

RESEARCH BRIEF

Language and Literacy Benefits of Lexia English in California

Key Findings

- Among educators using Lexia English, 22% reported using teacher-led Lexia Lessons while **86% of educators reported accessing student data** on myLexia at least once a week.
- Emergent Bilingual students (EBs) who used Lexia English scored **25 points higher on the California state English language proficiency assessment** (ELPAC) compared to their peers.
- EBs who used Lexia English scored **18 points higher on the state English language arts assessment** (Smarter Balanced ELA) than students who did not use the program, highlighting the role of language proficiency in broader literacy development.
- EBs who used Lexia English **were more likely than their peers to reach proficiency and show proficiency growth** on the Overall ELPAC and the Oral ELPAC.

Introduction

In the 2021-22 school year, Lexia partnered with 3 school districts across the state of California to conduct a large-scale study examining the impact of using [Lexia® English Language Development™](#) (Lexia English) on English language proficiency and literacy outcomes for Emergent Bilingual students (EBs) in grades 1-5. Lexia English is a blended learning program designed to improve the academic English language skills of EBs by emphasizing explicit language instruction and oral language practice. An increasing body of research shows that the development of oral language skills plays a crucial role in the acquisition of broader literacy skills ([NASEM, 2017](#)), and it remains to be seen how a blended learning tool such as Lexia English impacts both language and literacy outcomes for EBs.

In a previous study of EBs from one school district in California, use of Lexia English was associated with higher English language proficiency scores compared to students not using the program ([Feroce, Liu, & Chattergoon, 2022](#)). We build on this prior research by examining a larger group of students in California, and specifically looking at both English language proficiency and language arts outcomes while also accounting for students' prior year achievement. Furthermore, we also collected data from educators to begin to better understand program implementation at the district level. By using a more robust research design, the current study adds to the growing evidence base demonstrating the effectiveness of Lexia English for EBs. This study provides Moderate evidence of effectiveness, according to the federal guidelines provided by Evidence for ESSA.

3 Districts

39 Schools

1,570 Students

Grades 1-5

Study Design

We first examined English language proficiency outcomes based on scores from the 2022 English Language Proficiency Assessment for California (ELPAC). ELPAC scores consist of an overall score as well as oral and written subdomain scores. Data come from 1452 students in grades 1-5 (grade 1: 17%, grade 2: 19%, grade 3: 19%, grade 4: 24%, grade 5: 21%) across three California school districts (district A: 35%, district B: 40%, district C: 25%).¹ Students were considered Lexia English users if they had completed at least 1 unit in the online program (n = 732). Lexia English users and non-users were closely matched on pre-test scores (2021 Overall ELPAC) as well as district, gender, race/ethnicity, and home-language.² In addition to Lexia English, all districts were using various literacy programs with EBs, including [Lexia Core5® Reading](#) (Core5). Students who used Lexia English had similar usage of Core5 (total program minutes) as students who did not use Lexia English ($\beta = 67.260, SE = 53.226, p = 0.207$). Thus, any potential group differences in learning outcomes are not likely due to differences in student use of Core5. Student demographic data is provided in the table below.

Student Characteristics

	ELPAC Subgroup			SBAC Subgroup		
	LE	Non-LE	Total	LE	Non-LE	Total
Avg. ELPAC Sp. 2022 Score	1492	1467	1480	-	-	-
Avg. ELPAC Sp. 2021 Score	1455	1442	1449	1477	1479	1478
Avg. SBAC Sp. 2022 Score	-	-	-	2399	2381	2390
Avg. Weeks of Program Use	8	-	8	13	-	13
Avg. Minutes/Week	35	-	35	35	-	35
Avg. Program Units Completed	41	-	41	68	-	68
% Hispanic	92%	92%	92%	92%	92%	92%
% Spanish Home Language	92%	92%	92%	92%	92%	92%
% Female	48%	48%	48%	49%	50%	50%
n	732	720	1452	310	305	615

¹ Across both ELPAC and SBAC analyses, there were 1570 different students.

² For pre-test scores, we used Mahalanobis-distance matching with a 0.20 caliper based on grade-standardized scores for the 2021 Overall ELPAC ([Austin, 2009](#); [Stuart, 2011](#)).

We also examined student English language arts outcomes based on scores from the 2022 Smarter Balanced Assessment Consortium English Language Arts assessment (SBAC ELA). The SBAC ELA is particularly important as it is the measure of student literacy achievement in California as well as 11 other states. All students in California in grades 3–8 and 11 take the SBAC ELA yearly. The sample consisted of 615 EB students in grades 3 to 5 (grade 3: 35%, grade 4: 32%, grade 5: 34%) across 3 California districts (district A: 26%, district B: 50%, district C: 24%). Students were considered Lexia English users if they had completed at least 1 unit in the online program. We followed the same methods as the ELPAC analyses and matched Lexia English users and non-users based on pre-test ELPAC scores (2021 Overall ELPAC), district, gender, race/ethnicity, and home-language. Students who used Lexia English had similar usage of Core5 (total program minutes) as students who did not use Lexia English ($\beta = -175.880$, $SE = 121.840$, $p = 0.149$).

We analyzed students' 2022 ELPAC and 2022 SBAC scores using linear mixed effect models, controlling for prior year (2021) ELPAC achievement, race/ethnicity³, home-language (Spanish-speaking vs. non-Spanish speaking), and gender, and a random intercept for district.⁴ We used students' 2021 Overall ELPAC scores as the prior year achievement measure for the SBAC analyses due to limited data availability of students' 2021 SBAC scores. Inclusion of language proficiency scores as a prior year achievement measure for literacy outcomes is also accepted by external review organizations like the Johns Hopkins University organization Evidence for ESSA. We also explored whether Lexia English users were more likely than non-users to attain "Proficient" levels on the ELPAC (Level 4) and SBAC (Levels 3,4), as well as whether they were more likely to increase a proficiency level on the ELPAC compared to non-program users. For the proficiency analyses we ran logistic mixed effects models with the same fixed effect predictors and random intercepts as in the scaled score analyses.

We also administered a survey to 189 educators and conducted focus group interviews with 5 educators to better understand implementation of Lexia English. We specifically asked questions around implementation settings, self-reported use of teacher-led Lexia Lessons, and engagement with myLexia student data.

³ Due to a small number of observations, we represented race/ethnicity as three dummy-coded variables for Hispanic, Asian, and Other, with Hispanic being the reference group.

⁴ Analyses of student scores were based on grade-standardized scores and not the raw scale scores.

Results

Among educators using Lexia English, 22% reported using teacher-led Lexia Lessons, while 86% of educators reported accessing student data on myLexia at least once a week.

Data from the educator surveys and focus groups revealed that districts were using Lexia English as intended, but there was considerable variability in implementation patterns. Educators reported using Lexia English across a variety of settings, with 83% reporting using the program in ELD settings, 28% in ELA settings, 20% as part of a targeted intervention, 11% before/after school, 7% at home, and 6% in other settings. Approximately 22% of educators reported using teacher-led lessons with their students, and this ranged from 18% to 63% across districts. Of educators that did report using the teacher-led lessons, 62% reported using the lessons for at least 30 minutes per week. Focus group data revealed that educators used teacher-led lessons in various ways. One educator reported using the teacher-led lessons both to re-enforce and pre-teach to students, as illustrated in the following quote.

“... if there’s a bunch of students on the same level, I put them in the same group and then pull a lesson that they might be struggling with or haven’t gotten to yet on Lexia English”

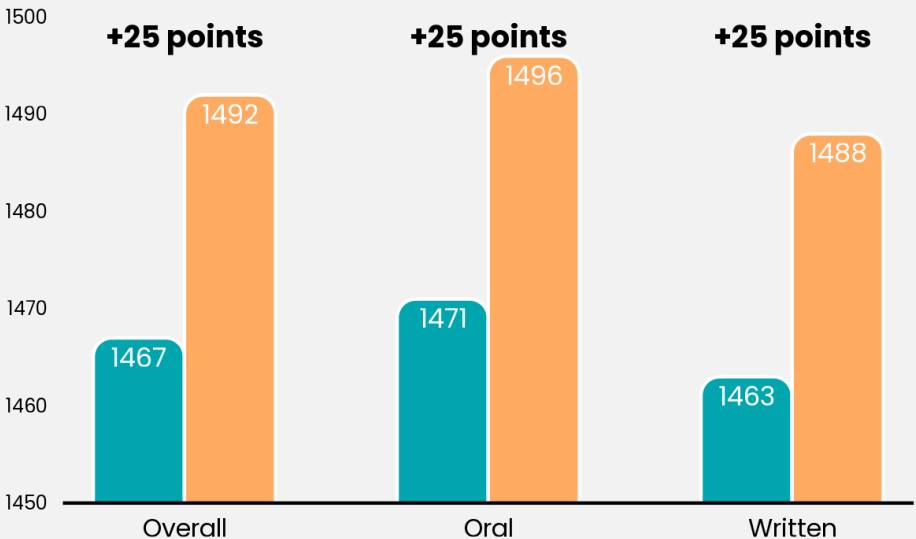
- Grade 1 Educator from District B

Although use of teacher-led lessons was variable, 86% of educators reported accessing students’ usage data on myLexia at least once a week, with usage varying from 86% to 89% across districts. myLexia is the online platform that offers real-time progress monitoring of student performance and language proficiency, providing educators with data to support student achievement in a personalized way. During the focus group interviews, most educators indicated that they found using myLexia data to be helpful in classroom management as well as to systematically keep track of student program usage.

Students using Lexia English scored 25 points higher on the California state English language proficiency assessment than students who did not use the program.

EBs who used Lexia English scored, on average, 25 points higher than non-Lexia English users on the Overall ELPAC, the Oral ELPAC, and the Written ELPAC.⁵ Notably, for all three measures, Lexia English users had statistically similar 2021 scores as non-users but statistically greater 2022 scores than non-users even when accounting for prior year achievement. Thus, the differences on the 2022 ELPAC measures are not likely due to any pre-existing group differences in students' 2021 English language proficiency scores. These differences were associated with effect sizes of 0.21 (Overall ELPAC), 0.21 (Oral ELPAC), and 0.14 (Written ELPAC).

Comparison of 2022 ELPAC Scores for Lexia English Users and Non-Users



⁵ These differences are based on raw means.

Students using Lexia English scored 18 points higher on the state English language arts assessment than students who did not use the program.

EBs who used Lexia English scored significantly higher than their peers on the SBAC ELA assessment, even when accounting for prior year English language proficiency. Lexia English users scored, on average, 18 points higher than non-users, which is associated with an effect size of 0.22.⁶ It should be noted that 81% of educators reported having formal training in teaching elementary education, and 76% had been teaching for 6 years or more. Thus, the positive outcomes for the SBAC ELA may have been influenced in part by educators' ability to engage in using not only Lexia English, but also other district-provided supplementary literacy curricula. Overall, these results highlight how Lexia English's focus on explicit language instruction and oral language practice can support the development of students' broader literacy skills, a finding which has been increasingly documented in education research with EBs ([NASEM, 2017](#)).

EBs who used Lexia English were more likely than their peers to reach proficiency and increase proficiency levels on the Overall ELPAC and Oral ELPAC.

EBs who used Lexia English were more likely than their peers to reach proficiency on the Overall ELPAC and the Oral ELPAC. For the Written ELPAC and SBAC, Lexia English users had higher odds of reaching proficiency than non-users, but this difference was not statistically significant. Additionally, Lexia English users were significantly more likely than their peers to increase a level on the Overall ELPAC and Oral ELPAC. Lexia English users also had higher odds of increasing a proficiency level on the Written ELPAC compared to their peers, but this difference was not significant. This demonstrates that Lexia English can help students grow in their English language proficiency as well as reach "Proficient" status on their English language proficiency assessment.

⁶ When including 2021 ELPAC scores as a predictor, we were able to explain 35% of the variability in students' 2022 SBAC scores. This lends support to our analyses that students' 2021 ELPAC scores are a valid prior year predictor for their 2022 SBAC scores.

Discussion

The results of the present study align with previous research on Lexia English and strengthen evidence of the program's effectiveness in helping EBs attain greater English language and literacy skills. In a previous study of EBs in California ([Feroce et al., 2022](#)), students who used Lexia English had higher ELPAC test scores than their peers who did not use the program. However, prior-year achievement scores were not included in the analyses and thus it is possible that positive effects (effect size = 0.20) were driven by higher-performing students using Lexia English. In the current study, Lexia English users and non-users had statistically similar prior year ELPAC scores. Thus, the findings from this study (effect size = 0.21) not only align with the previous study but provide stronger evidence around the impact of using Lexia English given the similar group characteristics prior to program usage. The proficiency analyses also align with a [previous study in Arizona](#) in which EBs who used Lexia English were more likely than their peers who did not use the program to increase proficiency levels on the state English language proficiency test.

The study also adds to our understanding of program implementation and the relationship between program use and student literacy outcomes. Data from educators highlight that there is varied use of the program's blended learning components, particularly around teacher-led Lexia Lessons, but that there is overall high use of engagement with student data on myLexia. In future studies we may aim to examine more directly how educators are fully utilizing Lexia English with students by conducting classroom observations and relating these back to student English language proficiency outcomes. As a final point, this study shows that students who used Lexia English had higher scores and rates of proficiency achievement than their peers on a high-stakes, standardized English language arts assessment (SBAC ELA). This lends support to the accumulating evidence of how providing targeted explicit instruction and oral language practice may benefit broader literacy skills of EBs.

Want to Learn More?

For more information and updates on research related to Lexia English, please contact research@lexialearning.com.

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