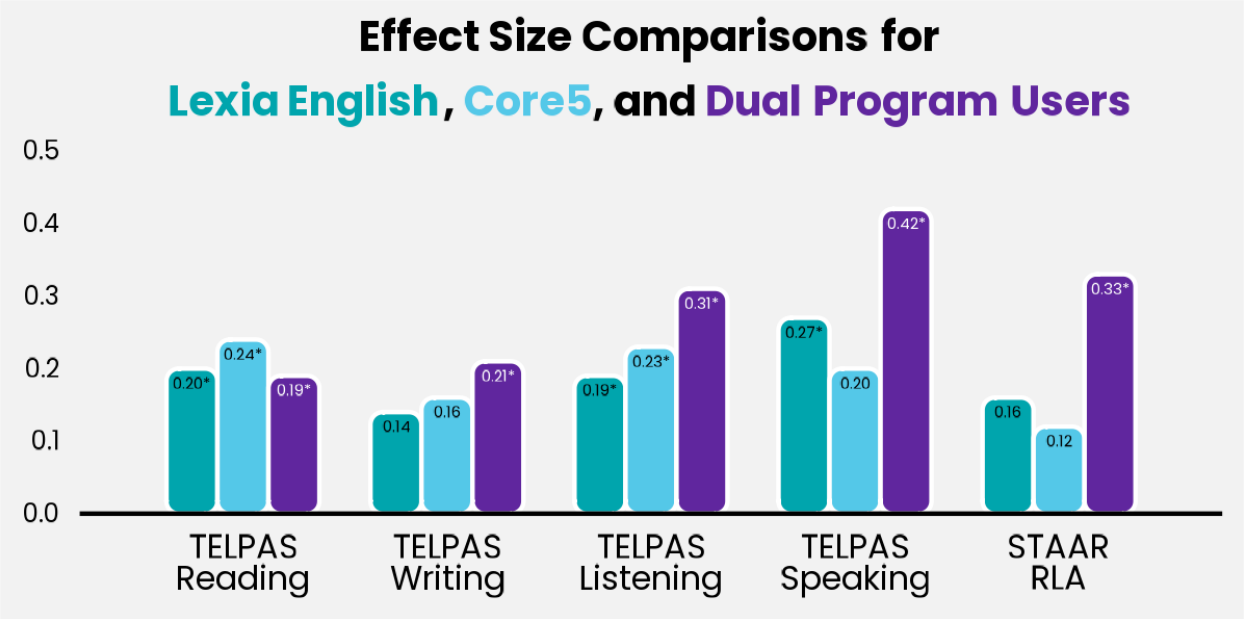
Matched Sample Descriptive Statistics	Pre-TELPAS				
	Non-Lexia	LE Only	Core5 Only	LE + Core5	Total
Avg. TELPAS 2023 Comp. Score	1.8	1.8	1.8	1.7	1.8
Avg. TELPAS 2024 Comp. Score	2.0	2.2	2.2	2.2	2.2
% Economic Disadvantaged	94%	94%	95%	95%	94%
% Special Education	19%	21%	17%	15%	18%
% District Newcomers	71%	70%	77%	78%	73%
% Grade 3	42%	42%	44%	44%	43%
% Grade 4	25%	24%	28%	28%	26%
% Grade 5	34%	34%	28%	28%	32%
N	149	136	82	96	463

Lexia researchers estimated program impact via multilevel regressions that controlled for district, pre-test scores, gender, special education status, economic disadvantaged status, newcomer status, years enrolled in the district, grade level, and language program.

Results

Students who used Lexia English and Core5 together scored significantly higher on all TELPAS domains than students who did not use either program.

Students who used Lexia English, Core5, or both scored higher on all TELPAS domains compared to students who were non-Lexia users. However, only the dual program users showed statistically significant effects in all domains. This trend can be seen in the adjacent figure, where results that are statistically significant ($p < .05$) are denoted with an asterisk. Non-Lexia users are the reference group and thus are not depicted.



Students who used both Lexia English and Core5 scored significantly higher on all TELPAS domains compared to non-Lexia students: reading, writing, listening, and speaking. Lexia English-only students showed significant positive effects for reading, listening, and speaking. Core5-only users showed significant positive effects for reading and listening. Additionally, the largest effects on TELPAS outcomes were, in most cases, for dual program users, with Core5-only users showing the largest effect on TELPAS reading. Finally, for all groups, each effect size – which indicates the extent of difference between the Lexia group and non-Lexia group – is considered medium (0.05 - 0.20) or large (> 0.20) according to Kraft (2020).

Compared to non-Lexia students, the robust effects for the dual program users can be explained by the increased opportunities that students had for personalized instruction and practice in multiple aspects of language comprehension and production.[4] Namely, both Lexia English and Core5 include program activities that focus on vocabulary learning and listening comprehension. In addition, Core5 provides support in building foundational literacy skills (such as word-level decoding) and Lexia English incorporates speaking activities, which together enable students to acquire language knowledge across spoken and written modalities.

[4] Dual program users had statistically similar program usage (units completed, weeks of use) compared to Core5-only users and significantly less program usage compared to Lexia English-only users. Thus, it is not likely the case that the advantage of dual program use is due to greater progress completed in each program individually. For reference, dual program users had statistically significant greater overall use of Core5 than Lexia English.

Students who used Lexia English and Core5 together scored significantly higher than non-Lexia students on STAAR RLA.

For STAAR RLA, analyses were conducted based on the subset of matched students who had available STAAR 2024 scores and followed the same analytical methods as the TELPAS analyses. Given that STAAR testing begins in grade 3, students' standardized 2023 TELPAS scores from all domains were used as a pre-test control, and additional sensitivity analyses were conducted for students in grades 4 and 5 controlling for prior STAAR RLA and TELPAS scores.

Matched Sample Descriptive Statistics	Pre-STAAR				
	Non-Lexia	LE Only	Core5 Only	LE + Core5	Total
Avg. TELPAS 2023 Comp. Score	1.8	1.8	1.8	1.8	1.8
Avg. TELPAS 2024 Comp. Score	2.1	2.2	2.3	2.3	2.2
Avg. STAAR RLA 2024 Score	1412	1420	1420	1456	1424
% Economic Disadvantaged	94%	93%	95%	93%	94%
% Special Education	20%	23%	18%	17%	20%
% District Newcomers	70%	67%	75%	73%	71%
% Grade 3	41%	43%	49%	47%	44%
% Grade 4	24%	22%	26%	25%	24%
% Grade 5	35%	35%	25%	28%	32%
N	142	120	76	75	413

Dual program users scored significantly higher on the STAAR RLA compared to non-Lexia students.[5] Given that this study focuses on emergent bilingual students, it makes sense that using both a language-focused and literacy-focused program can best support the broader literacy achievement of these students. Results suggest that supporting students' ability to both understand and produce language in oral and written modalities can help improve students' critical reading, analytical, and writing skills essential for success on assessments like STAAR RLA. These skills not only enhance students' ability to comprehend and engage with a range of texts but also prepare them to articulate their ideas clearly and effectively.

Overall, the findings of this study suggest that providing personalized, targeted instruction in both English language proficiency and literacy have the greatest impact on the English

[5] STAAR RLA sensitivity analyses were also conducted for just 4th and 5th graders while also controlling for 2023 STAAR RLA scores and 2023 TELPAS scores. This yielded similar results, with the only significant positive effect seen for dual program users (effect size: 0.33), and positive but non-significant effects for Lexia English-only users (effect size: 0.13) and Core5-only users (effect size: 0.05).

language proficiency and academic achievement of emergent bilingual students. That is, while both Lexia English and Core5 can benefit the language development of emergent bilingual students, the use of both programs in conjunction helps build the strongest, most comprehensive foundation for broader literacy achievement and academic success.

Want to Learn More?

For additional information, including technical details of the analyses, or updates on research related to Lexia English and Core5, please contact research@lexialearning.com.

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Lexia®, a Cambium Learning Group brand, is a leader in science-of-reading-based solutions. For over 40 years, the company has focused on pre-K-12 literacy and today provides solutions for every student and educator. With a complete offering of professional learning, curriculum, and embedded assessment, Lexia helps more learners read, write, and speak with confidence.

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