

Don't Act Like You Forgot: Approaching Another Literacy "Crisis" by (Re)Considering What We Know about Teaching Writing with and through Technologies

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In 2015, when (re)considering his much-cited essay "Literacy and the Discourse of Crisis," John Trimbur recognized how "the rise of new digital media, new information economies, new means of knowledge production, and new technologies of surveillance" has contributed to the continued deployment of discourses of crisis "opening up all kinds of new opportunities for mass media pundits, scolds, killjoys, and 'death of the book' curmudgeons." Of course, the latest literacy crisis around AI and Large Language Model (LLM)-generated writing proves Trimbur's point well. I was truly amazed, perhaps even baffled, by the intensity of the AI literacy crisis discourse when I presented a version of this essay at CCCC 2023 as part of "ChatGPT, Magical Thinking, and the Discourse of Crisis," a special session organized by Frankie Condon and also featuring remarks from Antonio Byrd, Harry Denny, Aimée Morrison, and Charles Woods. In the time since that session, the discourse of crisis has, somehow, continued to elevate, especially with the introduction of GPT-4 by OpenAI and similar tools like Google's Bard, not to mention the advent of AI "detection software" from the likes of the controversial plagiarism detection giant TurnItIn. While a lot has changed since I drafted my initial thoughts (and no doubt more will change during the publication process of this essay), I maintain my position that, while this iteration of AI technology is new and needs to be addressed on its own terms, our general approach to AI and writing should follow core tenets set out and cited in decades of scholarship and pedagogy in computers and writing, digital rhetorics, technical communications, and our allied fields.

To invoke Rihanna: Don't act like you forgot.

Turning to computers and writing, digital rhetoric, and technical communication scholarship, I'd like to (re)consider a few things we already know about teaching writing with and through technology. I do not mean to represent the following as the only things we know; certainly, naming what we know can be a limiting endeavor (Wardle and Adler-Kassner 6). Instead, I offer the following tenets so that we might "make sense of, to *pay attention* to, how technology is now inextricably linked to literacy and literacy education," as we undertake the task of rhetorically responding to AI and LLMs with and through writing pedagogies (Selfe 414).

Technologies Are Never Neutral and Always Political, Material, and Rhetorical

Technologies do not exist in isolation from cultural practices but rather reflect and reify the practices and ethics of the designer(s). It has been over 25 years since “The Politics of the Interface” asked us to consider the embedded raced, gendered, and classed assumptions made in desktop computer interface design (Selfe & Selfe). More recently, teacher-scholars have brought needed attention to the ways Black, Indigenous, and queer community practices inform techno-culture but are often rendered invisible by and/or shut out from accessing the technologies themselves (Alexander and Banks; Arola; Banks).

Angela M. Haas reminds us that “studying the politics of the interface—and the relationships therein—help reveal that even when not intentional digital design can disproportionately affect some communities [more] than others” (414). Algorithms, data archives, and training sets that make AI and LLMs work are reflective of the data input and, therefore, respond to the user imagined by and represented in the data it is fed. They are, according to Emily M. Bender et al., “stochastic parrots” that repeat our encoded bias without understanding the significant harm of the language it produces (617). As Antonio Byrd has said, “Our literacies are its literacies” (“chatGPT”; see also Byrd in this issue).

So, when we ask, what user the interface is designed to respond to, what cultural practices can be accounted for by the language data that feeds its algorithm, and who is rendered invisible through its functions, we must also ask how our literacies, biases, ideologies, and languaging practices are being rendered (in)visible through these technologies.

New Technologies Build on and Expand from Old Technologies

Technology, in one form or another, has a long history in the practice and teaching of writing, and that history continuously evolves and expands based on the technological, cultural, and pedagogical needs of the day (Johnson and Agbozo). AI is not an exception to this observation. Hugh Burns, who authored what is considered the first *Computers and Writing* dissertation and developed a number of AI writing programs of varied sophistication, studied computer-assisted instruction by centering “pseudo-Socratic dialogues”—a proto-prompting chat—as a way to help writers engage in invention. In the very first issue of *Computers and Composition* in 1983 (then merely a newsletter not a leading international journal), Burns concluded, “I, for one, believe composition teachers can use emerging research in artificial intelligence to define the best features of a writer’s consciousness and to design quality computer-assisted instruction—and other writing instruction—accordingly” (4). Less than a decade later, in 1991, Lynette Hunter called for rhetoric to

see the worlds made possible by AI and vice-versa. In critically interrogating and working with AI, Burns and Hunter suggest, teachers and students of rhetoric can come to deeper understandings of human consciousness and rhetorical worldbuilding.

As we entered the new millennium, scholars like Patricia Ericsson and Richard Haswell cautioned against the wholesale acceptance of machine scoring of student essays, noting the lacking academic credentials of AI programs (5). Then, Carolyn Miller, in 2007, considered the ethical implications of attributing agency, and agency attributing powers, to automated scoring systems. Miller recognized that teachers and scholars are “culturally and economically positioned to deny agency to machines” when their own agency is on the line, whereas administrators and entrepreneurs “are culturally and economically positioned to welcome mechanized agency” when students’ agency and writing is at issue (152). With Ericsson and Haswell and Miller, AI’s ability and economic benefit is balanced against a humanistic ethic that “requires both technical and moral education, for our attributions of agency are ultimately moral judgements, matters of decency and respect, matters of ‘acknowledgment’” (Miller 153). Such a balancing act complicates Burns’ and Hunter’s thinking via the context of cultural, economic, and technological advancement in the 21st century.

Recently, Bill Hart-Davidson argued for considering how writing with robots/AI extends our rhetorical practice rather than giving way to fears of being replaced by robots. Hart-Davidson practices a pragmatism toward AI and writing that I believe is worth quoting at length:

The robots are already here. And more are coming. And by and large, it will not be folks with training in writing and rhetoric studies who create or use them. But we can perhaps be among those who influence both how they work and how they are incorporated into the writing practices of people and institutions. I think we definitely should be. And in order to do that, we need to stay involved with theorizing, building, and research writing by non-humans. (254)

Hart-Davidson’s call “to stay involved” indexes the scholarly conversation I’ve worked to demonstrate. Indeed, new technologies build on and expand from old technologies, and leaning on this scholarship reminds us that we are not the first or the last to be in our current position.

Technologies Must Be Taught

For those working beyond discourses of literacy crises and beginning to integrate AI and LLMs into writing classrooms, it is essential to remember that technologies must be taught. If the goal of teaching writing with and

through technologies, like AI and LLMs, is to encourage critical and generative engagement and communication, we cannot make assumptions about rhetorical experiences and technical literacies students bring to our classroom. We cannot assume that students are able to access and compose with the technologies integrated and investigated in our courses. Accordingly, it is important to remember that access, especially for marginalized communities, has potentially been limited along both material and ideological sociocultural lines (Banks; Haas). Learning about technology by investigating, playing, breaking, and remaking technology is essential if students are to form critical digital literacies. This remains true with AI and LLM systems, even if how that is done remains less clear.

Integration of these technologies into writing curricula signals an investment in extending digital rhetorical skill. To these ends, and seeing where we are and divining where we are going in terms of AI and writing, a multiliteracies approach to AI and LLM-generative writing is worthy of sustained consideration. Perhaps adapting Stuart Selber's "computer literacy in the digital age" for our new algorithmic age would encourage pedagogical innovation that advocates for functional, critical, and rhetorical literacies as a way to prepare students of writing to be effective users, informed questioners, and reflective producers of AI and LLM technology "in the service of social action and change" (xii).

But before asking students to experiment with writing generators in our classes, it is absolutely necessary to model critical digital literacies by examining and being transparent about the potential impact engaging with tools, like chatGPT, has on user data and intellectual property. Charles Woods, for example, asserts, "Instructors need to interrogate the policy documents for the technologies they integrate in their classrooms before students use the tools" (Byrd et al.). Such an examination demonstrates the layers of literacies necessary to write with and through evolving technology systems and policies.

Policing Is Not Pedagogy

Some who call themselves teachers seem eager to discipline and punish. This is particularly true when we consider the never-ending, lose-lose arms race to prevent the crisis of (possible) plagiarism. Even after decades of praxis interrogating intellectual property, digital remix, and the circulation of communication paired with pedagogical tools for discussing citation and attribution critically, the hunt for plagiarism seems to have spiked with expanded public access to AI and LLM technologies. Much of the discourse centered on plagiarism and academic integrity positions student writers as purposely deceitful and mercilessly unethical. This has been concerning in terms of the types of assumptions made about students' as well as the implied thrill of catching a student using AI and LLM-generated writing. It all feels very familiar to

the discourses surrounding plagiarism detection at the turn of the 21st century, services, which have amassed giant data archives of student writing that can potentially feed AI and LLMs because of paranoia and an impulse of surveillance.

Sandra Jamieson, in a previous *Composition Studies Where Are We*, reminds us, “A pedagogical response [to AI] 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” (156). Jamieson specifically invokes Berthoff’s positioning of revision as creation. Working with students to define AI and LLMs as one of many writing tools will be essential as a prohibition, which some universities are rushing to implement, of these technologies in writing classrooms will not be possible or, frankly, even desirable. Bedour Alagraa puts Jamieson’s (re)turn to pedagogy another way: “im not gonna turn into robocop, just gonna keep teaching and meet students where they are” (@balagonline). That’s the ethos I think we need to prioritize: pedagogy not policing.

As should be clear, I think the discourse of crisis needs to give way to more generative thinking. My synthesis of previous scholarship from computers and writing, digital rhetorics, and technical communications shows that we have, can, and should approach AI and LLM-generated writing with a cautious optimism. This does not mean ignoring the legitimate dangers of AI and LLM-generated writing. Bender et al.’s “stochastic parroting” and Matthew Kirschenbaum’s warning of a “textpocalypse,” for example, need our collective attention. But it also means also seeing the potential for expanding our rhetorical writing practices with and through these technologies. While the current pace of change for these technologies is dizzying, I’m looking forward to the future. In this *Where We Are*, for example, we have careful theoretical, empirical, and pedagogical thinking about the potential affordances and constraints of AI and writing, and the role composition studies (and its allied fields) have to play in the coming years. The intentional multidimensional, post-process model S. Scott Graham offers in this forum is particularly intriguing to me. Beyond published pages, I’ve had thought-provoking conversations with teacher-scholars like Laura L. Allen (York University), Anna Mills (College of Marin), and Anuj Gupta (University of Arizona) about the work they are already doing in their classrooms and the ways students are engaging with AI and LLMs and the technical, cultural, and ethical complexities involved.

In this (re)consideration of what we know about teaching writing with and through technologies, I have contributed a small historiographic account of where we have been and where we can go if we don’t forget the pedagogical and scholarly work that has preceded this latest literacy crisis.

Don’t act like you forgot.

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