Newsela usage leads to pronounced gains for Hispanic-identifying students

A Newsela efficacy study
Executive Summary

- Below level middle school readers were invited to participate in a 4-week summer reading intervention involving daily use of Newsela.

- Teachers selected high-interest texts and activities across the Newsela platform, and self-reported seeking out content that would resonate with their mostly Hispanic classes.

- Newsela was nearly 70% more effective at promoting reading skill maintenance and growth compared to the average summer reading program.

- Results were especially pronounced for Hispanic students* and for students with high summer program attendance.

*Note: We use the term “Hispanic” to match the language used by the district that participated in this study.

KEY FINDING

Newsela is 70% more effective at promoting reading skill maintenance and growth compared to the average summer reading program.
Introduction

In Fall 2021, teachers across America faced the daunting task of supporting students with weaker than typical academic achievement\(^1\) and motivation to achieve in school\(^2\) resulting from lost or diminished learning opportunities the prior school year following the COVID-19 pandemic. Such losses were particularly acute for Hispanic students, who faced added challenges.\(^3\)

Compared to their White peers, Hispanic students are more likely to have parents who either are frontline workers with jobs that put them at-risk for COVID-19 and kept them away from the home, limiting their ability to provide just-in-time school support, or who lost their jobs as a result of the pandemic, creating a stressful and resource-constrained home environment.\(^4\) Some parents in these households are native Spanish speakers with lower levels of English language proficiency, making extra school-home written communication introduced by the pandemic particularly challenging.\(^5\) Hispanic students, on average, also have reported less reliable home Internet and lower digital device access than their White peers, creating further remote/ distance learning challenges.\(^6\) These extra barriers to pandemic learning are especially concerning given well-established pre-pandemic performance gaps between White and Hispanic students.\(^7\)

To equip all students, including Hispanic students, for success this past back to school season, many school systems nationwide sponsored summer learning programs.\(^8\) Prior to the pandemic, educational research provided compelling evidence that students typically see declining academic skills over summer vacation,\(^9\) but summer learning programs have the potential to mitigate learning loss.\(^10\)
Previous research suggests that Newsela can be highly effective at promoting reading achievement for diverse samples of middle school students participating in summer learning programs.¹¹ Newsela’s vast library includes thousands of fiction texts, leveled nonfiction texts, and multimedia content. Newsela publishes content from over 180 of the world’s leading sources, with an emphasis on selecting content and topics that all students can relate to. Newsela’s editorial staff uses a framework rooted in 5 key areas (identity, diversity, justice, action, and rigor) when evaluating contents’ fit for the website, aiming to select balanced sources that represent authors of color and perspectives across religious or cultural backgrounds, ethnicities, socioeconomic backgrounds, gender identities and other identity markers across all genres and mediums. On any given day, Newsela users might read an article about Hispanic Heritage month, watch a rendition of Maya Angelou’s “Still I Rise,” or follow recipes for Japanese dishes like Oyako Donburi or Oishi Omurice.

For this study, Newsela partnered with a school district in the state of Washington to conduct a quasi-experimental evaluation of a middle school summer learning program where Newsela was used as the primary ELA solution. Intervention teachers provided one hour of daily ELA instruction using content of their choosing across the Newsela platform. This report a) documents student attendance rates, b) explains how teachers chose to leverage Newsela’s flexible content offerings, and c) quantifies student reading achievement outcomes. The following hypotheses and research questions were proposed concerning student reading outcomes.

**Hypothesis 1**

Students who use Newsela during the summer program will exhibit similar scores on their Spring and Fall benchmark reading assessments. Comparison students who do not participate in the summer learning program will exhibit summer learning loss (i.e., declining scores).¹²

**Hypothesis 2**

Learning outcomes will be strongest for the students with the highest program attendance.¹³

**Hypothesis 3**

All students will benefit from Newsela, including Hispanic students.
Method

RESEARCH PROTOCOL

The participating school district invited middle school students to participate in a summer reading intervention. Classes met daily for one hour of ELA instruction over a four-week time period. During the program, the district tasked teachers with leveraging Newsela’s engaging content library to encourage students to read as much as possible and to create a joyful, engaging, and motivating classroom environment. Teachers had liberty to choose texts and activities at their discretion across the Newsela platform based on their and their students’ interests.

Towards the end of the second week of the intervention, Newsela observed four classes and interviewed teachers about their program perceptions.

PARTICIPANTS

The intervention was delivered by 6 teachers. Four teachers instructed the same classes for all four weeks. Two teachers split the summer session: One taught two classes for the first two weeks of the summer session, and the other teacher taught those classes for the remaining two weeks. On average, teachers had 13 years of teaching experience (range of 3-26 years).

Two were secondary science teachers, 2 were secondary EL teachers, 1 was a secondary ELA teacher, and 1 was an elementary teacher.

This report focuses on 70 rising 7th and 8th graders who a) were invited to participate in the summer learning program and b) had valid pretest and posttest data. On average, these students ended the prior school year reading at around the 21st percentile—a population in need of Tier 2 intervention according to the American Institutes for Research National Center on Intensive Intervention.¹⁴ As shown to the right, this was a majority-Hispanic sample.

READING ACHIEVEMENT MEASURE

To measure reading achievement, students completed the computer adaptive i-Ready Diagnostic® reading assessment in the Spring (pre-test) and in the Fall (post-test). It typically takes students around 35-60 minutes to take the reading portion of the assessment. At the secondary level, this assessment measures vocabulary and comprehension (both informational and literary texts). Scaled scores on this assessment can range from 100-800.

Student Characteristics

17% IEPs
37% English Language Learners
94% Low-Income

Student Race-Ethnicity

74% Hispanic
23% White
3% Other
Results

STUDENT ATTENDANCE

Forty-six (46) students (66%) attended at least one summer learning session. On average, these students attended 11.5 days—or about 61% of sessions. This means that the average student received about 11.5 hours of Newsela instruction. In subsequent analyses, we compare 26 “high attendance” students who attended 12 or more of sessions (mean of 15 sessions) to 20 “low attendance” students who attended fewer than 12 sessions (mean of 7 sessions). Twenty-four students did not attend any sessions (no attendance comparison group). There were no differences in Spring reading scores or demographic characteristics between high attendance, low attendance, and no attendance students.¹⁵

TEACHER INSTRUCTION

The experienced teachers in this study were dedicated to providing their students with an enjoyable, educational summer learning experience. As one teacher explained:

“I have very high expectations and REALLY want it to be interesting for them. ‘Cause they're spending their summer doing this.”

In preparation for each session, they reported investing time searching for high-interest texts and planning activities that would resonate with their mostly Hispanic classes. One teacher noted:

“Almost all of my kids are Mexican this year. [...] I wanted to find something [texts] specifically that they had background in.”
Teachers primarily focused on promoting reading and creating a safe space for students to discuss their reading. Specifically, Newsela observed or teachers mentioned adopting the following instructional goals.

<table>
<thead>
<tr>
<th>INSTRUCTIONAL GOAL: STUDENTS WILL BE ABLE TO...</th>
<th>TEACHER EXPLANATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand what the text says</td>
<td>“What I'm looking for is their reading comprehension. Most of the articles assigned did that [had quizzes assessing basic comprehension of texts].”</td>
</tr>
</tbody>
</table>
| Identify main ideas and supporting details      | “What are the central ideas? Pull out some details that either support that or just are interesting.”
|                                                 | “We're working on central idea. I know all the kids are really low in that. So I'm using the article to teach the skill.” |
| Understand word meaning and choice              | “Reluctant readers don't read because they don't understand the words that they're reading. So we have dug deep into [vocabulary in] two articles.” |
| Express text-to-text and text-self connections  | “We're doing like a triple Venn diagram to compare the different […] stories.”
|                                                 | “It [the activity] made them talk about their prior knowledge.” |
Although there was quite a bit of alignment in terms of teachers’ overarching and more detailed daily goals, how they went about addressing these goals varied considerably. Some teachers exercised multiple instructional strategies; hence, the number of teachers listed in this paragraph totals to more than the sum of the teachers in the study. Three teachers reported or were observed exercising a close reading approach where their classes would read and sometimes re-read the same text, attending closely to vocabulary and exercising comprehension strategies. These classes often completed short Newsela comprehension quizzes accompanying articles, sometimes completing multiple quizzes for the same article written at different levels.

One teacher was observed having classes engage in independent reading, where they could choose texts from a curated list created by the teacher or from anywhere else across the Newsela platform. After reading each text, the teacher required students to complete corresponding comprehension quizzes. Two teachers (both of the science teachers) dabbled in experiential learning, where their classes would read Newsela articles with activity suggestions and/or engage in active pursuits inspired by texts, such as following recipes or creating papyrus.

**SAMPLE READING TOPICS**

Below are a few examples of authentic, engaging texts on Newsela with reading comprehension quizzes that students read during the summer school program.

**Whole Class**

- **ARTS & CULTURE** Snowboarding becomes a hip, mainstream Olympic event
- **ARTS & CULTURE** Empathy is key to building strong friendships
- **MOONEY** Would you eat food made with “trash?”
- **ARTS & CULTURE** Science and Engineering in Ancient Egypt
- **MOONEY** Coming wave of video games could help students build empathy

**Independent Reading Selections**

- **ARTS** Japan’s Studio Ghibli teaches fans how to draw its beloved character Totoro
- **ARTS** Technology preserves Holocaust survivors’ memories
- **MOONEY** NFTs: What are they, and why did someone spend $69 million for one?
- **LAW** How a dog became mayor of a California town
- **SPORTS** Should robots referee sports?
READING ACHIEVEMENT

Overall Sample Results

First, we compared summer learning outcomes for students who did vs. did not attend the summer learning program (i.e., treatment vs. comparison). As expected, reading scores decreased in magnitude for students who did not attend the intervention (mean loss of 6.83 scale score points). Exceeding expectations, scores increased modestly for the Newsela treatment group (mean gain of 2.61 scale score points). Differences between groups were not statistically significant but directionally positive.

Another way educational researchers interpret the impact of an intervention is to calculate an effect size.¹⁶ Effect sizes are standardized measures of effectiveness that facilitate comparisons across different instructional programs/interventions. The larger an effect size is for a given program or intervention, the greater the impact the program or intervention had on students.

A published review of 35 experimental and quasi-experimental summer learning programs revealed that the average summer learning program has an effect size of .13.¹⁷ The effect size of Newsela was .22 - vastly larger than the established .13 benchmark. This means that Newsela was nearly 70% more effective than the average summer learning program.

Results as a Function of Student Attendance

Based on past research and logic suggesting that the program would likely be most impactful for students with greater attendance, outcomes were compared for high attendance, low attendance, and no attendance students.

Students with high attendance exceeded expectations, gaining 9.54 scale score points over the summer. In contrast, both the low attendance and no attendance groups experienced losses of 6.40 and 6.83 scale points, respectively. Differences between the high attendance group and low and no attendance groups were marginally significant.¹⁸

To help interpret these results, effect sizes were once again calculated. When focusing on just the high attendance vs. no attendance groups, the effect size nearly doubled, even more strongly reinforcing Newsela’s impact.
OUTCOMES FOR HISPANIC STUDENTS

Finally, we replicated the above analyses for the sub-sample of Hispanic students. Results were even more noteworthy. The effect size for all treatment vs. comparison Hispanic students (i.e., the difference between students who did and did not participate in the program) was .39, and the effect size for the high attendance vs. no attendance Hispanic students was .59. The overall treatment effect was marginally significant,"¹⁹ and the difference between high and no attendance groups was fully significant."²⁰ This demonstrates that teachers’ efforts to leverage Newsela texts to foster an inclusive and engaging environment for their Hispanic students paid off.

Outcomes for Hispanic Students

<table>
<thead>
<tr>
<th>Attendance Level</th>
<th>Changes in i-Ready Diagnostic scale scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Attendance</td>
<td>+ 11.84 points</td>
</tr>
<tr>
<td>Low Attendance</td>
<td>- 5.94 points</td>
</tr>
<tr>
<td>No Attendance</td>
<td>- 12.81 points</td>
</tr>
</tbody>
</table>

¹⁹ Marginal significance
²⁰ Fully significant

Changes in i-Ready Diagnostic scale scores
Conclusion

In just four weeks with an average of only 11.5 hours of instruction, Newsela users achieved impressive results. Not only did Newsela help intervention students ward off summer slide, but students who participated in the intervention earned higher reading scores in the Fall than they did in the Spring.

Newsela use resulted in reading performance that overall was nearly 70% stronger than expected based on previous research, with even larger and more robust effects for students with high program attendance and for Hispanic students.

Although it's clear from prior research that summer learning programs on average help limit summer slide, learning outcomes are typically more modest than what we observed in the present study.²¹ Newsela's extensive content library empowered teachers to design an engaging and culturally relevant summer learning experience, contributing to these outstanding results. These findings point to the value of Newsela in helping to prepare at-risk students for improved back to school readiness.

The present findings are very encouraging. This was a high-risk, low performing student population who could not afford significant summer slide. This study demonstrates just how much these at-risk students can benefit from even a relatively short intervention fueled by high-interest, culturally-relevant texts.

4 ibid
5 ibid
6 ibid
7 ibid
13 Prior research notes that attendance at summer learning programs can be very inconsistent, and, as might be intuitive, students with stronger attendance records exhibit stronger learning outcomes. Augustine, Catherine H., Jennifer Sloan McCombs, John F. Pane, Heather L. Schwartz, Jonathan Schweig, Andrew McEachin, and Kyle Siler-Evans, Learning from summer: Effects of voluntary summer learning programs on low-income urban youth, Santa Monica, Calif.: RAND Corporation, RR-1557-WF, 2016. As of July 31, 2021: https://www.rand.org/pubs/research_reports/RR1557.html
15 ps > .1
16 Effect sizes in the present study were calculated using procedures outlined in Morris, S. B. (2008). Estimating effect sizes from the pretest-posttest-control group designs. Organizational Research Methods, 11(2).
18 Controlling for race and school membership, students with low attendance had gain scores that were 15.83 points lower than students with high attendance (t(65) = -1.77, p = .081, d = .32), and students who did not attend had gain scores that were 16.57 points lower than students with high program attendance (t(65) = -1.95, p = .055, d = .40).
19 Controlling for school membership, Hispanic Newsela treatment students gained 16.40 points more than Hispanic comparison students (t(49) = 1.79, p = .079, d = .39).
20 Controlling for school membership, Hispanic students who did not attend had gain scores that were 24.71 points lower than students with high program attendance (t(48) = -2.45, p = .018, d = .59). Hispanic students with low attendance had gain scores that were 17.70 points lower than students with high attendance (t(48) = -1.78, p = .081, d = .38).