

Using an Automated Writing Feedback Tool: Insights on Ecree for Students and Families

This brief aims to help middle and high school students and their families learn about Ecree, an automated feedback tool that supports student writing in the classroom. The brief summarizes key takeaways from a study of Ecree in grade 8–11 English language arts classrooms during the 2021–2022 school year. Read more about the [study methods](#).

The Ecree Tool

[Ecree](#) is a digital writing tutor that provides feedback to students on their drafts of argumentative and personal narrative essays, and scores to teachers summarizing students' performance. Ecree's feedback on grammar, style, vocabulary, organization, argumentation, and analysis aims to help students improve their drafts and hone their writing skills as they practice. Research suggests that students' writing skills improve when they have frequent opportunities to practice and receive clear feedback on their writing and revisions.¹

Key Takeaways

- / Ecree likely improved the quality of students' writing, especially for students with less advanced writing skills at the start of the school year.
- / Teachers and students found Ecree was easy to use and helped students improve their writing.
- / Some students may be overwhelmed by Ecree's feedback about their writing.

Implementation Context

The study took place in Alabama and North Carolina in two suburban school districts during the COVID-19 pandemic. The study randomly assigned teachers to either have access to Ecree (intervention group) or teach using their typical methods (comparison group). School districts provided students with laptops and internet access, which are required to use Ecree. About a quarter of students in the samples used for analysis were Black or Latino, which were communities in focus for this study.

Both districts conducted instruction in person, but some classrooms in each district had to pivot at times to virtual instruction because of COVID-19 outbreaks. Although teachers and students in the intervention group used Ecree, very few were able to complete all study activities. The Ecree team and study researchers requested teachers attend webinar trainings and assign at least six essays in Ecree. Students were intended to complete and revise at least six essays during the study. On average, teachers assigned 1.5 essays and students completed and revised one essay in Ecree.

Samples Used for Analysis



Student surveys: 433 (intervention); 411 (comparison)



Student essays: 247 (intervention); 283 (comparison)



Teacher surveys: 17 (intervention)



Teacher interviews: 7 (intervention)

KEY TAKEAWAYS

1 **Ecree likely improved the quality of students’ writing, especially for students with less advanced writing skills at the start of the school year.**

The study findings suggest that Ecree likely improved the quality of students’ writing on an end-of-year writing task (79 percent chance of a positive impact). However, results differed for students who had more and less advanced writing skills at the start of the school year. For students with less advanced writing skills, Ecree likely improved the quality of their writing (86 percent chance). For students with more advanced writing skills, it is unlikely that Ecree improved the quality of their writing (46 percent chance).

The findings also suggest that Ecree likely improved students’ confidence in their ability to develop writing ideas (78 percent chance of a positive impact) and their level of enjoyment of writing (96 percent chance), with some differences again across students with more and less advanced writing skills at the start of the school year. Among students with more advanced writing skills, Ecree likely improved their enjoyment of writing (78 percent chance), their confidence in their ability to develop writing ideas (85 percent chance), and their confidence to follow writing conventions (81 percent chance). For students with less advanced skills, Ecree likely improved their writing enjoyment (91 percent chance) but not their confidence in developing writing ideas or following conventions (less than a 50 percent chance).

2 **Teachers and students found Ecree easy to use and helped students improve their writing.**

Within classrooms that had access to Ecree, more than half (59 percent) of surveyed teachers agreed (53 percent) or strongly agreed (6 percent) the tool was useful to help students improve their writing. Teachers who used Ecree said during interviews that Ecree helped students on their writing during class time, like a teacher’s assistant. This kind of support gave teachers time and space to

There will be a time when 10 students need me, it is little things like “Do I need a comma here?” But Ecree can fill in that gap so then I can help more with the content.
— Grade 11 teacher

provide one-on-one support or to focus on in-depth writing content (as opposed to more basic instruction like helping students with grammar).

55% of surveyed students reported that Ecree helped them improve their writing.

Students expressed similar views about Ecree’s usefulness. Within classrooms that had access to Ecree, about half (55 percent) of surveyed students agreed (49 percent) or strongly agreed (6 percent) the tool helped them improve their writing. More than half agreed (49 percent) or strongly agreed (9 percent) it was easy to use (58 percent in total).

58% of surveyed students reported that Ecree was easy to use.

Many teachers and district staff reported that the COVID-19 pandemic made it challenging to teach writing during the 2021–

2022 school year. These challenges might have influenced students' overall experience using the tool, and students and teachers in Ecree classrooms used Ecree less often than study researchers requested. As a result, these findings may not reflect how students might experience using Ecree during a typical school year.

3 Some students may be overwhelmed by Ecree's feedback about their writing.

A key feature of Ecree is that it provides students with feedback about their writing when they need it the most: as they are engaged in the act of writing. However, this requires students to understand and respond to feedback largely on their own. Most interviewed teachers noted their students felt overwhelmed, frustrated, or confused by aspects of Ecree such as the type of feedback, amount of underlining, and unclear directions. Some interviewed teachers reported Ecree feedback addressed topics or used terms teachers had not yet introduced, such as "passive voice." Teachers across several grades reported that they needed to help students navigate feedback provided by Ecree.

I think [Ecree] may have intimidated them a little bit...it's amazing to me, but they were overwhelmed.

— Grade 8 teacher

STUDY OVERVIEW

Study design. The study team randomly assigned 45 English language arts teachers from two school districts either to have access to Ecree (intervention group) or teach using their typical methods (comparison group). The team then compared student and teacher outcomes for the intervention group to outcomes for the comparison group. The study included about 1,800 students in grades 8–11 across 19 schools. Read more about the [study methods](#).

Data and methods used for the brief. Not all study participants completed all data collection activities. The study team analyzed completed surveys from 368 students and 17 teachers in the intervention group at the end of the study to assess usability and usefulness of Ecree. The student samples used for analysis of survey measures ranged from 367 to 368 depending on the survey measure because some students left some questions blank. For impact analyses of student survey outcomes, the study team analyzed completed surveys from 433 students in the intervention group and 411 students in the comparison group. For impact analyses of writing proficiency, the study team analyzed essay writing assessments from 247 students in the intervention group and 283 students in the comparison group. The study team also conducted interviews with seven teachers in the intervention group and two district staff, in addition to reviewing Ecree usage data. Using the impact estimates and evidence from prior studies, the team calculated the probability that the true impacts of Ecree were positive. For reporting findings in the briefs, we considered an impact likely if the probability that the impact was greater than zero was 75 percent or above; potentially likely if it was between 61 and 74; and unlikely to have had an impact if the probability was 60 percent or less. The study team calculated descriptive statistics from the survey and usage data and thematically coded interview notes.

Implementation context. The study took place in two suburban schools districts in Alabama and North Carolina during the COVID-19 pandemic. Instruction in both districts was conducted in person, but some classrooms in each district had to pivot at times to virtual instruction because of COVID-19 outbreaks. School districts provided students with laptops and internet access, which are required to use Ecree. The intervention-group teachers and students used Ecree for the first time during the study. About a quarter of students in the samples used for analysis were Black or Latino, which were communities in focus for this study.

Level of implementation. Although teachers and students in the intervention group used Ecree, very few completed all intended activities. The Ecree team and study researchers requested teachers attend webinar trainings, set up prompts for writing assignments, and assign at least six essays in Ecree. Students were intended to complete and revise at least six essays and use the writing diagnostic feature. Across both districts, 76 percent of the teachers attended the webinar training. Teachers assigned an average of 1.5 essays, and students completed and revised an average of one essay in Ecree.

Read more briefs in this series here: [Evaluating the Development of Secondary Writing Teaching & Learning Solutions](#).

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Interested in implementing Ecree in the classroom? Email contact@ecree.com.

Endnote

¹ Graham, S., Hebert, M., & Harris, K. R. (2015). Formative assessment and writing: A meta-analysis. *Elementary School Journal*, 115(4), 523–547; Kellogg, R. T., & Whiteford, A. P. (2009). Training advanced writing skills: The case for deliberate practice. *Educational Psychologist*, 44(4), 250–266; Tehrani, F. A. (2018). Feedback for writing or writing for feedback? *Journal of Language and Linguistic Studies*, 14(4), 162–178.

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