The AI "Crisis" and A (Re)turn To Pedagogy

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The college essay is dead [and] nobody is prepared for how AI will transform academia" screams Stephen Marche in *The Atlantic*; "Freaking Out About ChatGPT" wails the headline to John Warner's Inside Higher Ed article; "Professors, programmers and journalists could all be out of a job in just a few years, after the latest chatbot from the Elon Musk-founded OpenAI foundation stunned onlookers with its writing ability" opines Alex Hern in the Guardian. Both Warner and Marche offer suggestions for responding to this crisis, but first they work to establish it as a crisis. In 2020 the Guardian online published "A robot wrote this entire article. Are you scared yet, human?" Our colleagues in Europe have been talking about Quillbot and the other paraphrase and paragraph generating software for some time now, but it took crisis reporting to make conversations in the US move into the general realm. My university president convened meetings of faculty a few months ago asking how the university should rethink higher ed in response to the AI crisis that is coming, but he seemed not to expect a response from the faculty in writing studies or education. Although this concern is precipitated by a writing issue, it is not seen as a crisis that composition faculty are called upon to solve, and we might wonder why. We have the tools, the theory, and a history of successful pedagogy to shape a response. And we should do so. We may need to rethink the way we teach writing but no more than we did with the advent of computers or the internet. AI itself is not a crisis, but ignoring the crisis rhetoric and the implications it raises for our discipline and the work of writing may make it so.

Composition studies has a tradition of responding to externally defined writing-related crises. As Cedric Burrows observes in this Where We Are, on one level, externally generated crises have shaped the big ideas of our discipline as socio-cultural discourse in the public realm challenges the field to respond; however, this crisis is of a different nature. It is not a crisis of marginalization or social justice; it is a crisis grounded in the *work* of writing. Like other externally defined panics, the focus of fears about AI is not on *who* is writing but *how*. And how that can be policed.

In 1955, headlines in *Time* screamed that Johnny couldn't read, a cry picked up again in 2018 in *Forbes*, although with different justification. The 1980s saw the cheating crisis when online paper-mills with names like schoolsucks. com and 123helpme.com were held up as proof that students should not be allowed to use the internet because of course they will cheat. This sentiment is echoed in the "plagiarism crisis" of the 1990s and again with fears of widespread

cheating as students took exams on unsupervised home computers during the Covid-19 pandemic. And now here we are again with AI.

But like these other panics, AI is not the crisis we should be focusing on. AI is another tool that writers can use or misuse and that the discipline of composition should embrace. It provides in many ways the impetus we need to turn *back* to a focus on writing itself, informed by all of the other turns we have made but also by older work on revision and invention.

For that to happen, though, we have to face what is a crisis in the field: our engagement with the work of writing. Both the work of teachers and the work of students. Our field has done more than most to respond to the exploitation of the contingent faculty on which our discipline depends even more than higher education in general, yet we generally present it as a matter of justice rather than as a pedagogical issue. The observation that our teaching conditions are our students' learning conditions does not address which pedagogy is employed to generate that learning. The often unspoken fact is that most day-to-day work of teaching writing is not conducted by the theorists who shape our discipline, and most teachers of composition can not attend expensive academic meetups or subscribe to the journals in which the issues at the heart of the discipline are discussed and refined. While those in the discipline turn (churn?) from theory to theory, most teachers of writing are commuting from campus to campus and their tenuous contingent positions with no time and often little interest in engaging in the larger questions of the discipline. So how should the discipline respond to issues that not all teachers of writing are engaged with?

The other side of this crisis is also a labor issue, more subtle yet also at the core of the discipline: the intellectual labor of our students and how we think about it. We accept the fact that students are deprived of their intellectual labor when we require them to submit papers to a plagiarism detection service that turns around and uses them as part of its originality checking pool, for example. And we let technology replace pedagogy because we have bought into the crisis language that says students will cheat if they have the chance. That same attitude led many faculty to accept the surveillance software used in the pandemic to monitor students as they took tests and exams. Such an attitude of mistrust does not create a welcome learning environment for students, and it also represents a shift from teaching to policing that seems to go against the fundamental values of the discipline. While much of this occurred outside the discipline, many people wrote about it from within, yet it did not gain the momentum to turn the field.

And into this environment of distrust comes artificial intelligence and the crisis headlines I quoted at the beginning of this article. The AI paraphrase generator QuillBot (quillbot.com) has been around since 2017, while ParagraphAI (paragraphai.com), the most recent entrant to the field before ChatGPT, was

launched in summer 2022. Quillbot informs readers that all they have to do to have it "rewrite your text" is write or paste something into the space provided "and then press the Paraphrase button" (quillbot.com). Similarly, ParagraphAI invites users to "Type or paste any message, email, or comment and select your preferred tone and direction" to get "clear, concise, and error-free messages in seconds," messages they promise, that are "99.9% plagiarism-free" (paragraphai. com). Quillbot allows users to determine how many synonyms the paraphrase should contain (with the maximum number only available to those who subscribe); ParagraphAI allows users to select the tone and genre of their text. When my students and I tested them, both produced reasonable paraphrases and finished text. ChatGPT uses the same AI structure, but promises to take the output to a whole new level. A colleague pasted in one of the questions for the final exam in his upper-level psychology course and reports that the answer hit all of the right points. Examples of ChatGPT prose fills the popular media and the articles cited above include examples.

For those new to this technology, I asked ChatGPT to explain. In response to my question "What is the history of GPT?" I got the following response:

GPT, or Generative Pretrained Transformer, is a type of large language model that was developed by OpenAI. It is based on the Transformer architecture, which was introduced in a paper by researchers at Google in 2017. The first version of GPT was released in 2018, and since then it has been improved and refined through a series of updates. GPT-2, which was released in 2019, was the first version of the model to demonstrate impressive performance on a variety of language tasks, including language translation, summarization, and question answering. GPT-3, the latest version of the model, was released in 2020 and has set new benchmarks for the performance of large language models. (https://chat.openai.com/chat)

Actually the latest version is ChatGPT, released on November 30, 2022, so I asked about that and got the following reply: "...my knowledge is based on the text that I have been trained on. My training data only goes up until 2021, so I may not be able to provide information on developments or technologies that have emerged after that time" (https://chat.openai.com/chat).

Clearly a response to AI generated writing is necessary, but the answer to "Are you scared yet, human?" should be no. The question of how to respond has begun to appear on listservs and social media groups in the US, and scholars like Steven Krause offer cogent responses. Will ChatGPT kill the college essay as crisis mongers fear? On his blog, Krause argues that if it does, it might save writing. He draws our attention first to the issue of the prompt, noting that in his use of GPT, "figuring out how to come up with a good prompt involved trial and error, and I thought it took a surprising amount of time" (steven-krause.com). The prompt questions about GPT that I cited above were simple, and the answers far from essay-length. In contrast, my psychology colleague asked a very focused question that provided an outline for his students, and ChatGPT used that outline to generate an answer that responded to each part of the question. The first part was essentially a memory question designed to test their understanding of concepts taught in the class, which should be easy for AI. But the second part of the question tested their ability to apply those concepts to a novel example, and ChatGPT delivered that as well. Faculty assigning short essay take home exams have cause for concern about the use of ChatGPT. On the other hand, asked to perform more complex analysis or interpretation with no cues, the current AI programs would be challenged. As they would if asked to generate a research paper drawing on sources; although AI can create paraphrases of source paragraphs, students would need to provide and cite them. And this is where the discipline's consideration of labor comes in.

If we approach students as willing participants in their own education who are not out to cheat at every turn, our challenge as a discipline is to think about how we can work with AI just as we learned to work with computers when they entered the classroom and as our colleagues in mathematics incorporated calculators. Teaching students to think about how to word a prompt that will generate useful information from GPT is just another version of teaching them to develop a research question that will generate useful data or literature, or to use boolean logic to develop a search question that will identify useful sources from a library database. In other words, as Krause observes, GPT can be used as a "brainstorming tool." It can also be used to generate information that may challenge students to think more deeply about their own ideas as they begin to develop arguments, what Krause's students called a "'collaborator' or 'coach' . . . [functioning like] peer review." Several paragraphs generated from GPT still need to be worked into a paper with "transitions between AI generated chunks of text" (stevenkrause.com), challenging writing faculty to really teach revision rather than just requiring it.

But this is where AI lays bare the dual crises of labor in our discipline. A pedagogical response calls on us to trust students; to teach them the work of writing and include AI in the process instead of focusing our efforts on ways to catch those who use AI or reject it as unethical. This can include using AI essays to demonstrate and move students beyond form, to complicate structure, generate ideas, develop content, incorporate sources, and learn to summarize and paraphrase so that they can place those sources into dialogue with each other rather than as stand-alone paragraphs. And then it calls on those of us theorizing this to do the work of faculty development with our colleagues who teach composition and those who teach and assign writing across the

curriculum. Warner asserts that "we should collectively see this technology as an opportunity to re-examine our practices and make sure how and what we teach is in line with our purported pedagogical values." We might also reread those who wrote about and theorized the work of writing as our discipline was forming. For example, Ann Berthoff's discussion of revision as an act of creating. Applying the process she describes to AI generated paragraphs in addition to student drafts could teach the respect for process as a non-linear activity that she called for. Rather than a new turn, then, AI and the complexity of the work of writing exposed by it calls for a re-turn to the pedagogies that shaped our discipline and the commitment to student writing that propels it. I am not scared; I am excited by the possibilities these developments open up for the discipline of writing studies.

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