The AI Writing Revolution is Here: Teaching with Writing in Human Development

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The advent of widely available generative artificial intelligence (AI) was the catalyst for a deeper collaboration with students about writing. The course we taught, *Principles of Human Development,* is a lower-level writing-intensive 4-credit-hour course that covers an immense amount of material: human development from conception to death, the role of context in developmental trajectories, and the skill of writing professionally for social sciences. Students met twice weekly for large lectures and weekly for small discussion labs facilitated by a graduate teaching assistant (TA); they were evaluated both on how well they understand course material and on the quality of their writing. I began teaching the course in 2015; the changes to the course described here were instituted for Fall 2024 and were the first time we integrated AI. Despite the ever-evolving landscape of technology, the goals of the course have remained unchanged for decades: write to learn and learn to write.

As the instructor of record for the course, I created all assignments, lectures, activities, and assessments to ensure the course met the learning objectives as set by the faculty. Because of the unique lecture/lab structure of the course, I also trained and worked closely with eight TAs. Each TA facilitated two discussion sections and graded all writing assignments for those students. The TAs provided more individualized communication with students, both in small discussions and in the personalized feedback for students on their writing. My co-author is an experienced TA in the course, so we have unique perspectives on how the semester went and how AI has gradually become part of the writing-intensive curriculum.

Given the students' anxiety about their own writing and their doubts about success in a writing intensive course, I came into Fall 2024 semester fully aware of the temptation to use AI as a replacement for thinking or as a crutch for writing. We were at a unique moment in time; the TAs, students, and I were learning AI simultaneously, and we had an opportunity to influence understand-

ing of and to set expectations of use of AI in classwork. Could we harness everyone's equally novice status so we can learn together?

We addressed AI in the course in several ways. First, we added education about AI, how it works, its capabilities, and how it can be used in writing. Teaching assistants received training before the semester began to ensure clear communication of expectations and consistent grading related to AI use. Early lectures and labs incorporated AI-related education to help students understand how to use these tools appropriately and ethically in their coursework.

Second, the syllabus outlined both university-wide and course-level AI use policies to provide consistent standards while creating space to accommodate individual differences in students' experiences and familiarity with AI tools. The University gave instructors freedom to incorporate AI (or not) into their courses, and our approach was to allow students the choice to use AI as a writing tutor in their writing assignments. The policy specified that all words and ideas were to be the students' own, and students could submit to an AI tool no more than one paragraph of writing (to protect their intellectual property) for feedback that could be applied to the rest of the paper. For all writing assignments, students included an AI disclosure statement that indicated whether they used AI. Some students were adamant that they did not want to use AI to protect their own learning. If they did, however, their disclosures described the AI prompt used, summarized the feedback provided by AI, and included a reflection on how feedback was used (or not used) in the paper. Students also were directed to save their metadata so they could produce it upon request. We believe that this approach (education, student choice, accountability through disclosure, and reflection) helped students learn about and practice using AI appropriately. The University does not use existing AI checker tools due to poor reliability, so in this course, we relied on the judgement of the TAs and instructor to identify any suspected AI misuse.

Third, writing assignments (including AI use) were scaffolded and allowed for student choice. The writing assignments, primarily, scaffolded into a research paper answering a question about human development; students individualized their writing in several ways. First, they had to select from among seven prompts that focused on different areas (e.g., school readiness, physical health, intimate relationships, successful aging). Within each prompt, students selected a developmental period on which to focus and a developmental theory to apply. Because this course attracts students from multiple majors, the choices allowed students to find a topic relevant to their personal or professional goals. Our assumption was that when students are engaged in a topic and see its relevance to their lives, they would be more invested in the process and less likely to misuse AI.

While choice was important, so too was the scaffolded structure that supported students' learning and writing development. Writing and receiving feedback from TAs and peers in stages helped students build their writing skills over time while learning to use AI responsibly. In the ear-

ly stages when students wrote a one-page prospectus identifying their topic, AI could be used for brainstorming and idea generation. In an intermediate stage, students submitted annotated outside scholarly sources. This ensured that students were relying on real scholarly work and reduced the likelihood that they were citing sources hallucinated by AI. In later drafting stages, AI was used as a writing tutor, but with clearly defined boundaries. For each writing assignment, we required students to develop an initial idea or draft before using any AI tools. This ensured they engaged in the writing process themselves before turning to technology for support. The goal was to promote thoughtful use of AI and personal responsibility throughout the writing process.

Fourth, we increased supervised writing time during discussion sessions and encouraged students to seek help during teaching assistants' office hours. This approach reinforced that, beyond using AI, students had direct support from TAs to develop their writing skills and complete assignments successfully. Benefits of using AI as a writing tutor include accessibility and immediate feedback, but drawbacks continue to be hallucinated sources, bias, and inaccuracies (among others). Increased supervised writing time meant students had immediate access to TA feedback without the drawbacks of AI. We also had more certainty that the students' ideas and words were their own.

Fifth, we focused on active learning strategies in lectures to enhance students' understanding and competence, which in turn built their confidence to write about the course content. In addition, the TA team and I held weekly meetings to explore ways to better support students. Around the middle of the semester, each TA met individually or in pairs with their assigned students to ensure active engagement. These efforts reflected our shared responsibility with the students in fostering a more meaningful and inclusive learning experience. We hoped this approach would increase their motivation to engage fully in the writing by making the material feel more relevant and meaningful.

For future semesters, we will build on our existing strategies. First, we will incorporate more education about AI *throughout* the semester, rather than relying on a few discussions and demonstrations at the beginning of the semester. The added activities will incorporate real-life examples of (in)appropriate uses of AI and will provide opportunities for students to practice iterative prompting and working with AI output (e.g., critical reading and revision of output). Second, we will increase the frequency of in-person writing. TA-supervised writing may promote appropriate uses of AI and provides immediate answers to student questions about writing or the content. Third, we will model AI disclosures in class. For example, even though we did not use AI-generated material directly in class (e.g., images or specific assignments), I did use it as a thought partner when brainstorming lecture activities. We hope that observing the instructor and TAs disclose appropriate AI use would encourage honest AI disclosure statements in students' writing. Fourth, this experience has prompted us to think about writing itself. As we continue to incorporate AI as a thought partner and co-creator, perhaps we need to think more about *writing as revision* and less about *writing as creation*. In that vein, we will not only continue to scaffold writing assignments and promote revision but also add

more activities working with AI output critically. These revisions to the course will still meet the dual goals of the course to *learn to write* and *write to learn* while also promoting AI literacy skills. We are, after all, training students for jobs not yet created. Finally, we must recognize that one course cannot adequately address all aspects of AI and writing while also addressing content. We must trust our colleagues and institutions across education to address AI so that together we will provide students with a strong foundation to learn about and ethically incorporate AI in writing and learning.

Author Note

We have no known conflict of interest to disclose.

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