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AI Feedback Should Be Used in a Human-Centered Process, with Peer Feedback

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The influential tech analyst Mary Meeker (2024) recently published a report on GenAI and higher education, envisioning a business-first transformation of education in which learning is an “accessibility of answers” (p. 6), GenAI tutors play a leading role, and chatbots assess student writing. If we reduce learning about writing to a mechanistic interaction, however, we miss out on the key social dimensions of writing. Writing is still an act of communication, a crucial life and workplace skill, and we need human readers to help us recognize writing’s fundamentally social and rhetorical nature. Students’ interactions with other people about their writing are correlated with deeper learning, as well as personal and social development (Anderson et al., 2015). Moreover, human relationships matter to educational equity. If we remove humans from feedback, we go against the body of research demonstrating that students’ relationships with teachers and peers impact engagement, motivation, and sense of belonging, which in turn correlate with student success and graduation rates (for example, Kirby & Thomas, 2021). GenAI tools may support educational equity by increasing opportunities for students to receive feedback (Warschauer et al., 2023), particularly in the many contexts where they don’t receive feedback on drafts. GenAI must, however, be used in a human-centered process,

Why do students need feedback on writing in the first place? Cycles of drafting and revising are crucial for student writers’ growth, including clear, focused, specific and actionable feedback (Flower & Hayes, 1981; Sommers, 2006). In reality, however, many teachers and TAs lack the time or resources to provide feedback on drafts. Machine feedback isn’t new. In *Bad Ideas about Writing* (2017), Chris M. Anson and Les Perelman discussed the many problems with using computers to evaluate student writing. Research suggests that GenAI feedback is high

enough quality to be used for draft feedback (Steiss et al., 2024), but it remains a bad idea to rely solely on computers to respond to student writing. In this volume, Shane Wood argues that teachers should not rely on GenAI to provide feedback on student writing because good feedback is relational, based on “knowledge of the writer.” However, teaching *students* how to use GenAI tools for feedback can be empowering. Combining peer and GenAI feedback is a way to draw on the different strengths of each type of feedback while building supportive relationships and AI literacy.

Over the past year, our research team studied 654 students who used ChatGPT 3.5 feedback combined with peer review, in composition classes and large science classes (Sperber et al., 2025). Although GenAI feedback was often overly general, 58% of students preferred receiving feedback from both peers and GenAI compared to 36% who preferred peer feedback alone—a mere 7% preferred GenAI feedback alone. Notably, 71% of students who asked the chatbot follow-up questions preferred combined GenAI and peer feedback, suggesting that interaction with GenAI increases its usefulness.¹ In this chapter, I first discuss peer review, since it must be well structured to be effective (Anson et al., 2023), then explain how to prompt chatbots for feedback, the importance of a reflective approach, and the benefits of combining peer and GenAI feedback.

Peer Review Best Practices

For faculty members who do not currently incorporate peer review, it’s important to begin by making sure students understand assignment goals. Assignment-specific rubrics help students to grasp disciplinary expectations, and these rubrics can be used to guide peer reviewers. Analyzing model papers, written by former students and professionals, helps students become familiar with genre expectations. Students should assess their drafts’ strengths and weaknesses to develop writing awareness, and then ask for feedback. Reviewers should offer supportive feedback and specific suggestions for improvement, focusing on higher-order concerns like use of evidence over sentence-level issues. Taking time to talk about feedback in class is important, too, since dialogue can clarify reviewers’ comments and build community. Lastly, peer review groups of three or four are more effective than pairs (Van den Berg et al., 2006).

¹ Data for continued conversations was collected in the second half of our study. Out of 292 students, 36% continued AI conversations.

Prompting AI for Feedback

Teaching students how to use GenAI for feedback is not only about getting additional feedback, but about building AI literacy, or an understanding of the affordances and limitations of GenAI tools, and hands-on knowledge of how to use GenAI—skills advocated for in the *MLA Student Guide to AI Literacy* (2024). I emphatically remind students that just because GenAI sounds confident, doesn't mean it's always right! It's also important to discuss the fact that GenAI reproduces human biases, including a bias for Standard Academic English (Mayer, 2024). We provided students with the following prompt:²

Copy and paste the entire message below into the chat box without submitting. Next, copy and paste the assignment prompt, rubric, and paper, and then submit.

I am a student in a [university writing course] working on a paper. Pretend you are a peer-reviewer who will review my draft based on the assignment prompt and grading rubric I provide. Please provide clear, detailed, specific, and supportive feedback. Do not rewrite my paper for me. The format for your feedback should be as follows: 1. Two to three positive aspects of my paper and why those aspects are effective. 2. Three to four aspects for revision and the reasoning about why each poses an issue, and 3. A suggestion for revising each one.

Here is the assignment prompt:

Here is the rubric for the assignment:

Here is the paper:

For more specific, tailored feedback, students should ask follow-up questions, for example, they can ask GenAI to provide examples from the draft or ask for feedback on the clarity of a paragraph or on other areas of concern. For additional strategies, see prompts by Dani Nyikos and Kristi McDuffie (Chapter 41, this collection), [“Getting the most out of AI feedback” \(Mills, 2025\)](#), and [Follow-up chat guidance in the PAIRR Packet \(2025\)](#). Feedback quality may also be improved by using detailed rubrics and by prompting GenAI to take on the role of an

² Prompt adapted from Steiss et al. (2024).

experienced and empathetic writing teacher (A. Mills, personal conversation, September 26, 2024). Improved GenAI models, such as ChatGPT 4.0, are likely to produce better feedback, and other chatbots can be explored—my favorite is Claude AI.

AI and Peer Feedback Together

The majority of students preferred combined peer and GenAI feedback (58% of all students and 71% of students who continued GenAI conversations after the initial prompt). We attribute students' preference for combined feedback to the fact that 75% of students reported similarities in peer and GenAI feedback, which reinforced both sources of feedback. This reinforcement is especially important given that students frequently mistrust peer feedback (Alnasser, 2018) and GenAI feedback. Peer and GenAI feedback also complemented each other, as Dolores observed, "Both [GenAI and peer feedback] were equally valuable, but in different ways." However, a sizable minority of students preferred peer feedback alone (36% of all students and 19% of students who continued GenAI conversations), which we attribute to better peer feedback and a desire for real human feedback. Students identified the main affordances and limitations of GenAI and Peer feedback as follows. GenAI feedback offers:

- Constructive criticism with actionable revision strategies
- Rubric driven feedback
- Organized and clear feedback
- Feedback on organization, focus, development and transitions
- Feedback on grammar and mechanics
- Positive and critical feedback
- *Downsides:* may be general, shallow or inaccurate; lacks contextual knowledge of course and assignment, cannot "see" multimodal compositions or citations

Compared to GenAI, peer feedback offers

- More specific, deeper feedback
- Contextual knowledge of the course and assignment
- An authentic audience
- Knowledge based on personal experience
- Emotional support and community
- *Downsides:* may not be detailed; may focus on superficial concerns; may offer positive but not critical feedback

The Importance of Reflection and Self-Assessment

GenAI must be used within a pedagogical framework that builds on what we already know about how writers learn. As Kathleen Yancey (1998) helped us to see, student writers need to reflect on their writing in order to grow. The writer must consider each piece of feedback in relation to the assignment and their own goals. Assessing GenAI feedback, rather than taking it at face value, also helps to build AI literacy. That is, when students look critically at GenAI feedback and notice where it falls short or decide against a piece of advice, they begin to understand GenAI as the fallible tool it is. At the same time, writers refine their purposes and build agency; for example, Dolores decided which feedback aligned with her goals: “I asked ChatGPT about my explanations for a lay audience since that’s what I was most concerned about for this draft . . . I disagree with [one] suggestion . . . but I do agree that I should consider reordering.” GenAI feedback can be a useful learning resource when paired with peer review if, and only if, students are really thinking about the feedback they receive, from humans and machines, and making their own decisions.

Conclusion

The extent to which GenAI tools will, in practice, support students’ writing development remains to be seen, but a large part will depend on the pedagogical models we implement. Feedback alone does not help students grow as writers: it’s students’ engagement with feedback that matters (Zhang & Hyland, 2022), and human relationships matter to engagement. If students are engaged, recognized and supported, they are more motivated to learn and less likely to drop out (Furrer et al., 2014), and they may also be less likely to misuse GenAI (Bowen & Watson, 2024). Only 7% of students preferred GenAI feedback alone. Clearly, many students feel that GenAI feedback has something to offer, but they certainly don’t want GenAI to become the only type of feedback they receive.

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