



Lexia
California



CALIFORNIA STATE IMPACT REPORT

Impact of Lexia® Core5® Reading in California Schools (2020-21)

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Key Findings

- California schools with strong Core5 implementation **scored 7 points higher** on the third grade Smarter Balanced English Language Arts assessment and had **3% more students reach overall proficiency** than California schools that did not use Core5.
- Core5 schools that had more students meeting their Core5 usage targets were associated with **higher third grade Smarter Balanced English Language Arts outcomes**, scoring 4 to 16 points higher than non-Core5 schools.

Introduction

In 2021, California launched a new initiative to have every student reading by third grade ([California Department of Education, 2021](#)). Researchers have found that reading proficiency at the end of third grade is predictive of high school graduation rates, with non-proficient readers 4 times more likely to not graduate on time compared to proficient readers ([Hernandez, 2012](#)). Additionally, the COVID-19 pandemic impacted all students at a pivotal time in their reading growth. According to the National Assessment of Educational Progress (NAEP), average scores for age 9 students in 2022 declined 5 points in reading compared to 2020. This is the largest average score decline in reading since 1990 ([NAEP, 2022](#)).

Programs such as Lexia® Core5® Reading (Core5) have the potential to help accelerate students' development of literacy skills, with recent research showing over 40% of students who used Core5 exceeded their growth targets in a reading assessment ([Lexia Research & Analytics, 2021](#)). Core5 is an adaptive blended learning program for students of all abilities in grades K-5 and focuses on 6 critical areas of reading: Phonological Awareness, Phonics, Structural Analysis, Automaticity/Fluency, Vocabulary, and Comprehension. The program consists of online and offline components for students and an offline component that supports educators in providing differentiated instruction for students. Given the importance of third grade reading proficiency benchmarks, *this study focuses on the impact of Core5 on students' ELA achievement among schools in California that serve grade 3 in 2020-21.*

Study Design

Lexia researchers merged publicly available school-level Smarter Balanced English Language Arts (SBAC ELA) assessment data disaggregated by grade from the 2018-19 and 2020-21 school years, together with school-level demographic data from 2020-21. All data were retrieved from the California Department of Education (CDE) website. The CDE reports schools' mean scores and the percent of students attaining overall and domain-specific proficiency on the SBAC ELA assessment by grade. Lexia researchers merged aggregated school-level in-program Core5 usage data by grade onto the CDE school-by-grade file. This process resulted in a file that contained assessment data for both Core5 and non-Core5 schools, school-level demographic data, and in-program school-by-grade usage data for Core5 schools. We restricted our analyses to Grade 3, considering any schools that had at least one student using Core5 in Grade 3 during the 2020-21 school year to be a "Core5 school."

The analytic data consisted of 1,447 schools that served Grade 3 students. Table 1 presents *school-level* characteristics for these schools. On average, schools had a total enrollment of 463 students. Schools in our data had 46% Hispanic students, 34% White students, 11% Asian students, 4% Black students, and 9% students of another race. On average, 49% of students qualified for free or reduced-price lunch. Of the schools in the data, 22% were categorized as Core5 schools serving students in Grade 3. During the 2020–21 school year, approximately 40% of third grade students met or exceeded their ELA standard ([CDE, 2021](#)).

Table 1 *School Characteristics*

	Overall	Core5 Schools	Non-Core5 Schools
Avg. K–12 # of Students Enrolled	463	463	463
% Female	49%	49%	49%
% Hispanic	46%	50%	44%
% White	34%	29%	35%
% Asian	11%	12%	10%
% Black	4%	3%	5%
% Other Race	9%	7%	9%
% Free/Reduced Price Lunch	49%	49%	50%
% Core5 School	22%	–	–
Total Schools	1,477	323	1,154

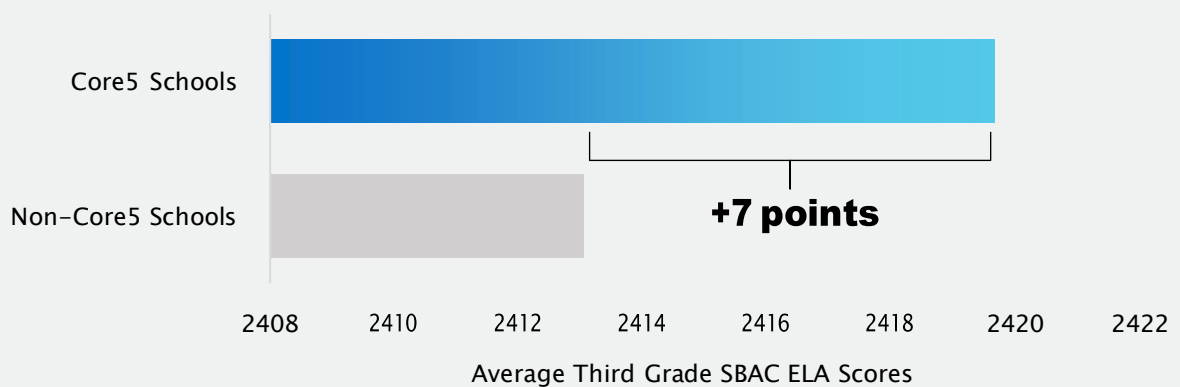
Table 1 also disaggregates school achievement and demographic characteristics by whether a school is a Core5 school (n=323) or a non-Core5 school (n=1,154). Core5 and non-Core5 schools were generally similar in demographic composition, including gender, race/ethnicity, and free or reduced-price lunch. Although Core5 schools served a slightly larger percent of Hispanic students, these differences were minimal. Overall, there were no meaningful differences in student characteristics between schools that did or did not use Core5.

Lexia researchers evaluated associations between use of Core5 and schools' 2020–21 third grade SBAC ELA achievement (mean scores and percent of students attaining proficiency) using multiple linear regression, statistically controlling for school-level characteristics and schools' prior achievement in 2018–19. We measure Core5 usage within a school as the percent of students meeting their weekly usage targets in the program.

Results

California schools with strong Core5 implementation had better third grade Smarter Balanced English Language Arts outcomes than California schools that did not use Core5.

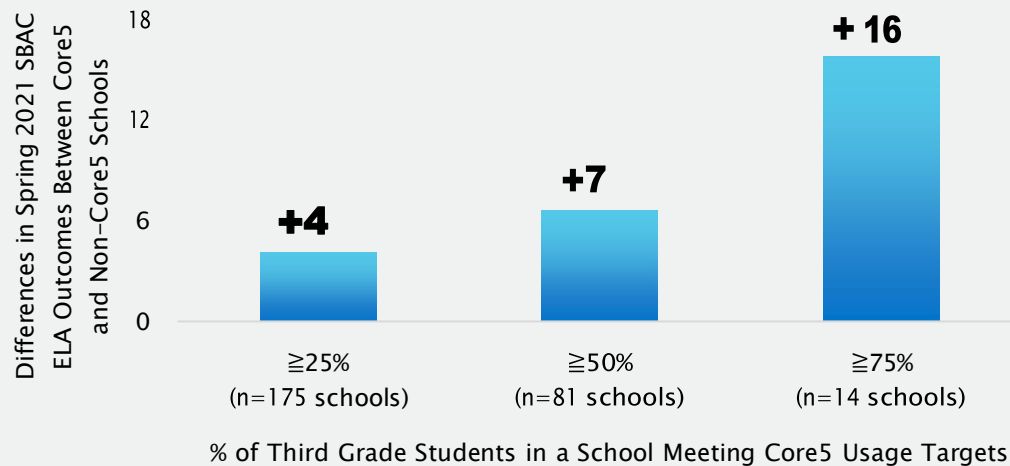
Schools with strong Core5 implementation scored 7 points higher on the third grade SBAC ELA assessment, on average, than non-Core5 schools. Similarly, Core5 schools with strong implementation had a higher percent of third grade students attaining overall proficiency (+3%) and proficiency¹ in the domains of Reading (+3%), Writing (+3%), Listening (+3%), and Research (+3%) relative to schools that did not use Core5. All results were statistically significant. For these analyses, we considered schools with more than 50% of third grade students meeting Core5 usage targets to be strong implementers.



¹ We considered the percent of third grade students above standard for subdomains as proficient.

Core5 Schools that had more students meeting their Core5 usage targets were associated with higher third grade Smarter Balanced English Language Arts outcomes.

Schools with higher percentages of students meeting usage in Core5 had better ELA outcomes compared to non-Core5 schools. For example, Core5 schools with at least 25% of their third graders meeting usage scored 4 points higher on the third grade SBAC ELA assessment than non-Core5 schools, 7 points higher when we increased the threshold to 50%, and 16 points higher when increased to 75%.



We found similar patterns when looking at SBAC ELA proficiency overall and across domains (Table 2). While Core5 schools with at least 25% of their students meeting usage had 1% more students meeting overall proficiency than non-Core5 schools, Core5 schools with at least 75% of their students meeting usage had 7% more students meet overall proficiency than non-Core5 schools. Similar patterns also emerged across the SBAC ELA subdomains: Reading, Writing, Listening, and Research.

Table 2 Relationships Among the Percentage of Students Meeting Core5 Usage Targets and Smarter Balanced ELA Proficiency Achievement

	% of Third Grade Students in a School Meeting Core5 Usage Targets Compared to Non-Core5 Schools		
	≥25% (n=175 schools)	≥50% (n=81 schools)	≥75% (n=14 schools)
Overall % Proficient	0.9	2.7*	7.3*
Reading % Proficient	1.4*	2.6*	5.6*
Writing % Proficient	1.5*	2.6*	5.0*
Listening % Proficient	1.9*	2.6*	4.2*
Research % Proficient	1.7*	3.0*	7.1*

* Denotes statistical significance at the $p < 0.05$ level.

Schools with stronger use of Core5 were associated with better school achievement on the SBAC ELA assessment.

The results of this study provide promising evidence that use of Lexia Core5 is associated with positive third grade ELA learning outcomes in California schools. While the 2020–21 school year was the first year when students resumed taking the Smarter Balanced assessment after major pandemic–related disruptions to the state testing program, student participation in testing still varied due to the ongoing impacts of the pandemic (CDE, 2021) and, as such, the generalizability of this study may be limited and results should be interpreted with caution.

Want to Learn More?

If you would like more information on this study, please contact research@lexialearning.com.

