Newsela ELA for Middle School Students in California

ESSA Level II Study

Prepared for:

Newsela

Prepared by LearnPlatform:

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EXECUTIVE SUMMARY

Newsela contracted with LearnPlatform by Instructure (LearnPlatform), a third-party edtech research company, to examine the relationship between *Newsela ELA* usage and outcomes for students. LearnPlatform designed the study to satisfy Level II requirements (Moderate Evidence) according to the Every Student Succeeds Act (ESSA).

Study Sample and Measures

The study included 2,464 6th–8th grade students (1,232 students who consistently used *Newsela ELA* (i.e., twice a week on average) and 1,232 students who did not use it) across 162 elementary and middle schools in a large, urban district in California. It used data from the 2021–22 and 2022–23 school years to provide insights into *Newsela ELA* implementation and its impact on student outcomes in English language arts. Specifically, the Newsela team provided LearnPlatform with 2022–23 usage data on *Newsela ELA* and the school district provided researchers with 2021–22 and 2022–23 Smarter Balanced Assessment (SBA) and student demographic data.

Main Research Findings

Researchers used descriptive statistics to describe participant characteristics and support analyses of implementation. LearnPlatform also conducted regression analyses to examine how consistent usage of *Newsela ELA* relates to student achievement on the SBA as well as the magnitude of the difference between the performance of treatment and comparison students on the SBA. In addition, researchers calculated standardized effect sizes to determine the strength of the relationship between *Newsela ELA* and student outcomes. Researchers also presented findings using percentile points to aid in interpretation of the effect size.

Key Findings
Students who consistently used *Newsela ELA* outperformed non-users
+ An average student not using *Newsela ELA* would be expected to score 4 percentile points higher on the SBA had they used *Newsela ELA*.
+ An average Hispanic/Latino student not using *Newsela ELA* would be expected to score 5 percentile points higher on the SBA had they used *Newsela ELA*.

Note: These findings were statistically significant at the $p = 0.05$ level.

Conclusions

This study satisfies ESSA evidence requirements for Level II (Moderate Evidence) given the positive, statistically significant findings.

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Introduction

Newsela ELA, by Newsela, supports reading skill and strategy development in alignment with the Science of Reading. It provides students with opportunities to practice and build vocabulary, comprehension skills, and background knowledge. Further, *Newsela ELA* offers diverse perspectives that represent all students and facilitates engagement and motivation to learn.

As part of their ongoing efforts to demonstrate the effectiveness of *Newsela ELA*, Newsela contracted with LearnPlatform by Instructure (LearnPlatform), a third-party edtech research company, to examine the relationship between consistent usage on *Newsela ELA* with student outcomes in English language arts (ELA). LearnPlatform designed the study to satisfy Level II requirements (Moderate Evidence) according to the Every Student Succeeds Act (ESSA). Specifically, researchers executed a well-designed and well-implemented quasi-experimental study to examine the impacts of middle school students' consistent usage of *Newsela ELA* on ELA achievement. The current study had the following research questions:

Newsela ELA Implementation

1. Of the students who consistently used *Newsela ELA (i.e.,* twice a week on average*)*:
    a. How many unique days, weeks, and months did students engage with a text on average?
    b. How many unique texts did students engage with on average?
    c. How many Newsela ELA quizzes did students take on average?

Effectiveness

2. How did students' ELA achievement on the Smarter Balanced Assessment (SBA) for those who used *Newsela ELA* consistently compare to students who did not use the product?
3. Did this comparison differ for Hispanic/Latino students?

Methods

This section of the report briefly describes the study's design, setting, participants, measures, and analytical methods.

Study Design

This study used a quasi-experimental design with propensity score matching to align with ESSA Level II evidence standards (see Appendix A for more information about the propensity score matching procedures used in this study). To allow for comparisons of ELA performance between students who used *Newsela ELA* consistently (i.e., twice a week on average) and students who did not use the product, the study included two groups of students. Specifically, one group included students who used *Newsela ELA* at least monthly during the 2022–23 school year (treatment group). The other group included students who did not use the product at all during the 2022–23 school year (comparison group).

Setting

The study included 2,464 grade 6–8 students (1,232 students who consistently used *Newsela ELA* and 1,232 students who did not use it) across 162 elementary and middle schools1 in a large, urban district in California.

Participants

There were 1,232 students from 45 schools who consistently used *Newsela ELA,* which was twice a week on average.2 According to student demographic data provided by the district, approximately half of these students were in 6th grade (48%), followed by 7th grade (29%) and 8th grade (23%). These students were evenly split between females (50%) and males (50%) and represented various races and ethnicities including Hispanic/Latino (81%), White (8%), African American (3%), Asian (3%), Filipino (3%), two or more races (2%), and American Indian (<1%).

The comparison group of students consisted of 1,232 students from 151 schools. The district's demographic data showed these students were split between 6th grade (47%), 7th grade (28%), and 8th grade (25%). Like the treatment group, these students were also evenly divided between females (50%) and males (50%). Further, these students represented the following races and ethnicities: Hispanic/Latino (68%), White (13%), African American (10%), Asian (5%), two or more races (3%), Filipino (2%), and American Indian (<1%).

Measures

Researchers used 2022–23 student-level usage (i.e., the number of unique days, weeks, and months students engaged with a text, the number of unique texts that students engaged with, and the number of ELA quizzes taken) to inform the extent to which students used *Newsela ELA* during the school year and whether consistent usage (e.g., twice a week on average) related to

[1] Thirty-four schools included students who consistently used *Newsela ELA* and students who did not use it.
[2] The minimum required level of usage to be included in the study was at least once a month.

ELA outcomes on the Smarter Balanced Summative Assessment (SBA). The SBA, a district-administered and standardized end-of-year assessment addressing ELA skills and concepts in alignment with the Common Core State Standards, was used to assess students' knowledge and progress towards college and career readiness (California Department of Education, 2023). Pretest (i.e., spring 2022) and posttest (i.e., spring 2023) assessment were administered to all 6th–8th grade students in the study.

Data Analysis

Researchers used a variety of quantitative analytic approaches. Specifically, researchers used descriptive statistics to describe participant characteristics and support analyses of implementation. In addition, LearnPlatform researchers conducted regression analyses to examine any differences between the treatment and comparison students on the SBA. The regression analyses included student-level covariates to control for potential selection bias. In addition, researchers calculated standardized effect sizes, Hedges' g, to measure the size of the difference between the two groups and percentile points to aid in interpretation of the effects.

Baseline Equivalence

To ensure the validity of the study's findings and to adhere to ESSA Level II standards, researchers assessed the equivalence of standardized assessment scores between student groups (i.e., treatment and comparison students). Students who consistently used *Newsela ELA* were not statistically significantly different from students who did not use the product regarding their scores on the spring 2022 SBA (pretest; effect size = 0.06). Baseline differences with an effect size between 0.05 and 0.25 must include acceptable statistical adjustments in analyses (What Works Clearinghouse, 2022). Therefore, spring 2022 SBA scores were statistically controlled for in the final model. See Appendix A for more details regarding baseline equivalence.

Program Implementation

This section presents descriptive findings related to *Newsela ELA* implementation. Researchers analyzed usage from the program to determine the extent to which 6th–8th grade students used *Newsela ELA* during the 2022–23 school year.

Key Question

Of the students who consistently used *Newsela ELA* (i.e., twice a week on average):

a. How many unique days, weeks, and months did students engage with a text on average?
b. How many unique texts did students engage with on average?
c. How many *Newsela ELA* quizzes did students take on average?

Over the duration of the study, 6th–8th grade students who consistently used *Newsela ELA* engaged with unique texts for an average of 39 days (range: 12–125), 21 weeks (range: 10–36), or 10 months (range: 9–12). This translates to students using *Newsela ELA* approximately twice a week on average. Of these students, they also engaged an average of 34 (range: 7–465) unique texts during the study period. Therefore, these students generally engaged with one unique text per day given the average number of active days on the program (39 days). As a result, students who consistently used *Newsela ELA* (i.e., twice a week on average) used it more frequently than the minimum required level of usage to be included in the study (i.e., at least monthly). Lastly, students took an average of 21 (range: 0–118) ELA quizzes over the duration of the school year. As a result, the average students who consistently used Newsela ELA took a quiz on 62% of the texts that they engaged with. Table 1 provides the average *Newsela ELA* usage for the 2022–23 school year.

Table 1. Average Newsela ELA student usage by number of unique days, weeks, months, text engagements, and Newsela ELA quizzes taken

	Days	Weeks	Months	Text Engagements	*Newsela ELA* Quizzes Taken
Overall (*n*=1,232)	39	21	10	34	21

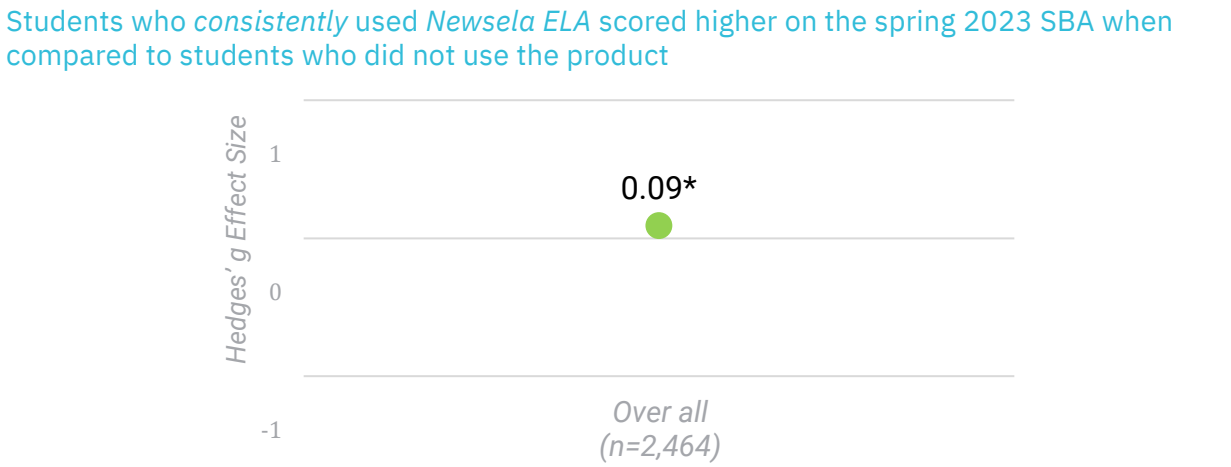
Effectiveness Findings

The following sections detail the effectiveness findings from examining the differences in SBA performance by student group (treatment and comparison). Researchers controlled for student-level covariates including school, grade, gender, race/ethnicity, and spring 2022 SBA scores.3 Additional information on these analyses and findings can be found in Appendix B. Researchers reported statistically significant findings at the $p = .05$ level. To determine the magnitude of the relationship or the size of group differences, researchers calculated standardized effect sizes (Hedges' g). Researchers also presented findings using percentile points to aid in interpretation.

Key Question

How did students' ELA achievement on the SBA for those who used *Newsela ELA* consistently compare to students who did not use the product?

Researchers conducted a regression analysis to determine whether there were any differences on SBA performance between 6th–8th grade students who consistently used *Newsela ELA* and students who did not use the product. Findings suggest that students who consistently used *Newsela ELA* scored statistically significantly higher on the spring 2023 SBA when compared to students who did not use the product (see Figure 1). Specifically, a comparison student at the 50th percentile would be expected to perform 4 percentile points higher on the SBA (54th percentile) had they used *Newsela ELA* (see Figure 2).

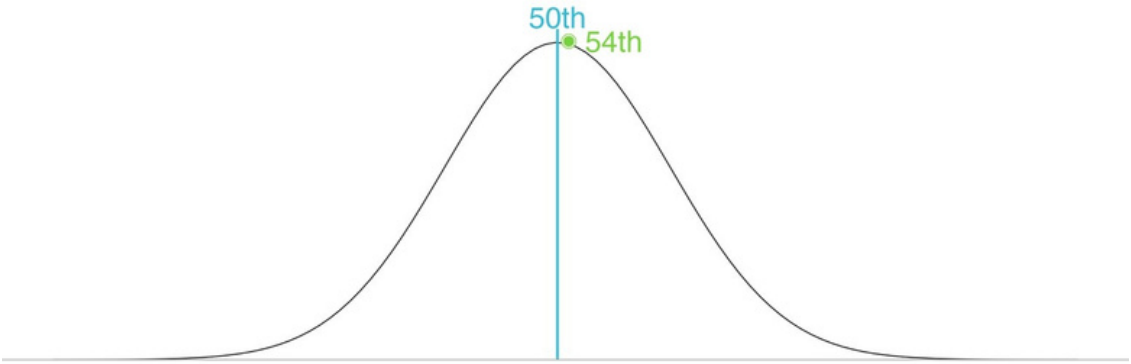


Note: Statistically significant findings are green (positive relationship) with an asterisk by the effect size. Hedges' g estimates can exceed the range represented in this figure.

Figure 1. Regression between students who consistently used Newsela ELA and students who did not use the product for student achievement on spring SBA scores.

[3] Analyses for Hispanic/Latino students included all the same covariates as the overall model except race/ethnicity.

A comparison student at the 50th percentile would be expected to perform 4 percentile points higher on the SBA had they used Newsela ELA



Note: The 50th percentile (midpoint) is represented by the blue line with the expected performance had they used *Newsela ELA* being represented by the green point.

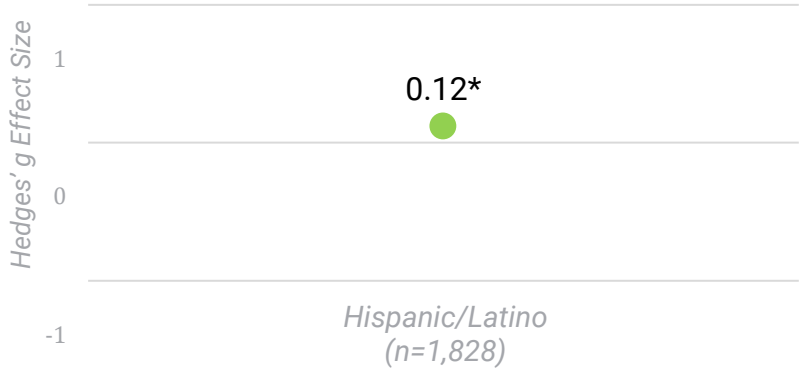
Figure 2. Regression findings between students who consistently used Newsela ELA and students who did not use the product reported using percentile points.

Key Question

Did this comparison differ for Hispanic/Latino students?

Researchers conducted an additional regression analysis to determine whether there were any differences on SBA performance between Hispanic/Latino students who consistently used *Newsela ELA* and Hispanic/Latino students who did not use it. Findings suggest that Hispanic/Latino students who consistently used *Newsela* scored statistically significantly higher on the spring 2023 SBA when compared to Hispanic/Latino students who did not use the product (see Figure 3). A Hispanic/Latino comparison student at the 50th percentile would be expected to perform 5 percentile points higher on the SBA (55th percentile) had they used *Newsela ELA* (see Figure 4).

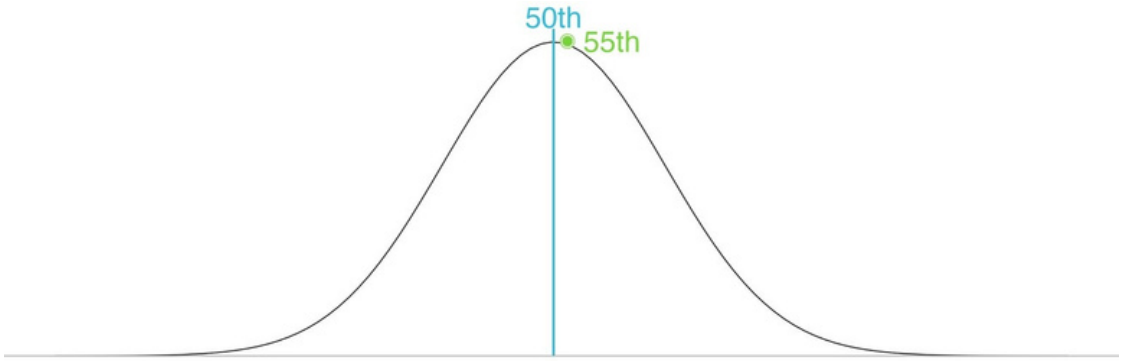
Hispanic/Latino students who consistently *used Newsela ELA* scored higher on the spring 2023 SBA when compared to students who did not use the product



Note: Statistically significant findings are green (positive relationship) with an asterisk by the effect size. Hedges' g estimates can exceed the range represented in this figure.

Figure 3. Regression between Hispanic/Latino students who consistently used Newsela ELA and Hispanic/Latino students who did not use the product for student achievement on spring SBA scores.

A Hispanic/Latino comparison student at the 50th percentile would be expected to perform 5 percentile points higher on the SBA had they used Newsela ELA



Note: The 50th percentile (midpoint) is represented by the blue line with the expected performance had they used *Newsela ELA* being represented by the green point.

Figure 4. Regression findings between Hispanic/Latino students who consistently used Newsela ELA and Hispanic/Latino students who did not use the product reported using percentile points.

Conclusions and Recommendations

In this study, results indicated that students who consistently (i.e., twice a week on average) used *Newsela ELA* outperformed a comparison group of students who did not use the product. Those findings suggest that an average student not using *Newsela ELA* would be expected to score 4 percentile points higher on the SBA had they used *Newsela ELA*. These findings also held when considering only Hispanic/Latino students. Specifically, an average Hispanic/Latino student not using *Newsela ELA* would be expected to score 5 percentile points higher on the SBA had they used *Newsela ELA*. These findings were statically significant and positive.

Similar positive impacts on students, particularly for Hispanic/Latino students, have been found in recent years for Newsela users. Newsela and Empirical Education conducted two prior studies that also found promising findings for this population of students (Empirical Education, 2017; Hurwitz, 2022). Given the current study's findings, in conjunction with this previous research, use of *Newsela ELA* for Hispanic/Latino students could be of particular interest for school districts.

Provided the positive outcome findings for students, this study provides results to satisfy ESSA evidence requirements for Level II (Moderate Evidence). Specifically, this quasi-experimental study met the following criteria for Level II:

- ✓ Proper design and implementation
- ✓ Baseline equivalence for treatment and comparison groups
- ✓ Statistical controls through covariates
- ✓ At least 350 students in the analytical sample
- ✓ Representative, multi-site study
- ✓ At least one statistically significant, positive finding

In addition to ESSA Level II, this study was designed to align with the standards, *WWC Standards With Reservations,* according to the WWC Version 5.0 Procedures and Standards Handbook (What Works Clearinghouse, 2022).

References

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Hurwitz, L. B. (2022). *Newsela usage leads to pronounces gains for Hispanic students*. Newsela. https://go.newsela.com/rs/628-ZPE-510/images/Efficacy-Study-Hispanic-Students.pdf

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Appendix A. Additional Information on Study Design and Methods

Propensity Score Matching

To help make the student groups (i.e., students who consistently used *Newsela* and students who did not use it) as comparable as possible, propensity score matching was performed. To calculate propensity scores, researchers conducted a regression with student group as the dependent variable and school, grade, gender, ethnicity and fall SBA scores as the covariates. The probability pairs were saved as a new variable. Researchers then organized the pairs into the appropriate groups to allow for 1:1 neighbor matching. Comparison students without a treatment match were dropped from the final analytic sample.

Baseline Equivalence

Researchers conducted baseline equivalence analyses to determine whether there were baseline differences between students who consistently used *Newsela ELA* and students who did not use the product during the 2022–23 school year. Specifically, researchers used a regression analysis to examine pretest scores (i.e., fall SBA). As noted in Table A1, there were no statistically significant differences between groups regarding fall SBA scores.

Table A1. Baseline equivalence analysis of fall SBA scores by student group

Outcome Variable	Coefficient	Standard Error	*t*-value	*p*-value	Effect Size
Fall SBA composite score	6.72	4.38	1.53	0.13	0.06

Appendix B. Additional Information on Study Findings

The following sections show additional information regarding the study's findings. Researchers report statistically significant findings at the $p = 0.05$ level and calculated standardized effect sizes.

How did students' ELA achievement on the SBA for those who used *Newsela ELA* consistently compare to students who did not use the product?

Researchers ran a regression analysis with SBA spring scores as the outcome of interest to examine differences between student groups. Specifically, the overall model included study condition (treatment or comparison) school, grade, gender, ethnicity, and SBA fall scores (see Table B1).

Table B1. Greater details of regression between student groups and achievement on spring SBA scores

	Coefficient	Standard Error	*t*-value	*p*-value	Effect Si
Overall (*n*=2,464)	10.02	2.65	3.78	0.00*	0.09

Note: *Statistically significant at the 0.05 level.

Did this comparison differ for Hispanic/Latino students?

To examine differences between Hispanic/Latino student groups, researchers ran an additional regression analysis with SBA spring scores as the outcome of interest and included study condition, school, grade, gender, and SBA fall scores (see *Table B2*).

Table B2. Greater details of regression between Hispanic/Latino student groups and achievement on spring SBA scores

	Coefficient	Standard Error	*t*-value	*p*-value	Effect Size
Hispanic/Latino (*n*=1,828)	11.91	4.79	2.49	0.01*	0.12

Note: *Statistically significant at the 0.05 level.