SOCIAL INNOVATIONS Journal
Vol. 30 (2025): The Future of AI in Education: Innovations and Insights

Reimagining Writing Assignments in the Age of GenAI: A Practical Guide for Educators

By: Amy Stornaiuolo[1], Robert Jean LeBlanc[2]

[1]University of Pennsylvania
[2]University of Lethbridge

Keywords: artificial intelligence; generative AI; writing; literacy; education; teaching

Abstract

Generative AI (GenAI) is transforming writing practices, yet many educators feel unsure about how and when to address it in their instruction. This article presents a heuristic for AI integration in writing instruction developed through the Digital Discourse Project. Our guide categorizes GenAI use in assignments across five pedagogical purposes: resistance, support, expression, understanding, and critique. By examining real-world classroom applications, we demonstrate how educators can align AI tools with instructional goals and pedagogical priorities. This guide assists teachers in making informed, equitable decisions about GenAI in writing instruction, fostering intentional and context-aware approaches to AI-integrated education.

Introduction

While generative AI (GenAI) is reshaping the way people write in their daily lives, many educators are unsure how and when to address it in ways that fit within their time, curricular scope, or pedagogical vision. Educational scholars, who have long documented how different approaches to technology integration create different outcomes, have expressed concerns about whether GenAI will be used to support learners' agency and creativity (Resnick, 2024). Without deliberate decision-making, the technologies surrounding classrooms can feel like an external force rather than a tool that educators and students can actively shape. We respond to this challenge by offering a heuristic for GenAI integration —one that acknowledges the powerful role that educators' purposes play in shaping teaching and learning in an era of rapid technological change.

Through the Digital Discourse Project, a five-year study involving a research-practice partnership with the National Writing Project, we developed a guide to support educators in thinking about when, how, and whether to incorporate GenAI directly and explicitly in their instructional practices. While we found that educators might turn to GenAI in their lesson planning – from creating mentor texts or differentiating written materials to scaffolding lesson activities and designing rubrics – these were activities that often ran in the background of teaching, invisible to students. There were myriad resources available to teachers to help them with these infrastructural dimensions of using GenAI in their professional teaching lives, but few directions on how to use AI explicitly and directly in their *student-facing instruction*.

Certainly, there are many blogs and articles suggesting that educators should incorporate AI literacy into their instruction (e.g., Blank & Rogers-Whitehead, 2024), but initially, we could not

find materials focused on how K-12 teachers might design writing assignments, an area that particularly concerned teachers. Many worried that students were already using GenAI technologies in their writing without guidance or instruction, potentially in ways that crossed ethical lines and veered toward plagiarism. While curricular resources eventually emerged (e.g., AI Pedagogy Project, 2025), these often consisted of stand-alone assignments not always tied back to broader purposes or principles. We found that teachers wanted a systematic approach to guide them in making decisions about how to craft assignments for different pedagogical purposes.

The guide we developed to help educators address these concerns emerged from our collaboration with three dozen teachers over multiple years. Our empirical research was informed by writing studies scholars like Vee and colleagues (2023), who collected AI-focused writing assignments for undergraduates, and by educators using Paul Allison's GPT Thinking Partners tool, inspired by Mollick and Mollick's (2023) paper on designing writing assignments with the AI positioned as tutor, mentor, coach, teammate, simulator, tool, or student. As education scholars Beck and Levine (2024) argue, teachers are powerfully positioned to design assignments that "help students recognize their agency in writing" (p. 713). We found that understanding *assignments as a lever* for when and how to bring GenAI into classrooms moved teachers toward more deliberate decision-making, particularly to support interest-driven, collaborative, and human-centered approaches to learning by doing (Resnick, 2024).

Guide for Designing Writing Assignments with AI

Our guide offers a streamlined set of categories that support educators in designing writing assignments that emphasize different purposes for GenAI: resistance, support, expression, understanding, or critique. Each of these purposes may intersect with the others: sometimes educators want to design assignments that use GenAI both to support students as writers and spark creative expression or that resist the use of GenAI while positioning students to critique it. While these categories are meant to be flexible and overlapping, they also provide an anchor for educators to identify a central purpose in incorporating GenAI into their instruction.

If teachers primarily want to support students' writing practices, for example, they can tap into the *assistive uses of GenAI* (e.g., checking grammar before turning in an assignment). If they want to emphasize students' own thinking/voice, they can engage with *resistive uses of GenAI* (e.g., documenting a real-world, hands-on process). If teachers want to facilitate writers' expression, they can lean into the *creative uses of GenAI* (e.g., generating character dialogue for a short story). To help students understand how writing works, teachers can emphasize the *rhetorical uses of GenAI* (e.g., comparing AI and human-generated text). If teachers want to prepare students to critique how GenAI technologies shape writing, they can engage with *critical uses of GenAI* (e.g., learning about bias in training data for large language models).

Table 1. ***Guide for designing GenAI writing assignments***

Category	Purpose	Examples
Assistive	Supporting the practice of writing	Checking grammar Dialoguing about ideas Generating content
Resistive	Resisting AI use by foregrounding students' ideas and voices	Pen and paper Process-focused Documentary or personal writing
Creative	Exploring the expressive dimensions of writing	Co-composing stories/poems Making images or videos Developing characters
Rhetorical	Highlighting how writing works	Comparing AI/human output Changing audience/purpose Generating different forms
Critical	Learning about how GenAI technologies work	Researching environmental impacts Testing GenAI for bias and misinformation Exploring ethical questions (e.g., plagiarism)

Designing for Support: Assistive Uses of GenAI

Most people are familiar with the *assistive uses* of GenAI in writing: from nudges to intelligent tutors to chatbots, GenAI provides writers myriad ways to generate or elaborate ideas, revise texts, ask for clarification about a teacher's feedback, or check a text for grammar. Educators can tap into these assistive affordances when designing writing assignments with the purpose of supporting students in their thinking and writing processes. Many arguments for including GenAI in instruction center around capitalizing on AI's capacity for just-in-time instruction and personalized and actionable feedback, which distributes the time-intensive labor of responding to student writing.

One example of how teachers might *design for support* by leveraging these assistive dimensions of AI comes from high school English teacher Rolyn Heywood. To prepare students to write an essay about figurative language in *The Odyssey*, Rolyn asked students to socially annotate part of the text using an AI chatbot embedded in the NowComment platform. Students were unfamiliar with the symbols, language, and cultural references in the text, so to support their understanding through annotation, Rolyn directed them to use the embedded chatbot, which included characters like Telemakhos or Penelope that students could query. Rolyn's purpose in supporting students' writing practices began with idea generation – using AI as a dialogue partner to support their textual interpretation – and extended to other assistive uses of GenAI, such as when she had students upload subsequent paragraphs to Google Gemini and experiment with different prompts

to get feedback on their analysis of key quotes. Rolyn used GenAI at different moments in her instruction to support students at various points in their thinking and writing.

Designing for Resistance: Resistive Uses of GenAI

Many teachers want to push back against the incursion of GenAI into all forms of student writing, and in that case, they may want to *design for resistance* to GenAI. To engage in *resistive uses of AI*, some teachers have turned to pen and paper while others have focused on process dimensions of writing, such as having students compose different elements over time or write only in Google Documents so versions can be tracked. One reason teachers may design assignments for resistance is to highlight students' unique voices and perspectives and encourage students to think deeply via the practice of writing. Resistive assignments highlighting student voice might cross multiple modes (e.g., audio, video, social annotation) or employ creative constraints (e.g., writing artist statements, infographics, or other genres about a local or personal issue, event, or creation); experiential, documentary, and reflective forms of writing (e.g., engaging in a science or social experiment and writing about results or personal connections); or the use of primary documents (e.g., interpreting a case study through the lens of a class reading/document).

One middle school teacher we worked with, Katie Burrows-Stone, often leaned into creative activities for writing that positioned students as makers. In her collaborative zine project, Katie led students through multiple steps of building a zine in small groups, beginning with individuals brainstorming questions about issues that mattered to them ('How does climate change affect our everyday lives?'), doing initial research about the issue (reading an article or collecting primary data from their lives), and then making different texts that responded to the question (a creative, informational, and artistic piece). From here, groups worked together to design a zine on each guiding question, culminating in a digital gallery walk. These activities were resistive because they anchored the writing process in students' lives and concerns and highlighted their individual creative capacities as authors and makers.

Designing for Expression: Creative Uses of GenAI

One familiar function of AI involves its *creative uses*, such as co-composing fictional works with AI (e.g., a play in which the AI generates its own dialogue) or blending graphic elements into texts to expand them in new ways (e.g., generating illustrations for a children's story). Through these creative uses, students can take advantage of the generative dimensions of AI to express themselves alongside AI. Teachers may want to lean into these creative uses of AI when they design their writing assignments, with the broader purpose of helping students express themselves in new ways and across multiple forms.

One example of how teachers can *design for expression* emerges from a summer writer's camp that high school educator and literacy coach Joe Dillon facilitated with secondary school writers. In one assignment, students collaborated with AI to write a skit that could be performed. One group asked AI to suggest different endings to their skit; another used AI to generate stage directions and add a new villain. In a later assignment, Joe asked writers to choose a character

from a favorite text on Character.ai, engage in a dialogue with the character, and then write a fan fiction piece situated in that fictional universe. Joe wanted students to express themselves through writing while having fun and exploring the creative dimensions of co-composing across humans and machines.

Designing for Understanding: Rhetorical Uses of GenAI

Educators might use GenAI in their assignments to help students understand how writing works. These *rhetorical uses* of GenAI highlight how audiences, styles, purposes, and modes can shape texts, helping students develop nuanced understandings about how to design their communication to suit their broader purposes. For example, GenAI provides rich opportunities for comparing how humans and machines approach writing situations differently. For educators who want to *design for understanding* about these rhetorical dimensions of contemporary communication, GenAI tools offer opportunities to think about audience and revision in new ways as they learn how to prompt and revise prompts across different tools.

Bonnee Breese Bentum is a high school educator who designed assignments for students to develop a robust repertoire of communicative strategies they could adapt across contexts. In one assignment, Bonnee asked students to participate in a New York Times forum about voting rights. She asked students to write a biography that could be posted on the forum, inviting them to first write a bio and choose a picture before turning to GenAI to do the same. Bonnee invited students to analyze the differences between the materials they generated and those created by GenAI and then helped them develop new strategies for prompting the GenAI tools in different ways to accomplish their communicative goals. Assignments that help students learn how writing works (e.g., comparing literary styles or text structures) can support their rhetorical understanding.

Designing for Critique: Critical Uses of GenAI

Some educators are hesitant to use GenAI in their instruction, given well-documented concerns about bias, environmental impact, student privacy, or the ethics of how the training data is acquired. Turning toward *critical uses of Gen AI* is one way for teachers to help students learn how these technologies shape the current writing landscape, with particular attention to the language ideologies embedded in the large language models. Many curriculum resources centered on AI literacy can be adapted for writing assignments that help students understand how GenAI works and what the implications are for writers (e.g., how plagiarism checkers work). For educators who want to *design for critique*, there are a number of ways of teaching about GenAI, some that involve students experimenting with different tools and others that do not ask students to use it at all.

Samuel Reed is an example of a high school teacher who regularly designed assignments for critique. He taught students how large language models work, such as by having young people learn about statistical prediction (e.g., comparing human and machine coding of patterns in online comments). One assignment asked students to engage in a dialogue with another student on an AI-enabled platform and then analyze the AI chatbot's suggestions (e.g., which were

intrusive, helpful, off-topic, etc.). This assignment does not necessarily ask students to interact with the GenAI directly (i.e., they could see what suggestions were offered without incorporating them) but to bring a critical gaze to thinking about when, how, and why the technologies were attempting to intervene in the textual exchange.

Conclusion

Our guide supports educators in making informed decisions about how, when, and whether to integrate GenAI into their classrooms. This ensures that instructional choices are aligned with pedagogical goals rather than dictated by external pressures or defaulting to existing inequalities in technological access and literacy. While educators play a key role in this work, policymakers, edtech developers, social investors, and nonprofits can also use this heuristic to design more nuanced, context-aware experiences for teaching and learning with AI. By centering the needs and expertise of educators and students, we can move beyond reactive responses to GenAI in writing instruction and toward more intentional, equitable, and future-ready practices.

Acknowledgments

With deep gratitude for all of the partners in the Digital Discourse Project and for support from the James S. McDonnell Foundation (JSMF grant 220020588).

References

AI Pedagogy Project. (2025). *Assignments*. metaLAB (at) Harvard. https://aipedagogy.org/assignments/ Licensed under Creative Commons BY-NC-SA 4.0.

Beck, S. W., & Levine, S. (2024). The Next Word: A Framework for Imagining the Benefits and Harms of Generative AI as a Resource for Learning to Write. *Reading Research Quarterly*, *59*(4), 706–715. https://doi.org/10.1002/rrq.567

Blank, L., & Rogers-Whitehead, C. (2024, June 6). *Simple Starters for AI Literacy and Digital Citizenship Learning*. Blog. ISTE. https://iste.org/blog/simple-starters-for-ai-literacy-and-digital-citizenship-learning

Mollick, E.R., & Mollick, L. (2023). Assigning AI: Seven Approaches for Students, with Prompts. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4475995

Resnick, M. (2024). Generative AI and Creative Learning: Concerns, Opportunities, and Choices. *An MIT Exploration of Generative AI*. https://doi.org/10.21428/e4baedd9.cf3e35e5

Vee, A., Laquintano, T., & Schnitzler, C. (Eds.) (2023). *TextGenEd: Teaching with Text Generation Technologies*. The WAC Clearinghouse. https://doi.org/10.37514/TWR-J.2023.1.1.02