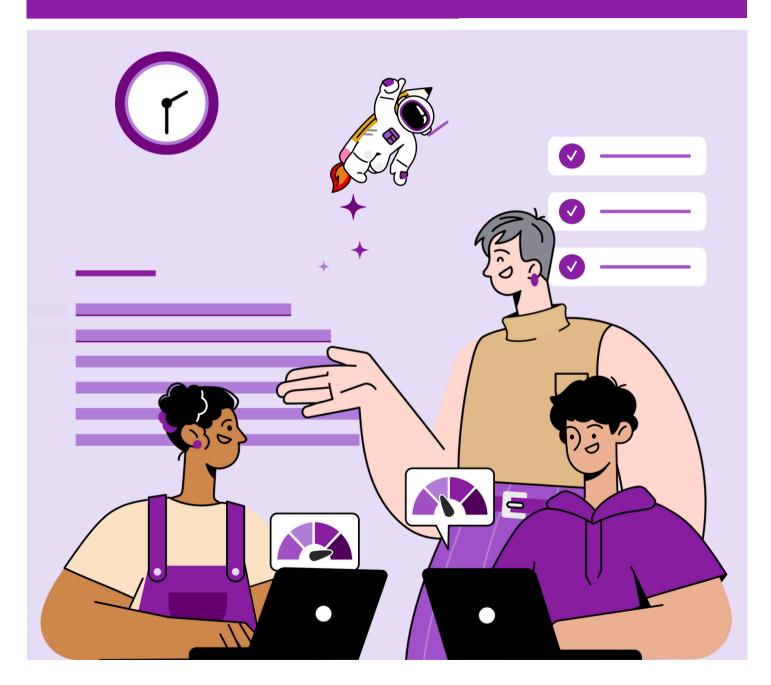


Newsela Writing boosts student writing and earns teacher support

A summary of pilot research findings







What is Newsela Writing?

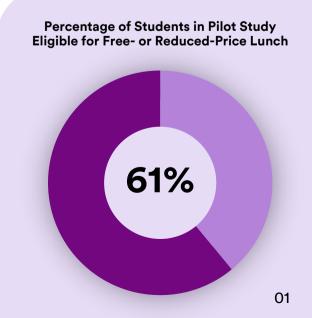
Newsela Writing helps students in grades 3-12 become confident, capable writers. <u>Using AI specifically designed for classrooms</u>, it offers immediate, continuous, rubric-aligned feedback to students. Newsela's team of curriculum experts has spent countless hours training our machine-learning model to ensure that this writing aid for students aligns with teachers' pedagogical goals and state-specific rubrics.

Evaluating the impact of Newsela Writing: Research design and methods

To examine the impact of Newsela Writing on student outcomes and teachers' opinions of the tool, <u>Mathematica</u>, funded by The Bill and Melinda Gates Foundation, evaluated an earlier version of Newsela Writing called Ecree.¹

A randomized controlled pilot study was carried out in 8th, 9th, 10th, and 11th-grade classrooms of two school districts from two states in the US. Nearly 2,000 students (sample = 1828) participated in the study, with an average of 61% of students eligible for free- or

reduced-price lunch. Half the teachers were randomly assigned to have access to Newsela Writing (i.e., intervention group), while the other half continued with typical instructional practices (i.e., comparison group). Data were collected on student outcomes (argumentative essay writing proficiency task and student surveys) and teacher outcomes (interviews about classroom context and teacher surveys). Key results are summarized on the next page. These early results are encouraging, though some findings are stronger than others. See the endnotes for details.



Research highlights



Newsela Writing boosts student writing quality and attitudes.

- Newsela Writing students outscored controls on an end-of-year writing assessment. Students in the
 intervention group who used Newsela Writing scored the equivalent of about 10 percentile
 points higher than students in the comparison group who did not use Newsela Writing on an endof-year writing task. ²
- Particular improvements were observed among students in the intervention group in the following writing components:
 - Students' ability to clearly and effectively organize their essays (14 percentile points).
 - Their use of supporting evidence (14 percentile points).^{3 4}

+10

Percentile increase in overall writing ability

+14

Percentile increase in clearly and effectively organizing essays

+14

Percentile increase in using supporting evidence

- For students with less advanced writing skills, using Newsela Writing was associated with improved writing (15 percentile points), particularly on writing organization (18 percentile points) and the use of supportive evidence (20 percentile points).^{5,6,7}
- Compared to students who did not use Newsela Writing, those who did reported **higher levels of confidence in their writing ideation** (that is, their ability to generate ideas around their writing) and their ability to **organize and communicate their ideas in writing** assignments, even after accounting for students' self-reported confidence at the beginning of the study.
- More than half (58%) of surveyed students reported that Newsela Writing was **easy to use** and **helped them improve their writing** (55%).

Research highlights (cont'd)

Newsela Writing helps teachers to deliver writing practice more effectively.

- More than half (59%) of surveyed teachers using Newsela Writing agreed or strongly agreed that the tool was useful to help students improve their writing.
- Teachers reported in interviews that the tool's feedback was helpful, especially for students with at least foundational, at-grade-level reading and writing skills.
- For students who already had foundational writing skills, teachers reported that feedback afforded students opportunities to continue practicing good writing habits.
- Similarly, teachers reported that the tool's automated feedback allowed students to work independently and incorporate feedback into their writing.
- Teachers reported they used tools' automated scoring and score reports to focus comments and feedback when conferencing with students and to develop their instructional practice.





"By using [Newsela Writing], [students] get immediate feedback [on] the whole process as they input their work. I am able to answer more questions and it lessened the stress of my workload... It took the anxiety away from those students that ask for immediate reassurance with their writing."

—11th-grade teacher

References



- 1 For published research insights reports about Ecree, visit https://www.mathematica.org/ projects/evaluating-the-development-of-secondary-writing-teaching-and-learning-solutions.
- In documentation shared with the Newsela team, the Mathematica researchers reported an intervention effect of Hedge's g = 0.25. Using procedures outlined by <u>What Works Clearinghouse</u> to aid in the interpretation of educational intervention effects, we translated that effect size into an improvement index (U_3)—a measure of the difference between intervention and control group students expressed in terms of percentile ranks. U_3 = 0.5987 or 60th percentile. This indicates that students who used Newsela Writing were scoring in the 60th percentile while those who did not use Newsela Writing scored in the 50th percentile. Although directionally positive and encouraging, this difference did not achieve conventional significance in the regression model (p = 0.162).
- Hedge's g = 0.35 for the purpose/organization component of the end-of-year writing task to $U_3 = 0.6368$ or 64th percentile. The difference between intervention and comparison groups is 14 percentile points. Although directionally positive and encouraging, this difference did not achieve conventional significance in the regression model (p = 0.102).
- 4 Hedge's g = 0.37 for the evidence/elaboration component of the end-of-year writing task to $U_3 = 0.6443$ or 64th percentile. The difference between intervention and comparison groups is 14 percentile points. The result was marginally significant in the regression model (p = 0.083).
- 5 Hedge's g = 0.39 for less advanced students on the overall end-of-year writing task, $U_3 = 0.6517$ or 65th percentile. The difference between intervention and comparison groups is 15 percentile points. The result was marginally significant in the regression model (p = 0.066).
- 6 Hedge's g = 0.47 for less advanced students for the purpose/organization component of the end-of-year writing task, $U_3 = 0.6808$ or 68th percentile. The difference between intervention and comparison groups is 18 percentile points. This difference was marginally significant in the regression model (p = 0.050).
- Hedge's g = 0.52 for less advanced students on the evidence/elaboration component of the end-of-year writing task, $U_3 = 0.6985$ or 70th percentile. The difference between intervention and comparison groups is 20 percentile points. This difference was significant in the regression model (p = 0.031).