



**THE PROCEEDINGS
OF THE ANNUAL
COMPUTERS AND
WRITING CONFERENCE
2025**

**Edited by
Christopher D. M. Andrews
Elena Kalodner-Martin
Nicole O'Connell, Hua Wang
Lydia Wilkes, and Charles Woods**

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Series Editors: Christopher D. M. Andrews and Lydia Wilkes

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**THE PROCEEDINGS OF THE
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WRITING CONFERENCE, 2025**

Introduction (or Speaking of Generative AI...)

Christopher D. M. Andrews, Texas A&M University-Corpus Christi

Elena Kalodner-Martin, The Ohio State University

Nicole O’Connell, University of Massachusetts, Amherst

Hua Wang, Cornell University

Lydia Wilkes, Auburn University

Charles Woods, East Texas A&M University

This edited collection includes selected proceedings from the 2025 Computers and Writing Conference. Contributions engage with the 2025 conference theme, *Agency and Authorship*, using a variety of theoretical, pedagogical, and research-based approaches familiar to scholars of digital rhetorics, multimodal composition, and closely related fields. In their CFP, conference organizers invited attendees to propose work looking beyond and around artificial intelligence and large language models; however, as with much of the “big tent” of writing studies and its subfields over the last few years, AI was a significant concern for C&W attendees and contributors and has become a growing concern from an editorial perspective as well. While this volume is only a partial, selected representation of C&W attendees’ work, the overwhelming number of submissions we received for the *Proceedings* were themed around AI, a trend we expect to continue. That being said, we are pleased to also include multiple chapters that have little to nothing to do with large language models in these *Proceedings*.

Contributors to this year’s collection (including Jennifer Sano-Franchini, whose keynote begins the *Proceedings*; chapters are otherwise published in alphabetical order by first author) grapple with the role of generative AI in writing classrooms and pedagogies, in professional and lived communities, in crisis response, and in activist spaces—some chapter authors will sound heartily AI-forward and integrative while other chapters offer visions and versions of critical AI literacy, AI pedagogy, and AI inquiry that span resistance, refusal, and other positions at varying levels of intensity. It is, we admit, hard to keep up! For this year at least, AI was not a significant factor in our production and review process, and as far as we are aware was used neither by authors nor reviewers beyond what is generally accepted under the WAC Clearinghouse [Commitment to Publication Ethics](#). Given the rapidly expanding larger

discussions around generative AI in publication and review (Singh, 2025; Sun et al., 2024; Zou, 2024), the editorial team expects to work on an AI policy for the series before the next *Proceedings* commences, engaging fully in “productive action from an unsettled middle” (Basgier & Wilkes, 2025, p. 66).

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What’s “Critical” about “Critical AI”? A Recommitment to Humanistic Inquiry in the Ostensible March to Hyper-Automation

Jennifer Sano-Franchini, West Virginia University

This paper interrogates the language we use to talk about generative AI as an emergent writing technology, more specifically focusing on what it means to engage in “critical” approaches to digital technologies and to text generative large language models (LLMs) in particular. I then offer “critical interface analysis,” as one possible way for slowing down at a time when all roads seem ostensibly to be leading to hyper-automation. In doing so, I discuss the affordances of examining place, materiality, embodiment, and digital interfaces together in our efforts to cultivate students’ digital literacy in a time of rapid technological change.

On the Ostensible March to Hyper-Automation

Yesterday, as I was en route to Athens, Georgia, news broke that House Republicans forwarded a proposed decade-long ban on U.S. states and localities regulating AI, in an effort to keep any regulation entirely under federal control (Brown & O’Brien, 2025). This, coming from the party of states’ rights, and anti-big government. While it is unclear whether this clause will become policy, it certainly illustrates the level of backing behind Big Tech’s Big AI push, and the intimate relationship between the biggest producers and backers of generative AI and the current administration.

Notably, this news came on the heels of yesterday’s reports that Big Tech CEOs, including the heads of OpenAI, NVIDIA, and Amazon, accompanied President Trump on his trip to Saudi Arabia (Allyn, 2025). According to NPR correspondent Bobby Allyn, “the Saudis have invested billions of dollars to support AI development in the U.S., and this week, they’re promising even more” (para. 6). Princeton professor Bernard Haykel explained that three other reasons Saudi Arabia may be of interest to Big Tech include land for data centers, energy, and a “very low to nonexistent regulatory environment” (para. 7).

Why might Big Tech corporations be looking abroad for land for data centers—among other resources—at a time when there’ve been reports coming

out of Memphis about Elon Musk's xAI Colossus supercomputer data center housing 35 illegal methane gas turbines emitting toxic and carcinogenic pollution, creating serious health concerns, with disproportionate impacts for residents of Boxtown, a historically Black Memphis neighborhood (Kerr, 2025; Wittenberg, 2025)? It seems to be the latest iteration of the same old story of U.S. capitalism and exploitation scaled up through neocolonial expansion.

Central elements of this story include the exploitation of human labor, land, and water resources in already-marginalized areas for the benefit of the ultra-wealthy, contributing to an ever-widening wealth gap that exists both domestically and globally (Aratani, 2025; Buchholz, 2025; Inskip & Dumas, 2025; Qureshi, 2023; Smith, 2025). For instance, xAI is only the most recent iteration of a much longer history of industrial pollution—and community resistance—in South Memphis' Boxtown Community (“Unfair Share,” 2021).

What's more, these relationships were brought into stark relief in Karen Hao's *Empire of AI*, which offered an in-depth look at how the current AI industry and the cultures and ideologies that brought it into being contribute to global-scale labor exploitation and resource extraction. These systematized processes can be seen as neocolonial in nature, in the sense that under neocolonialism, “foreign capital is used for the exploitation rather than for the development of the less developed parts of the world” (Nkrumah, 1965, p. 4).

At its core, the current push for widespread uptake of generative AI products, as heralded by Big Tech corporations like OpenAI, Microsoft, Google, Meta, and Anthropic is extractive not only in the sense of copyrighted materials and non-copyrighted intellectual property being extracted without the informed consent of authors and creators but also extraction of land, water, and energy resources, and the extraction that occurs through underpaid global labor used to label, moderate, and test content, extraction of user inputs and feedback (Hogan & Lepage-Richer, 2024). All of this extraction is taking place for the stated end goal of exploiting human labor on a mass scale in an effort to eventually replace human workers with contracted software and services (Hao, 2025).

I begin with this context because my argument in this piece is that critical approaches to artificial intelligence should include the ability to understand the political histories, ideologies, cultures, and economies undergirding the products that we are encouraging our students to use. I think it's imperative that we all understand that these are the companies, supply chains, and political forces pushing the generative AI products that so many of our students are using, that too many of our universities have signed onto, and that we ourselves are being pushed to adopt. After all, we wouldn't want to bury our heads in the sand, right?

On the other hand, despite these turns of events, I'm still not entirely convinced that a generative AI future defined by current models of these technologies is inevitable. When I say generative AI, I'm referring to current systems that generate text, image, audio, visual, code, and other content through user prompting and probability-based algorithms, such as ChatGPT, Gemini, Perplexity, Firefly, Claude, and Character.AI. I'm not suggesting that generative AI will disappear entirely, but I'm not yet convinced that the goal of Artificial General Intelligence (AGI) or a ubiquitous generative AI future is an inevitable outcome that all writers and knowledge workers will have to contend with, and I say this for a few reasons:

1. OpenAI has not found a path to profitability. According to Ed Zitron (2025), the company is losing money year over year as every ChatGPT query, whether by a paid or free user, results in a net loss for the company.
2. These technologies are not improving. More recent versions of ChatGPT are reportedly less accurate and "hallucinating" more often, perhaps as a result of its re-processing its own outputs (Laird, 2025; Zeff, 2025).
3. There are reports coming out of the private sector suggesting that these technologies have not been an effective investment for many professions. For instance, Klarna, a Swedish financial technology company, flipped from an AI-first strategy to hiring people again, and a recent IBM survey of 2000 CEOs found that only one in four AI projects delivers on the promised return on investment (Ivanova, 2025). Moreover, there have been frequent reports about how these products have led to—or are likely to lead to—disastrous workplace outcomes, including in fields like law, medicine, and policy development (Merken, 2025; Naddaf, 2025; Al-Sibai, 2025).
4. Much of the evidence for inevitability that I've seen appears to amount to short-term uptake and investment, not sustainable growth. Studies cited often have little to do with the functional capabilities of these products and more to do with uptake, investment, and outlook—things that are more reflective of short-term marketing success than long-term growth and expansion (see, for instance, OpenAI, 2023; Maslej et al., 2025; Watkins & Monroe, 2025). When functional capabilities *are* mentioned, they are often self-reported by companies and measured by company-defined benchmarks (Sano-Franchini, 2025).
5. More recently, Danielle DeVasto and Zsuzsanna Palmer (2024) reported on findings suggesting that direct engagement with generative

AI had negative learning outcomes for students in a business communication course. In “Building Critical AI Literacy in the Business Communication Classroom”, the authors found in a study of student writers that less direct engagement with generative AI had a greater impact on students’ understanding of business writing principles. That is, “students in the variable group who collaborated with ChatGPT were less likely to identify and change the shortcomings of the generated text with regard to effective use of business writing principles” (2024, p. 567).

I offer this picture of our current, constantly changing, and expansive context because a large part of what I’m arguing in this paper is that any “critical” approach to generative AI requires that we pay attention to these contexts—including the global flows of capital and harm that circulate to produce, sustain, and manage generative AI products—in our decision-making and practice. Moreover, I argue that it’s imperative that we go beyond acknowledgement or recognition to meaningfully account for these concerns through our decision-making and practice.

On Being “Critical”

With that said, can we have a conversation about the rhetorics of “criticality” in the context of generative AI? If you’ve been paying any attention to conversations about generative AI in higher education, you may have noticed that “critical” is a term that comes up quite a bit—for instance, think “critical AI literacy” or “critical” approaches to—or uses of—AI (MLA-CCCC Joint Task Force & Critical AI Literacy, 2024; Vee, 2025). Yet what I’ve noticed is that the term “critical” gets used in different ways by different people to advance multiple, at times conflicting, points of view. Recently, I’ve found myself avoiding the term altogether in the context of this topic because of how the lack of shared understanding can lead to confusion, conflict, and even hurt feelings as we collectively work to disentangle and come to terms with what it means to use, think about, and institutionally implement generative AI. At times, it seems “critical” is equated with thoughtful, intelligent, aware, and questioning as opposed to gullible, robotic, or entirely subservient to technologies. As a result, to be accused of not being critical, very reasonably, feels quite insulting.

So, I wanted to spend a little bit of time talking about the rhetoric of criticality in AI discourse. To do so, I analyze a couple of definitions of “critical” that have been forwarded in reference to “AI,” before proposing a shift toward a narrower and hopefully more precise understanding of “criticality.” My hope is that by gaining some clarity regarding this particular term, we

might be able to more productively push forward our shared understandings of generative AI and its implications for computers and writing, for higher education, and for society more broadly.

Two contexts where "critical" has been explicitly defined in relation to AI and AI literacy are Maha Bali's (2023) oft-cited "What I Mean When I Say Critical AI Literacy," and Lauren M. E. Goodlad's (2023) "Editor's Introduction: Humanities in the Loop." For Bali, "critical" has multiple meanings that include:

- "skepticism and questioning,"
- attention to "social justice dimensions and inequalities," and
- examination of "potential harms, and ... the credibility/accuracy of its outputs/outcomes," thus coinciding with "information literacy, media literacy and digital literacy" (para. 1)

On the other hand, Goodlad (2023) defines "critical" by referencing the OED entry for "critical thinking" as "the objective, systematic, and rational analysis and evaluation of factual evidence in order to form a judgment on a subject, issue, etc." In other words, "critical" involves evaluation and assessment through the formation of judgment" based on "factual evidence." In addition, Goodlad (2023) offers the requisite note that although "critical" and "critique" are often associated in the vernacular as a negative approach concerned with "fault-finding," these terms in academic usage are not pejorative but rather extend on the ancient Greek term for judgment and discernment.

Each of these definitions offer something helpful at the same time that I find both too broad to be particularly useful. What I think is helpful is Bali's (2023) suggestion that critical analysis involves attention to social justice and inequality, as well as Goodlad's (2023) caveat about "critical" not necessarily being a negative stance but rather meant to signify discernment and judgment more broadly. Here, Goodlad (2023) is speaking to a distinction between vernacular usages and specialized, technical usages of "critical" as it is often used in the humanities, a distinction that I think is important to keep in mind.

At the same time, I find both definitions are so broad that one can make the case that any kind of "skepticism and questioning" or evaluation and judgment formation related to LLMs and their capabilities are "critical." Yet for me, being skeptical of an LLM's outputs—which are widely known to provide inaccurate "hallucinations" with a great degree of frequency—and evaluating and questioning how to form usable prompts is not in and of itself "critical." As a result, I would argue that "critical" gets used to describe what Stuart Selber (2004) referred to as "functional literacies"—the ability to understand and analyze a product's functionality often, in a rather bounded way, with limited attention to a broader, global context.

At risk of stating the obvious, the value of using a term like “critical” to differentiate “analysis” from “critical analysis” or “evaluation” from “critical evaluation” is to imply that there is a way to engage in analysis and evaluation that is different from the way everyday users of products and technologies analyze and evaluate these products. In *The Practice of Everyday Life*, Michel de Certeau (2002) described how everyday users of objects engage in a kind of everyday creativity where people quite typically use objects “imposed by a dominant economic order” (p. xiii) in ways that are subversive—that go beyond what the producers or designers of those products had in mind (p. xiii). For instance, he suggests that even the act of speaking is a kind of active reappropriation of dominant language by the speaker (p. xiii). He argues that “users make innumerable and infinitesimal transformations of and within the dominant cultural economy in order to adapt it to their own interests and their own rules” (pp. xiii–xiv). Put differently, de Certeau says “The tactics of consumption, the ingenious ways in which the weak make use of the strong, thus lend a political dimension to everyday practices” (p. xvii).

In other words, ordinary use of LLMs often already includes the practices of analysis, evaluation, questioning, and tactical approaches to making chatbots work for a given user’s purposes. As a result, “critical” gets used to describe what I would argue are mundane activities that, to be sure, require skill and active engagement, yet arguably do not necessarily justify dedicated, postsecondary-level lessons, courses, and even degree programs. It is also for this reason combined with the fact that LLM chatbots are generally products designed for non-expert consumers that I believe students who must go on to use these products and assess their outputs in the workplace will generally be quite capable of doing so. As a result, the argument that we need to teach students how to use these technologies because they will need to use them in the workplace is not a particularly compelling argument for me.

Instead, I argue that we need to consider the valuable skills and literacies that higher education offers that are not easily found or learned in the workplace, on Google, or in the context of everyday life, and that we can do so by looking back to the usage of “critical” as a specialized, technical term in advanced humanistic study—as a source of expertise. To do so, I draw on its usage in the term “critical theory.” According to the *Stanford Encyclopedia of Philosophy*’s entry on the “Critical Theory (Frankfurt School),” understandings of critical theory are often grounded in the Frankfurt School vis-a-vis Max Horkheimer’s 1937 essay, “Traditional and Critical Theory.” Through this context, “critical theory” involves a few key features:

- It does not “take the existing social order as given.” Instead, it “analyze[s] the broader social context in which [empirical social research is] embed-

ded," and it does so because social orders are contextual, rhetorical, and historically situated, and because norms of knowledge production function to "reinforce dominant ideologies and power structures" (para. 19).

- As a result, it reflects on the context of its own origins and, importantly, aims to be a transformative force within that context.
- In doing so, it embraces an interdisciplinary methodology that aims to bridge the gap between empirical research and the kind of philosophical thinking needed to grasp the overall historical situation and mediate between specialized empirical disciplines.
- It "aims not merely to describe social reality, but to generate insights into the forces of domination operating within society in a way that can inform practical action and stimulate change" (para. 20).
- And finally, "it aims to unite theory and practice, so that the theorist forms 'a dynamic unity with the oppressed class' (1937a [1972, 215]) that is guided by an emancipatory interest...in establishing 'reasonable conditions of life' (ibid., 199)" (para. 20).

Put differently, critical approaches account for the taken-for-granted presuppositions of the specific context of analysis. In this way, I must admit that I have quite a hard time understanding any stances that make generative AI adoption compulsory—or taken for granted—as critical approaches. And to be clear, my point here is not that everyone must use the word "critical" in the same way, or that we all need to prioritize terms that have been used in critical theory. My point is that we need to consider the rhetorical affordances and limitations of how we use the terms that we do.

How can a critical theory approach be applied to the context of current generative AI? As a start, a critical approach to generative AI might involve asking questions like:

- Where, how, and why has this technology emerged? What are the various motivators, agents, and driving factors that have pushed forward its production? What problem(s) is it designed to solve?
- How does it fit into broader social orders and global contexts? How is it located in the context of existing flows of capital?
- What are the presuppositions, logics, and values that lie beneath the discourses of compulsory adoption that have been circulating in the field and in higher education more broadly?
- What are the limitations and affordances of functional approaches to analysis and understanding?

For me, this is what a critical approach to technologies like generative AI looks like. To do "critical" work is not only the ability to problem solve, nor

is it simply about making something work for one's individual purpose, such as the ability to discern and correct for biases in a system's outputs. It is also not about understanding how to strategically navigate existing inequitable systems and ultimately perpetuate the status quo. It is the ability to recognize how various objects, processes, and activities are always embedded within and contribute to much larger political systems, with varied implications for different communities of people. Importantly, it is the ability to account for inequitable systems within one's decision-making and ultimately intervene in injustice and exploitation. It is also the ability to reflexively navigate ambiguity, tensions, paradoxes, and contradictions, and to make decisions that consider individual, community, and global impacts at the short and long term.

Moreover, these considerations are very much in our wheelhouse as computers and writing teacher-scholars, given our historical foundation in the works of folks like Cynthia Selfe, Gail Hawisher, Richard Selfe, Stuart Selber, Johndan Johnson-Eilola, Adam Banks, Angela Haas, Carolyn Miller, and others who have pushed us to ask critical questions about the language we use to talk about technology, and about the technologies themselves, including their long term impacts. For instance, Stuart Selber's (2004) *Multiliteracies for a Digital Age* stated that critical literacy is "about the ways students might be encouraged to recognize and question the politics of computers" (p. 75). More specifically, he argues that "a critical approach to literacy first recognizes and then challenges the values of the status quo. Instead of reproducing the existing social and political order, which functional modes tend to do, it strives to both expose biases and provide an assemblage of cultural practices that, in a democratic spirit, might lead to the production of positive social change" (p. 81). In other words, Selber's (2004) explication of "critical literacy," which is likewise often referenced in current discussions of generative AI, makes clear that it is not enough to recognize ethical issues and biases; it's imperative that critical approaches actively challenge the values of the status quo through practice.

In a lot of ways, and as Megan McIntyre pointed out in a conversation we recently had, these contrasting approaches to "critical" AI are indicative of two different ways of interpreting the issue, or even two different realities, where one presupposes generative AI *use* at front and center, while the other foregrounds and prioritizes the contextual implications of generative AI.

Critical Interface Analysis

To offer a possible example of how we might slow down in the current generative AI context, I look back to prior work I've done on critical interface analysis, a method that I argued (2018) is built from a tradition of scholarship that

has explored the ideological function of technological interfaces in computers and writing, including works by Cynthia and Richard Selfe (1996); Myra Moses and Stephen Katz (2006); Stuart Selber (2004), Johndan Johnson-Eilola (1996), Aimée Knight et al. (2009), Michelle Sidler and Natasha Jones (2008), Christina Haas (2012), and Edward Tufte (2003). I lay this method out in "Designing Outrage, Programming Discord: A Critical Interface Analysis of Facebook as a Campaign Technology" (2018) where I engage in a critical interface analysis to demonstrate how Facebook's user interface design contributes to political polarization as it "prioritizes concision, speed, curation practices that limit divergent perspectives, and the flattening of complex identities and political commitments such that they are indexable processable, and thus, monetizable" (p. 387). Moreover, I argued that affectively, Facebook's interface design "encourages sensationalism, controversy, drama, intrigue as well as feelings of amusement, anxiety, fear, and suspicion over curiosity, empathy, understanding, or kindness" (p. 401). As a result, I suggested that critical interface analysis can be a way to unpack some of the taken-for-granted assumptions and oft-overlooked biases built into digital interfaces. In addition, in the Introduction to a special issue of *Technical Communication* on critical digital interface analysis, Kaytely Carpenter and I (2023) argued that "critical digital interface analysis is distinct from other approaches to studying UX and digital platforms ... in that it considers how the design of digital interfaces—which all who have access to that technology can directly and immediately access—affects how technology users interact with the platform, the organizations that host them, one another, and the ideas, objects, and spaces that make up the world around us" (p. 1).

To engage in a critical interface analysis, one would analyze a digital or other designed interface with the following questions in mind:

- Who is the target/primary user? Who are the secondary users, unintended users, and other stakeholders and beneficiaries?
- What are the tasks, interactions, and relationships (human-computer, human-human) that are facilitated by and through the interface?
- What kinds of content are presented through it?
- What are its organizing logics?
- What are the ideological and cultural values and assumptions imparted through the interface, whether through its content, its organizing logics, or the interactions facilitated by the site?
- In what environments will these tasks be conducted and these interactions take place?
- What are the affordances and limitations of the interface? What and whom does it leave out?

- What are the range of emotions and embodied responses that are enabled and encouraged by the interface?
- On what memories, literacies, and histories does the interface rely? (p. 391; see “Designing Outrage, Programming Discord” (2018), for a walkthrough of a critical interface analysis.)

For purposes of this discussion, I argue that what makes this method critical is that it encourages engagement with questions that go beyond functionality to include interrogation of stakeholders and beneficiaries; the range of tasks, interactions, and relationships facilitated by the interface; its organizing logics and the ideological and cultural values and assumptions imparted through the interface; as well as its broad affordances and limitations. In doing so, critical interface analysis encourages slow engagement with digital technologies as opposed to foregrounding compulsory use.

Moreover, this framework was productively expanded upon by Chen Chen and Xiaobo Wang, (2023) who, in “Reporting Online Aggression: A Transnational Comparative Interface Analysis of Sina Weibo and Twitter,” revised this framework in ways that, importantly, more explicitly call attention to transnational users, adding questions like:

- How do the ideological and cultural values imparted by the interface interact with the cultural and ideological values of transnational users?
- How do transnational users navigate these competing values? What kinds of affective experiences may they have? What dispositions and deliberations are facilitated by the interface and how do they impact transnational users?
- How does the interface empower or fail users through cultivating virtues or vices (hexis) in transnational contexts?
- How does the interface reproduce colonial, imperial values, while erasing cultural values from historically marginalized groups through its design? How does the interface facilitate online aggression and violence toward transnational, multilingual users?
- How does the interface impart a platform’s assumptions about these users’ labor and data in transnational spaces?

As a result, Chen and Wang (2023) demonstrated how critical interface analysis can be productively modified and adapted to suit one’s given concerns and context.

More on Critical AI Literacy

Critical AI literacy might also involve interrogation of the taken-for-granted language that is used to discuss generative AI products, which Megan McIntyre,

Maggie Fernandes, and I (2024) argued “create associations between these technologies and human activities and capabilities [... associations] that are designed to cultivate trust in corporate, exploitative, and extractive technologies” (para. 5). For instance, what if, rather than talking about AI broadly, which includes a wide range of technologies that have existed long before ChatGPT’s 2022 launch and that have a variety various functionalities, purposes, and implications, we use more specific terms like “(text/image/code) generative AI,” “LLMs,” or “chatbots”? What if rather than talking about “AI” writing, we identified LLM outputs as “synthetic text,” “synthetic media,” or simply “output”? What if we stopped saying that LLMs can “read” or “think,”—which they can’t—and instead described what is occurring in these moments as “processing”? What if, rather than “hallucination,” we used “inaccuracy,” “error,” “misinformation,” or even “disinformation”? How might we, as rhetoricians and as computers and writing scholars, use our expertise to more critically study the discourses and rhetorics that are used to discuss these products, in ways that go beyond isolated experiences and single use cases, to analyze the broader social, political, and global contexts in which generative AI is embedded, including how it might function to “reinforce dominant ideologies and power structures”? And how might we then build systems and infrastructures that meaningfully take up what we find from such analyses?

As folks who work at the intersections of writing, rhetoric, and technology, we understand that how we talk about Big Tech Gen AI matters. I implore that we stop reinforcing either/or, adopt-or-refuse frameworks that limit possibilities and, worse, work to advance a supposed “middle ground” third option. Such rhetorics not only limit possibilities in decontextualized ways, but also position the notion that people should have the option to refuse to use corporate chatbots that rely on stolen intellectual property, that are environmentally destructive, that are extractive and exploitative on multiple levels, as an extreme position. In my view, the position of compulsory use is a far more extreme and destructive position and one we need to continue to challenge as these positions arise in higher education. Having a critical, expansive, hopeful, and forward-thinking view of generative AI must include options that center the more difficult avenues of resistance, refusal, and reimagining.

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The Rhetorical Agency of Ghanaian Celebrity Women: Exploring Celebrity Agency and Instagram Affordances in Sponsoring Literacies Among Ghanaian Youths

Ernestina Akorfa Akorli-Coffie, East Carolina University

In Ghana, West Africa, celebrities like Anita Akuffo and Berla Mundi are well-known in the Ghanaian media and digital space for their digital rhetorical work. Through a case study of these two Ghanaian celebrity women's Instagram posts, comment sections, and circulatory practices, this study discusses how these celebrities exercise rhetorical agency on Instagram through their embodied visual cues that sponsor literacy practices by crafting posts that reflect the celebrity identities in sponsoring literacies and Ghanaian contemporary socio-cultural knowledge systems. This study, through a Silicon Snowball Sampling technique and Transliteracy theoretical framework, provides an understanding of the influences of the kinds of digital literacies and linguistic forms enacted by the followers of these celebrities through their engagement with the celebrities' Instagram posts and the negotiation of Instagram affordances. While influencing their audiences through captioning, visuals, and interactive features like comments and Instagram affordances, this study argues that the celebrities' agencies and literacy sponsorship are expressed in how these actants use Instagram tools to influence audience literacies and how Instagram's affordances manipulate the mediation of this literacy. This study concludes that Instagram literacy provides an avenue for teaching and learning the rhetorical moves of cultural and transnational digital literacies in the classroom.

Amid the digital revolution, literacy sponsorship has broadened to include institutional bodies, corporate actors, and digital technologies, reflecting the evolving and innovative approaches to literacy (Alexander, 2023; Brandt, 1998). For this reason, the understanding of literacy now extends beyond the 'Literacy Myth' that portrays literacy as an independent variable that is independent of sociocultural influences (Graff & Duffy, 2008). Brandt (1998) argued that sponsors "are any agents, local or distant, concrete or abstract, who enable, support, teach, model, as well as recruit, regulate, suppress, or

withhold literacy—and gain advantage by it in some way” (p. 166). Thus, this highlights that literacy acquisition is not an autonomous acquisition skill but is dependent on sponsorship. As such, sponsors of literacy play an influential role in shaping literacy by promoting or restricting literacy development based on their own interests, power, and agendas (Brandt, 1998).

In today’s world that is heavily influenced by new technologies, digital tools like social media platforms, mobile applications, and online communities offer access to literacy sponsors by providing opportunities for creative expression, participatory culture, and access to global networks of information (Habes et al., 2019; Kovalik & Curwood 2019). Consequently, as a researcher of African descent, the numerous engagements of Ghanaian celebrity women on Instagram (IG) have piqued my interest, as I have noticed that their rhetorical activities on IG create opportunities and spaces for information and social interactions through comment sections. For that reason, I center the digital lived experiences of two Ghanaian celebrity women on IG to understand their agency in impacting literacy sponsorship among Ghanaian youths through their rhetorical activities that create opportunities for communication. By *agency*, I echo Glenn’s (2018) assertion that “Agency is embodied and kairic, dependent upon both the rhetor’s identity and the context (the material conditions, tradition, and audience) within which the rhetor acts, reacts, and interacts” (p. 81)

In that capacity, this paper argues that studying celebrity rhetorical activities on IG can help rhetoric, composition, and literacy scholars to study and account for the evolving agencies of bodies and literacy practices in digital spaces permeated by technology. Research in the field of literacy about brown and black bodies has focused on African American literacies (Browdy & Milu, 2022). Due to this focus, there is a gap in research that conceptualizes literacy from a non-African American literacy context, constraining the field from examining global experiences of literacy sponsorship. As part of a quest to disrupt this literacy conceptualization gap, this study asks in what ways does the agency of Ghanaian celebrity women foster literacy practices among Ghanaian youths on IG? Building on this, I argue that Ghanaian celebrity women’s engagement culture on IG not only portrays the rhetoric and agency of celebrity engagement. Rather, these celebrity agencies provide a digital archive of fluid African digital rhetorical literacy narratives that contribute to understanding some digital composing skills of the current digital generation in the Ghanaian context and the conceptualization of evolving transnational fluid digital literacies. Within the context of this study, the celebrity agencies refer to how these celebrities assert their individual celebrity status through text and their unique embodiments as seen in their photos and visual narratives that influence audience engagement and literacy practices. Because the “rhetor’s identity and

the context (the material conditions, tradition, and audience) within which the rhetor acts, reacts, and interacts” influence agency, I focus on how these celebrities enact agency on Instagram by navigating the platform’s affordances and constraints and the celebrity situatedness in Ghanaian cultural context through their embodied performances (Glenn, 2018, p. 81).

Towards Inclusive Literary Traditions and Media Use Among Ghanaians

Transnational rhetorical literacies have emerged as a vital area of inquiry within rhetoric and composition, challenging traditional, monolingual, and Western-centric literacy paradigms (Dingo et al., 2013). As traditional rhetorical studies often prioritize Western, male-dominated perspectives, Royster and Kirsch (2012) argued for a shift towards feminist rhetorical practices that embrace diverse voices and methodologies to promote an ethos of care and inclusivity. This insight from Royster and Kirsch (2012) inspired my interest in studying the Instagram practices of Ghanaian celebrity women to contribute to inclusive practices in the field of rhetoric and composition. Royster (2003) advocated for a paradigm shift in rhetorical historiography by engaging in ‘dramatic experimentation’ as a means of landscaping for the inclusion of female rhetoricians of African heritage. She highlighted Busby’s (1992) *Daughters of Africa* as a significant contributor shaping the discipline’s history of rhetoric, as it shows the work of 200 African women and that of the diaspora, which Busby situated as an “anthology among literary traditions, rather than rhetorical traditions” (Royster, 2003, p. 151). Because studies of literacy contexts in the United States and Britain have historically captured a narrow focus on basic parameters of context, what Levinson, as cited by Street (1993), described as an attempt to “faithfully represent the philosophic-linguistic tradition in the United States and Britain, rather than, for instance, that on the continent” (p. 440), this limitation constrains how we understand transnational literacies and their broader influences. In consequence, I situate my study within the context of IG use in Ghana, as the platform operates as a transnational rhetorical site where the two Ghanaian celebrity women for this study actively enact their agency through embodied photo posts and digital storytelling that promote their aesthetic self- and brand representation.

Social media adoption in Ghana, like WhatsApp, Facebook, Instagram, Twitter, Snapchat, Telegram, TikTok, and LinkedIn, continues to grow, with trends suggesting its sustained use for various activities in the future (Sasu, 2023). The use of these platforms serves diverse purposes for Ghanaians, including education, entertainment, and fostering social connections (Odoom et al., 2024). Several studies by scholars, media agencies, and NGO’s in Ghana

about the current wave of new media show that Ghanaians, especially feminists, participate actively on social media for their liberatory activities (Nartey, 2021). From my research so far, even though social media studies are getting much attention in Ghana, recent studies in the field have yet to consider how Ghanaian celebrity women on IG are enacting their embodied agency that influences and sponsors the digital literacy of their audiences who engage the celebrities' rhetoric.

IG has become a significant platform for Ghanaian celebrities, enabling them to shape their public personas, engage with audiences, and promote various social and commercial initiatives. Gbedawo (2021) highlighted IG's effectiveness in helping celebrity influencers promote small businesses to youth audiences, while Mattson (2023) showed how Ghanaian dancers use the platform to circulate art and foster cultural interaction. In a similar vein, Akingbade (2024) examined the political economy of influencer marketing, and Botchway (2023) focused on celebrity endorsements in the telecom sector. Adding a historical dimension, Agyepong (2017) explored celebrity capital in Ghanaian politics. Together, these studies underscore IG's multifaceted role in Ghanaian celebrity culture; however, there is still a need for research that explores how Ghanaian users engage rhetorically and construct literacy identities on the platform, because there is little research about IG, even though Kovalik and Curwood, (2019) studied Instapoetry on IG and their implications for teaching and learning in the English classroom.

Methods and Methodology

Case Study and Silicon Snowball Sampling

This study employs a case study method to investigate the digital literacies that emerge within the IG posts and comment sections of the two selected Ghanaian celebrities, where the analysis is guided by a Transliteracy framework inspired by Kovalik and Curwood (2019), which emphasizes the interconnectedness of multiple literacies across digital and cultural contexts. Case study research, as Yin (2009) described, is particularly suited for exploring contemporary phenomena within their real-life contexts, making it an appropriate method for analyzing the dynamic interactions of celebrities and their comment sections on Instagram. Before I selected my samples as cases to study, I defined the set of potential texts to analyze through the research question I wished to answer, which I mentioned in my introduction (Blythe, 2007, pp. 206-207). The data collection process for this study involves manual searching and sampling of the celebrity Instagram posts through a Silicon Snowball Sampling technique (Lee, 2024). Silicon Snowball Sampling "adapts the principles of traditional snowball

sampling to the virtual realm of online environments and is particularly useful in social media research” (Lee, 2024, p. 3). This sampling technique involves following “links, hashtags, mentions, and various connections within that space to discover additional sources of data” (Lee, 2024, p. 3).

Due to the vast curated archive of each celebrity’s IG posts, I narrowed my focus to the celebrities’ handles and posts from January to November 2024. The traditional snowball sampling technique mentioned above helped me to select 10 images and 5 video posts from each celebrity, Anita Akuffo and Berla Mundi, along with their corresponding comment sections and circulatory practices, which include reels, hashtags, likes, and stories that show audience engagement. I tracked reposts composed through reels, hashtags, and stories in which users tagged the celebrities’ initial posts within the time period I mentioned above. The captions from these interactions revealed users’ agency in circulating and reinterpreting the celebrities’ rhetoric across broader digital publics, demonstrating their digital composition and literacy skills.

Unit of Analysis and Theoretical Framework

Using the case study method, I investigated the digital literacies that emerge within the celebrity IG posts, comment sections, and circulatory practices. Following Blythe (2007), I coded the data by sorting and classifying through a coding scheme I devised through the recurring literacy themes such as multimodal communication, informal English, Ghanaian sociolects, proverbs, monolexical communication, phrasal communication, appropriation of keyboard symbols, translingual practices, and the culture of commenting, reposting and circulation through celebrity agency interpretation as social learning, recaptioning, the literacy of tagging, and hashtags.

To ensure a seamless analysis, I first defined my unit of analysis, which refers to the clearly defined phenomenon that I wish to study (Blythe, 2007, p. 209). My unit of analysis focused on the verbal units within the written texts of comment sections and captions from recirculated posts. Verbal units consist of different types of analytical units, such as phrases, clauses, and rhetorical units that “help researchers explore how meaning is conveyed through what is said or written” (p. 211). As such, I coded my units of analysis, guided by my attention to a specific type of rhetorical unit known as the *macrosegment*, as highlighted by Blythe. For the context of my analysis, I characterized the macrosegments of the digital literacies *first* by focusing on the coherent rhetorical purpose of each celebrity’s embodied visual rhetoric through their pictures and videos on IG seen in followers interpretation of celebrity embodied visual cues shaped by the platform’s discursive interface; *second*, the creative adaptations of IG infrastructure as visual cues of follower literacy agency seen from followers’ comments and circulatory practices such as appropriation of

keyboard symbols and multimodality; *third*, the consistent set of linguistic choices employed by followers influenced by the platforms affordances and commenter's transliteracy identities.

Finally, I examine these units within the celebrities' embodied visual rhetoric alongside followers' comments in my discussion to identify the celebrity embodied agencies that wield various literacies emerging from interactions with the celebrity rhetorics and to understand how meaning and engagement unfold through IG affordances. Additionally, I tracked posts in which users tagged or reposted the celebrities, as these practices revealed how multimodality is negotiated and how users exercise agency in circulating and reinterpreting the celebrities' rhetoric across broader publics. These expressions of agency challenge traditional assumptions that Ghanaian communication occurs primarily through structured English forms, highlighting instead the creative and fluid linguistic practices that emerge in digital spaces.

I situated the analysis of literacy practices on IG from a transliteracy perspective by acknowledging four characteristics of literacy as articulated by Kovalik and Curwood (2019). According to them, Transliterations "characterise literacy in the modern world as having four key qualities: digital tools, multimodal representation, a global audience and dynamic movement across physical and virtual contexts, all facilitated by technological advancement" (Kovalik & Curwood 2019, p. 186). Transliteracy theory, while robust (Thomas et al., 2007), requires additional perspectives that attend to "how people make meaning across interactions among people, things, texts, contexts, modes, and media" (Stornaiuolo et al., 2017, p. 72). Integrating transliteracy within new media literacy studies accounts for fluid literacy identities and robust practices influenced by sociocultural contexts, the ecology of the digital spaces, their actants, and their power dynamics. Considering this, I conceptualized Transliteracy from the expanded definition of Stornaiuolo et al. (2017), who suggested a plural conception of the theory.



About Anita Akuffo and Berla Mundi and Their Celebrity Agencies

Anita Akuffo and Berla Mundi, as they are publicly called on media appearances, are prominent award-winning celebrities in the Ghanaian media landscape and digital space for their work in media such as journalism, entertainment, and social advocacy (LinkedIn, 2025; Wikipedia, 2025). On IG, Anita Akuffo's verified handle is *ann_ita1*, while Berla Mundi uses the verified handle *berlamundi*. They both engage their audience through similar content on Instagram, ranging from photos and videos captioned around fashion, lifestyle, professional skits, civic discourse, ambassadorial representations, advocacy, and social-cultural discourse. The intended audience for these celebrities is their fans, including the brands and media houses they represent

and work for in Ghana. In addition to their unique visibility through international travels or media appearances, due to algorithmic influence, their posts sometimes become globalized through tags and hashtags; hence, their posts reach many other audiences in the diaspora and those who may or may not be interested in their rhetoric. Both Anita Akuffo and Berla Mundi post similar forms of content, yet they each embody it uniquely through multimodal visual cues in their image composition and video framing such as filters, captions, emojis, poses, gestures, fashion choices like hairstyle, clothing and adornments, background aesthetics, color palettes, and camera angles, which collectively construct and communicate their individual, distinct rhetorical identities. This study conceptualizes their unique embodiments of visual cues as seen in Figures 2.1, 2.2, 2.3, 2.4, and 2.5 as their rhetorical agency. Consequently, I argue that these visual cues provide an agency for their audience to participate through the comment section and circulatory practices, which impact their audience literacy performances on IG.

Discussion: Celebrity Agency and the Rhetoric of Instagram Ambience Affordances

The macrosegment rhetorical unit guiding my analysis in this section is first celebrity agency and second followers' creative adaptations shaped by the platform's interface and users' fluid multiliteracy practices that foreground their creative literacies and multimodal interactions through IG's affordances. By celebrity agencies, I refer to how the various modes of interaction and visual cues embodied in the celebrities' posts work together as celebrity agency to portray a shared communicative goal reflected through followers' comment mediated by IG's affordances. In other words, while the celebrity's agency on Instagram emerges from their rhetorical intentions expressed through the visual cues embedded in each celebrity's posts which, though diverse in style, and embodiment, creates rhetorical meaning that invite followers' engagement and literacy practices. These interactions are further shaped by how these users are navigating the platform's features to comment, remix emojis and keyboard symbols, and recirculate the celebrity content across Instagram depending on their digital disposition and how they are interacting with each celebrity's unique embodied agency. Gallagher's (2020) discussion on "ambient affordances" reiterates discursive interface by Stanfill (2015) as they mentioned that affordances, while intentional design, do not completely delineate user communication, but also shape normative communication patterns, an intention of designers. Figures 2.3 and 2.4 show the celebrities posts with commenters' literacy practices on Instagram which reveal how followers engage with the celebrities' visual cues as agencies by navigating the

platform's affordances to enact their digital literacies in the comment section. From the commenting and circulatory practices observed, the digital literacies are shaped by the platform's affordances and normative communication patterns, such as the constant use of the emojis ,  to express admiration and love for the celebrities' post.

The findings from my case study reveal how some commenters were appropriating keyboard symbols, such as the closing parenthesis) to represent the Twi language alphabet [ɔ], likewise the number 3 to represent [ɛ] in constructing meaning in the Twi language such as “3w)h)” (understood in context as ‘its been there’), “3ny3” (understood in context as ‘isn't that’), and “Kyeres3” (understood in context as ‘meaning’). The repeated use of keyboard symbols and varieties of similar emoji's especially the love emoji and its colorful variants, in expressing commenters' reactions may either be portraying commenters creative literacy inventions, preference for a specific IG tool, or digital rhetorical sovereignty. This may also be a revelation of IG's constraints in perpetuating power dynamics of sponsoring normative literacy. Arola (2017) in advocating for indigenous interfaces reiterated that “the fixed template-driven design of most social media platforms appears to limit the ways in which one is able to compose oneself and one's relations online” (p. 210). As such, she called for decolonizing social media interface with inclusive design elements and communication tools that can foster indigenous ways of being. Considering this, it will be prudent that designers of digital platforms provide inclusive interface design and localized affordances, such as indigenous emojis, that will permit varieties of cultural and indigenous writerly forms if users want to communicate translingual and situated meanings.

I argue that even though celebrity agency and IG affordances contribute to digital literacy sponsorship, the literacy agencies within IG show that the rhetorical situations of these literacies are influenced by the power dynamics of the platform's affordances and constraints. This reaffirms one of the tenets of transnational feminist rhetoric on “a cogent analysis of power” as highlighted by Chen (2025, p. 452), as they echoed Dingo et al (2013). Dingo et al. (2013) argued that “to be responsible, authors and rhetoricians must show the inherent influence each site has on one another” (pp. 518-519). Considering this, my focus on digital transliteracy iterations on IG from a Ghanaian context is to illustrate another dimension of a rhetorician being responsible in showing an understanding of IG's inherent power dynamics and affordances on literacies sponsored through followers' interpretation of meaning embodied by the visual cues of human actants such as celebrities' visual rhetoric on IG. As such, both IG's affordances and the celebrity's visual rhetoric connects to provide a participatory culture of literacy sponsorship influenced by technological power dynamics that allow celebrities and followers to navigate their

literacies between the virtual and physical worlds. This ideology impacts my conceptualization of IG literacies as not limited to the expression of linguistic elements but a reflection of the product of the intersection of systems, bodies and circumstances that warrant and influence the emerging digital literacy productions by followers on IG. These include the rhetorical exigencies of users, the digital ecological space, its neoliberal ideologies, and the agency of users and their audiences.

Situating literacy sponsorship within the analysis of celebrity agency and the platform's literacy dynamics is important to understanding evolving transnational digital compositions as these literacies are influenced by "the interaction between uneven structures and sites of power that is crucial to understanding how rhetoric works in an era of neoliberal globalization" (Dingo et al., 2013, p. 519). The appropriation of keyboard symbols by the commenters such as using the number 3 to represent the Twi vowel [ɛ] or the closing parenthesis) to signify [ɔ] illustrates a localized literacy innovation born from the material affordances and constraints of the English-dominant digital infrastructure. While a commenter from Anita Akuffo's post on November 7, 2024, seen in Figure 2.1, creatively repurposes the standardized English keyboard symbols mentioned above to express their cultural literacy interpreted from the celebrity's agency in her photo, the appropriation also limits the function of the indigenous vowel sounds' intonation which is supposed to convey an indigenous marker of meaning and emotion in the written speech of the translingual cultural literacy intended as seen in this translingual code meshing form "Kyeres3 ahouf3 no de3 3w)h) since childhood oo 😊😊" (*direct translation in English language reads 'it means the beauty had been there since childhood oo*). Composing the same phrase using the localized keyboard symbol in Twi could read 'Kyerese ahoɔfe no deɛ ewɔhɔ since childhood oo 😊😊' which would more accurately preserve the tonal and phonetic integrity of the Twi language, allowing the intended affect, emotion, and indigenous cultural nuance the Twi language fully convey.

The above linguistic identity thus reflects both resistance to and adaptation within the dominant technological systems, showing the commenters' fluid literacy agency in translingual language use yet also disclosing the unequal power dynamics embedded in the platform's design features in constraining translingual forms of meaning making. Even though these adaptations contribute to emerging transnational digital literacies, where users remix their cultural phonetic logic, platform symbols and local languages to construct meaning, one consequence of this is that to outsiders unfamiliar with Ghanaian languages and alphabets, the use of the numeral 3 in "Kyeres3" or "3ny3" may appear inappropriate or blur the meaning making process even when the foreigner enables the translation feature on IG.



Figure 2.1. Selected comment section of Anita Akuffo’s Instagram post on 11/7/2024 showing translingual practices and appropriation of keyboard symbols.

I make this assertion because the use of the numerical 3 erases the phonetic and cultural meaning markers that the localized alphabet would express in their written speech. Moreover, since the platform’s linguistic infrastructure is designed with Western linguistic norms, it may not recognize or interpret accurately such culturally specific creative adaptations by the commenters when the translation feature is enabled, thereby misreading or excluding their semantic and affective value in translation. This draws our attention to Chen’s (2025) and Dingo et al.’s (2013) assertions on how power circulates across sites of meaning-making, not only marginalizing non-Western languages and sponsoring normative digital expressions but also highlighting how non-Western users must constantly negotiate their indigenous linguistic visibility within digital spaces. Milu (2022), in discussing some decolonial possibilities for Translingualism, argued that “Indigenous languages and translingual practices in Africa are marginalized by imperial languages of Europe through the rhetoric of modernity and logic of coloniality” (p. 378). Consequently, the literary adaptations by commenters in this study contribute to the emerging fluid digital literacies and exemplify translingual composition agencies on digital platforms, reflecting instances of their resistance to and adaptation within the technological system.

Celebrity Agency and Literacy Practices on Instagram

The third macrosegment rhetorical unit is the consistent set of linguistic choices employed by followers interacting with these celebrities' IG visual rhetoric. As established earlier in the bio section and preceding discussion, both Anita Akuffo and Berla Mundi assert their agencies as celebrities not only through photos and videos captioned to represent their identities, but also through their embodiments of visual cues which encompass the affordances, poses, gestures and fashion choices that influence the audience's literacy practices. The celebrities' embodiments, which impact their agencies through their visual rhetoric, influence how their audience engages their posts through writing and digital storytelling seen in the circulatory practices in followers' reels, stories, and recaptioned posts displaying the celebrities. From my case study, commenters enacted several linguistic forms listed in the *Unit of Analysis section* which I coded as themes because these themes were consistent linguistic forms through which commenters expressed their digital literacy agencies as they engaged in the comment section. This shows their interpretative meaning from celebrities' posts. Figures 2.2 and 2.3's comment sections show commenters' translingual and digital literacy enactments born from their interpretation of celebrities' visual cues which portrays the dynamic movement of followers' socio-cultural knowledge from the physical to the virtual contexts influenced by the visual cue of each celebrity.



Figure 2.2. Commenters interpreted Berla Mundi's celebrity agency by reading and responding translingually to the embodied visual cues presented in her Instagram photo on 11/01/2024.

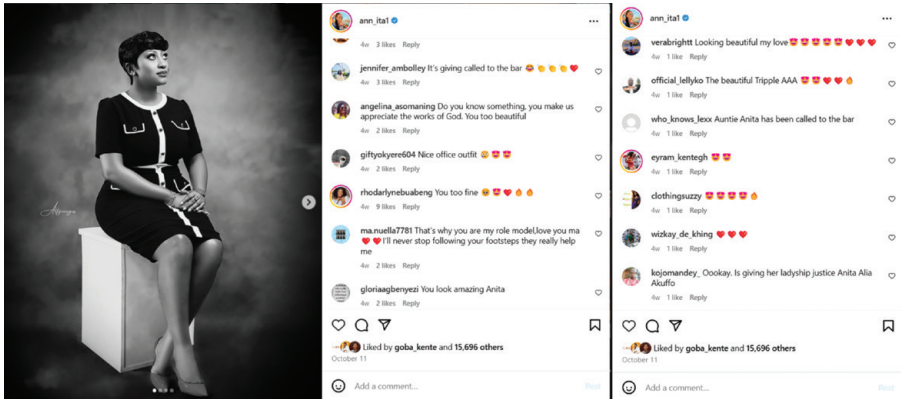


Figure 2.3. Through a situated embodied knowledge, commenters interpreted Anita Akuffo’s celebrity agency more formally influenced by her embodied visual cues presented in her Instagram photo on 10/11/2024.

Figure 2.2 shows Berla Mundi’s poised presence at New York’s Times Square, elegantly seated with a cup of coffee, which elicited interpretive responses from commenters such as “*International Mundi 😊*” and “*You don Jakpa again?? 😊*” (Jakpa, which means travel, is a borrowed Nigerian pidgin phrase now commonly used by Ghanaians. In context it reads ‘you have travelled again?? 😊’). Berla Mundi could have shared a simple photo from her lodging room; however, her agency in posting Figure 2.2 allowed commenters to interpret the visual cues in her photo through shared cultural, geographic, and social knowledge that resonate within the Ghanaian digital discourse as commenters linked her posture, setting, outfit, and style to her cosmopolitan identity and global success, reinforced by her appearances on international media platforms and her role in hosting major global events.

Similarly, Figure 2.3 shows Anita Akuffo’s professional photoshoot, which her commenters gave interpretation such as “*Its giving call to the bar 🍷🍷🍷🍷🍷🍷🍷🍷*”, “*Ookay. Is giving her ladyship justice Anita Alia Akuffo*”, and “*Corporate woman Whattt 🍷🍷*”. The commenters’ interpretations of Anita Akuffo’s post through the visual cues of her short hair and black formal dress reflect a situated understanding of the current wave of Ghana’s contemporary career culture, particularly as social media annually celebrates the many Ghanaians called to the bar each year who post their photos embodying similar agencies as Anita’s photo portrayed. This contextual meaning aligns with Tekobbe’s (2025) call for relational and reciprocal approaches to storytelling to avoid the extraction of cultural knowledge. Unlike Anita Akuffo’s initial post in Figure 2.1, which garnered numerous translanguaging comments such as the repeated phrases *Emashi* and *kpen kpen*, reflecting how her embodied agency invited culturally situated linguistic play, Figure 2.3 instead elicited more formally structured English responses,

probably with the association to a lawyer, though many replaced punctuation with emojis. This shift suggests that this celebrity’s agency is fluid, context-dependent by her visual cues in a particular rhetorical situation, and how audiences interpret her agency by aligning their linguistic and expressive choices with the visual, setting, and perceived persona conveyed in each visual composition. In this way, the meaning-making and literacy practices that emerged from Anita Akuffo’s post can be viewed as negotiated and participatory.

In addition, the comment sections of all five figures show commenters displaying fluid linguistic forms to make meaning and interpret the celebrities’ images. The use of multimodality and linguistic forms in Figures 2.4 and 2.5 reflect an intentional awareness of cultural linguistic usage, as the comment section and repost show a shared knowledge of similar types of digital literacies negotiated by the commenters. Some of the composition literacies include multimodality (seen in the use of *emojis* (❤️, 🤩), *GIFs*, *stickers*, *background music*, *celebrity images* with *Ghanian English pidgin captions*, and *celebrity tags* seen in the comment sections and repost in Figures 2.4 and 2.5), informal English (seen in through the graphological elongation or letter repetition in Figure 2.4 *Steeppppp on ussssssssss Queenn B!!!* ❤️❤️🔥🔥), and shorthand-informal way of writing words (*fyn*, *u*), punctuation ellipsis in Figure 2.4 and 2.5), Ghanaian sociolects, which is the fluid variety of using English by some social groups in Ghana (seen in Figure 2.3 “*The goddess is goddessing*”), monolexical and phrasal communication with emojis seen in all figures, and translanguaging practices. These literacies shows “the ideas of fluidity and change as ways to study digital writing and its afterlife” (Gallagher, 2020, p.157). Interestingly, the celebrities’ captions reflect fluid literacy practices that construct their literacy identities as they influence similar agencies among commenters that consequently sponsors commenter’s literacy.

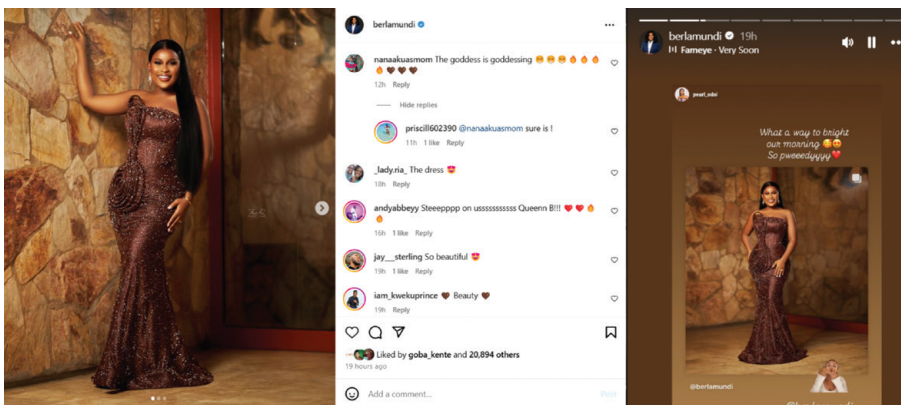


Figure 2.4. Selected comment section and repost of a follower’s Instagram story by Berla Mundi on 11/12/2024. Berla enacted her celebrity agency that has sponsored different literacy practices.



Figure 2.5. Selected comment section and repost of a follower’s Instagram story by Anita Akuffo on 11/12/2024. Anita enacted her celebrity agency that has sponsored different literacy practices.

Conclusion

This paper argues that our historic moment, entangled in the web of evolving digital technologies and celebrity digital agencies through their visual cues on IG, is a ripe moment to reconceptualize transnational digital literacy and composition by studying its production, nature, and potential. The implication of the understanding of the rhetorical agency of celebrities in sponsoring followers’ digital literacies on IG suggests possible pedagogical moves that the field of computers and writing, and instructors might consider as writing pedagogy to help students understand the exigencies of digital compositions and the situated rhetoricity of cultural literacies in a digital context. When pedagogical practices in writing instructions consider IG literacies in literacy narrative and rhetorical analysis projects, this inquiry can equip students with the skills to analyze this digital platform as a rhetorical situation to understand rhetoric and embodied multimodal practices. It provides varied ways to discuss rhetorical appeals, such as celebrity agencies and platform design elements, and how they influence the audience and their digital compositions. Because the act of composing on IG is shaped by specific agency and the platform dynamics, I contend that any concept of digital literacy for rhetoric and composition should acknowledge the sociocultural and digital factors that intersect in digital spaces, shaping the fluid cultural compositions. Understanding literacy from this perspective helps instructors guide students to discuss the localized literacy practices and rhetorical appeals from their cultures that influence digital literacies and texts in order to understand the key forces that organize and shape them towards

an understanding of context on writerly forms. This can also offer a situational approach to teaching the genres of digital texts and rhetorical appeals.

The literacy practices manifested through the comment sections and recirculation shows that these celebrities' IG rhetorical agency yield literacy practices such as tags and hashtags which I echo "became an important rallying cry in social-practice perspectives, as local readers and writers were observed making meaning of literacy on their own turf and on their own terms" as permitted through the celebrities post and the platform's affordances (Brandt & Clinton, 2002, p. 341). This contextual understanding of digital writers' agency to composition can help instructors situate students into discussing and writing about algorithmic literacies and why users embody that to communicate rhetorically and technically. Gallagher contends that "When writers consider digital algorithms, they consider the various input features that become homogenized into a display on people's computers and mobile devices. To make the decision about when to write, these writers think about the calculations and procedures of an algorithm in addition to context-appropriate texts" (Gallagher, 2020, p. 73). Because social media participation remains prevalent among students (Habes et al., 2019), with platforms like IG and YouTube widely used in educational contexts, literacy practices students engage in outside class lead to the sedimentation of literacy norms that students bring to the class to approach their writing situations (Canagarajah, 2013). Considering this, I propose that instructors can leverage students' interests in social media, and online content creation to teach digital multiliteracies and multimodal ways of composing by digital natives.

As social media remains "new enough in the writing classroom despite its inclusion in daily life for over a decade" (Vie, 2018, p. 121), I argue that as instructors we can leverage young people's fascinations about celebrities on social media to research and learn about social media. This can help students understand the factors that influence the alternative social media literacy which students bring to the classroom. Instructors can employ celebrity visual rhetoric as a resource to learn and make comparisons between rhetorical choices people employ to compose across online and academic contexts. Currently in Ghana and the sub-West African countries, "contemporary practices of education have little to say about writing as a field" (Lampsey & Dumavor, 2021, p.133) due to colonial legacies in the educational and literacy practices (Bih-Ababio 2016). By problematizing academic literacy practices in the West African context, Lampsey and Dumavor (2021) invite scholars who are concerned about the notion of writing, its landscape, and pedagogies to "look beyond the colonial educational frameworks and ideologies that drive writing pedagogies in West Africa to a more local but practical one" (p. 137). One of the significances of my study on investigating the rhetorical agency of

Ghanaian celebrity women is that it provides an understanding of contemporary digital composition of digital writers contextualized in the Ghanaian digital culture and shows how digital rhetorical practices and literacies are embodied, which I believe can help the Ghana Education system develop a situated and localized writing pedagogy to understand its writing landscape to accommodate the fluid digital compositions of writers.

This disciplinary understanding also impacts the field rhetoric and writing studies by contributing to “Transnational Black language work that dialogues African languages,” which “offers the field one pathway to understanding rhetorical practices from other traditions beyond African American” (Browdy and Milu 2022, p. 233) as these celebrities’ IG agencies create a curated digital archive of transnational rhetorical and digital literacy narratives visible through their Instagram handles which can be accessed through silicon snowball sampling techniques. Recirculated multimodal posts of these celebrities that featured hashtags and tags create archives on Instagram that document how Ghanaians have been engaging in digital writerly forms by interpreting embodied visual cues to perform localized literacies. As such, paying critical attention to this digital archive of Ghanaian celebrity rhetorics can reveal how localized literacies are embodied through translanguaging and multimodality through the combination of visual cues and the creative adaptation of platform affordances to embody cultural rhetorical ingenuity that Western-centric notions of digital literacy and multimodality may not account for. I see a potential opportunity for my future research on digital accessibility to consider literacy sponsorship for individuals with disabilities, or how the rhetorical agency of disabled individuals might manifest within the IG space. For teachers and researchers in the field, this study offers another perspective for reimagining culturally situated digital composition literacies, multimodality influenced by human agency and platform power, communal and negotiated digital literacies, fluid transnational digital compositions influenced by digital agencies, usability of digital platforms, and embodied linguistic and socio-cultural knowledge forms as legitimate forms of rhetorical knowledge and digital literacy. This study contributes another layered understanding of literacy sponsorship from a contextualized cultural perspective.

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Promoting Writer Agency and AI Literacy through Process and Reflection

Salena Anderson, Georgia Southern University

This essay explores a first-year writing assignment, including excerpts of prompts, rubrics, and related scaffolding for integrating and assessing a critical AI literacy learning objective with other learning objectives for rhetorical knowledge and writing processes. This IRB-approved research (H25055) considers a multipart writing assignment that asks students to compare their own writing without generative artificial intelligence (GenAI) assistance with a human-in-the-loop writing process and a machine-in-the-loop writing process (Knowles, 2024) using rhetorical analysis and persona prompting for portions of the assignment. Students also completed a writing process portfolio and reflective writing to help promote metacognitive practices and writer agency through “thoughtful choice” (Kroll, 2018) and reflection on the different writing processes. Students considered GenAI’s limitations and affordances in their workflow, employing rhetorical analysis to analyze their own writing and GenAI outputs for the assignment and grappling with their personal views of the impact of GenAI on their writing. The study includes a sample of student responses. To promote writer agency and critical AI literacy, the assignment sequence supports students in making informed and thoughtful choices in their use or refusal of GenAI technologies in their writing.

In the years since the widespread public rollout of ChatGPT and other generative artificial intelligence (GenAI) technologies, the conversation around GenAI literacy has evolved to include more overt discussion of writer agency as writers and instructors recognize different dimensions of the risks of overreliance on GenAI. While much of the early discourse around GenAI centered on academic honesty, as seen in examples from Alex Barrett and Austin Pack (2023), at this point, a more insidious risk associated with reduced or lost agency is gaining attention, as seen in the 2025 Computers and Writing Conference, themed “Agency and Authorship.” In their third working paper (October 2024), the Modern Language Association and Conference on College Composition and Communication (MLA-CCCC) Joint Task Force on Writing and AI also attends to themes of agency while arguing for the importance of scaffolding students’ AI literacy:

Students need practical, instrumental strategies for using GAI to accomplish specific objectives. ... GAI literacy, however,

should also include the capacity to design or critique tools (Selber), to reshape the rhetorical situation in which one is writing in order to claim more agency, and to question the ethics and efficacy of using these tools in the first place. (5)

In this list of objectives related to the development of GenAI literacy, the authors consider the importance of students “claiming more agency.” In a list related to “critiqu[ing] tools” and “question[ing] the ethics and efficacy of using these tools,” students’ need to embrace their agency may seem to contrast with the ways that agency can be threatened by or ceded to these technologies. Of course, the rhetorical situation also includes other aspects of students’ writing contexts. For instance, how do course policies, instruction, and assessment impact student agency, such as when GenAI use is either required or restricted?

This IRB-approved study (H25055) explores a series of related assignments, including prompts and rubrics, designed to promote critical AI literacy and writer agency. The central assignment is a multipart essay that blends persona prompting, rhetorical analysis, and a combination of writing without GenAI assistance, writing with human-in-the-loop processes, and writing with machine-in-the-loop processes (Knowles, 2024). However, equally important to student learning are the related writing process portfolio and reflective writing. These assignments allow students to gain experience with different ways of using GenAI technology in their writing processes and to explore those experiences and students’ related or resulting views on GenAI use. While conversations around GenAI are sometimes framed in binaries, such as risks and benefits or AI evangelists and AI refusers; critical AI literacy may afford students many more nuanced positions on GenAI use.

In this paper, I argue that promoting critical AI literacy and writer agency requires scaffolding students’ “thoughtful choice” (Kroll, 2018) between different writing processes with or without varying types of GenAI use. While Barry Kroll discusses writers’ choices in the context of the continuum of fast to slow rhetoric, the concept of thoughtful and deliberative choice can also be applied to other continua related to writers’ processes and rhetorical decisions. For instance, in exploring their rhetorical agency and critical AI literacy, students may consider the continuum of writing or text generation processes, from human-authored to machine-generated texts. On one end of this continuum are solely human-authored texts (such as those handwritten with no technological assistance), followed by those composed with machine-in-the-loop processes (with an engaged writer employing AI as part of their workflow) or human-in-the-loop processes (with a baseline level of human engagement accompanying GenAI use) (Knowles, 2024), and finally texts composed with virtually no thoughtful human engagement in the process

(such as texts generated with GenAI and an assignment prompt that was cut and pasted into the input box without the writer reading the prompt or output). The essay concludes with discussion of a small sample of student responses to their reflective writing process assignments, showing how students work toward embracing their agency as writers and deepening their sense of critical AI literacy—even as they arrive at different positions with regard to GenAI use in their writing processes.

Critical AI Literacy and Writer Agency

The MLA-CCCC Joint Task Force on Writing and AI, reflecting the views of many—but certainly not all—writing studies scholars, argues for the scaffolding of GenAI literacy in language, literature, and writing classes. In their argument for “Building a Culture for Generative AI Literacy,” the task force asserts, “The importance of such literacy should be reflected in course learning objectives that are the grounds for assessment” (Adisa et al., 2024, p. 11). In other words, in their view, it is not sufficient to merely integrate GenAI through policy; it should also be considered in the instruction and assessment in the course. They go on to explain how first-year writing, as a shared requirement and introduction to university-level discourse, research, and writing practices, carries a “special responsibility” (p. 14) to support students’ development of AI literacy. The task force recognizes the academic freedom of individual instructors to refuse integrating GenAI learning objectives in their courses; however, they also suggest that this position may burden other instructors with the responsibility for this teaching and learning (p. 11). In a somewhat contrasting view, Megan McIntyre (2024) argues for the validity of both classes that prohibit GenAI use and those that allow GenAI use with citation, emphasizing the challenges of integrating GenAI effectively. Maggie Fernandes and Megan McIntyre (2025) go further, arguing that AI literacy instruction restricts linguistic justice and ignores Students’ Right to Their Own Language (CCCC).

Whatever choices an institution, program, or individual instructor makes, they have the potential to impact writer agency. For instance, the MLA-CCCC task force frames choices students make regarding GenAI use in terms of agency, providing an example of “modeling student agency to not use GAI” (p. 16). Thus, students’ choices on whether and how to use GenAI in their writing processes may be viewed as expressions of their agency. Notably, the example provided by the task force focuses on choosing *not* to use GenAI; is the student choice to use GenAI equally agentive? In the pre-GenAI era, Marilyn Cooper (2011) argues that students are already empowered as writer agents by virtue of the power of their words to express their individual identities and views and to impact their interlocutors. Cooper (2011) asserts the following:

Individual agency emerges ineluctably from embodied processes; agency is inescapable for embodied beings. As Rickert says, students in writing classes (like all concrete others) are productive agents already. What we need is not a pedagogy of empowerment, but a pedagogy of responsibility. We need to help students understand that writing and speaking (rhetoric) are always serious actions. (p. 443)

If Cooper's argument still applies, as embodied beings (in contrast with GenAI systems), our student writers enjoy agency through their "writing and speaking," which may be distinct from their efforts with text generation. In any case, their choices and their words express their agency, and our course policies and curricula must strive to reinforce this agency and students' appreciation of both their agency and, as Cooper argues, their responsibility for their rhetorical choices.

Writing Processes and Reflection

Of the eight habits of mind identified in the Council of Writing Program Administrators' (CWPA) "Framework for Success in Postsecondary Writing," the CWPA identifies three of those practices—metacognition, openness, and flexibility—as being supported by reflection. For instance, they suggest that "reflect[ing] on the texts that [writers] produced in a variety of contexts" can help increase metacognition (p. 5); "listen[ing] to and reflect[ing] on the ideas and responses of others—both peers and instructors—to their writing" can promote openness (p. 4); and "reflect[ing] on the choices they make in light of context, purpose, and audience" can help promote writers' flexibility (p. 5).

Each of these areas are relevant for students' cultivation of critical AI literacy as they consider their choices in their writing processes, their written texts, and their audiences, purposes, and contexts. For instance, while GenAI may be a suitable or even ideal technology for certain applications or contexts, it may be wholly inadequate for others. Crystal VanKooten (2016) theorizes meta-awareness and related reflection, dividing meta-awareness into areas such as process, techniques, rhetoric, and intercomparativity, showing how students move toward different aspects of meta-awareness in first-year writing. Metacognitive work in each of these areas can promote a deeper sense of critical AI literacy.

Prompts and Rubrics

The activity described in this essay builds on and adapts an assignment described in Rob Terry's "Slowing Down Rhetoric via Persona Prompting" (2025), developed by Rob Terry and Natalie Ingalsbe. In their original assignment, students use persona prompting to generate three opinion pieces in

Copilot on a topic of debate selected by the instructor or the individual students. Students then use the Toulmin rhetorical framework to analyze and compare the opinion pieces. To practice persona prompting, writers engage in “a structured prompt engineering approach that embeds a consistent and predefined set of characteristics, behaviors, or traits to guide the model’s responses in a manner aligned with a specific personality or identity” (Olea et al. 2024, p. 1). This assignment scaffolds an aspect of AI literacy related to prompting while assessing students’ rhetorical analysis, and it is aligned with the WPA Outcomes Statement for First-Year Composition for rhetorical knowledge; critical thinking, reading, and composing; and processes.

Building on the strengths of this assignment with its integration of AI literacy and rhetorical analysis learning objectives, the adapted assignment made several changes to promote additional writer reflection and opportunities to build critical AI literacy. In particular, in Fall 2024, three sections of first-year writing at a regional research university in the southern United States were included in this study; and for these sections, the adapted assignment featured the following modifications:

1. Inclusion of an additional learning objective related to GenAI literacy
2. Changing the three opinion pieces from being all GenAI-generated to one solely human-authored text composed by the student writer, one essay generated with a machine-in-the-loop writing process, and one essay generated with something closer to a human-in-the-loop writing process
3. Including a rubric category related to distinguishing between machine-in-the-loop and human-in-the-loop writing processes.

In addition to departmental learning objectives related to rhetorical analysis, the adapted assignment used in this study included the following learning objective: “Cultivate awareness of the relationship between your writing and ideas and the types of writing and idea generation that are possible through generative AI technologies.” To support this objective, the prompt included the following sections, excerpted below:¹

Part 1: Articulating Your Own Position

First, write a 500-word position piece that answers the fol-

¹ Part 1 is new to the revised prompt. Part 2 was adapted from Terry (2025) to feature only two opposing personas. In Part 3, Persona 1 and Persona 2 directions are new to the adapted version of this assignment, and the rhetorical situation supplied in Part 3 was maintained from the original prompt. Part 4 was adapted to include reflective questions related to the differences in writing processes and GenAI integration across the opinion pieces in addition to the original prompts related to Toulmin analysis.

lowing questions: *Should the use of generative AI be allowed in first-year student writing? If so, to what extent or in what ways, and why? If not, why not?*

Part 2: Develop Personas: Create Two Personas:

Persona 1: This persona should take the same position you articulated in your position piece for Part 1. You will need to add details to this persona using the persona prompting strategy we practiced in class.

Persona 2: This persona should take a position that in some way opposes the position taken by Persona 1. Develop the details for this persona using our class guide.

Part 3: Write Opinion Pieces, Integrating Generative AI Technologies: Using Copilot, have both personas write a 500-word opinion piece advocating for their position, written for a general audience that will be read on a popular local social media forum. These pieces should reflect the persona's unique viewpoint and arguments but be accessible to an audience without specialized knowledge.

- For persona 1, you will compose a text with machine-in-the-loop writing (where you write the essay with support from generative AI technologies). To do so, you must do one or more of the following: (1) Enter your Part 1 opinion piece in Copilot, request AI feedback, and revise based on that feedback AND/OR (2) Enter your outline or prewriting for your Part 1 opinion piece to prompt a new opinion piece based on your ideas, but generated by AI. Next, you should review the output text and make any changes you see fit, either by hand or by use of generative AI. Finally, you should read your revised text to check and make final corrections for accuracy, style, and readability to ensure that the persona 1 text still reflects your position on the topic of generative AI in college writing.
- For persona 2, you will generate an opinion piece that presents an *opposing* view to your argument with human-in-the-loop writing. To do so, you will prompt Copilot; Copilot will generate a text based on your persona 2 prompting; and you will read the resulting text and make any final edits or corrections.

Part 4: Evaluate the Arguments (500-word analysis essay):

In a final analysis essay, identify which of the three position pieces you feel is the most persuasive and effective for a general audience.

- In your analysis of effectiveness, to go beyond simply indicating which piece you agree with the most, perform a Toulmin analysis that uses quotes and specific references to that position piece to illustrate why you find it so effective.
- To what extent do you believe the effectiveness of the position pieces relates to how they were composed, including whether and how you used generative AI?
- Were the elements that you found most or least effective in the position piece(s) the result of your own brainstorming, writing, or revisions? Were they the result of generative AI output, feedback, or revisions? Both or neither? Provide examples.
- You might, but are not required to, compare features from the position piece that you found strongest against what you found less successful in the other essays.

Sequencing and classroom writing lab time were important aspects of this assignment. For Part 1 of this assignment, I emphasized both in the prompt and in class the importance of the sequential nature of the assignment: Part 1 must be completed first as it must be human-authored and without the influence of GenAI technologies, using only the student's own brainstorming and research either individually or with peers. To complete Part 1 later, after having generated opinion pieces with GenAI, could result in some influence on the human-authored text from having read the GenAI-generated texts. Parts 2 and 3 relied heavily on peers being able to help one another in class and my circulating to help address technical questions. Part 4 obviously could not be completed until the other parts were already complete. To collate all of the parts of the assignments, I supplied students with a template.

Students were also required to submit a writing process portfolio that included a prewriting assignment, a rough draft, peer review sheets, a revision planning sheet, and a cover letter. These materials were designed to encourage students' reflection on their writing processes, including GenAI use, while Part 4 of the final essay encouraged students' analysis of their writing processes and the written products that came from those different research and writing processes (with and without GenAI assistance).

While the rubric for the writing process portfolio was geared more toward completion with contract-style grading, the rubric for the final draft of the essay included criteria related to the critical AI literacy learning objective for the assignment, including the ability to distinguish between machine-in-the-loop and human-in-the-loop writing processes as well as the ability to transparently document GenAI use. Rubric criteria included

1. The appendix features at least four distinct generative AI prompts: (1) the Persona 1 prompt, (2) the Persona 2 prompt, (3) at least one Persona 1 paper prompt, (4) at least one Persona 2 paper prompt. The prompts show thoughtful attention to providing relevant details and carefully differentiating between machine-in-the-loop writing and human-in-the-loop writing. All prompts are clearly and accurately cited in the works cited page.
2. The appendix features at least four distinct generative AI prompts: (1) the Persona 1 prompt, (2) the Persona 2 prompt, (3) at least one Persona 1 paper prompt, (4) at least one Persona 2 paper prompt. The prompts provide sufficient relevant details and differentiate between machine-in-the-loop writing and human-in-the-loop writing. All prompts are clearly cited in the works cited page.
3. The appendix features at least four distinct generative AI prompts: (1) the Persona 1 prompt, (2) the Persona 2 prompt, (3) at least one Persona 1 paper prompt, (4) at least one Persona 2 paper prompt. The prompts attempt to differentiate between machine-in-the-loop writing and human-in-the-loop writing. All or most prompts are cited in the works cited page.
4. The appendix features some persona and/or paper prompts, but it may or may attempt to differentiate between machine-in-the-loop writing and human-in-the-loop writing. The prompts may or may not be cited in the works cited page.

Student Responses

More and less experienced users of GenAI achieved different types of learning through the assignment. For instance, one of the more experienced GenAI users in the class created the following persona prompt for this assignment:

Persona: Karen, Background: She hates AI seeing it as a crutch and a source of uncreativity, and she would NEVER recommend AI use in school or college, Tone: concerned and protective,

Goal: to protect students from relying on the use of AI

hey Karen, can you write a five paragraph, 500 word, argumentative essay about whether first year students should use AI in their writing

At just sixty-five words, this prompt appeals to the stereotype of “Karen,” who in this case opposed GenAI use. The writer uses an informal style with phrasing like “hey Karen;” however, in the prompt, the writer shows rhetorical awareness by prompting for a specific genre: “argumentative essay.”

The student reflected that there are other types of prompting beyond persona prompting but observed that his learning related to the particular GenAI technology the class was asked to use:

I learned more about the limitations of copilot, and how it often stays close to a script so that unlike most other AI's it can remain more factually correct, yet at the cost of explanations. My opinion remains unchanged about AI, and I still view it as a way to enhance my essay while not allowing it to write the essay.

Having extensive previous experience with other GenAI technologies, such as ChatGPT, this writer was disappointed and frustrated with his experiences with Copilot. However, in terms of learning, the writer was able to appreciate more deeply the real differences between the technologies, reaffirming his preferences between the different products as well as his view on the importance of maintaining his own voice.

A less experienced GenAI user experimented with lengthier persona prompts and reached a more general but no less important conclusion about GenAI use. This writer produced a 348-word prompt that also alludes to and adapts another existing character, Tolkien's Dwalin, excerpted below:

Persona: Dwalin Wilhelm, a first-year Mechanical/Aerospace engineering student with an impressive creative mind.

-Background: Dwalin is well-versed in the mechanics of flight and how a plane manages to achieve flight. He grew up with LEGO's that helped nurture his creative mind so that he can imagine how the pieces work in tandem. He is a decent writer, but finds it more enjoyable when he writes about subjects he is interested in. ...

Dwalin, please orchestrate a 500 word essay on how far AI should be allowed in the first-year writing process. It should

follow this outline: Your position should follow the premise that first-year writing students should be able to use AI to only the extent of Generalized Brainstorming, Basic Outline Preparation, and Editing for practicality and/or preference.

This writer uses considerably more detail and a more formal style, even including politeness markers like “please.” In terms of genre, this prompt uses the more general term “essay,” and leaves the argumentative part implied by referencing “Your position.” While this prompt is more detailed, it features less directness and specificity about genre. This writer supplies an outline, as well, however, allowing the writer to retain greater control of the direction of the essay.

Based on this experience with using Copilot, this writer reaches a conclusion that holds across all GenAI products:

I learned that AI is both a crude but specific tool. The output is a direct result of the input. The less that is put in the less that comes out, and therefore; the inverse is true. A better input provides a better output. ... I am not opposed to including AI in the writing process, it's just that I would rather keep that involvement at a 'minimum' per say. ... I do find that the machine-in-the-loop essay is well engineered and in tune with the finer points of my voice.

This writer, too, embraced the value of his own voice, articulating a somewhat more hesitant position about GenAI use but deploying the vocabulary he learned during the unit and assignment to showcase his understanding that there are different ways and degrees of integrating GenAI into one's writing processes.

This kind of reflective work provided students an opportunity to consider the impact of GenAI on their individual voices, with students writing first without GenAI and comparing their own writing with GenAI outputs. The attention to students' own voices in the assignment provided an opportunity to discuss Students' Right to the Their Own Language, an important part of their agency as writers. While this second student arrived at a cautious position with a more favorable stance toward machine-in-the-loop writing, the assignment also makes negative assessments available. As the first student perhaps knowingly suggests in his persona's name choice, GenAI often produces flattened and stereotyped outputs.

Discussion and Conclusions

Dianna Winslow and Phil Shaw (2017) show how scaffolding metacognitive practices can help promote agency in first-year writing, and we observe this

same finding in the present study. Students reflect on their writing and writing processes with and without GenAI assistance and embrace their own views on integrating GenAI into their writing processes. However, there may be tensions between the more complex scaffolding of this reflective work in the assignment sequence used in this study and certain aspects of students' critical AI literacy development. For instance, while the multi-part structure and writing portfolio helped to break down a complex assignment and allowed students to explore the continuum of GenAI integration in their writing processes, this same structured scaffolding may have limited creativity in exploring GenAI or overwhelmed some students. For comparison, when considering the scaffolding of information literacy, in a study of first-year student research essays and their related class prompts, M. Sara Lowe, Sean M. Stone, Char Booth, and Natalie Tagge (2016) found that "Prompts with moderate sequencing produced better student scores than prompts that were heavily sequenced" (p. 132). These findings surprised the researchers, who expected more scaffolding to support greater information literacy; however, they concluded that the additional sequencing might have been overwhelming for some first-year students.

With this possibility in mind, for future curriculum design and research, I am considering ways of streamlining this assignment to allow students to explore the continuum from human-authored to machine-generated texts with less structured sequencing. It may be that more in-class lab time to experiment with GenAI in ways that are guided by the students' own curiosity may further deepen their critical AI literacy in evaluating whether, to what extent, or in what ways they would like to integrate (or resist) GenAI in their writing processes. If unexamined GenAI use can threaten students' agency as writers, so too can course policies or assignments that flatten conversations about GenAI into binaries or that restrict students' engagement with their own writing processes. Reflective writing that promotes metacognitive skills across students' writing processes remains a powerful tool for supporting student agency and critical AI literacy; and the complexity of the ever-evolving GenAI landscape demands strategies for instruction and assessment that encourage students to embrace their rhetorical agency.

This study shows that combinations of GenAI use for some (parts of) assignments and rejection of GenAI for other (parts of) assignments, when informed by reflective practices, can help students consider their voice, their use or refusal of GenAI, and their writing. Assignments—across writing contexts in first-year writing and beyond—must balance attention to the twin needs for such scaffolding and for writer creativity in their writing processes. These concepts can be applied in a range of writing situations. In an upper-level English class this semester, I have restricted GenAI use in one paper while encouraging students' choice in other papers, asking them to reflect on

the differences if they later choose GenAI. As a writing center director, I also train consultants to support writers' reflective choices in using or refusing GenAI as they develop GenAI literacy. Assignments that scaffold writer choice, creativity, and reflection can encourage writers to embrace their agency and their unique voices even in the GenAI era.

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Politics of Compliance: Redefining Perceived Agency in “Wellness”

Morgan Banville, Massachusetts Maritime Academy

Emily Gresbrink, Minnesota State University, Mankato

Elena Kalodner-Martin, The Ohio State University

Our article offers a toolkit for computers and writing scholars and educators to use—for themselves and their students—to address what we refer to as “perceived agency.” We find it imperative to create deliverables that can be used as a guide in navigating consent, agency, and privacy. In particular, our article contributes to understanding how perceived agency informs lived experience—and ponders, “in what ways digital technologies mediate, manifest, and manipulate this relationship?” We focus specifically on instances in healthcare, where biometrics in NICU nursing, wearable technologies for diabetes management, and the use of artificial intelligence in crisis communication showcase tensions between perceived agency and embodied, psychological,

The Electronic Frontier Foundation (EFF), a leading nonprofit organization defending civil liberties in the digital world, created a “Surveillance Self-Defense Kit” with the goal of ensuring that technology supports freedom, justice, and innovation for all people of the world (see About EFF). This article extends ideas from the EFF toolkit by offering a guide for computers and writing scholars and educators to use—for themselves and their students—to address what we refer to as “perceived agency.” Due to the political upheaval in the United States, we find it imperative to create deliverables that can be used specific to precarious sites such as healthcare to guide in navigating consent, agency, and privacy. In particular, our healthcare toolkit contributes to understanding how perceived agency informs lived experience and questions, “in what ways digital technologies mediate, manifest, and manipulate this relationship?”

We answer this question by troubling agency as a framework to understand not only the range of available actions but the influence that safety, security, and stakes have in contributing to users’ perceptions of autonomy. We offer *perceived agency* as a lens for examining how different people assess and act upon their autonomy based on their precarity in different contexts, given their understanding of risk, safety, and consequence. To illustrate such perceptions, we focus specifically on case instances in healthcare, where biometrics in the neonatal intensive care unit (NICU) (Morgan), wearable technologies

for diabetes management (Elena), and the use of artificial intelligence (AI) in crisis communication (Emily) showcase tensions between perceived agency and embodied, psychological, and/or material consequences for patients, their families, and the impacts of slow technology (such as referenced in Johnson, Chandler, & Rice, 2024; Ulmer, Sellnow & Seeger, 2022). Slow technology refers to taking the time to see how something works, understanding how it works, applying it, seeing what it is, and finding out the consequences of using it (Hallnäs & Redström, 2001, p. 203). We find that perceived agency and slow technology are two approaches that are necessary to address the implications of health surveillance; for example, employers often incorporate wearable devices within the workplace to increase a more “efficient,” “safer,” and “healthier” work environment (Zikos & Hodgkins, 2025). Such incorporation, despite the potential for lower insurance premiums or discounts at local fitness centers, creates an *unsafe* work environment due to the increase of surveillance, invasion of health data by corporations and third-parties, and questionable definitions of what is considered “healthy” (see Banville, 2020; Thompson, 2019).

By looking at these three high-risk and high-stakes health settings, we reveal how the ‘choices’ that are often presented to patients (“users”) often obscure the systemic factors that trouble refusal and consent, particularly for those who are already marginalized by nature of their race, class, gender, and more. In doing so, we further complicate what it means to be compliant, and how to subvert the very systems that seek to oppress and control. How can we—as computers and writing scholars and teachers—protect ourselves and the people most likely to *not* have agency or autonomy? Through the use of our toolkit, we advocate for a slow technological approach under the framework of perceived agency as a means to integrate technology in a meaningful way that emphasizes informed consent.

Troubling and Extending Agency

As mentioned in our introduction, while employers assume (and likely believe) that they are contributing to creating a “safe” and “healthy” work environment by implementing new technologies, they are instead subjecting employees to increased surveillance that they are often uninformed about. This opens up space to ask: How is the concept of “health” and “wellness” situated for healthcare professionals, patients, and more?

We want to note that “using technology as a means of improving the quality of life” (Beck, 2018, p. 300) is not a neutral or universally accepted endeavor. The decision to adopt—or refuse—technological interventions is shaped by intersecting factors such as medical authority, social expectations, and

perceived risk, or agency. In the case of biometrics, wearables, and implants, for example, the stakes of compliance are particularly high: Who gets to say no to these technologies, and under what conditions? Who is expected to say yes, and how is their consent shaped by institutional pressures, medical recommendations, or workplace policies? What are the consequences for saying no, especially when these devices are often positioned as being *only* helpful? And, with artificial intelligence (AI) as a prominent player in multiple technology and medical spaces, at what point do we accept or refuse it - and when will that decision be out of our hands (is it already)?

While individuals may appear to have agency in making these decisions, the distinction between having agency and the perception of agency is critical, especially when structural forces like employer mandates, medical guidelines, and financial incentives subtly (or explicitly) coerce compliance. As such, we point out that these questions are not just hypothetical; they have real consequences for patients navigating the fine line between autonomy and adherence. Risk, in this context, is not just about potential device failure or adverse health outcomes but also about the social and professional repercussions of non-compliance. Whether framed as a requirement for insurance coverage, a condition of employment, or a standard of responsible self-management, the expectation to comply with technological interventions has material consequences, reinforcing existing disparities in access, agency, and decision-making power.

Why a Toolkit?

Toolkits offer greater flexibility of use, and for the purposes of this paper, are defined as a grouping of multiple strategies and examples that translate explicit knowledge such as templates, guidelines, case studies, and more to a defined population. Further, toolkits can be used to facilitate change, and can include strategies for guideline implementation, informing policy, and practitioner training (Torrey et al., 2001; Wirtschafter et al., 2011). For example, the Registered Nurses Association of Ontario offers a toolkit on “Best Practice Guidelines” for patient care. Toolkits can be used by computers and writing scholars for promoting best practices as well as providing key roles for instructors in specific fields. For instance, Tham (2018) devised a toolkit that explores seven dimensions of interactivity for wearables and internet of things products and identifies key roles for technical communicators in immersive media design. Such toolkits are essential for providing guidance for implementing strategies and examples into practice.

We find that the questions from the Electronic Frontier Foundation (EFF) Security Plan outlined from 2023 is an effective example of a toolkit. Such

questions, along with resources online, assist readers with outlining ways to protect themselves and those around them, and can be adapted based on location and context:

1. What do I want to protect?
2. Who do I want to protect it from?
3. How bad are the consequences if I fail?
4. How likely is it that I will need to protect it?
5. How much trouble am I willing to go through to try to prevent potential consequences?
6. Who are my allies?

The following toolkit offers examples that computers and writing scholars may use in healthcare or crisis communication settings. We believe that these examples are common and demonstrative of the types of plans that instructors, students, practitioners, and patients alike would benefit from having access to.

Creating a Security Plan: Biometrics in the NICU

This section focuses on creating a toolkit for parents and guardians that builds from the 2023 EFF Security Plan questions. In high stress, potentially unanticipated, and emotional situations such as that in a neonatal intensive care unit (NICU), it makes logical sense that a parent’s first thought might not be about the tools and technologies that neonatal nurses are using for their newborns. Not only is there a sense of perceived agency with choice—do I *really* have a choice in this situation? —but there are also fraught conditions around refusing biometrics across the globe based on citizenship status, race, class, gender, and sexuality (see Banville, 2023). Biometrics are defined as “any identifier of the body that is collected and used for personal identification (and authentication)” (Banville, 2023, p. 20). Examples range from facial recognition, iris scans, voice recognition, fingerprinting, and more.

Stakeholders, such as nurses, doctors, parents, and guardians, involved in the NICU have a goal of keeping the patient safe. Ensuring both privacy and security for the patient are extensions of some of the more immediate safety concerns. For example, the consequences and implications for those who are undocumented (see Altman, Broder, & D’Avanzo, 2025) refusing biometric usage in a healthcare setting, versus a U.S. citizen, would have varying levels of risk. For those who are undocumented, the refusal of biometric usage would be high risk as they could be labeled as “noncompliant” and thus unwarranted attention might be placed on the individual, potentially leading to denial of care if labeled as a “non-emergency”, deportation, and more (for

specific legalese, see D'Avanzo, 2025). On the other hand, if a citizen refuses biometrics, they could also be labeled as non-compliant, but the risk would be significantly lower due to the level of perceived agency (in this particular example). To address such varying levels of risk, it is crucial to create an individualized security plan as modeled by the EFF. In such high stress situations, urgency and fear should not be the motivator to use or opt into biometric usage. Creating a security plan is an example of a toolkit for computers and writing scholars to contribute to documentation design in healthcare settings and implement activities in the college classroom. Furthermore, answering the following questions allows for parents and guardians to prepare their own safety plan for their child, and ultimately, for themselves. The questions can be developed individually or discussed with a trusted provider; it is recommended that such questions are completed prior to labor (this process can be initiated at any reasonable time prior to the day of labor when tensions might be exacerbated). Parents and guardians could consider the security plan as an additional component to the routine checklist that might already be in place; for example, in addition to creating a birth plan, preparing a hospital bag, babyproofing the home, buying a car seat, and much more.

1. *What biometric data do I want to protect? Such biometric data specific to newborns could be fingerprints, handprints/palmprints, ear recognition, and footprints.*

Parents/guardians typically care about the safety of their child: from mental and physical health, interpersonal relationships, and more, biometric technologies are an extension of the everyday concerns parents may have about their child (see Minkin & Horowitz, 2023). For this question, safety (or protection) could refer to limiting the biometrics that can be collected and ultimately distributed to third-parties such as insurance companies, data brokers, pharmacies, and more. Though such data is subject to compliance measures (depending on the biometric and device), sharing between providers still occurs, security breaches do happen, and unlike a password, your child's biometrics cannot be reset.

2. *Who do I want to protect my biometric data from?*

Data might be protected from biometric companies, third-parties, law enforcement, and government agencies. Reasons for protection range from privacy invasion, data mining, discrimination, citizenship concerns, inaccuracies and false identification (see Kalisky et al., 2022), and more.

3. *How bad are the consequences if I fail to protect my biometric data or opt out?*

Potential consequences range depending on positionality: examples include, but are not limited to, data breaches (Hernandez, 2025), misuse (RightPatient, 2023), risk of deportation (DHS, 2025), privacy violations (Brown & Ellena, 2023), insurance premiums increasing (Parson, 2024), and more.

4. *How likely is it that I will need to protect my newborn's biometric data?*

No matter parent/guardian positionality, it is important to protect both their own biometric data and the data of the patient (child). Consequences will vary, but individuals creating a security plan should review the previous question to determine risk tolerance and allowance (again, this is grounded in positionality).

5. *How much trouble am I willing to go through to try to prevent potential consequences for myself and my child?*

This question refers to the consequences of sharing biometric data with healthcare institutions, which may have potential legal and social repercussions (see National Research Council US Whither Biometrics Committee, 2010). Further, “trouble” can also mean refusing and/or opting out of biometrics, potentially leading to labels such as “non-compliant” or “suspicious,” which also may lead to “riskier” consequences.

6. *Who are my allies (for supporting my right to opt out of biometric usage)?*

Answers will vary: who are the people that can be trusted, friends and professionals, alike? Oftentimes, trusted professionals may be doctors with whom you have had an established rapport or history with; generally, healthcare professionals who listen and honor your concerns as well as your own background and expertise specific to your body are those who might be trusted.

One problem with relying on health technologies such as biometrics is that they are fallible, and they have their limits. Welhausen and Bivens (2021) allude to some of these concerns when referencing a case study of two civilian emergency response mHealth apps—Pulse Point and OD Help. Their concerns range from ease of use of these technologies for professionals and

users (usability and medical attention), to the stability of the programs, security or reliability of data and internet connections, and more. mHealth apps are not biometric technologies, yet they harbor biometric identification and information. The mHealth apps can (and are) fallible, which raises concerns about users perceived agency, data protection, and other vulnerabilities. One vulnerability (amongst many others) is that such apps are often assumed to follow HIPAA guidelines but are, in fact, not bound to such guidelines (see Helm & Georgatos, 2014). In the classroom, educators could provide additional examples of vulnerabilities that suggest that newborn biometrics can be altered, distributed, and are inaccurate and biased (see Saggese et al., 2019; Tiwari, 2024).

Opting In and Out for Chronic Care: Wearable Health Technologies for Diabetes Management

Wearable technologies like continuous glucose monitors (CGMs) are life-saving tools for people with diabetes, providing timely alerts, tracking blood glucose trends, and offering data-driven insights for medical decision-making. Yet, for many patients, especially marginalized populations, wearables also introduce tensions surrounding autonomy, consent, and surveillance (Britton & Britton-Colonnesse, 2017). This section of our toolkit troubles the dominant narratives surrounding wearables and offers questions for guiding discussions about the unequal stakes and pressures associated with their use, particularly in high-stakes medical settings. Each section offers guiding questions that may open discussions between patients and providers.

1. *Reconsidering Perceived Agency: Who is a “Good Patient”?*

Patients face not just medical decisions but social and professional pressures that shape their choices. Wearables are often marketed as tools that enhance patient agency, but they can also reinforce the notion of the “good patient” as someone who complies with healthcare recommendations and uses all available technologies, regardless of their concerns. Refusal may carry consequences, including being labeled as “non-compliant” and risking poorer treatment outcomes, such as increased risk of complications, slower recovery times, and even death. Because wearable technologies are only one option among many, questions may trouble the framing of them as the only good or responsible choice.

- “Are there alternative ways to monitor my condition that don’t involve continuous data tracking?”

- “What are the potential trade-offs between using this device and managing my health through other methods?”
- “How can I balance the benefits of wearable data with my concerns about privacy, comfort, and long-term use?”

2. *Navigating Surveillance, Data Collection, and Privacy*

Concerns about data privacy are echoed by many wearable users, yet most continue using these devices due to the perceived trade-off between health benefits and privacy risks (Banville, 2020). These concerns are often amplified by the lack of digital security, particularly because Health Insurance Portability and Accountability Act (HIPPA) guidelines geared towards patients’ data privacy do not extend to devices like the Dexcom or other many Continuous Glucose Monitors (CGMs). This dynamic highlights how consent can be compromised when patients feel pressured to comply, particularly in high-stakes environments like diabetes care. Questions may focus on untangling concerns about data privacy and consent when facing decision-making about wearable health technologies.

- “Can you explain how this device collects my health data and who might have access to it?”
- “What are the potential risks to my data privacy, and how are those risks being addressed?”
- “Who benefits from the data collected by this wearable, and how can I protect my privacy while still managing my health effectively?”

3. *Exploring Informed Consent and Positionality*

Informed consent is shaped by systemic factors, including racism, sexism, and ableism. Marginalized patients face heightened risks of dismissal, disproportionate financial burdens and insecurities, poorer health outcomes, and pressure to comply with provider recommendations, often under the guise of “shared decision-making.”

Questions can explore how patients from marginalized, underrepresented, or other vulnerable backgrounds can shape informed consent.

- “Are there alternative options that might better align with my values, and how can I advocate for them in a system that may not prioritize my needs?”

- “Is there someone else I can consult with on using this device?”
- “Are there any risks or biases with using this technology that may disproportionately affect [identity aspect], and how can these be addressed?”

It is important to consider how wearable health technologies do offer invaluable insights for patients, and for many, may be the most accessible option for managing their health. However, they still may introduce questions about the pressures, risks, and implications of opting in *or* out. These guiding questions seek to foster open, patient-centered conversations that consider not only the technical advantages of wearable devices but also the broader implications for informed consent, data privacy, and the equitable treatment of all patients. They may also be adapted for conversations in the classroom, where students can be guided through activities and discussions on the implications of surveillance technologies and data privacy in arenas like healthcare.

Generative AI in Crisis Communications: Mitigating Emergent Situations

When risk evolves into crisis, immediacy and speed become critical variables in response and mitigation. As a particularly fast and accessible tool, generative artificial intelligence (GenAI) tools have emerged as potential first responders. The viability and ethics of GenAI first responders have been explored in some depth (Cheng & Jiang, 2020; Chin et al., 2023:), but a question remains underexplored: can GenAI (or rather, should GenAI) be a replacement for a human respondent in crisis?

Xiao and Yu (2024) asked respondents to evaluate chatbots as first responders in crisis situations. Drawing on Coombs and Holladay’s situational crisis communication theory (SCCT), they describe SCCT as an empirical approach to crisis communication and management (Coombs & Holladay, 2002). Importantly, Coombs (2021) notes that SCCT’s substructures and crisis typing establish a “base-level,” empirical response model focused on instructing and adjusting information. Within that frame, an AI-driven chatbot could, in theory, deliver these empirical, inform-and-instruct messages efficiently (Xiao & Yu, 2024). However, *could* does not mean *should*. Xiao and Yu’s study found that chatbots excel in speed, accessibility, and scalability. But the impersonal tone, privacy risks, accuracy, and technical glitches raised significant concerns (2024, pp. 11–12). This suggests that AI may meet the empirical demands of base-level crisis responses, but it struggles to replicate the human judgment, empathy, and contextual awareness necessary in crisis

communication. As such, it is difficult to argue against AI's rapid response as a practical support for crisis management. What this means is that a crisis demands immediacy, and chatbots can meet that need. Overall, Xiao and Yu's study reinforce a critical point: in moments when trust, clarity, and human reassurance matter most, efficiency alone is not enough. Crisis communication still depends on the human capacity to balance speed with sensitivity.

Take for example the integration of GenAI into mental health applications: If a human user finds themselves in a crisis, choosing to hand off empirical decision-making or engaging in conversations with GenAI can be helpful to reduce mental load. For example, the development of culturally-situated chatbots in the southern United States uses GPT-4-to help diverse communities prepare for hurricanes, (Zhao, 2024), similar to a team at UT-Austin's development in 2025 of a multilingual emergency messaging bot (Engel, 2025). On the other hand, handing off empirical decision making to GenAI can edge into potentially dangerous territory. Take into account mental health apps and the surge of GenAI: while some users perceive AI tools positively in mental health contexts (Andrade et al, 2014; Carlbring et al, 2024), other users have experienced detrimental harm from engaging with GenAI during mental health crises, or with chronic mental health conditions; use of some of these have led to violence and death and subsequent lawsuits (Abrams, 2025; The New York Times, 2025).

A key component of this step is perceived agency. While the decision for users to use these apps is key, some of those users may not have known they were engaging with GenAI. Returning to the use-case of mental health applications, the peer-support app TalkLife used AI to alter human-written messages. Koko, another peer-to-peer app, used GPT-3 to construct user-facing messages without informed consent (Neville, 2025). In these situations, perceived agency was not afforded to the users of TalkLife and Koko; they were put into a spot where AI was the norm. In this case, and with others, we recommend that perceived agency should be the norm and fully available in times of crisis so users can openly and transparently choose to engage with GenAI; it must not be veiled or convoluted.

Empirical and automated decision making for the sake of speed and quantity does not necessarily equate to response quality or eliminating stress. We question the idea of prioritizing empirical and automated decision making for the sake of speed and quantity and ask how this impacts quality (while failing to eliminate stress). We also question the perceived agency components of GenAI in times of crisis; the decision to use AI should always fall into the hands of the user - not the creator - and should remain transparent, particularly for tools where precarious conditions (such as mental or physical health and safety) are paramount. While a person may not function as

empirically, quickly, or even correctly as a chatbot or GenAI's large language models (LLM)s, there is the component of empathy, humanism, and personhood which comes with talking *to* a person in emergencies, crisis, or disaster which has an impact (Akerkar & Devavaram, 2015; Gresbrink, 2024; Schoofs, Fannes & Claeys, 2022).

We argue that GenAI tools in high-risk or crisis responses are not always more effective or appropriate. Instead, a more mindful, methodical approach to the crisis is needed, which is modeled from Hallnäs & Redström's slow technology–designing for reflection (2001). Here, we see crisis communication taking up the authors' challenge for technology which “promote(s) moments of reflection and mental rest in a more and more rapidly changing environment” (2001, p. 202). An important clarification must be made; we aren't suggesting crisis responses *be* slow. A crisis always has a sense of urgency and haste that requires immediate attention due to ongoing harm. This process of engaging in slow technology can still be inherently empirical; contingent on the scenario, a disaster or crisis can still call for an empirical response. As technologies change and emerge, we instead call for a mindfulness towards personhood that GenAI cannot yet handle or output. Simply stated: we advocate for thoughtful responses helmed by people, or - if GenAI is unavoidable - guided by mindful exploration and cautionary use and reflection of a person.

With tools for GenAI in crisis a looming potentiality, a list of questions for the toolkit might look like asking if GenAI is the appropriate tool to utilize:

- “Is a generative AI tool the right one to use as a first responder in a crisis scenario?”
- “How many people will be impacted if I use GenAI as a first responder versus if I do this myself, as a person?”
- “Can a GenAI response accurately and appropriately mitigate the most immediate harm in the crisis scenario?”
- “Does a GenAI response further cause harm to people, places, or objects?”
- “Does a GenAI tool's response accurately reflect the human experience and agency of those impacted in a crisis?”

Conclusion: Resisting Hyper-surveillance

Finally, as we explore conversations in perceived agency, consent, and privacy, our toolkit aims to increase access to these critical topics for personal and pedagogical applications. Importantly, it is intended to disperse and increase access to critical information for marginalized or precarious populations; in particular, we write this toolkit for those who are at risk of losing unrestricted access to

timely, accurate, and equity-oriented health information in the aftermath of the 2024 United States presidential election. We believe that autonomy, agency, and consent are critical in both an education and embodied sense, and our toolkit seeks to support those who are most at risk for losing these critical rights.

Further, it is important to note that medical surveillance and biometrics overlap with the current artificial intelligence “hype” that has swept the globe. For example, voice biometrics have been introduced in healthcare offices to help transcribe patient notes, and GenAI tools have been integrated into mental health, such as Headspace’s Ebb tool (Headspace). More recently in March 2025, Google claimed that the company would expand its health-related artificial intelligence summaries in search as a way to “improve” their influence in the health sector (Bloomberg, 2025). According to the article, Google also intends to add a separate feature in search called “What People Suggest,” which it said aims to provide users with information from people with similar lived medical experiences. As we have discussed, there are risky ethical dimensions associated with the increased usage of AI in healthcare, including the potential surveillant risks and aspects associated with embodied, community care. Furthermore, as surveillance technologies and artificial intelligence move towards a commonplace position, it is essential to know your rights to privacy and autonomy, particularly in the United States. We hope that building a toolkit can be one way to equip stakeholders in resisting hyper-surveillance and the increasing attacks on bodily autonomy and agency.

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Human-in-the-Loop Writing: Students Self-Assessing Their Use of GenAI Applications

Josh Barrows, Maryam Vaezi, and Rochelle Rodrigo, University of Arizona

This study aims to shed light on the composition students' perceptions and interactions with generative AI (GenAI) tools integrated into writing instruction. While the small sample size limits generalizability, structured reflection revealed nuanced student attitudes about the process, efficiency, ethics, and quality of artificial intelligence (AI)-assisted writing. Student evaluations of AI tools involved several key dimensions: process, efficiency, ethics, and quality. Students assessed how well these tools supported specific writing process stages, including reading, grammar, summarizing, analyzing, outlining, brainstorming, and source finding. Efficiency emerged as a significant factor in students' evaluations, specifically ease of use and speed. Ethical considerations also played a crucial role, with students expressing varied levels of confidence and uncertainty about issues related to academic integrity, plagiarism, and the responsible use of GenAI. The quality of the AI output was a critical focus, with students assessing its effectiveness based on prompt responsiveness, detail, adherence to genre conventions, and comparative evaluations against their own writing or the results from other Gen AI applications.

The recent advancements in Large Language Models (LLMs), including ChatGPT and other generative artificial intelligence (GenAI) tools, have prompted a significant increase in scholarly research addressing their applications, challenges, and ethical considerations in higher education (Kostopolus, 2025). While digital literacy is formally embedded in many curricula, the success of technology integration ultimately depends on whether teachers and students personally choose to adopt these tools (Barron et al., 2003). Adoption is a complex social and developmental process shaped by interacting factors such as personal traits, prior experiences, the nature of the innovation, and contextual influences that evolve over time (Adler & Clark, 1991; Hall, 1979; Rogers, 1995). Students' willingness to adopt artificial intelligence (AI) tools like ChatGPT is significantly influenced by their perceptions of usefulness, ease of use, emotional responses, and past experiences (Hord et al., 1987; Zou & Huang, 2023).

This study was developed to collect data about students' perceptions of using GenAI applications in writing courses. In this chapter we share codes

developed from students' reflection on the efficacy of being assigned and using Gen AI applications. While the small sample size limits generalizability, structured reflection revealed nuanced student attitudes about the process, efficiency, ethics, and quality of AI-assisted writing.

Not surprisingly, research already shows there are many reasons students adopt using GenAI applications. Al-Mamary and Abubakar (2025) investigated the adoption of ChatGPT as an AI tool by university students in Saudi Arabia, and "perceived autonomy and relatedness" (p. 1) were found to be the key factors influencing students' willingness to embrace AI technologies, while perceived competence did not significantly affect this willingness. In a similar vein, Strzelecki (2024) examined the factors influencing the adoption of ChatGPT by 503 students from Polish state universities. Several key factors were identified: a) "hedonic motivation", which refers to the enjoyment and satisfaction students derive from using AI and its subsequent effect on their motivation to use it, b) "performance expectancy", relating to students' perceptions of ChatGPT as a means to enhance their academic performance, and c) "habit", reflecting the regular integration of AI tools, including ChatGPT, into students' study routines (p. 237). These findings are consistent with Segreeva et al.'s (2025) study, which identified close links between "habit", "performance expectancy", and "hedonic motivation" and the students' acceptance and use of AI tools in higher education (p. 223). Segreeva et al. (2025) also introduced "social influence" (SI), which includes peer encouragement, and "price value" (the perception of affordability) as significant predictors of students' "behavioral intention (BI)" to adopt these technologies (p. 227).

Over the past few years, researchers have found students use GenAI applications for a variety of reasons. Črček and Patekar's (2023) study on students' use of ChatGPT for academic writing in Croatian public and private universities revealed that more than half of the students had used ChatGPT, primarily for generating ideas, paraphrasing, and summarizing content. Črček and Patekar found that while many students viewed using ChatGPT to generate ideas as ethically acceptable, fewer considered it ethical to use the tool for other purposes or to replace their own writing. Surveying students across various disciplines in a Saudi Arabian university, Bensalem et al. (2024) found that most participants regularly use tools like Grammarly, ChatGPT, and ProWritingAid for such benefits as improved grammar, coherence, vocabulary, and productivity. Despite the generally positive perception of these tools, some students expressed concerns about becoming overly dependent on them, the potential negative effects on creativity and critical thinking, and ethical issues related to AI-assisted writing.

Students' feelings about using GenAI are just as varied as their reasons for adoption and use. Maya's (2024) work highlights a wide range of student

attitudes towards AI. While most students used AI for efficiency, stress relief, and personalized support, Maya found others also avoided it. The diversity of student attitudes toward AI is consistent with findings from Cummings et al.'s (2024) study, which examined first-year writing courses incorporating GenAI tools. According to Cummings et al., students valued the support these tools offered but expressed concerns about losing their authorial voice, becoming overly dependent, and potentially committing plagiarism. Structured assignments and reflective practices helped students overcome these concerns and critically assess the tools' usefulness. Consequently, most students started to see AI as a helpful supplement rather than a replacement (Cummings et al., 2024). Like Maya (2024), Bensalem et al. (2024) and other scholars, Cummings et al. (2024) pointed out growing yet ambivalent adoption of AI tools in student writing, highlighting concerns about ethics, dependence, and voice alongside recognized benefits.

In their empirical study involving 603 students and 312 writing instructors, Gallagher and Wagner (2024) compared student and instructor perceptions of academic dishonesty in collaborative writing situations involving humans vs. AI writing technologies. Findings revealed that students and instructors generally aligned in their perceptions, with both groups demonstrating “significant differences in perceived dishonesty between AI and human collaborators” in certain cases (Gallagher & Wagner, 2024, p. 267). Both teachers and students perceived AI to be more academically dishonest than human collaborators in most contexts, particularly when AI was responsible for generating the text. However, both groups associated less academic dishonesty with AI when it was used for lower-level processes such as brainstorming and language refinement. Findings also reveal a shared uncertainty among participants. For instance, both students and instructors appeared unsure about whether having a human or an AI tool generate an outline should be considered academically dishonest. Gallagher and Wagner (2024) note that this uncertainty highlights the importance of tackling questions of academic integrity in genuine, real-world contexts.

Methods

Our Intuitional Review Board (IRB) approved study focused on students' use of GenAI applications in their writing courses. The research team designed their writing courses to incorporate GenAI applications in the teaching, learning, and writing processes. One course, ENGL102 (a second semester first-year composition [FYC] course), was taught by Barrows and Rodrigo. The second course, ENGL307 (Introduction to Business Writing), was taught by Barrows. As part of each course, students were prompted to reflect upon

their expectations and experiences with the GenAI applications. Specifically, students were prompted to:

1. Complete an initial survey that asks qualitative and quantitative questions about previous experiences with writing, online learning, and GenAI applications.
2. Participate in an initial discussion board activity that asks students to a) reflect on their pre-existing beliefs and expectations about GenAI and b) learn how GenAI works and then reflect upon what they've learned.
3. Complete a short survey after every activity or assignment that includes using GenAI.
4. Respond to assignment specific reflection questions for each of the assignments that used GenAI.
5. Produce an end-of-course reflection on their use of and learning about GenAI.
6. Complete an end-of-course survey that includes parallel questions from the initial survey.

All the “research” instruments were assigned as reflective learning assignments, which is part of the DEER Praxis that we used to help design the course materials (Cummings, Monroe, Watkins, 2024). After the course was completed and grades were posted, students were asked to provide consent for these learning materials to be used for this study.

Our research team met for four sessions where we compared our individual coding. In between these sessions, we had many two-person sessions which we used to collaboratively develop and refine the code book as well as code the data. For each major session, the third member corroborated the two independent codes to find areas of disagreement. Our final codebook includes four major sections focused on how students assessed the usefulness or efficacy of the GenAI tools. The students assessed the tools based on process, efficiency, ethics, and quality.

We had six respondents with three from each course. These participants are represented as pseudonyms, and we did not correct or revise any of the student language presented in quotes in our discussion. Due to the small sample size, these results are not generalizable; but they can provide some important information for how we understand the ways that students might be interacting with and perceiving use of GenAI in the writing classroom.

Data Analysis

We developed four codes about how students were assessing the efficacy of the GenAI tools that they used in the course: process, efficiency, ethics, and

quality. With many of our sub-codes there were instances that students articulated general codes with either positive or negative connotations. So, we further delineated between many codes by appending either a positive (p)/yes (y) or negative/no (n) with that code.

Assessing Based on Process

The *process* category of codes was based upon students' claims, or predictions, of the usefulness of general and sometimes specific GenAI applications based on how they would help with specific parts of the writing process. Within the process category we had six codes: read, grammar, summarize, analyze, outline, brainstorm, and find source.

The first code, *read*, refers to any instance where students note that GenAI has assisted in their reading or understanding of the material. When asked about using GenAI in the future, Alara said "Gen AI might help me in the sense that it can help me understand the topic a little better to really be able to become as knowledgeable as I can be." Although we never explicitly prompted students to read a text through or with GenAI, it appears that assigning students to prompt for summaries functioned as ways to engage more meaningfully with the text.

The second code, *grammar*, refers to any time that students note that the AI application has assisted with grammar revision or recommendations for writing. Meredith describes how "Gen AI can also help point out grammar mistakes i didnt notice earlier." Other participants also articulated grammar as an area that GenAI can help them. We found the *grammar* comments interesting since we never explicitly assigned an activity that prompted students to use a GenAI application to analyze their drafts, especially for tone, style, and grammar. Students already brought the knowledge that reviewing drafts for tone, style, and grammar was something a GenAI application might do; and they obviously value that help.

The third process code, *summarize*, is used to mark where students note how the AI application has summarized or paraphrased input content. James reflected: "I could use gen AI to generate the summaries from the notes, and then proof read the summary and correct it where need be as well as reword it to insure that it is cohesive. I think that Gen AI in this case is a perfect application as one of the things that it does best is summarize. It also saves me some of the trouble of trying to balance important points, as I can highlight all of them and then generate a summary based on those." We find the comments on *summary* interesting, especially in the cases where students are articulating how they can improve the summary by including their own annotations from their first read through of the article in the

prompt for the AI, like James does. This type of awareness goes beyond just asking AI to summarize an article, but it is a purposeful summative task with directive elements.

The fourth process code, *analyze*, is used to show where students express how the AI application sometimes analyzes readings or analyzes their own work as a reviewer, including drafts, notes, and instructions. Alex projected future use: “I will start by addressing whatever homework precedes the step of drafting the review of literature, then create an outline of what I want it to look like. I will then formulate a draft and utilize AI to “poke holes” in what I have and receive suggestions for what to add.” The *analyze* code is important because we realized that students are using the AI application to analyze both their own writing and argument like Alex does as well as using it to analyze a particular source like other students mentioned.

The fifth process code, *outline*, refers to when the student responses show that the AI application has provided an outline for input content or provides a suggested outline for student work. James describes how the AI application can do outline work, saying “In this case I was much more excited about the summaries and the RoL drafts or outlines that it made, This will hopefully help me in writing my RoL.”

The sixth process code, *brainstorm*, refers to when students articulate how an AI application has developed new and creative ideas or offered different perspectives. Many students, like Alex, claimed “Gen AI will help me think of ideas and how I can improve upon the existing work that I have.” The students expressed brainstorming both in the ideation stage of writing as well as in the revision stage, articulating how the AI application can be used as a brainstorm in multiple areas of their writing process.

Finally, the last process code, *find source*, describes how students articulate that the AI application helps students explore related resources they already know or when the application finds initial sources related to a topic. Bethany projected future use: “I plan to find sources that branch off each other to fill in the gaps the other articles are lacking.” Since we never explicitly prompted students to use GenAI to find sources, the *find source* code emphasizes the need to make sure students understand how specific GenAI applications work and what information and resources to which the GenAI application has access.

Since we specifically prompted students to reflect, we believe many of these process comments are heavily influenced by the required prompting after a specific activity. We think the most honest assessment based on the writing process was when students were prompted to predict when and how they might use GenAI in future composing situations.

Assessing Based on Efficiency

The second major category that developed in our iterative coding was how students were assessing AI application efficacy based on *efficiency*. We are using two sub-codes for *efficiency*. The first code for efficiency, *easy use* (y/n), refers to instances where students specifically mention that the GenAI application was easy to use as well as times where they mentioned that it was specifically not easy to use. Alex claimed “Copilot was the worst because it would not allow me to include all of the notes I needed it to analyze in the prompt. It also didn’t seem to comprehend what I was asking it to do when I told it to not respond until I explicitly told it to, nor when I asked it to address my three previous prompts.” Not surprisingly, we find the *easy use* code demonstrates that the usability of the tool is one of the important measures that students are using to determine GenAI application efficacy.

The second code for *efficiency*, *speed*, refers to times where students articulate how quickly, or more rapidly, work is accomplished with a GenAI application. Two students also claimed the reverse; for example, Bethany reflected: “Some concerns I have from using Gen AI is having to navigate and refine questions consistently. It takes about as long as it does to refine questions in AI as it does from a general google search.” These moments are helpful for instructors to encourage students to think about their writing process and ways that the GenAI application can sometimes be helpful, or faster, in some ways and not in others.

Assessing Based on Ethics

Our pedagogical framework also attends to ethics in our instruction, and we found that students also expressed their perceptions of ethics as an important piece of their assessment of AI applications in the writing classroom. The third major theme of *ethics* is broken into three sub codes: confident, unsure, and stores.

The first code, *confident*, refers to both instances of when a student is confident that their use of GenAI was ethical as well as when they were confident that the use of GenAI is not ethical. Alex reflected: “I am most excited about the content that addresses specific questions, rather than the ones with specific prompts asking the AI to generate entire assignments. The reason for this is because I think it is a slippery slope to ask AI to do too much on the front end, and a student may risk plagiarism because of it.”

Our second code for ethics, *unsure*, is used to notate when students specifically mention that they are unsure whether the specific use of AI is allowed as well as when the student articulates that they are unsure whether the

specific use was unethical. Meredith reflected: “My main concern I have for AI is when I ask it for help with my writing, sometimes it will give me a great sentence that I want to use, but if I use it it is plagiarism. So I will try to reword it into my words. But still, is that a form of plagiarism?” Students articulated a lot of concern about plagiarism and academic integrity when using GenAI applications. In future iterations, we might use additional codes since *allowed* and *ethical* are not synonymous.

The third ethics code, *stores*, refers to instances where students articulate how the GenAI application is used to store ideas, notes, or sources where the student can return to them. James says, “I generally don’t use AI much outside of the assigned usage, but if I do it is usually in powernotes, and so I have a recorded history in the project that allows me to track everywhere I have used it and to be able to accurately recall where and when it was used.” In these instances, students are outsourcing confidence in the tools to their tracking abilities or when they are being intentional about archiving material and instances of GenAI use.

Assessing Based on Quality

Finally, and perhaps most significantly, students assessed AI applications based on the quality of their performance. We determined five subcodes assessing quality: prompt, not enough, more, form, and compare.

The first code, *prompt (y/n)*, refers to instances where students assessed accuracy broadly. Students specified whether the prompt works (or not) as a measure of the quality of the result. James was not happy with summary results: “I don’t think it was necessarily wrong, but it was very short to summarize the entire purpose of the article, and I think it gets at too much of the literal function of the writing and less at the bigger picture stuff like why this was written, or the purpose of studying this material at all.” We typically saw the *prompt* code while students were comparing different AI tools and how some of them functioned better or worse than others at a specific writing task.

The second code in quality, *not enough*, indicates that students expressed how the AI application’s generated results did not include enough information. Alex describes how “The worst in this case was Powernotes; it focused more on what the article implications are and didn’t assess the audience, the exact article name or author, and other crucial details.” Here, it is evident that Alex has a contextual understanding of what a summary should include and the AI application did not include it. These cases are opportunities for instructors to think about rhetorical re-prompting to guide the AI to give output according to what students are looking for.

The third quality-based code, *more (p/n)*, refers to when students describe how the AI application included more information that is sometimes good and is sometimes excessive, negative, or bad. An example of more (p) and more (n) are:

- Bethany: “I prefer to do the genre analysis with AI as the AI provided more information and ideas that I was not aware of.”
- Alex: “as long as the findings are specific while concise, there is no reason to include every specific finding in the summary. The summary is meant to concisely summarize, not to re-write the introduction and conclusion.”

Although almost all of our participants articulated that the GenAI applications provided more information than what they would have found on their own, a couple of the participants, like Alex, show that sometimes a more detailed response is not desired.

The fourth code, *form (y/n)*, is used to indicate when students describe how the AI application generated results that followed expected conventions or not; conventions include grammar, length (conciseness), style, and punctuation. James reflected, “I was a little surprised when I prompted the AI to write it with a policy maker audience in mind that it went straight to writing a letter pitching information to them, but it also makes a lot of sense to write it in that way, it just doesn’t serve my purposes perfectly.” For students to assess the form of GenAI application output, they need to understand the genre conventions for the type of text they are hoping to create.

The fifth code, *compare*, refers to when students compare the results with something else to assess quality. Sometimes students are comparing the AI application to their own work, and sometimes students are comparing to a different GenAI application or a different source. Meredith compared results from GenAI to her own work: “The difference between ours and AI is that the AI one gave a lot more detail than ours it also included other objects needed.” It is worth noting that many of the prompts asked students to compare the GenAI application to various works, so we had a high number of “compare” codes.

Conclusion

This study aims to shed light on the composition students’ perceptions and interactions with GenAI tools integrated into writing instruction. While the small sample size limits generalizability, structured reflection revealed nuanced student attitudes about the quality, process, ethics, and efficiency of AI-assisted writing (Table 5.1).

Table 5.1. Summary of Codes

Major Code Category	Code Definition	Sub-Categories
Assessing based on Process	Students' claims, or predictions, of the usefulness of general and sometimes specific GenAI applications based on how they would help with specific parts of the writing process.	read, grammar, summarize, analyze, outline, brainstorm, find source
Assessing based on Efficiency	Students' assessment of how easy the GenAI application to use and/or how quick it functions.	easy (y/n), speed (y/n)
Assessing based on Ethics	Students' reflections on their understanding of the ethics and/or allowance of using the GenAI application.	confident, unsure, stores
Assessing based on Quality	Students' assessment of how well the GenAI application performed and the quality of the resulting data.	prompt (y/n), not enough, more (p/n), form (y/n), compare

Student evaluations of AI tools involved several key dimensions. First, in terms of the writing process, students assessed how well these tools supported specific stages, including reading, grammar, summarizing, analyzing, outlining, brainstorming, and source finding, often extending their use beyond what was explicitly assigned. Moreover, efficiency emerged as a significant factor in students' evaluations. While some students appreciated the intuitive and time-saving aspects of the tools, others found the need for re-prompting to be cumbersome and inefficient. Ethical considerations also played a crucial role, with students expressing varied levels of confidence and uncertainty about issues related to academic integrity, plagiarism, and the responsible use of GenAI. Lastly, the quality of the AI output was a critical focus, with students assessing its effectiveness based on prompt responsiveness, detail, adherence to genre conventions, and comparative evaluations against their own writing or other tools.

The results of this study generally align with scholarship about the various factors that impact adoption: personal traits, prior experiences, the nature of the innovation, perceptions of usefulness, ease of use, emotional responses, and contextual influences that evolve over time (Adler & Clark, 1991; Hall, 1979; Hord et al., 1987; Rogers, 1995; Zou & Huang, 2023). More importantly for writing instructors, these findings underscore the importance of providing intentional and reflective opportunities for students to navigate the evolving landscape of GenAI in academic writing. Kostopolus (2025) addresses the ethical dilemmas linked to integrating GenAI in multimodal composition, particularly those related to authorship, honesty, and intellectual property.

She argues that educators can effectively incorporate GenAI into multimodal composition by encouraging students to treat it as a tool that supports, rather than replaces, their writing, while remaining mindful of ethical citation practices. Assigning reflections helps students to understand where, how, and why they are using GenAI as a tool. When provided the opportunity to reflect, students can demonstrate they are critically nuanced users of writing technologies, especially GenAI applications.

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Rethinking Embodiment: Algorithmic Activisms and Critical Embodiment Pedagogy for Equitable AI Design

Reliance Chekwubechukwu Enwerem, University of Central Florida

Precious Chijindu Amaefule, University of Alabama

This paper argues that composition instructors and researchers can curate equitable AI tools by foregrounding and recognizing the diverse embodied experiences of learners, engaging with counter-publics and marginalized communities, and empowering them to compose for accessibility and inclusivity. Generative AI (GenAI) plays a major role in advancing ideologies and (mis) representing and silencing diverse bodies. As educational technologies advance and GenAI achieves interdisciplinary utilization, scholarly conversations are geared towards the ways composition classrooms critique the ideologies behind AI perceptions and evaluate the ways individuals are (mis)represented by these tools, in digital spaces (Noble, 2018; Marlowe and Purdy, 2021; Vee, 2017). Drawing on Christina Cedillo's critical embodiment pedagogy and Michael Warner's notion of counter-publics, this paper explores the body as a site of public rhetoric shaped by the discourse around AI, embodiment, inclusivity, and marginalization. We highlight *The Maker or Do-It-Yourself (DIY) movement in Western Kenya* and *Black Girls Code* as illustrations of how a community-driven approach to integrate the bodily experiences of others can result in inclusive AI tools, thus fostering an equitable educational and digital landscape. Based on insights from these case studies, we propose classroom activities aimed at fostering equitable AI technologies grounded in critical embodiment pedagogy.

Activism has long served as resistance to diverse social justice concerns and struggles globally. People, marginalized/*othered* by race, abilities, class, socio-economic status, gender, and religion among others, have engaged in activism as a means of creating awareness about their marginalized status, depicting life as the other, and facilitating positive change. Daily, across countries globally, "people gather to intervene and advocate for themselves in response to everything from seemingly mundane localized concerns to major social justice movements" (Phillips et al., 2024, p.2). Significantly, grassroots activisms are diverse localized responses to certain exigencies, emergent or ongoing social injustices

within a specific community, and could result in collective action both online or on the ground (Phillips et al., 2024, p.18). Technologies and interfaces are not value-neutral and are used to perpetuate social injustices and marginalization. Hence, this paper posits that rethinking embodiment through the frameworks of algorithmic activism and critical embodiment pedagogy is pertinent to fostering equitable AI design. This can be achieved through collaboration between composition teachers and creators of composition technologies. This interdisciplinary collaboration will enhance critical digital literacy as well as ensure accurate representation of minority groups in digital spaces. Ultimately, this paper explores the *Maker or Do-It-Yourself (DIY) movement* in Western Kenya and *Black Girls Code* as case studies of algorithmic activism that illustrate how community-driven approaches and critical embodiment pedagogy integrating the bodily experiences of *others* can result in inclusive AI tools, thus fostering an equitable educational and digital landscape.

The latest composing technologies, such as generative artificial intelligence (GenAI) tools, social media spaces, Google, and wikis, reflect socio-political ideologies. These ideologies are visible in the pervasion of othering dominant in the digital landscape and are depicted by “gestures of omission” which have resulted in “missing people” (Selfe & Selfe, 1994, p. 486; Owusu-Ansah, 2023, p.143). Similarly, using data from Google Web Search, Noble (2018) examines the power of algorithms in reinforcing dominance and oppression in digital spaces. She exposes sexism in Google Search autosuggestions and “the ways those digital decisions reinforce oppressive social relationships and enact new modes of racial profiling, which I have termed technological redlining” (p.1). For GenAI (mis)representations, the argument usually is that the results generated are based on big data modelled into these systems from resources available online. However, these misrepresentations of the *others* in composition technologies are algorithmic oppressions constructed via language and oppose certain fundamental human rights, including fairness and justice (in digital spaces).

The exigency for this topic is rooted in the need to dismantle monoliths and enhance accurate and equitable representations, which can be achieved by moving beyond inclusivity to equitable designs. Unlike inclusivity which calls for retrofitting and making accommodations, equitable technologies are built and designed with justice at its core. As educational technologies advance and GenAI achieves interdisciplinary utilization, several conversations are geared towards the ways composition classrooms must critique the ideologies behind AI perceptions and evaluate the ways individuals are (mis) represented by these tools, in digital spaces (Noble, 2018; Marlowe and Purdy, 2021; Vee, 2017). As composition and digital rhetoric scholars interested in studying how the embodied experiences of marginalized people are represented in digital spaces, we decided to explore what an activist approach to

(dis)embodiment might look like by thinking critically about the role of marginalized bodies/ communities, experiences, and activism as well as critical embodiment pedagogy in shaping the ways that marginalized bodies are understood, represented, and engaged within various contexts, particularly in relation to power and ideologies in digital spaces.

Using a qualitative literature review and case study approach, we draw insights from rhetoric and composition scholarship that intersect social justice with digital rhetoric, rhetorics of the body, grassroots activism, and critical embodiment pedagogy. Many composition and rhetoric scholars have questioned dis/embodiment in technology, the ways bodies, bodily experiences, realities, and literacies are represented or ignored in technology (cf. Cedillo, 2018; Noble, 2018; Yergeau et al., 2013; Anderson, 2023). Bodies currently exist in physical and digital spaces, and modern technologies such as GenAI play a major role in advancing ideologies and (mis)representing and silencing diverse bodies. GenAI technologies are widely considered the latest composing technologies, suitable for composition via diverse media. Despite their current updates based on 21st-century technological advancements, these tools consistently fail to account for the diversity of human experiences and instead reinforce biases towards marginalized groups.

Algorithmic Activism as Grassroots Activism

The idea of algorithmic activism put forward in this paper is rooted in Phillips et. al's (2024) concept of grassroots activism. In "Grassroots Activisms: Public Rhetorics in Localized Contexts," Phillips et al. (2024) posit that "... an uncomplicated view of grassroots activism implies that people engage and attempt to intervene when and where it affects them most, working from the bottom up to make change in larger institutions and systems" (p.12). They define activism generally as "actions in service of addressing, alleviating, or eliminating systemic power imbalances and their effects" (p.16). These coalitional interactions intersect with scholarship, pedagogy, and social justice concerns to facilitate accurate representations of marginalized groups (p.16). For Lukowski and Gross (2024), advocacy could take different forms and is a significant aspect of grassroots activism that facilitates awareness and enacts change via activism. Additionally, grassroots activism can also be viewed as a counterpublic challenging the stereotypical totality of the dominant public towards marginalized groups in digital spaces. Warner's (2002) notion of a counterpublic refers to a group that positions itself as a public yet is itself in contradiction to the ideologies inherent in the dominant public (p. 81). They are usually activism-inspired and, like publics, address specific people with common discourse. Counterpublics "challenge the seeming social totality of the public" (Martini, 2020). Thus, they

“are spaces of circulation in which it is hoped that the poesis of scene making will be transformative, not replicative merely” (p.88). Consequently, algorithmic activism could be described as digital and justice movements pioneered by marginalized groups aimed at rendering algorithmic inequalities apparent, redressing algorithmic stereotypes by asserting their agency to rewrite monolithic representations (cf. Costanza-Chock, 2020).

Critical Embodiment Pedagogy

This paper positions critical embodiment pedagogy as key to rethinking embodiment for equitable AI design. Critical embodiment centers and critiques how individuals’ identities are shaped via their bodily experiences and representations in diverse spaces. Cedillo (2018) conceptualizes critical embodiment pedagogies within composition pedagogy, situating composition pedagogy as a type of activism aimed at dismantling stereotypes, eliminating the margins by teaching students “to move others towards particular stances or courses of action”. She defines critical embodiment pedagogies as “approaches that recognize and foreground bodily diversity so that students can learn to compose for accessibility and inclusivity” (Cedillo, 2018). By teaching writing using rhetoric that engages critical embodiment, we create opportunities for students to “contest conditions that create exclusion.” Additionally, Cedillo (2023) defines critical embodiment pedagogies as “approaches that center the body in response to various epistemological concerns including... the invisibility and hyper-visibility of Othered bodies...and how these issues ensure the erasure of marginalized groups from (and through) dominant histories, traditions, and practices” (p.58).

The Maker or Do-It-Yourself (DIY) movement in Western Kenya

DIY activities emphasize building and creating independently. In *Western Kenya, The Maker or DIY movement* promotes independent design, customization, and personalization of digital technology (Hamidi et al., 2018). Hamidi et al. (2018) describe it as “a ‘global’ community of technology enthusiasts, amateur designers and hands-on artist/technologists who engage with every stage of the design and fabrication of their small-batch productions for technology enthusiasts” (p.78). According to Lukowski and Gross (2024), “grassroots activism is the ongoing process in which individuals coordinate and collaborate with others to create social change” and “activist rhetoric requires ground-level organizing to amplify the needs and goals of a group” (p. 195). The DIY-AT movement project is based on community engagement and sponsored by the government and nongovernmental organizations. Maker projects are usually aimed at supporting learning and inclusion of

underrepresented populations in the creation of digital technology and media (Hamidi et al., 2018, p.78). The maker movement has impacted education by enhancing digital literacy, curriculum development, as well as creating opportunities for accessibility by making space for people with disabilities to design their own assistive technologies (DIY-AT), personalized to their specific needs (cf. Bar-El and Worsley (2021); Hamidi et al. (2018)).

Hamidi et al. (2018) observe that research-based studies have determined that “creating and customizing one’s own assistive technology can create a sense of empowerment and agency in users and lead to their increased investment in the end product” (p.79). Hence, diverse makerspace groups and researchers employ DIY as a platform for community building. The DIY-AT participatory and co-design project led by Hamidi et al. in Western Kenya facilitated training workshops and provided opportunity for participants to customize and adapt the TalkBox to specific students’ needs. An open-source DIY prototyping platform, The TalkBox is useful for creating customized Augmentative and Alternative Communication (AAC) devices for non-verbal users (Hamidi et al., p.80) This centers disability rights and the embodied knowledge of disabled students as critical to the technology design. It also empowers underrepresented groups by giving them agency to define their identities and reinforce resonant design over retrofitting (cf. Yergeau et al., 2013). Critical embodiment pedagogy emphasize curriculum designs and pedagogies that center the lived experiences of marginalized groups. Consequently, this project fosters critical embodiment via an iterative course design and a pedagogy that creates inclusive spaces and enables students to foreground bodily diversity and compose for accessibility and inclusivity (Cedillo, 2018). The maker movement enables diverse groups to compose technologies rather than just the few financially privileged, thus creating opportunities for students to “contest conditions that create exclusion” (cf. Bar-El and Worsley, 2021; Cedillo, 2018). This in turn empowers underrepresented groups, exposing students to critical digital literacy practices that enable them to actively critique, interrogate, and participate in the creation of these technologies, thereby fostering equitable technology design.

Black Girls Code

A significant component of the digital divide is the gender disparities among female students pursuing higher education in the sciences. According to Rockman et al. (2017), racial and gender discrimination, educational environments that reinforce stereotypes and biases, result in othering, isolation, low participation, and eventually attrition from studies. Black Girls Code (BGC) is a non-profit organization and community engagement initiative founded by Kimberly Bryant in 2011 to enhance inclusion in science and technology by training young

girls from underrepresented communities in science, technology, engineering, and math fields (STEM) (Black Girls Code, 2024). BGC aims to close the gender gap in tech by introduce programming and technology to young girls who eventually, may become “builders of technological innovation and their own futures” (BGC Mission Statement, 2011; Rockman et. al, 2017).

Coding is rhetorical and a mode of composition. According to Christina Jones, the current CEO of BGC, “Code is more than algorithms and applications—it’s language that powers dreams and dissolves barriers” (Black Girls Code, 2024). Code is ideological and influences the way people and marginalized communities are (mis)represented in digital spaces. Algorithms are rhetorical because they construct meaning by combining data depicting preferences, activities, and expressions. Algorithms “create meaning and work to persuade the human and nonhuman audiences they engage to induce various types of change in the ecologies in which they operate” (Brock, 2019, p. 68). AI tools are generated via coding and as a form of composition, coding incorporates the stories and embodied experiences of writers/coders. *Black Girls Code* centers the unique perspectives of underrepresented students in coding development while simultaneously aiming to dismantle monolithic representations and socio-political ideologies in STEM. Indeed, “The future isn’t just written in code; it’s shaped by those behind the keyboards. It’s time to ensure those coders reflect the diversity of the world they’re shaping” (Black Girls Code, 2025). *BGC* hosts annual summer camps, open to diverse individuals across the United States, where young girls are mentored and exposed to AI, coding, and machine learning to build real projects. Their website also hosts a range of online courses designed to inspire and educate young people interested in tech. By diversifying the field, underrepresented students can (re)assert agency, which could eventually result in not just inclusive, but also equitable design of technologies. This further reinforces the impact of critical embodiment pedagogies that enable students to intersect diverse aspects of their identities while advocating for equitable technological designs.

Class-Specific Exercise

In what follows, this paper proposes classroom activities that could be tailored to fit any of these distinct levels: first-year writing, technical writing, and graduate classes. In designing these activities, the authors acknowledge that its practice could appear differently given students’ various learning stages. The question that guides the design of these exercises is: how could technology co-creation in the writing classroom be used to teach students how ideologies shape writing technology design, empowering them to make ethical rhetorical choices in their design? Grounded within Cedillo’s concept

of critical embodiment pedagogy, the activities outlined below lean towards co-creation, however, the authors made the rhetorical choice of incorporating analytical exercises given that these are activities designed with a writing-centered classroom in mind.

Class Activity:

Goal: The goal of this exercise is to engage students in practical learning. Through the class activities, students' attention is drawn to the bias and exclusion that can emerge through linguistic, ideological, and design choices embedded in AI technologies. While building an AI chatbot, students become aware of the rhetorical and ideological choices designers make in the design process and use their understanding of equity to design a chatbot.

Required Materials: Safiya Noble's *Algorithms of Oppression* and Ruha Benjamin's *Race After Technology*.

Additional Reading: Jennifer Sano-Franchini's *Critical Digital Interface Analysis*.

Recommended Free AI Chatbot Design Tool: Poe

Recommended Instructional Sources: "How to Create a Prompt Bot"

Learning Outcomes

- Understanding how bias seeps into technologies.
- Reflection on equity in technology design and building a ChatBot.
- Students' practical experience draws their awareness to how language ideologies operate within interfaces and how ideologies could be restructured through equitable design.

Exercise A: Designing a ChatBot

This exercise is designed to engage students in a co-creative process of the rhetorical choices embedded in technology design.

Stage 1: Critical Engagement with Existing ChatBot

Goal: This first stage of the exercise builds students' critical awareness of how ideological decisions impact AI's output. This

prepares their minds for the custom chatbot creation stage.

Begin the class by having students interact with an existing chatbot (*Poe* is recommended for this purpose, given students would be building their personal chatbots on the platform).

- The class collectively decides on a prompt.
- Ask students to record moments when the bot's response reflects bias, misunderstanding of context, or linguistic homogeneity.

Some Reflective Questions While Engaging in this Process:

- What assumptions about language and identity bias are reflected in the bot's response?
- How does the bot's tone or diction reflect the ideology behind its response?
- Is the interface or generated language choices accessible to diverse users?
- From your interactions, what identities are centered, stereotyped, or erased from its output?

Stage 2: Ideation & Planning

In small groups, students use a specific context to brainstorm the design of a chatbot that promotes.

Goal: The ideation encourages students to plan intentionally before embarking on the design. Their response to these questions would become data they fed into the knowledge bank of their custom chatbot.

Brainstorming Question: Imagine you are designing a chatbot that students could interact with in a Community ESL class, what would it mean for the design of this chatbot to be equitable? Things to keep in mind while brainstorming:

The purpose and audience for the chatbot.

- Ethical and rhetorical problems it aims to address.
- Design principles that would guide the creation (Equity and accessibility).

Stage 3: Building a Custom Chatbot

Goal: Transforms students' theoretical understanding of bias and ideology into material design practice.

Using *Poe* (or any other free no-code chatbot builder), students begin to build a custom chatbot. Following the guide on the instructional manual, students would design a custom bot. Here, they make the rhetorical and design decisions that would determine the AI's output. Students design their chatbot by:

- Describing the functionalities of the chatbot.
- Prompt the bot, telling it how to behave and respond to users' messages.

Example: You are an ESL student's conversation assistant. Interact with them without being biased or having ideological preferences.

- Include a knowledge source to the bot. Ideas generated during the ideation stage could be uploaded at this stage as the knowledge source.
- Decide on a greeting message with your audience/users in mind.
- Decide on the bot's "temperature". This is essential as it controls the bot's level of creativity and unpredictability in its response.
- Publish your bot.

As they design, students should document the rhetorical choices they are making:

- How they decide on the functionality of the bot.
- How they decide the bot's tone and style.
- What kind of things they include or exclude for the bot's responses.
- The choices they make about the information fed into the bot's knowledge source.

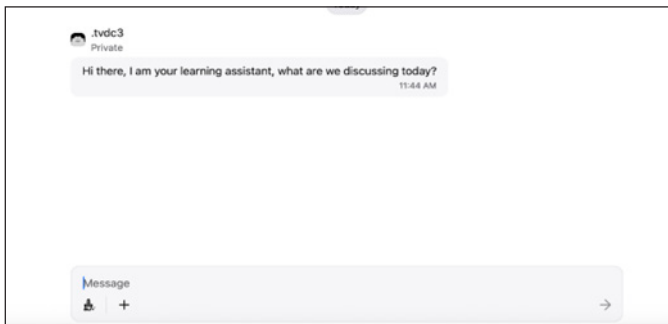


Figure 1. Custom POE bot interface

Stage 4: Usability Testing

Students test their custom chatbots from the context of an ESL student. During the test, students record:

- The rhetorical sensitivity of the chatbot's responses.
- Where the chatbot succeeds or fails to represent equitable design principles.

Exercise B: Critical Reflection

This exercise is designed as a follow-up to the first exercise. Here, the instructor invites students into critical reflection on their design, encouraging students to use their practical experience to reflect on the intersection of language and ideology in technology design.

Reflective Questions:

1. What are the rhetorical and ethical goals behind your design?
2. How do your design choices reflect equity and inclusion?
3. Given that the bot is built within an already designed AI system, how does that impact the outcomes of your rhetorical design choices?
4. How has this process shaped your understanding of technology, writing, and rhetoric?

Additional Reflective Questions for a Technical Writing Class:

- What does it mean to design accessibly and equitably?
- How can you, as a technical writer, advocate for users whose voices, identities are often misrepresented or erased by digital technologies?

Conclusion

Embodied view assumes that because all bodies matter, all bodies are unique and should be centered. We should strive for equity rather than inclusion. Although technologies are ridden with diverse ideologies and socio-politics, scholars in technical communication and RhetComp can create accessible spaces within pedagogies. Hence, Algorithmic activism and critical embodiment pedagogies advance equitable spaces and technologies' design, enabling marginalized students to contest dominant narratives and (re)assert

agency by centering their complex realities and bodily experiences as knowledge building in the composition classroom. Future research could explore diverse curriculum design strategies that could intersect composition classes and technology fields as co-creators and co-educators to reinforce embodied perspectives and equitable technology designs.

Additionally, important questions that shaped the design of these class exercises are: how do we have conversations about critical AI literacy and practically engage critical embodiment pedagogy across various levels of the composition classroom? How do we do this meeting different academic level requirements? The activities are not designed as a semester-long syllabus, rather as separate activities that could be carried out in an entire week of class or restructured by an instructor as a semester-long class activity. Given that, these exercises have been designed to mirror already existing class activities across levels. Yet, it is important to end by acknowledging that engaging in exercises like this means additional labor for instructors, and its sustenance will require institutional support.

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What's AI Got to Do with It?: An Analysis of GenAI Competency Frameworks

Roberto S. Leon, Georgia College and State University

This paper explores generative artificial intelligence (GenAI) competency frameworks and the extent to which they do or do not effectively represent what happens in the GenAI-assisted composing process. After a brief introduction to GenAI competencies literature, I critique these frameworks in terms of agency and consider their pedagogical value. Ultimately, I argue that GenAI competency frameworks, as currently defined, do not sufficiently differentiate between using GenAI and other writing technologies.

Proponents of generative artificial intelligence (GenAI) assert that we must teach our students to use GenAI, that our graduates will not get jobs if they do not learn to use it, that it amounts to professional malpractice not to teach it (c.f. Godfrey, 2024; McDaniel Bae, 2025; Schroeder, 2024). An important outgrowth of these arguments is the rush to develop lists of GenAI competencies—what do writers need to know about GenAI to use it effectively? GenAI competencies literature ranges from general considerations (Long & Magerko, 2020; Wang, Rau, & Yuan, 2023) to fuller lists of competencies (c.f. Annapureddy, Fornaroli, & Gatica-Perez, 2025). Still others suggest that these lists of competencies should include a metacognitive dimension to account for the unique cognitive demands of working with GenAI (Tankelvitch et al., 2024). GenAI competencies are deemed essential not merely for employability but also for informed and enhanced user agency: Without such competencies, we are told, we might face a new literacy crisis (Johnson, 2023). Competency lists are generally useful for providing a sense that we understand a complex phenomenon enough to translate it into teachable elements. These lists also suggest that there is indeed something unique about working with GenAI that ought to be defined for these pedagogic purposes. While our current lists of competencies might be used to argue for the exceptionality of and our grasp on GenAI writing, this paper suggests that these competencies, as presently constituted, do not sufficiently recognize what GenAI writers actually do, and, further, that rhetoric and writing studies may already foster many of these competencies without the direct use of GenAI.

In a spirit of GenAI skepticism if not outright refusal (Sano-Franchini, McIntyre, & Fernandes, 2024), this paper explores competency frameworks and the extent to which they do or do not accurately represent what happens in the GenAI-assisted composing process. I begin by providing a brief introduction to GenAI competencies research as a subset of international and interdisciplinary AI literacy discussions. Following this exposition, I critique these competencies, starting by asking conceptual questions such as: Based on these descriptions, what do these competencies entail? How do these descriptions obscure or reveal what GenAI writers actually do? And, in what ways are these competencies GenAI mode-specific rather than applicable to composing in analog and digital modes generally? After using questions such as these to distill what these competencies tell us about what GenAI writers should be able to do, and considering how these competencies may already be instilled through best practices in writing curricula (Johnson, 2023), I suggest that, as we seek clarity regarding what actual tasks AI writing involves, we will be more successful in cutting through the hype and better understand the ways in which AI writing is and is not unique.

Defining GenAI Competencies

GenAI literacy is often described as an all-encompassing understanding of GenAI and how to use it effectively. As Duri Long and Brian Magerko (2020) define it, GenAI literacy involves “a set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace” (p. 2). Competencies are an important construct in this definition. A useful definition of competency can be found in Vikram Singh Chouhan and Sandeep Srivastava’s (2014) analysis of workplace competency modeling, where they define competency as “the capacity of applying or using knowledge, skills, abilities, behaviors, and personal characteristics to successfully perform critical work tasks, specific functions, or operate in a given role or position.” “Competencies,” they continue, “are thus underlying characteristics of people that indicate ways of behaving or thinking, which generalizes across a wide range of situations and [endures] for long periods of time” (p. 16). Businesses often work to identify key competencies to guide their hiring and training processes. In terms of GenAI competencies, various stakeholders have sought to define what workers need to know, think, and do about GenAI.

These definitions of GenAI literacy and competencies are notable for what they do and do not say about literacy itself. As we have understood for some time in rhetoric and writing studies, literacy includes but is not limited to the ability to simply do something like read and write. Rather, literacy also

involves processes of socially-situated meaning-making. In other words, literacy does not happen in a vacuum; rather, we must attend to the “specific historical and material contexts” in which it arises (Graff & Duffy, 2023). Discussions of GenAI literacy, however, often focus on use at the expense of context of use. As such, GenAI literacy is often treated as distinct from critical AI literacy. Whereas critical AI literacy emphasizes a conscious critique of GenAI and its relationship to structures of power, GenAI literacy mostly assumes the positive use of GenAI (Bali, 2023; McIntyre, Fernandes, & Sano-Franchini, 2025; Vee, 2025). With this agnostic positioning, GenAI literacy and competencies may, by very definition, undermine efforts to empower writers. How can writers be empowered if they do not recognize the power structures that enable and constrain their communicative agency?

Several GenAI competency frameworks have been generated in the past five years by scholars and policymakers outside of rhetoric and writing studies. Some of these frameworks are generated from systematic literature reviews while others are based on more general theorization. As such, the content of these frameworks is often defined abstractly. Most of these frameworks emphasize how GenAI is currently used rather than consider how it ought to be used. While the exact number of competencies varies, there is some consistency from one list to the next. Bingcheng Wang, Pei-Luen Patrick Rau, and Tianyi Yuan (2022) provide the shortest list, identifying four GenAI constructs: awareness, usage, evaluation, and ethics (p. 3). These constructs are generally representative of the constructs found in the other frameworks surveyed below. Each construct tends to take a noncritical stance to GenAI. Wang, Rau, and Yuan define awareness as “the ability to identify and comprehend AI technology during the use of AI-related applications” (p. 3). Usage is understood as distinct from this general awareness. They define usage as “the ability to apply and exploit AI technology to accomplish tasks proficiently,” that is, to use GenAI as opposed to analyzing or how to think about GenAI (p. 4). Evaluation they define as “the ability to analyze, select, and critically evaluate AI applications and their outcomes” (p. 4). And they define ethics as “the ability to be aware of the responsibilities and risks associated with the use of AI technology”—essentially, “to ensure that AI technology is used correctly and appropriately” (p. 4). These constructs—awareness of what GenAI is, how it works, and what it can and can't do; how to actively use GenAI; how to evaluate GenAI outputs; and how to use GenAI for good, not evil—manifest, in one way or another, across frameworks. Using these constructs as loose codes for the other frameworks, we can see how various researchers approximate these four constructs (see Table 7.1). Long and Magerko (2020), for instance, while writing well-before the launch of ChatGPT, already identify similar constructs such as “recognizing AI,” “critically interpreting data,”

and “ethics”—though usage receives less attention. In “The Metacognitive Demands and Opportunities of Generative AI,” Lev Tankelevitch et al. (2024) take a different tack, focusing less on awareness and ethics and more on how metacognitive competencies might map onto the prompt writing process. The UNESCO (2024) *AI Competency Framework for Students* represents another approach which, hearteningly, emphasizes not just usage but also forefronts ethics (including mention of labor and environmental issues—something the other frameworks ignore). Finally, Ravinithesh Annapureddy, Alessandro Fornaroli, and Daniel Gatica-Perez (2025) synthesize studies of GenAI competencies to arrive at yet another variation on this same theme.

Table 7.1. Coded Comparison of Selected GenAI Competency Lists

Wang, Rau, and Yuan (2022)	<ul style="list-style-type: none"> Awareness (A) Usage (U) Evaluation (Ev) Ethics (Et)
Long and Magerko (2020)	<ol style="list-style-type: none"> 1. Recognizing AI (A) 2. Understanding intelligence (A) 3. Interdisciplinarity (A) 4. General vs. Narrow (A) 5. AI Strengths and Weaknesses (A) 6. Imagine Future AI (A) 7. Representations (A) 8. Decision-Making (A) 9. Explainability (A) 10. Human Role in AI (A) 11. Data Literacy (Ev) 12. Learning from Data (Ev) 13. Critically Interpreting Data (Ev) 14. Action and Reaction (U) 15. Sensors (U) 16. Ethics (Et) 17. Programmability (Et)
UNESCO (2024)	<ol style="list-style-type: none"> 1. Human-centered mindset (human agency, human accountability, citizenship in the era of AI) (Et) 2. Ethics of AI (embodied ethics, safe and responsible use, ethics by design) (Et) 3. AI techniques and applications (AI foundations, application skills, creating AI tools) (U) 4. AI system design (problem scoping, architecture design, iteration and feedback loops) (U)

<p>Tankelevitch et al. (2024)</p>	<p>Prompt Formation:</p> <ol style="list-style-type: none"> 1. Self-awareness of task goals (U) 2. Task decomposition for prompting (U) <p>Prompt Iteration</p> <ol style="list-style-type: none"> 3. Well-adjusted confidence in prompting ability (U) 4. Metacognitive flexibility to adapt prompting strategy (U) <p>Evaluation</p> <ol style="list-style-type: none"> 5. Well-adjusted confidence in evaluation ability (Ev) 6. Self-awareness of applicability and impact of GenAI on workflows (Ev) <p>Understanding and Adapting Workflows</p> <ol style="list-style-type: none"> 7. Well-adjusted confidence in complete task yourself vs. with GenAI (U) 8. Metacognitive flexibility to adapt to GenAI (U)
<p>Annapureddy, Fornaroli, and Gatica-Perez (2025)</p>	<ol style="list-style-type: none"> 1. Basic AI literacy (A) 2. Knowledge of generative AI models (A) 3. Knowledge of the capacity and limitations of generative AI tools (A) 4. Skills to use generative AI tools (U) 5. Ability to detect AI-generated content (Ev) 6. Ability to assess the output of generative AI tools (Ev) 7. Skill in prompting generative AI tools (prompt engineering) (U) 8. Ability to program and fine-tune generative models (U) 9. Knowledge of the contexts where generative AI is used (Et) 10. Knowledge of the ethical implications (Et) 11. Knowledge of the legal aspects (Et) 12. Ability to continuously learn (U)

Agency and Pedagogy

Each of these frameworks takes matters of awareness, usage, evaluation, and ethics in several directions. For the purposes of this paper, however, I am especially interested in how these competency frameworks define usage and evaluation. I am interested in how usage and evaluation are described because of what they mean for agency—not only what we can know, but what we can do. Together, usage and evaluation represent a compressed description of the composing process of integrated writing and reading. While competencies are often deliberately written for wide application across disciplines and fields, and these lists are often derived from systematic literature reviews, the way they conceptualize usage and evaluation especially matters because it reveals how scholars are (or are not) thinking about practical matters. Often, current competency frameworks obscure what we actually do when we use and evaluate GenAI,

which has implications for agency and pedagogy. To put it briefly, it is difficult to be a conscious, agentic user if we blackbox usage and evaluation. Inasmuch as literacy includes both reading and writing, analysis and synthesis, the most functional competency frameworks ought to attend to usage and evaluation and, furthermore, define these competencies in ways that are actually proper to GenAI writers and not just to writing in general. If these competencies are simply applicable to writing in general, then ostensibly we can learn them through any writing technology, not just GenAI. In what follows, I will analyze these frameworks from least to most focus on usage and evaluation.

In some of these frameworks, there is little attention to defining usage and evaluation in concrete terms and, as such, limited clarity when it comes to what specific skills would be taught. Long and Magerko (2020), for instance, find little research on use, despite the fact that many AI agents (including, to a lesser extent, GPTs) were already in use when they published in 2020 (for a brief list of AI agents, see McKee & Porter, 2020). They also mostly pass over evaluation as a distinct competency. Wang, Rau, and Yuan, (2022) find a little more attention to GenAI use and evaluation, but not much. In their review of the literature on AI competencies, Wang, Rau, and Yuan identify skills such as “word processing, spreadsheets, and presentation” as well as “management and information integration” as kinds of usage scholars have considered (p. 4). And again, they define evaluation broadly as an ability to assess outputs (p. 4). For the most part, though, Wang, Rau, and Yuan focus on usage and evaluation in general terms. Such general terms are insufficient to differentiate GenAI literacy from any other kind of literacy. For example, if GenAI competencies are considered merely “word processing” and content management, well, we teach those already just fine with a computer and a knowledge base.

The UNESCO *AI Competency Framework for Students* (2024) gives slightly more attention to usage, or what they call “AI techniques and applications” and “AI system design” (p. 18). However, they do not give much attention to evaluation. They present AI techniques as “an integrated view of the intrinsically linked conceptual knowledge on AI and associated operational skills, using selected AI tools and authentic tasks” and AI systems design as more advanced “comprehensive engineering skills that determine the problem solving, architecture building, training, testing, and optimization of AI systems” (p. 18). UNESCO also conceptualizes AI techniques as moving from foundational skills to application of those skills and eventually the development of AI tools such as bots. While promising, UNESCO’s focus is primarily on the AI programming side of things: “Students,” they write, “will synchronically acquire skills in AI programming and reinforce the transferability of their knowledge and skills by applying them to the crafting of AI tools” (p. 25). Approaching GenAI literacy from a programmer perspective is valuable; however, the focus on users is also

necessary, especially as our own students will not necessarily be going into AI development fields but may be expected to use AI for other applications. Applications such as “facial recognition, social media recommendations, pattern analyses underlying scientific data, medical diagnoses, self-driving cars and predicting the risk of loan defaults” (p. 32) suggest the range of applications, but they do not include writing. For GenAI competencies that define what users do, not just what programmers do, we must look elsewhere. And, pedagogically, we’ve been talking about social media algorithms for a while and have conducted pattern analysis for even longer. Do we really need GenAI to teach these?

Annapureddy, Fornaroli, and Gatica-Perez (2025) introduce a framework that shows a little more potential for demystifying what actually happens when someone is working with AI—but just a little. Annapureddy, Fornaroli, and Gatica-Perez consider usage broadly as “Skills to use generative AI tools,” “Skill in...prompt engineering,” “Ability to program and fine-tune generative models,” and “Ability to continuously learn.” Likewise, they consider evaluation as the “Ability to detect AI-generated content” and the “Ability to assess the output of generative AI tools” (p. 7). For sake of time, allow me to just focus on a handful of these. In their telling, “Skills to use generative AI tools” include knowing “which tool to use for a specific application, and how to use it to generate new content” (p. 11). This description is a little more than just saying a user should have techniques, but the phrase “how to generate new content” is left woefully unpacked. Annapureddy, Fornaroli, and Gatica-Perez go a little further when it comes to prompt writing—I mean, engineering. Of prompt engineering, they write “While it is beyond the scope of this work to delve into the details of prompt engineering, given the abundance of academic writings and systematic reviews of the topic, being aware of different techniques to optimally prompt AI systems can allow users to be more efficient in their use of generative AI” (p. 13). Attention to prompting may be more proper to GenAI competencies because prompting focuses on precisely what usage is about—enabling users to make deliberate choices about how they use GenAI. However, as Annapureddy, Fornaroli, and Gatica-Perez do not expand on this point, we cannot be sure that they value such agentic insights. The research they cite does not identify sub-competencies for prompting, but they do share some brief research to describe the “Ability to Assess the Output of Generative AI Tools” competency (p. 13). Considering these competencies broadly, Annapureddy, Fornaroli, and Gatica-Perez call for developing frameworks that include “domain-specific competencies” for various industries and applications (p. 15). Annapureddy, Fornaroli, and Gatica-Perez recognize that their framework only gives a bird’s eye view of the matter and recognize the need for further articulation of GenAI competencies. This framework suggests competencies that may be more proper to GenAI usage and evaluation,

that begin to define what GenAI users do in practice. However, because this framework often operates at a high level of generality, these competencies lack sufficient definition. While prompting and evaluating outputs seem to better describe GenAI outputs, this lack of attention means prompting and output evaluation could be confounded with writing assignment prompts and teaching editing—again, practices that are not specific to GenAI usage.

Of the frameworks surveyed, Tankelevitch et al. (2024)'s framework seems the most specific and practical. Noting that “there is not yet a coherent understanding of the usability challenges of GenAI, much less one grounded in a theory of human cognition” (p. 1), they emphasize how metacognitive processes map onto the prompting process; in other words, usage and evaluation, that is, a reduction of the composing process, is their primary focus. Because these processes are central to this framework, I will briefly describe them here. Tankelevitch et al. divide the prompting process into four stages: prompt formulation, prompt iteration, evaluation, and understanding and adapting workflows. Tankelevitch et al. then map the following cognitive tasks onto this process (p. 7). For each of these tasks, note that the active engagement of the user is central. Prior to prompt formulation, a user should have self-awareness of their task goals and determine what they will put into the prompt. Then, in prompt iteration, the user will rely on their prompting ability as well as employ metacognitive flexibility to adapt their prompting strategy. In the prompt evaluation stage, the user will then shift from their prompting confidence to their evaluating competence. Finally, in understanding and adapting their workflows, the user will need to be aware of whether GenAI fits their current workflow, remain confident in their ability to complete the task on their own, and adjust their workflow to include GenAI. Because this model centers on usage and evaluation and correlates these processes with human metacognitive processes, this model has more to offer us as we seek to understand and define GenAI competencies. To say that a GenAI user doesn't merely create prompts but specifically formulates, iterates, and adapts prompts and workflows—with a note on self-efficacy, no less—gives a more complete snapshot not just of the process of using GenAI mindfully but also suggests how this framework might be teachable. While this framework echoes the design process more generally (ideation, prototyping, reflecting, etc.), it does suggest ways we might focus on the role of digital tools in that metacognitive process.

Conclusion

In reviewing this handful of GenAI competency frameworks, I hope it has become apparent that much work is left to be done in defining these

competencies as an outgrowth of the GenAI literacy question. Many emergent frameworks consider usage and evaluation but define these processes cursorily as categories of interest but not of central focus. In highlighting frameworks such as Tankelevitch et al., I suggest that frameworks of usage and evaluation that hew closely to human cognitive processing rather than just GenAI processing might more comprehensively tease out what GenAI writers actually do, even on a cognitive level. More studies of these cognitive and behavioral processes would enable us to define more actionable competencies and would ensure that those competencies are actually teachable and specific to the use of GenAI. It is one thing for future graduates to say “I have GenAI skills,” and another to say something like “I embrace rather than avoid multishot prompting” or “I regularly synthesize multi-authored and GenAI-authored content.”

To isolate mode-dependent GenAI competencies, it will also be crucial to hold our hypotheses up against competencies in other modalities. Tankelevitch et al.'s emphasis on metacognitive competencies over more abstract competencies, for example, has much in common with S. Scott Graham's (2023) looped AI writing process model (p. 167). If the prompting process is just another composing process, what it does may not be a difference in kind but rather of degree—the degree to what we already do in analog and digital writing. This is not to say that GenAI-specific competencies do not exist. Just as we've learned over the years that digital and multimodal reading and composition require their own unique sets of skills (Downs, 2021), GenAI surely has its own mode-dependent tasks and processes that go beyond how we typically think about concepts such as revision, editing, teamwork, and content management. In the meantime, however, GenAI competencies that are abstract and disconnected from what GenAI writers actually do are insufficient for arguing that we have to teach with GenAI. Inasmuch as these competencies are the same across modalities, we likely already teach our students GenAI writer competencies without and before they ever prompt GenAI.

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Tactical Technical Communication Meets Tactical Urbanism: Subversive Acts of Digital Writing, AI, and Material Practice in the Built Environment

Jamie Littlefield, Texas Tech University

This article argues that *tactical urbanism* and *tactical technical communication* share a common rhetorical and infrastructural logic. Both practices respond to constraints (whether bureaucratic, spatial, or institutional) through adaptive, small-scale interventions that prototype alternative futures. Drawing from infrastructure studies and public rhetoric, the article employs a multi-modal rhetorical case study approach to analyze three paired cases in which communicative artifacts enable or catalyze material change: a temporary street redesign guided by a tactical urbanist manual, a modular public space installation built using open-source CNC design files, and a speculative AI prompt book developed to generate civic dialogue around urban futures. These examples illustrate how tactical technical communication can function as infrastructure, helping to coordinate publics, distribute knowledge, and scaffold civic experimentation. Rather than treating writing as secondary to design, the article positions communication as a core mechanism by which built environments may be negotiated. The conclusion calls for increased collaboration between technical communicators and placemaking practitioners, emphasizing the field's capacity to contribute expertise that strengthens the viability and reach of tactical urbanist projects.

In cities across the globe, grassroots interventions—makeshift planters lining a bike route, hand-painted intersections, plywood kiosks, reclaimed curb space—are quietly reshaping how urban space is used and understood. Often built with limited budgets and temporary materials, these public experiments are part of a growing repertoire of *tactical urbanism*, a design strategy that tests alternative futures through scrappy, small-scale, citizen-led change (Lydon & Garcia, 2015). At the same time, a parallel conversation has been unfolding within the field of technical communication, where scholars and practitioners are exploring how communication functions under constraint, responding to complex systems with limited resources based on non-dominant user needs.

This approach, known as *tactical technical communication* (Kimball, 2006, 2017), positions do-it-yourself documents, community-authored guides, and user-driven social platforms not simply as containers for information, but as tools for acting within (and sometimes against) dominant systems.

This article brings these two practices into conversation. While tactical urbanism and tactical technical communication have developed in separate spheres (urban design and technical communication, respectively), both involve distributed authorship, iterative design, and improvisation in the face of institutional rigidity. Both rely on communication to create space for action and to make new futures feel legible, desirable, and possible. And both increasingly engage with digital technologies as tools for visioning and persuasion.

Rather than treating writing and design as separate phases of urban development, this brief article explores how tactical technical communication becomes infrastructural, not only describing or supporting material change, but composing it. I examine how DIY communicative artifacts such as tactical guidebooks, modular design files, and AI prompt tools function as forms of infrastructural mediation: they enable publics to visualize alternatives, prototype interventions, and engage in the rhetorical labor of reimagining place. I argue that these texts operate as tactical tools for material engagement, scaffolding action across physical, digital, and institutional terrains. Tacticality, here, is not only a response to constraint. It is a method of small-scale world-building, a way of rehearsing better material futures in the gaps of what currently exists.

Methods

This short, exploratory article employs a multimodal rhetorical case study approach to examine how tactical technical communication operates as infrastructural labor within placemaking and speculative urban design. The central research question—*how does tactical technical communication enable material interventions in urban space?*—guides an analysis of the three paired case studies, each combining a communicative artifact with a corresponding built or imagined spatial transformation. These cases span a range of genres and modalities, from temporary redesigns and participatory installations to speculative prototypes, allowing for close attention to the rhetorical and material dynamics at play. A case study approach is appropriate for this exploratory research because tactical technical communication, as it relates to tactical urbanism, is inherently situated within specific material and social contexts. Examining the communicative artifacts within their specific contexts (on the street, in the community) allows for close attention to how they coordinate publics, enable the mobilization of resources, and ultimately shape material futures.

The analytical approach employed here draws on rhetorical genre analysis (Luzón, 2005; Miller, 1984) to examine each short case through three dimensions:

1. **Genre features:** the formal conventions, multimedia or textual structures, and material affordances that shape how a particular artifact can be used.
2. **Rhetorical work:** the persuasive, coordinating, and infrastructural functions that the artifact performs.
3. **Material consequences:** the ways the artifact enables, scaffolds, or catalyzes physical change in urban space.

Drawing on infrastructure studies (Read & Frith, 2022; Frith, 2019; Read, 2019; Star & Ruhleder, 1996) and spatial theory as addressed in public rhetoric (Greene, 2023; Rice, 2012), the study positions communicative artifacts as adaptive, situated responses to complex sociotechnical conditions—tools that link discourse, publics, and material environments. Following Kimball’s (2006) notion of tactical technical communication, these artifacts are treated not as static texts but as generative interventions that can scaffold navigation in a sometimes hostile world.

Defining the Terrain: Tactical Technical Communication and Tactical Urbanism as Infrastructural Work

Tactical Urbanism

Tactical urbanism refers to low-cost, temporary, and often grassroots interventions that seek to improve public space, test policy changes, or prototype new modes of urban life. Coined and popularized by Mike Lydon and the Street Plans Collaborative, the term has been used to describe a range of practices from pop-up parks and guerrilla gardening to temporary bike lanes and reconfigured intersections (Lydon & Garcia, 2015). These interventions are typically small in scale but high in symbolic value, designed to invite public participation and demonstrate alternative uses of space within existing infrastructural or regulatory constraints. They create “tactile proposals for change instead of plans or computer-generated renderings that remain abstract” (Lydon & Garcia, 2015, p. 6).

Tactical urbanism is both a design strategy and a civic tactic. It operates in the “meanwhile,” the space between imagination and formal implementation, offering citizens and designers a way to prototype futures without waiting for top-down approval from municipal officials. Some interventions take the form of city-sanctioned pilot projects, while others are resolutely DIY. In one

neighborhood, residents may transform a vacant lot into a pop-up park using shipping pallets, potted plants, and folding chairs. In another, frustrated cyclists may paint an unauthorized bike lane in the middle of the night to draw attention to a dangerous stretch of road.

While many projects are short-term by design, their underlying goal is often systemic: to shift public perception, influence policy, or build momentum for more permanent transformation (Jiménez, 2014; Iveson, 2013). This iterative, adaptive logic positions tactical urbanism as a kind of speculative infrastructure, a material argument for what a street, a plaza, or a neighborhood could become. As speculative infrastructure, these interventions operate not as polished solutions but as prototypes of possibility, staging material rehearsals that allow publics and policymakers to test, discuss, and imagine alternative systems before formal implementation.

Though sometimes framed as apolitical or purely pragmatic, tactical urbanism can also serve as a subversive practice, challenging dominant narratives about who designs cities and who they are designed for. By working outside or alongside official channels, these interventions often reveal the exclusions built into public infrastructure and experiment with more just alternatives. As a result, tactical urbanism can be read not only as a design movement but as a rhetorical one, communicating alternative values, relationships, and temporalities through its form.

Tactical Technical Communication (TTC)

Tactical technical communication (TTC) might be defined as the inventive, adaptive writing practices that emerge from outside or in resistance to formal institutional systems. Rooted in the work of Kimball (2006) and influenced by de Certeau's (1984) theory of tactics, TTC focuses on the ways individuals and communities create and circulate technical knowledge when they lack institutional authority or access. Where institutional technical communication is often grounded in standardized processes and organizational control, TTC thrives in marginal or contested spaces, offering improvised solutions to immediate needs.

In these contexts, communication becomes a tool of navigation and survival. TTC includes zines, informal guides, user-generated tutorials, and crowdsourced documentation—genres that may lack official sanction but offer vital knowledge in accessible, actionable forms. TTC reflects a pragmatic ethos: getting things done with what's available. Scholars have explored these practices across a range of domains, including self-published repair manuals (Kimball, 2006), alternative instructional texts for women cyclists

(Hallenbeck, 2012), community-generated medical guidance (Alexander & Edenfield, 2021; Edenfield et al., 2019a, 2019b, Edenfield 2021), knowledge-sharing user communities (Das & Tham, 2022; McCaughey 2021), and tactical guides for digital activism (Colton et al., 2017).

What unites these diverse cases is not their content but their tactical orientation. TTC responds to constraint not by appealing to official systems, but by maneuvering within or around them. It privileges immediacy over standardization, access over authorization. Rather than designing formal systems, TTC exploits cracks in them by providing timely, situated support for action. These texts are rarely polished or comprehensive. Instead, they are partial, iterative, and often rooted in personal experience. Yet they exert real influence over how people move through technological, bureaucratic, and material landscapes.

Importantly, TTC often experiments with and remixes genre conventions. Writers working tactically frequently adopt the look and feel of institutional texts, mimicking the structure of official manuals or instructions, while infusing them with new values, voices, and publics. In this way, TTC doesn't just circulate knowledge. Rather, it remakes technical discourse to serve alternative purposes.

The Infrastructural Work of Tactical Urbanism and Tactical Technical Communication

Although tactical urbanism and tactical technical communication operate in different registers—one grounded in space and the other in discourse—they share a core function: both perform infrastructural work, the behind-the-scenes labor that keeps things running. This work often occurs outside formal systems, in moments where institutional processes fall short, move too slowly, or fail to meet public needs. In these gaps, tactical actors build (sometimes literally, sometimes rhetorically) the structures needed to support the collective life of the city.

In infrastructure studies, scholars have shown that documents can act as infrastructures in their own right: not simply conveying information, but coordinating actors, stabilizing practices, and embedding standards within systems (Littlefield, 2025a; Gallagher & Avgoustopoulos, 2023; Adams, 2022; Comi, 2022; Read & Frith, 2022; Weber, 2022). In this sense, a tactical guidebook, an instructional zine, or a community-authored signage system is not only a support text; it is part of the mechanism by which something works. Whether embedded in plywood furniture, traffic cones, or user-made code, these documents help bind people to tools, environments, and one another in ways that make action possible.

Tactical urbanism, too, operates infrastructurally. Painted bike lanes, makeshift benches, and temporary plazas rely on more than physical materials. Behind each intervention is a web of writing: outreach flyers, planning documents, social media campaigns, how-to manuals, and signage templates. These communicative artifacts enable participation, legitimize action, and distribute knowledge. They are often produced by people working without formal design credentials or agency authority. Yet they have the capacity to anchor physical change.

Crucially, both fields emphasize the tactical dimension of infrastructure. Unlike large-scale, top-down systems, tactical infrastructures are pieced together from available materials and designed for short-term use, experimentation, or visibility. They are often temporary, iterative, or disposable. But their rhetorical impact can be lasting. They demonstrate what is possible by modeling alternative arrangements and inviting others to remix.

By viewing tactical urbanism and tactical technical communication through an infrastructural lens, we can better understand how everyday acts of writing and building help sustain the collective life reflected in the built environment, especially in contexts where official infrastructures are inaccessible, inadequate, or unresponsive. In both cases, the work is often invisible, the materials provisional, and the labor distributed. But it is in these small, improvisational acts that new urban systems and new publics begin to take shape.

Case Study 1: *Tactical Urbanist's Guide to Materials and Design* and the Provo, Utah, Pedestrian and Bikeway Project

Finding: *Tactical technical communication enables tentative alignment between grassroots creativity and institutional systems, transforming instructional documents into tools for negotiation and action.*

The *Tactical Urbanist's Guide to Materials and Design*, developed by the Street Plans Collaborative, is a foundational resource within the tactical urbanism movement (2016). Presented in the form of a public, downloadable PDF, the guide blends the structure of a technical manual with the tone of an open-source toolkit. It includes detailed diagrams, cost estimates, use-case scenarios, and even recipes—for example, a washable cornstarch-based paint recipe that enables temporary street markings to be applied and removed without damaging public infrastructure. This cornstarch paint formula became a key tool in Provo, Utah, where community organizers (including myself) used it to stripe temporary bike routes, delineate roundabouts, and create colorful curb extensions on a wide road (Figure 8.1).



Figure 8.1. Painting the roundabout.

This case, known locally as the 300 West Pedestrian and Bikeway project, was a weekend-long tactical intervention aimed at reimagining how a car-dominated street might serve pedestrians, cyclists, and residents. While the physical materials were important, the *Tactical Urbanist's Guide* played an equally vital role in the project's rhetorical infrastructure. It served as a genre of alignment, bridging community imagination with institutional legitimacy. Volunteers used the guide's illustrations and materials tables to plan installations, while organizers cited its language and metrics to gain (temporary and limited) buy-in from city engineers. Rather than developing entirely new designs, we adapted visual templates and technical terms directly from the guide, translating its recommendations into locally specific actions.

The document's rhetorical power lies, at least partially, in its hybridity. It oscillates between the language of grassroots creativity and professional design. On one page, readers encounter playful signage strategies (pp. 72–73). On another, an analysis of street barrier selection criteria (p. 27). This dual register enables the guide to circulate widely across various audiences, including activists, planners, public works departments, and volunteers alike. In doing so, it functions as what genre theorists might describe as a boundary object: a flexible framework that supports coordination across divergent stakeholders while retaining a coherent purpose.

The guide's infrastructural work becomes most visible in what it enables. It standardizes without centralizing. It invites remixing without compromising

safety. And it makes technical knowledge available at the street level, quite literally on the pavement. In our case, the cornstarch paint recipe made the difference between a conceptual proposal and a temporary, real-world prototype. More than a set of instructions, it gave us permission to act and a shared language to explain what we were doing to intrigued neighbors.

The Provo project, which ultimately helped lead to the permanent installation of a crosswalk on a busy segment of the street, illustrates how tactical technical communication can activate new publics and reshape material environments. The intervention itself was brief, but the communicative infrastructure that enabled it continues to circulate. This case shows that tactical communication is not always about direct disruption; it often works by strategically borrowing the legitimacy of established systems to advance alternative goals. Infrastructure, in this sense, includes not just physical materials but also shared vocabularies, design logics, and scalable genres (like the manual form repurposed in the *Tactical Urbanist's Guide*) that support local action while embedding broader values of transportation justice and localized control.

Case Study 2: Wikiblock Library and Modular Civic Interventions in Akron, Ohio

Finding: *Tactical technical communication can distribute authorship by transforming residents from users of public space into co-fabricators of civic infrastructure.*

The Wikiblock Library, developed by the Better Block Foundation, is a digital archive of open-source street furniture and material infrastructure designs optimized for non-specialist community use. It allows users to download CNC (computer numerical control) cutting files for benches, kiosks, planter boxes, and other urban elements, all designed for simple fabrication with standard plywood and a local CNC router from a high school or community woodshop. These blueprints are meant to be automatically cut, assembled without nails or screws, and installed with minimal expertise. In effect, the library applies the logic of flat-pack furniture to civic design, offering communities tools to build their own public infrastructure.

More than a collection of files, the Wikiblock Library functions as a genre of distributed technical communication. Its documents embed technical expertise into a reproducible, adaptable format that can be understood and used by non-specialists. Each set of plans includes structural details, material specifications, and clear assembly instructions (with simplistic, Ikea-style illustrations), allowing users to fabricate components in schools, makerspaces, or garages. In doing so, the library supports a participatory model of design that treats everyday people not as end-users but as producers of public space.



ALLEN BIKE RACK Assembly Manual

Figure 8.2. Allen Bike Rack Assembly Manual

This participatory ethic was central to the Akron Better Block project in Ohio, where local residents and high school students used Wikiblock designs to transform a neglected street into a temporary civic plaza (Nightengale, 2016). With guidance from the documentation, participants built seating areas, kiosks, signage, and planters that created a lively, walkable environment in just a few days. The physical transformation was matched

by a rhetorical one: users moved from imagining change to building it, enacting a shift in authorship and agency. Wikiblock designs do more than instruct; they invite action. They encode an ethic of openness, remixability, and iteration. Once downloaded, the files can be customized, modified, or combined to fit local needs. By enabling this kind of flexible production, the documents themselves become infrastructural tools for civic authorship. Rather than centralizing expertise in architectural firms or city planning departments, they distribute technical power to residents, students, and volunteers.

This case demonstrates how tactical technical communication can scale community involvement by embedding infrastructural capacity within the documents themselves. The Wikiblock Library makes public space construction more accessible, but it also redefines and redistributes what counts as expertise. It shows that the work of placemaking can be widely shared and rhetorically generative, one modular bench or pedestrian island at a time.

Case Study 3: Reimagining Urban Spaces with Speculative Design AI

Finding: *Tactical technical communication can prototype civic imagination by using experimental media to spark participatory world-building.*

Unlike the previous case studies, which focus on physical interventions, this final example explores how technical communication can shape urban discourse through technology-mediated speculative design. Rather than offering concrete solutions, speculative design encourages critical reflection by asking “what if”—a question that opens the door to imagining alternative systems, values, and ways of living (Jagoda, 2023; Hoffman, 2022; Dunne & Raby, 2013). This approach aligns with a growing body of rhetorical and technical communication scholarship that treats design as a way of assembling publics, testing possibilities, and shaping affective attachments to place (Littlefield, 2024; Gries et al., 2020; Galloway & Caudwell, 2018; Le Dantec, 2016).

In 2022, I created *Reimagining Urban Spaces with DALL-E 2*, a visual rhetoric prompt book developed through my early experiments with one of the first publicly available AI image generators. The book guides users through a simple but provocative process: upload a photo of a city space, erase part of it, and write speculative prompts to imagine what else might belong there. My goal was not to produce polished plans, but to spark conversations and help people visualize futures that might otherwise remain abstract or politically out of reach (Littlefield, 2025b).

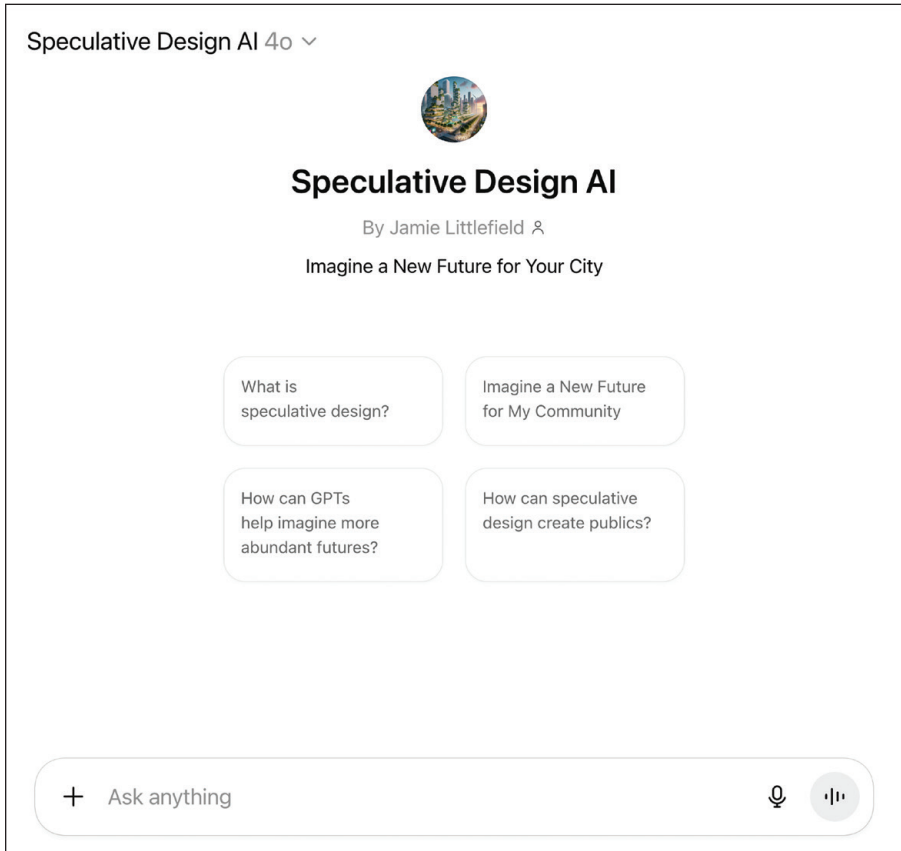


Figure 8.3. Speculative design AI interface

To expand on this, I later developed a custom GPT-powered bot called Speculative Design AI (Figure 8.3). Users describe a place they care about, share concerns or hopes for it, and then co-create speculative prompts and images. The tool includes follow-up questions to encourage sustained reflection and dialogue. Designed for accessibility, it lowers the barrier for people without formal design backgrounds to engage in envisioning and discussing the future of their environments. For example, when asked to help the user imagine a “more walkable” downtown Dallas, TX, the bot asks clarifying questions such as:

What specific concerns do you have about walkability in Downtown today?

(Examples: dangerous intersections, lack of trees/shade, poor public transit integration, empty sidewalks at night, too many surface parking lots.)

What hopes or dreams do you have for the future of walkability there?

(Examples: turning streets into pedestrian plazas, adding cooling infrastructure, bringing more housing into the core, pop-up gardens, artist-designed crosswalks.)

What values should this future prioritize?

(Examples: climate resilience, public safety, community joy, equity in mobility, cultural expression.) (Speculative Design AI GPT, 2025).

After prompting the user to consider their values and intentions for the specific place, the bot creates a written description of the co-created design and generates an accompanying visual. It then invites further discussion and feedback from the user.

These tools have been accessed by over a thousand beta users online. In one example, I used the prompt book to generate visual alternatives for a vacant lot across from my home—a plaza, a garden, and a mid-rise housing development. These images became a starting point for neighborhood conversations. The goal was never to finalize a design but to activate imagination, create space for public dreaming, and shift the narrative around what is possible.

While the *Tactical Urbanist's Guide* and Wikiblock Library offer templates for building physical infrastructure, these AI-based tools offer early prototypes for ways we might envision change in the future. They operate tactically by inviting remixing, fostering speculation, and distributing the work of civic imagination amongst non-experts. In this way, speculative design expands what technical communication can do and who it can empower, especially at the level of cities and urban systems.

Conclusion

This exploratory article has considered how tactical technical communication and tactical urbanism operate as intertwined forms of infrastructural labor, enabling small-scale interventions that shape the built environment and public imagination. Through three case studies—a city street redesign inspired by a tactical guidebook, a modular urban intervention supported by open-source fabrication files, and a speculative AI project designed to engage communities in future visioning—I have shown how tactical communicative artifacts can do more than inform. They can organize participation, coordinate material change, and create new publics capable of imagining and enacting alternative futures. These practices challenge narrow definitions of technical

communication by highlighting its role not only in documenting systems, but in designing and testing them. They also invite us to reconsider the boundaries of the field, expanding our understanding of what counts as technical or infrastructural work.

At the same time, my early approach is partial and incomplete, intended more as an introductory bridge between two disciplines than a full examination of tactical work and civic change. Each short case here offers a situated glimpse into how communication scaffolds urban experimentation, but broader research is needed to understand how these grassroots infrastructures scale (or fail to scale) across context and location. Questions remain about how urban practices persist once their temporary forms dissolve and how the infrastructural labor behind them can be recognized and sustained.

Even with these limitations, the cases here point to an opportunity for the field. Moving forward, technical communicators are well-positioned to partner with tactical urbanists who are already doing the work of reimagining cities. We bring skills in public-facing writing, participatory design, and communicative infrastructure that can help build publics and support the longer-term viability of material interventions. In practice, such collaborations might involve co-developing project guides that double as public engagement material, creating open-source templates for street interventions, developing speculative technical tools, or designing evaluation reports that translate the outcomes of temporary projects into language that city officials could act on. Technical communicators might also help civic groups frame their interventions through visual or narrative storytelling that attracts volunteers and local press. In turn, tactical urbanists can offer real-world test sites that allow technical communicators to see how their seemingly static texts take on active, infrastructural life within the built environment. By collaborating across disciplines, we can help make space, not just for better documents, but for better material futures.

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Distraction-Free Writing Devices: Peter Elbow and Smart Typewriters

Jackson W. Martin, North Carolina State University

Distraction-free writing devices are emerging writing tools that limit user function to streamline writing the first draft. Astrohaus' Freewrite Smart Typewriter is a standalone writing device with the sole function of composition, containing only a keyboard, e-ink display, file-management system, and Wi-Fi capabilities for cloud-based syncing. This device is directly named after the term popularized by Peter Elbow, and its design reflects his expressivist pedagogies. As Elbow's pedagogies echo throughout distraction-free writing devices, they curate an alternative writing environment by streamlining the writing process, directing the writer down a linear path through the first draft, denying the ability to make global edits while composing. This essay explores how distraction-free writing devices reflect expressivist pedagogies through the frameworks of new materialism and posthumanism, analyzing the role that materiality, distractions, and post-digital artifacts play in our writing process. As writing technologies and digital environments shape the activity of writing, their affordances and constraints create avenues for composition, guiding the writer through a unique process shaped by the device itself.

The role of the writing device in the twenty-first century is one with shifting identities and uses. In the midst of emerging large language models (LLMs), AI-enhanced writing tools, and advanced digital word processors, writing is an activity that is increasingly mediated by digital technology. Scholars across the disciplines have examined the role of this mediation through the frameworks of new materialism and posthumanism, ultimately challenging the traditional notions of authorship and subject/object relationality (Alexis, 2016; Boyle, 2018; Brown & Rivers, 2016; Micciche, 2014). As a result, the environment of digital word processors has been called back into question (Bray, 2013; Case, 2023; Ching, 2023). With so many digital tools and applications at their disposal, writers are constantly multitasking in digital spaces (Leon & Pigg, 2011; Portanova, 2017), and they are feeling distracted by the abundance of features offered in mainstream word processing software such as Google Docs and Microsoft Word (Ching, 2018; Jansson & Thorén, 2024).

However, some writers and computer engineers are resisting generative AI and traditional word processing technologies. Following a surge in distraction-free writing software marketed on their distraction-free nature—such as Scrivener, OmmWriter, and Sprinter—and the rise of calm technologies that

seek to reduce interruptions (Case, 2023), hardware is being created to combat distractions in composition. This hardware consists of various standalone writing devices that are reminiscent of the portable word processors of the past, emphasizing the experience of writing without distractions (Jansson & Thorén, 2024). At the forefront of this trend of devices is Astrohaus' Freewrite series, a line of distraction-free writing devices designed to prioritize writing the first draft. Named after the term popularized by Peter Elbow, the Freewrite Smart Typewriter is a commercial device directly inspired by expressivist writing studies scholarship (Freewrite, 2024). The Smart Typewriter features a full mechanical keyboard, an e-ink screen, and Wi-Fi capabilities for cloud-based syncing for further revision, emphasizing an uninterrupted writing flow at the expense of real-time revision. The Freewrite series is gaining popularity online, and, as of September 2024, users have written over 12,000 drafts and over 15.6 million words on Freewrite devices (Freewrite, n.d.a).

Here, I explore how distraction-free writing devices—particularly the Freewrite Smart Typewriter—can be understood through theories of new materialism and posthumanism to ultimately examine how the writing device itself serves as a collaborator in composition by streamlining the writing process. Drawing on Elbow's scholarship on freewriting, distraction-free writing devices revisit expressivist pedagogies by offering a unique path through the first draft, devoid of the perceived burden of active editing. In doing so, distraction-free writing devices offer an alternative writing experience that recognizes the inherent agency within writing devices and shapes a linear freewriting experience in the process.

While existing scholarship has touched upon distraction-free writing *software* (Ching, 2018, 2023), the materiality of the distraction-free writing *device* has yet to be closely examined in writing studies. I use the umbrella term *distraction-free writing device* to emphasize the unique role of the material writing tool, as opposed to the similar but different experience of using distraction-free writing software on a twenty-first-century computer. Even though I use the Freewrite Smart Typewriter as a case study, the Freewrite is not the only distraction-free writing device. The Freewrite still exists more broadly in a neoliberal system, and it ultimately seeks to solve the problem of distraction by increasing market share. Regardless, the materiality of an alternative writing tool creates a shift in the composition process, and the affordances provided by its limitations are worth studying in the midst of a cluttered digital era.

Distractions, Digital Matter, and Agency

The boundaries between the physical and digital world have diminished, largely in part to the various roles that computers play in our daily lives. Unlike typewriters, computers were not created to act as a writing device, and word

processing is not the twenty-first-century computer's primary identity: we use computers to write, read, contact family, watch videos, create art, play games, pay bills, and perform endless other activities, all on one device. In turn, the computer signifies the convergence of various opportunities that are all separate from writing in our minds (Jenkins, 2008). Each software is at odds with the others, competing for our attention, even when we can only perform one task at a time (Ching, 2023; Leon & Pigg, 2011; Portanova, 2017). Distractions are born out of this competition, creating a cluttered writing process in distracting digital environments (Jansson & Thorén, 2024). Distraction-free writing software and hardware, at their core, minimize access to digital matter, which can range from downloaded software, applications, or access to online content. Like physical matter, digital matter also influences the writer through the clutter of digital spaces and converging activities outside of composition (Jenkins, 2008). Even though people continue to be the primary authors of a text, actor-network theory provides a strong framework for how agency is further distributed to the surrounding material and social contexts (Dourish, 2017). While it may not be physically present, digital matter remains dynamic, and it is capable of influencing writers on digital devices.

Through the lens of new materialism, we can begin to examine the role of the computer in the writing process. While traditional materialist philosophies viewed matter as passive, new materialists view matter as active and agentic (McNely, 2019; Puzio, 2024), and posthumanism critiques the dichotomy between subject and object (Boyle, 2018; Micciche, 2014). Like physical matter, digital matter is capable of sticking to the writer, luring their attention elsewhere. Brain McNely (2019) used the term viscosity to describe this sensation, which he defines as “phenomena [that] reach out to us, grab us, arrest us... laden with rhetorical possibilities, with the potential for change, for difference” (p. 207). Viscous materials contain thick lures, and they catch our attention, creating a resonance that influences our state of being. Digital computer applications contain their own amount of viscosity, and their very existence tempts the writer, luring them away from the act of composition. Thus, viscous phenomena are rhetorical—they compel us, drawing our attention away from the activity at hand and towards something else.

If matter is capable of rhetoric and agency, the tools with which we compose are, too. While David Russell (2016) wrote that “[writing] is, in a material sense, nothing more than making marks on surfaces” (p. 26), writing technologies, in a new materialist sense, affect how those marks are *created* (Micciche, 2014). Kory Lawson Ching (2018) noted that the environment of a word processing software shapes the distractions that students face in the writing process; James J. Brown Jr. and Nathaniel A. Rivers (2016) noted that the QWERTY keyboard configuration itself precedes the act of typing, forever changing the way that

writers write; and Cydney Alexis (2016) found that the physical space where writing occurs is capable of shaping not only the writing process but also genres. In turn, the writing environment—digitally and physically—is capable of creating a sense of familiarity, focus, and opportunity for the writer. The affordances and constraints of these spaces provide unique avenues into the writing process.

The twenty-first-century computer contains digital lures that, consciously or subconsciously, demand energy from the user, for each of the computer's different identities continues to compel us. As Mark Weiser (1999) predicted at the end of the twentieth century, many technologies in the twenty-first century are invisible, and they alter the way that we navigate the world and aid us in invisible ways. Weiser (1999) defined invisible technologies as devices that “weave themselves into the fabric of everyday life until they are indistinguishable from it” (p. 3). Casey Boyle (2018) expanded this argument by finding that we are not separate from these technologies; rather, we are in a metastable orientation with them, not just looking *at* but existing *among* material devices. In turn, distraction-free writing devices challenge the convenience of invisible technologies, striving to exist as a technology whose features are as visible as possible. While mainstream word processing software such as Google Docs or Microsoft Word will correct spelling errors, suggest typical endings to sentences, and allow plugins that suggest areas for further development and improvement, distraction-free writing software and hardware intentionally offer none of these and actively deny the option to the user. Distraction-free writing devices challenge the writing process because we, as human beings, are entangled with our material tools, and we are used to the ways that they are supposed to function (Puzio, 2024). Distraction-free writing devices recognize this entanglement, and they seek to disconnect the writer from the digital and place them back into the material world.

The Freewrite Smart Typewriter and Distraction-Free Writing Devices

Distraction-free writing devices simplify the writing environment by locking the writer out of the traditional tools that they typically use. While distraction-free writing devices resemble the design philosophy of calm technology, which minimizes the use of non-essential features in technology (Case, 2023), distraction-free writing devices block access to non-essential digital matter altogether. The operating system has a minimalist design, while the hardware also limits distractions. The e-ink screen display size available on the Freewrite Smart Typewriter (Figure 9.1) is significantly smaller than one would typically see on a laptop or computer monitor, measuring only 121mm x 68mm

(Freewrite, n.d.b). The screen is slightly smaller than an index card, and the available display space only permits ten rows of single-spaced writing at a time. The available display space is even more limited on the Freewrite Alpha, an alternative model which can, depending on the selected font size, only display between three and five lines at a time on its LCD screen. This design philosophy actively rejects the notion of editing while composing, denying the writer the affordances that typical word processing software allows. The limited screen space encourages the writer to look *forward* in their writing process, forcing a sense of linearity and leaving the writer with no choice but to continue writing.

The Freewrite further denies premature edits by omitting mouse features on the Freewrite devices, creating no possible way to navigate through their writing and click on a misspelled word or an awkward sentence. Even though there are page up and page down keys, the Freewrite does not permit the writer to alter their prose past the current location of the cursor. This restriction and forced linearity through the rough draft attempt to motivate the writer to complete a rough draft while intentionally obscuring any interruptions. These constraints sacrifice dynamicity for the sake of uninterrupted expression, forcing the writer to separate writing the rough draft from editing. The emphasis on the rough draft further echoes expressivist pedagogies; Elbow (1973) argued that “editing, in itself, is not the problem... The problem is that editing goes on at the same time as producing... It’s an unnecessary burden to try to think of words and also worry at the same time whether they’re the right words” (p. 5). Additionally, students often face writer’s block when overwhelmed by rigid rules (Rose, 1980). Mike Rose (1980) wrote, “composing calls for open, even adventurous thinking, not for constrained, no exit cognition” (p. 399). The combination of the small screen size and lack of document navigation forces the writer to prioritize the text that is immediately present.



Figure 9.1. Freewrite Smart Typewriter. Photo by the author.

The Freewrite Smart Typewriter's screen is placed just above the keyboard at about a ten-degree angle, directing the writer's head down while composing. Instead of viewing a typical computer monitor that is positioned at a 90-degree angle from the keyboard, the writer is looking down at the device, keeping their eyes fixated on the keyboard and their hands. Unlike distraction-free writing software, distraction-free writing devices are entirely framed around the material keyboard itself, directly integrating the act of typing into the writing process. Brown and Rivers (2016) suggested that we must "notice what each of our hands is doing in concert with QWERTY as we compose sentences" (p. 223), particularly because the keyboard emphasizes the relationship between the writer and their material device. The ergonomics of the Freewrite device reconnects the writer's eyesight with their hands, nodding to writing by hand and reintroducing the performance of writing. Just as the original typewriter was referred to as the literary piano (Kern, 2015), the act of typing itself relies on this rhythmic motion, and the act of typing on physical keys provides haptic feedback, emphasizing the materiality and gestures shaped by QWERTY itself (Jansson & Thorén, 2024).

Peter Elbow, Linearity, and Expressivist Pedagogies

While distraction-free writing devices shape the writing process, they are not conducive to all stages of the writing process. The Freewrite Smart Typewriter echoes expressivist pedagogies, and the device's design philosophy nods to Donald Murray's initial framework of the writing process. Murray (1972) argued that the writing process consists of three distinct stages: pre-writing, writing, and rewriting. Even though pre-writing and re-writing are essential parts of the writing process, distraction-free writing devices actively prohibit global edits; they exclusively serve the writing stage. Peter Elbow (1973) argued that "writing has the advantage of permitting more editing. But that's its downfall too" (p. 5). In response to Elbow, distraction-free writing devices, at their core, are in service of the first draft and freewriting exercises, not the full writing process. Distraction-free writing devices are not meant to work in isolation, but they create a writing environment to start writing and exploring ideas, encouraging the writer to find their own voice in the process. In doing so, such devices create a collaboration between the distraction-free writing device and the computer itself, requiring two material tools to see the writing process through to its end.

Encouraging the writer to discover their own ideas through the act of freewriting, distraction-free writing devices direct the writer down a linear path through the first draft. By writing the first draft, Elbow (1973) argued that "you should expect yourself to end up somewhere different from where you

started. Meaning is not what you start out with but what you end up with” (p. 15). However, modern-day word processing software makes this difficult: they allow the writer to make global edits while composing, interrupting the drafting process with real-time editing. Spelling or grammatical errors are recognized, and the software immediately alerts the user with a colorful squiggly line, breaking the natural flow of composition with notifications of lower-order concerns (Buck, 2008). Distraction-free writing devices hide those errors from the writer, separating line edits from the writing process while directing the rough draft forward. The inherent design philosophy of distraction-free writing devices force a direct linearity through one stage of the broader writing process that is otherwise nonlinear.

Distraction-free writing devices pave the way for writers to explore their thoughts while moving forward, eliminating the urgency to step back and re-route. In turn, writing without feeling the need to adhere to rules or revision helps prevent writer’s block (Rose, 1980), moving the writer further through the draft to reach an endpoint. By emphasizing this forward-moving composition process, distraction-free devices shape the composing process itself. They shape not only how writers interact with their drafts, but also how they reflect expressivist thought by conceptualizing the act of writing as one of self-discovery rather than product-oriented perfection.

Conclusion

Distraction-free writing devices are emerging devices, and research in writing studies regarding their implications for pedagogy has yet to be published. It should be noted that there is no clear subject/object relationship between the writer and the writing device. As Laura Micciche (2014) noted, “writing is contaminated, made possible by a mingling of forces and energies in diverse, often distributed environments” (p. 502). Thus, writing is a collaboration between the writer and the writing device, and distraction-free writing devices recognize this relationship by putting the author’s unfiltered thoughts at the forefront of the writing process, not a variety of digital features. Future research need not be concerned with whether or not alternative writing devices *improve* writing quality; instead, we should be concerned with the ways that we are entangled with our devices, existing *among* them, being shaped *by* them while simultaneously shaping them, too, in the process (Boyle, 2018; Bray, 2013).

While it isn’t feasible to implement these devices on a wide scale across writing programs, students should experiment with a variety of writing devices and environments. Examining the role technology plays in our composition process is more important now than ever as generative AI continues to

find its way into all facets of digital composition. As blue books are returning to composition classrooms, writing instructors are left questioning if the writing device is representative of their pedagogical values in praxis (Shirky, 2025). Now is the time for students and scholars alike to revisit the study of the writing device. Examining the role that devices play enhances our awareness of the influence our technologies have over our writing processes. In learning more about how different technologies shape writing, we learn more about ourselves and the decisions we make as we mindfully use computers in our daily lives.

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Infrastructure's Promise: Designing First-Year Writing Courses Alongside GenAI

Seán McCarthy, Montclair State University

This paper examines the redesign of a first-year writing course for science majors at Montclair State University in response to the challenges posed by generative AI (GenAI). The redesigned course, “The Emerging Scientist,” embeds critical thinking and writing skills within experiential and process-focused assessment designs, positioning GenAI literacy as one component of broader learning objectives rather than the primary focus. Early data suggests the course successfully lowers DFW rates while enhancing student engagement. Drawing on Deb Chachra’s writing on infrastructure and Caitlin Martin’s framework for “deep change” in Writing Across the Curriculum (WAC), the paper explores how focusing on relationships between pedagogical elements, institutional stakeholders, and student experiences generates more productive questions and the potential for deep change. The paper concludes that ethical innovation in writing instruction during this disruptive technological moment requires grounding course design in infrastructures of trust, belonging, and collaborative relationships that support student agency and learning.

Keywords: artificial intelligence, assessment, collaboration, design, expressivism, Hispanic-Serving Institutions, infrastructure, institutional change, WAC/WID

I recently joined the faculty of the Writing Studies department at Montclair State University, an Hispanic-Serving Institution (HSI) in northern New Jersey. The responsibilities of that position made me very excited to begin this new chapter of my career. I joined a vibrant Writing Studies department that teaches more sections of general education courses than any other department on campus. A significant responsibility of my position was to foster interdisciplinary programming between my home college of Humanities and Social Sciences (CHSS) and the College of Science and Mathematics (CSAM). My first task was to collaborate with one of my new colleagues to redesign a first-year writing course aimed specifically at CSAM majors called “Writing in Science.” That course was relatively new, but it needed development. Students were not engaged with the content and increasingly resorted to generative AI (GenAI) to complete homework assignments.

In some ways, this new challenge felt familiar. In my previous position, part of my job involved developing interdisciplinary, team-taught courses in an innovation-focused teaching and learning lab. Collaborating across disciplinary lines is therefore something that I'm comfortable with that also brings me great joy. Aspects of this new challenge made me nervous, however: the student body is vastly different than that of my previous institution; the course needed to scale to fill a writing intensive general education requirement for approximately 1,000 science majors per year; and the project needed to also serve as a signature expression of collaborative interdisciplinarity between two colleges who had not worked together closely before. The question of how to approach GenAI hung over these already considerable design variables like an ominous cloud. What does a first-year writing course in the age of GenAI look like, and how do we know what students are actually learning?

It's too early to have definitive answers to these questions, but this project has been (and continues to be) a thrilling and successful adventure. The students are wonderful, my colleagues are great, and the specificities of Montclair have prompted me to think carefully about the relationship between general education courses and specific campus contexts. GenAI is part of that inquiry, but it's not really my primary focus. Rather, I'm more interested in how to design a first-year writing course that intrinsically motivates students to think and write before they turn to AI.

Since I'm exploring a design challenge that connects technology, classroom practice, and college-level interdisciplinary collaboration, I've paired two scholars from very different backgrounds to help me think through my redesign journey. Engineering professor Deb Chachra's *How Infrastructure Works: Inside the Systems that Shape our World* (2023) is a deep meditation on how seemingly invisible infrastructure such as water systems shape individual agency and collective equity. Given how GenAI has become entangled with so much of our teaching and learning infrastructures, I'm thinking alongside Chachra to better understand GenAI within broader infrastructural contexts rather than solely as a question of implementation.

Over the course of my first year in this new position, my role as interdisciplinary designer has become very much aligned with Writing Across the Curriculum (WAC) theory and practice. Writing Studies scholar Caitlin Martin's "Beyond WAC: Transforming Institutions, Transforming WAC through Deep Change" (2022) serves as a useful WAC entry point and a productive pairing with Chachra's understanding of infrastructure. Where Chachra is helping me to understand infrastructure and agency, Martin discusses the importance of a theory of change to facilitate sustainable transformation of college writing.

Both scholars are useful thinking partners as I explore the design of first-year courses in my new position. They may be useful to WAC/WID (Writing Across the Curriculum/Writing in the Disciplines) directors and others invested in writing course design, particularly those who seek to make ethical and effective design choices that include (but are not dominated by) GenAI. After a brief discussion of Chachra, Martin, and responses to GenAI in our field, I present a brief analysis of the Montclair science writing course redesign and how GenAI shows up in it. I conclude by presenting some tactics I believe move our project toward the kind of deep change that Martin calls for in WAC practice.

Infrastructure and Change

In *How Infrastructure Works: Inside the Systems that Shape Our World*, Deb Chachra (2023) made a point that seems blindingly obvious but one that many of us take for granted. Access to electricity and potable water means we don't have to spend countless hours cooking over campfires or walking miles to the nearest well. We can stay warm more easily, in winter, and electric light means we aren't so limited in our choices once the sun goes down. As Chachra explained, "infrastructural systems, by their nature, are more than just technical—they're inextricably social and political because they are intrinsically collective." (p. 120). Access to collective infrastructure is key to personal agency, and the breakdown of shutting off or not adequately regulating infrastructure is the basis of inequality.

The idea that GenAI should become government-regulated infrastructure that grants us collective agency, like access to electricity, has long been in circulation (see Gideon Lichfield 2025, for example). Instead, GenAI consumes vast amounts of electricity at huge environmental cost, remains federally unregulated (in the US, at least), and has created massive upheaval across all sectors. As teachers of writing, we do not need to read Hua Hsu's "The end of the English paper" in *The New Yorker* (2025) to understand the havoc GenAI is having on student learning. GenAI is already woven into the teaching and infrastructures teachers and students rely on daily. Our learning management systems, plagiarism detection software, search engines, and even our email and word processing platforms increasingly incorporate GenAI capabilities, making binary arguments about "using" or "not using" AI increasingly difficult to make.

Writing Studies has already provided so many thoughtful responses to GenAI to draw from I have space to mention just a few. There are resources on why and how and when to refuse AI completely (Jennifer Sano-Franchini et al, 2024). Robert Cummings, Stephen Munroe, and Marc Watkins experiment with GenAI in the first-year writing classroom in the first of two special issues on GenAI already published in *Computers and Composition*. I'm grateful for *TextGenEd* (2023), partly because the edited collection gathers many creative

assignments, but also because editors Annette Vee, Tim Laquintano, and Carly Schnitzler situate GenAI in the context of a much older tradition of generative text technologies. The “AWAC Statement on AI and Writing Across the Curriculum” (AWAC Working Group on AI in WAC, 2025) provides clear and compelling principles, reaffirmations, recommendations, and resources. The advice that struck me most deeply arrives at the end of the statement, before the appendices: “Together, these recommendations underscore a central premise of WAC work: that writing instruction is most effective when it is context-aware, collaboratively supported, and rooted in inquiry” (p. 15). Channeling Chachra (2023), it’s better to lean into the infrastructures we know grant us collective agency as we respond to and design alongside disruptive technologies.

Thinking about how existing writing infrastructure can help us transform writing across our institution requires a commitment to “deep change,” according to Caitlin Martin (2022). Adapting the work of Adrianna Kezar (2018), Martin argued that sustainable transformation requires developing a theory of change that works simultaneously at two levels: first-order changes such as adjustments to behaviors, structures, and policies, which we might consider to be a kind of visible infrastructure; and second-order change such as shifts in beliefs, values, and attitudes that are less immediately apparent. Deep change only occurs when both orders of change are present (Martin, p. 14). Next, I interpret the development of “The Emerging Scientist” as a kind of “first order” infrastructure, and I conclude by describing how aspects of second order change are already emerging in our work.

Designing Infrastructurally: “The Emerging Scientist”

During the summer of 2024, I began working to redesign “Writing in Science” with a new colleague, Liz Martin. Liz had taught earlier versions of the course and at the time served as associate director of the first-year writing program in the Department of Writing Studies. Liz discussed with me the specifics of campus culture at Montclair and the kinds of pressures students face that may have contributed to lack of connection with the course and their reliance on AI. Students often jostle school with work and family commitments, and many are unclear about the direction of their professional futures when they arrive on campus. At Montclair, 45% of the student body identify as Hispanic. Nearly half receive Pell grants, and 44% are first generation college students (Montclair State University, 2023). Montclair supports its diverse body of students through many initiatives and services that enhance student belonging. Terrell L. Strayhorn (2018) defined belonging as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the

campus community” (p. 4). This commitment to connectedness, care, and support is reflected in the newly redesigned general education curriculum, SEEDS, which is focused on self-discovery and exploration.

The connectedness and support that scaffold student belonging are also integral to the design work this project required. Leadership in writing studies and across both colleges has provided resources to make the design work happen. Over the past year, Liz and I have built a collaborative relationship based on trust and creativity that is amplified by colleagues who have joined us to teach and improve the course. Our students have responded well to the new direction and teach us daily how to make their learning better. Collaborative relationships built from trust and that spark joy and are vital to an infrastructure that empowers our collective agency—particularly as we design in response to a technology that cannot understand human experience. It is with this collective effort and spirit in mind that I offer up the following design strategies that have shaped how this course was designed.

1. Embed reading and writing instruction in experiential learning opportunities.

Earlier iterations of this course focused on genre instruction, but many of the students didn't have a clear sense of their academic or professional futures and couldn't connect with that work. Mya Poe, Neal Lerner, and Jennifer Craig suggested that science and engineering students learn better when they see how technical genres “are shaped by the contexts in which they are produced and the social exigency of that production” (p. 10). We have built on this insight across several assignments to foster a greater sense of belonging among our students. For instance, we introduce students to reading professional research by first reading about science breakthroughs that are reported in the media, tracing that scientific intervention backward to press releases and academic abstract databases, and only then commit to understanding how to read original research. When learning to compose science reports, students perform a simple and fun experiment in class where they measure the absorbency rates of different brands of paper towels. Assignments like this help students to understand professional research in the context of its circulation and impact, as well as to practice technical writing genres.

2. Enhance students' sense of belonging by drawing on expressivist and reflective writing techniques.

In his exploration of what he calls the “tacit” tradition of expressivism in writing studies, Eli Goldblatt (2017) isolated what he considers to be four

“legacies” of the tradition, the first of which speaks directly to fostering a sense of belonging. “The individual, embedded in culture and history,” Goldblatt wrote, “must find a way of being in the world through expression that cannot be adequately prescribed by textbooks, standardized curricula, or social norms” (p. 443). Liz and I prioritized what Goldblatt called “a way of being in the world” by kindling a sense of wonder among students about science and how it is communicated. The course begins with “My Journey as a Scientist,” an adapted literacy narrative written initially as a series of blog posts that we later edit into a single narrative. Throughout the semester, students report back to the class about examples of science they encounter in their everyday reading and media consumption practices in an assignment called “Science in the Wild.” Students have found inspiration in all sorts of media and genres, including true crime podcasts, children’s books, and sports commentary. We complement these personal explorations by teaching students to write ethnographic-style observations called field notes. These enable students to observe and document how science and their own experience as writers and learners surfaces, not just in class, but throughout their daily lives.

3. Encourage students to form a deeper connection between their thinking and writing by introducing GenAI editing assistance to texts that relate to students’ direct experience.

We ask students to not use GenAI during the first half of the semester, which gives them time to connect more deeply with the personal writing and experiential qualities of the assignments and readings. In the second half of the semester, we introduce GenAI readings on ethics and literacy practices. We ask students to feed their ethnographic-style observations into the audio tool built into Google’s Notebook LM software. The audio tool creates a (somewhat scarily) realistic-sounding podcast of two GenAI-generated voices discussing the themes of the students’ field notes. Students often delight in having their writing being the subject of a podcast, but don’t always agree with the interpretation of their lived experience provided by the nonhuman hosts. This fun assignment serves as an excellent staging ground to discuss GenAI’s inability to connect with lived experience beyond manipulating language. Throughout our AI-related discussions, we strongly emphasize the critical importance of writing from experience first and editing with GenAI later. To model that principle, students learn to edit with GenAI using long-form narratives comprised of their “My Journey as A Scientist” blog posts and collaboratively-authored experiment reports.

4. Use process-based portfolio methods to help students and their teachers to better understand what learning is taking place.

To assess the course, we employ a portfolio model called the “Learning Record” (Syverson, 1999). Throughout the semester, students gather evidence of their learning in the form of drafts, finished projects, field notes, notes on readings, presentations, and even materials for other classes that students believe contribute to their learning in this course. Using the Learning Record as our assessment method has several benefits. It offers students a metacognitive infrastructure by presenting them with the opportunity to reflect upon and interpret their learning. The portfolio model reinforces the experiential and expressivist approach of many of the course assignments, and it scaffolds students’ academic writing ability by teaching them to present and analyze evidence. Finally, the reflection-based structure of the portfolio provides students with space to reflect on their own use and attitudes toward GenAI, potentially giving instructors and administrators valuable insights. Research is emerging that assessing GenAI use is proving to be difficult in undergraduate learning (see Thomas Corbin et al., 2025). I offer that process-based portfolios, an important tradition in writing studies, could be important across disciplines as instructors grapple with GenAI and assessment.

Happily, “The Emerging Scientist” redesign has been enthusiastically received by CSAM leadership. In December 2024, Liz and I trained 11 instructors to teach 20 sections in the Spring of 2025, and we hope to be ready to serve nearly 1,000 science majors across 50 sections by Fall 2026. We have welcomed the ideas and expertise of our growing faculty team as we design iteratively, and we hope to learn more from an IRB-sanctioned study that is currently under way. Early grade data from our first two semesters already suggests that this course is having a very positive impact on lowering DFW rates (students who earn a D, F, or withdraw from the course).

Thinking “infrastructurally,” “The Emerging Scientist” is a first-year writing course that attempts to enhance students’ sense of belonging. It does so by embedding critical thinking, reading, and writing skills into experiential and expressivist assignments alongside process-focused assessment. Placing GenAI literacy skills in service to these broader aims may, I hypothesize, strengthen students’ motivation to not use GenAI indiscriminately throughout the writing process. This design choice opens up provocative questions for us to explore as we move forward and learn from our research study. Does a greater sense of student belonging increase students’ confidence in their writing and thinking skills? Does that confidence serve to reduce or change their reliance on GenAI? Will the increasing ubiquity of GenAI in student work spark a widescale

return to reflective and expressivist pedagogies? Are we finally on the cusp of widescale adoption of process-focused portfolios and other alternative grading systems? I argue that these kinds of questions are examples of “infrastructural thinking” because they focus on contextually-focused relationships between different infrastructural elements such as first year writing methodologies, critical thinking skills, and technology-enabled instruction. Particularly for WAC/WID designers and writing programs that steward general education writing courses, I suggest such relational questions are more generative than implementation-style questions like “how do I apply GenAI in first-year writing?”

Making Way for Deep Change

“The Emerging Scientist” is the 100-level component of a two-course intensive writing sequence. We have already piloted a 200-level companion course called “The Scientist in Society” that builds on the skills and methods students are introduced to in the 100-level “The Emerging Scientist.” To that two-course sequence, we have added a third, problem-focused course that presents students with opportunities to work in interdisciplinary teams on problems provided by real clients. We are piloting that course in Fall 2025, and have already applied for this three-course, nine-credit sequence to become a certificate in writing, collaboration, and design for science majors.

To make that expansion sustainable will require attention to underlying systems, values, and relationships. Martin (2022) emphasized that deep change occurs only when first order structural changes and second order underlying shifts in beliefs and assumptions happen together (p. 13). Since we are only three semesters into our redesign experiment, it is too early to know for sure whether these courses will result in systemic change on campus. However, we are closely following three of the guidelines that Martin argued lead to deep, second order change:

First, we are shifting our focus from practice and strategies to underlying conceptions. “The Emerging Scientist” is designed to provide core writing and critical thinking instruction in the context of enhancing student belonging. Belonging is a strategic priority on campus and has the potential to reframe for campus partners what can be achieved in a first-year writing class. If our study of the course helps us see a decrease in AI use because of students’ enhanced sense of belonging, then we also have the potential to shift attitudes and practices regarding GenAI instruction and at the general education level across campus (and perhaps beyond).

Second, we are designing long-term initiatives. Martin (2022) advised to “develop long-term initiatives that engage institutional stakeholders in sustained conversations about writing, teaching, and learning” (p. 17). The

courses we are creating for CSAM are designed to serve all their majors. We have also had productive conversations with other colleges on campus about adapting our courses for their majors. This kind of expansion presents an opportunity to shape a multi-course introduction to GenAI, presenting students with more scaffolded instructional time to get used to using GenAI in service to (rather than in place of) their learning.

Third, we are practicing distributed leadership. Martin (2022) noted that “change efforts require leadership of different types from multiple institutional standpoints” (p. 18). While my position was created explicitly to build interdisciplinary cultures, I’m merely one collaborator among many. Developing this infrastructure involves my department chair and first-year writing leadership, colleagues like Liz Martin and the many instructors who have taken up the opportunity to teach and bring their own expertise to “The Emerging Scientist” and other courses. Other important stakeholders include deans’ offices of two colleges, the College of Science and Mathematics board, the provost’s office, instructional technologists, librarians, research consultants, and of course the students themselves.

With just a year under our belts with this project, there is much left to achieve, and many more insights and processes we need to document. What I have learned thus far, and what has been confirmed by lenses provided by Chachra (2023) and Martin (2022), is that as an interdisciplinary designer I’m primarily a designer of relationships—and those relationships are profoundly informing my practice. Bringing my design work into the orbit of first-year writing has brought me closer to WAC thinking and doing. The continual encroachment of AI has prompted me to value more closely the expressivist and experiential traditions of our discipline. And being situated in a vibrant writing studies department has deepened my belief in collaborative, interdisciplinary potential.

Finally, and in the context of this profoundly unsettling period of history, most urgently: my understanding of sustainable and ethical innovation has become very much aligned with infrastructural integrity and relationships of trust. As Chachra (2023) wisely wrote:

The most radically important promise of infrastructural systems is not just that they underpin our individual agency but that they can do so in a way that is democratic and universal. Most technologies are sold on the premise of being liberatory, but infrastructural systems have genuinely demonstrated that they are. (p. 311)

The next time you read a screaming headline about how AI is going to demolish humans’ ability to think, turn off the screen. Close your eyes. Breathe. Gently

push to the side the inevitable annoyances and roadblocks caused by clunky campus infrastructure. Think instead of those instances when you and your students happen upon a joyous moment of learning and connection. Think of the times a beloved colleague had your back or inspired you to do your best work. Trust that in those moments lie the answers to what comes next.

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GenAI Authorship and Agency in a Professional Writing Course

Margaret Poncin Reeves, DePaul University

The emergence of highly capable and widely accessible generative AI tools has sparked widespread concerns about student authorship and agency. This pilot study draws on student reflections from a 5-week undergraduate Professional Writing for Business course in which students had the option to use AI to compose their assignments. These reflections suggest three key insights: First, that AI use creates new opportunities for developing students' critical AI literacy (Bali, 2023; MLA-CCCC Joint Task Force, 2023) and rhetorical metaknowledge. Second, such integration presents challenges around students' perceptions of their own learning and agency. Finally, the study suggests a pedagogical process for AI literacy that is iterative, building in repeated opportunities for AI-assisted composing, reflection, and instructor feedback on both the writing output and the AI-assisted writing process. This approach can help faculty and students illuminate—and navigate—the conflicting understandings of plagiarism and intellectual property that can occur in PW courses, sites where differing academic, workplace, and digital cultures converge.

This study reflects a moment in time. The summer of 2023 feels like a lifetime ago in the world of AI development, and yet questions around AI use in the classroom remain unresolved: Should we ban it? Resist it? Embrace it? Do we stay the course or upend everything we're doing in the classroom? At the time, I was preparing for my autumn course, Professional Writing for Business, and I was reading a mix of laments and celebrations of the ways large language models (LLMs), particularly ChatGPT, had disrupted education. Outside the field of composition and rhetoric, research teams like Shakke Noy and Whitney Zhang (2023) and Fabrizio Dell'Acqua et al. (2023) released large-scale studies of workplace writing suggesting that access to ChatGPT could improve professionals' work. Surveys like Cardon et al. (2023) described a widespread view that this technology would be essential in business communication moving forward. At the same time, there was growing concern over students offloading their learning and agency to LLMs (Cardon et al. 2023). In the popular press, Stephen Marche (2022) decreed the college essay “dead,” Ian Bogost (2023) declared that the past year had “end[ed] in ruin,” and Ethan Mollick proclaimed a “homework apocalypse” (2023).

In other words, it seemed clear that I couldn't ignore this development. What was less clear was how. If I allowed it into my classroom, what would happen when "the nearly unbridled power of ChatGPT" was unleashed (Cummings et al., 2024, p. 4)? Would students offload their agency and authorship to these AI tools? What would they learn—or fail to learn—about writing?

In taking on these questions, this paper contributes to a growing body of work exploring student perspectives on writing with LLMs (Bedington et al., 2024; Jiang et al., 2024; Fyfe, 2023; Yan, 2023), which demonstrate diverse attitudes, uses, and understandings of generative AI (genAI) that complicate the popular narrative of it simply being a cheating tool (e.g., Barbaro, 2023). As Stephen McElroy and Kristi Girdharry (2024) point out, "Listening to students' views provides a more comprehensive understanding of AI's impact on education and helps to ensure that ethical guidelines and teaching strategies evolve in ways that resonate with and benefit the primary users in educational settings"—that is, students themselves (p. 579). In this spirit, this paper draws from student voices to examine the impact of genAI on their sense of agency and how these perceptions are complicated—and even contradicted—by their interactions with it. It suggests a pedagogical process for AI literacy that is iterative, building in repeated opportunities for AI-assisted composing, reflection, and instructor feedback on both the writing product and process. Such an approach, which allows students autonomy over their learning, can create a more trusting environment in the classroom, creating space for instructor guidance around AI use.

Methods

This pilot study draws on student reflections from a 5-week 2-credit undergraduate Professional Writing for Business course. The two sections from which students were recruited were taught in an online asynchronous modality. In the course, students wrote four packets of short documents in response to different workplace scenarios (see Table 11.1). For each packet, students could choose to write their documents with or without AI assistance. Following the approach used by Paul Fyfe (2023), if students chose to use AI, no limitations were given on its use, but they needed to accompany their documents with a human-authored reflection. Of the 23 students enrolled across the two sections of the course, eight agreed to share their reflections for this IRB-approved study. The reflections were de-identified and coded using thematic analysis (Braun & Clarke, 2006). All names used in this paper are pseudonyms.

In their reflections, students were asked to consider their AI-assisted process and their learning:

Process Questions

1. How did you prompt the AI?
Did you simply copy my assignment? If so, which part?
Did you do anything to guide the AI into producing more useful output? (In other words, did you engage in prompt engineering?) If so, how did you guide the AI?
2. Did you revise the AI's output? If so, what did you change and why?

Learning Questions

3. To what degree are these documents “your” writing?¹ Do they sound like you? Would you consider them your intellectual property or the AI company's? Explain.
4. What is your takeaway from using AI on this assignment? What did you gain and what did you lose by using AI to assist you?

Table 11.1. Summary of Packet Contents

Packet 1	2 internal emails and a memo delivering mixed news
Packet 2	A series of internal and external documents in response to suspicious activity in a bank client's account
Packet 2	A memo advising company leadership on an ethical dilemma
Packet 4	A series of internal and external documents in response to a negative online review

In this way, the course created what Matthew A. Vetter, Brent Lucia, Jialei Jiang and Mahmoud Othman (2024) called a *local ethic*, “a framework that is capable of exploring unique ethical considerations, values, and norms that develop at the most foundational unit of higher education—the individual classroom” (p. 1). This local ethic, Vetter et al. argued, aligns with calls for a more ecological understanding of ethics, one in which students and teachers negotiate ethics through “ongoing dialogue” (p. 3).

To facilitate this dialogue, the course was designed to allow students multiple opportunities for AI experimentation on both their written product and their AI-integrated process. This iterative approach provided insight into how students were using AI in their projects—how they were prompting it and editing its output—and allowed me to provide feedback on how this use might be helping or hindering their success. Additionally, this course structure created opportunities for dialogue around ethical AI

¹ This question is taken directly from Fyfe (2022)

use, including guidance on whether students' choices around AI might be accepted in other courses or in the workplace. For example, in the opening materials for the course, I asked students to consider what other ethical systems would be available to them:

When deciding whether to use AI for this class, keep in mind that you may not be allowed to use it in your other courses—definitely check each professor's policy. Additionally, many workplaces have banned AI use over security and intellectual property concerns; others will automatically reject candidates using AI assistance for their cover letters or resumes. In other words, consider what you'd like to get out of this class: Are you hoping to better understand how to use AI as a writing assistant? Or are you more interested in learning how to compose for situations when AI use isn't possible?

I was then able to return to the local ethics of various workplace and classroom uses in my feedback throughout the course.

Student Uptake of AI

Overall, 4 of the 23 students enrolled the course opted to use AI on all their assignments, while 7 students chose not to use artificial intelligence at all (Figure 11.1), echoing Robert E. Cummings, Stephen M. Monroe, and Marc Watkins' (2024) conclusion that "college writers may not always be eager adopters of AI tools" (p. 9). One interesting finding was that student uptake of AI peaked in Assignment 3, with 13 students opting to use it, but decreased on the final assignment (Figure 11.2).

If students were completely offloading their learning to AI, one would expect that once they did so successfully, they would continue throughout the term. While it is outside the scope of this study to measure the success of AI-assisted writing versus purely student-generated writing, from my perspective, I didn't notice a correlation between grades and AI use. Some students' documents were more successful when they used AI assistance; others weren't. Further, while there were a few students whose work was unsuccessful because they submitted AI output with only cursory edits and little critical thinking, substantial revision of AI output didn't necessarily guarantee better outcomes. In fact, this is similar to Shakked Noy and Whitney Zhang's (2024) results. Their study of professional writers did not find that extra time spent editing AI output led to statistically significant improvement in how documents were rated.

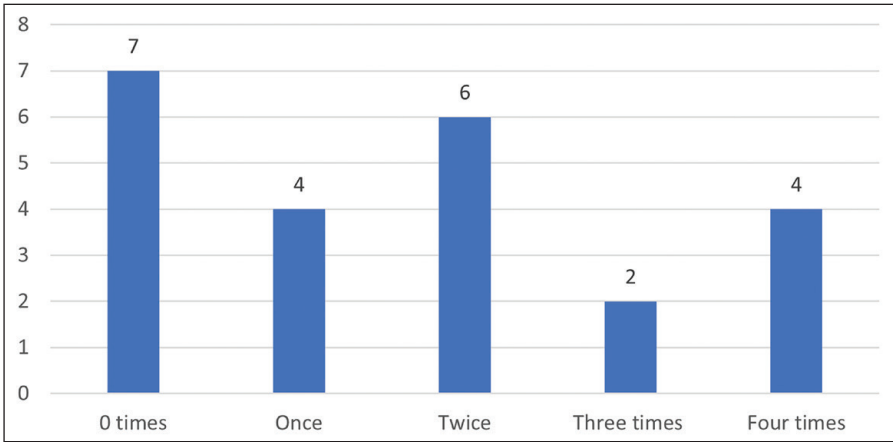


Figure 11.1. Number of times students reported opting to use AI (out of 23 students)

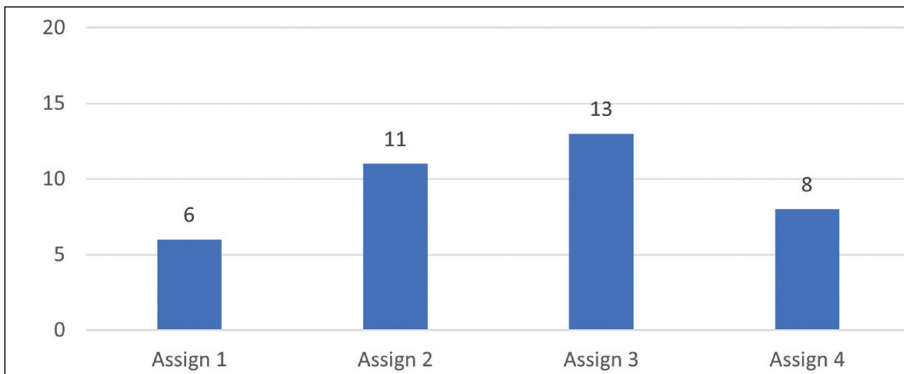


Figure 11.2. Number of students reporting use of AI from assignment to assignment (out of 23 submissions)

Students' Perceptions of their Learning

Many students reported that using AI helped them think more deeply about the course concepts, including rhetorical theory, and—of course—AI itself. For example, a student I'll call James wrote:

My takeaway was really learning how to use AI. Given my very limited experience with AI, I wanted to try it for an assignment in this course before the quarter's end but I wanted to find my style before and I feel I did that over the first 3.5 weeks. So, my biggest takeaway was seeing how effective it

can be and to not be afraid of prompting it to give it the style I want and not be afraid to change what it gives me to fit that voice as well.

Another student, Eric, reported:

I have found that often my results are more appropriate when asking [ChatGPT] to first consider the context in which they are creating the finished product. ... As humans, we use rhetorical tools to communicate; I believe it is equally important for the AI to understand the context of the rhetorical situation as it often offers a more tailored result.

Others, though, admitted that they were using AI to replace their learning. Kalia described her experience this way:

My takeaway from using AI this assignment, is that it definitely saved me a lot of time, however, it can cost me the skill of taking my time and organizing such assignments. It also takes away my integrity as I did not input much into this assignment.

While Kalia subsequently chose not to use AI on her other assignments, another student, Asher, took a different approach. He also reported that using AI inhibited his learning, saying, “[I]t’s a dependency cycle. ... you don’t learn anything when someone else does the work.” Asher, however, continued to use artificial intelligence on three of the four major assignments in the course despite continuing to report that he was “los[ing] the learning aspect of the assignment[s].”

This admission would seem to suggest that Asher’s approach involved little critical thinking. In actuality, however, there was a disconnect between Asher’s reports of his sense of agency in the learning-focused reflective questions (3 and 4 above) and his description of his process (questions 1 and 2). In fact, his approach to prompting and editing involved a great deal of experimentation and thoughtfulness. For example, he reported refining his prompt through several iterations, testing it across multiple AI platforms before settling on ChatGPT, and then using his own insights as well as the tool itself to revise the output.

What to make of this disconnect? Professional writing exists at the intersection of different workplace and academic cultures (Reyman, 2008). Claire Lauer and Eva Brumberger (2019) contrasted writing in school “where students are asked to produce complete documents through a process that begins with invention and drafting and extends through revision and delivery”

with what they observed in professional settings, where “many writers actually act as multimodal editors...often encountered *in medias res* after the content has been originated by coworkers or consultants” (p. 637). Perhaps Asher’s discomfort stems from this difference: He was accustomed to writing in academic spaces and so acting as prompter and editor—shortcutting the drafting stage—left him uneasy.

AI Enhances Creativity...All in the Same Direction

Because of his extensive upfront work, Asher also noticed something other students didn’t report: that large language models often produce similar output, despite individual variations to the prompts. As Asher put it, “I ran [the prompt] through about five or six times and started to see that the same wording and structure start to reappear. Even though I tried to engage in prompt engineering to a[n even] greater extent, I found the limit of what I could do when it came to altering the structure and wording of the memo.”

I was beginning to notice this similarity as well. The third assignment centered on an ethical dilemma that I had assigned to students many times over the years. This time, though, I saw students present solutions I’d never seen before—really good ideas, too. However, many of them presented the *same* novel solutions. In other words, a paradox started to appear. From the students’ perspectives AI use enhanced their critical thinking: multiple students reported that AI helped them think more deeply about the ethical dilemma. For example, one student described the AI tool as “guiding” him to “look at the ethical aspects and much more complicated topics than what I initially thought of alone.” Another reported:

I gained a lot of knowledge being able to see the ideas that the AI generated and gained a different understanding from the ideas that I wouldn’t have thought of on my own.... I believe that the AI allows one to gain a more in depth understanding of the problem at hand and solutions that can be used to solve it.

Yet, from a reader’s perspective, this notion of expanded critical thinking disappeared because so many other writers’ ideas seem to have expanded in the same direction. As I wrote in a message to students, this similarity suggests “limitations for using AI for workplace writing: If you use it in a client pitch, a job application, or a class paper—and your competitors are also using AI—it might be more difficult to distinguish yourself.”

This finding aligns with other studies that suggest that while AI use can increase an *individual's* creative output, it may flatten creativity across *groups* (Dell'Acqua et al., 2023; Doshi & Hauser, 2024). It also emphasizes the benefits of an iterative, open approach to AI that integrates reflection and feedback. When we don't know if or how students are using AI—or if we ban it outright—it becomes more challenging to show them its limitations. In this case, this demonstration of limitations might explain why fewer students selected the AI option in the final assignment of the course.

Distributed Agency, Neither Human nor Machine

Perhaps unsurprisingly, many of the students who opted to use artificial intelligence, particularly those who used it on multiple assignments, reported a different orientation to intellectual property and authenticity than many educators. Eric, when asked about this, responded:

Who owns the IP behind the generated works? ... If I were to punch $2 + 2$ into a calculator and it responds 4 would I say that is my answer or the calculator's? I would argue that it is somehow simultaneously both and neither.

I consider this similar to if I composed a loan amortization spread sheet and showed my boss saying, "Here are my calculations," my boss would most likely not respond by saying "LIAR! Those are Excel generated calculations." [A]lthough ChatGPT generated the result, I plugged in the inputs and conditions, and I claim full accountability for the work meaning I am staking my reputation on the accuracy of Chat.

In this way, Eric's response suggests a theory of agency that is more complex than what my reflection question (Is this 'your' work?) implies. Instead, it aligns with Jialei Jiang, Matthew Vetter, and Brent Lucia's (2024) findings that some students take a view of agency that is distributed, neither fully human nor machine: "agency is not confined to individual entities but is distributed across various actors. Together, humans and nonhumans collectively create agential capacities that continually adapt and reshape in reaction to ongoing movement and socio-material action" (p. 926). In the case of genAI, "The agency of writing becomes distributed across both human and nonhuman actors, generating a synergistic effect." (p. 3). Thus, Eric's reflection reminds us that our choices in the workplace aren't fully ours: They are influenced by office hierarchies, the norms and procedures of our fields, and the technologies that mediate our work.

Additionally, Eric shows that our disciplinary values are not necessarily shared by all writers—that ethics reflect local contexts and rhetorical ecologies (Vetter et al., 2024). Eric was a senior, and—as his example of the loan amortization spreadsheet suggests—was deeply immersed in his discipline, which colored his perception of the role of writing. The MLA-CCCC Joint Task Force on Writing and AI defined writing as “a process as well as a product” (p. 3) and asserted that “generative AI cannot simply be used in colleges and universities as it might be in other organizations for efficiency or other purposes” (p. 3). However, for many writers in this study, it is the product, rather than the process, that matters and will continue to matter as they enter workplace writing contexts.

Hidden AI, Transparent AI

A final finding from this iterative, open, and reflection-based approach was that it made conversations around artificial intelligence a lot less loaded. In simple terms, it allowed me to teach: I was able to comment on students’ AI implementation, suggest prompt engineering techniques and revision strategies, and correct misassumptions about how genAI works. For instance, when a student, George, submitted an assignment that appeared AI-generated without the required reflection, rather than accusing him of “cheating,” I simply emailed a reminder to send in the missing component. George, however, responded that he *hadn’t* used AI. So I asked him for a chat. Our subsequent conversation led to the realization that he was using artificial intelligence without realizing it.

Too often, a student’s failure to cite AI is treated as a moral failing or attempt at deception, when sometimes, it is simply an error. By treating artificial intelligence tools like any other technology, “neither good nor bad” (Kranzberg, 1986, p. 545), conversations around unacknowledged AI use became a lot less fraught.

However, that’s not to say that these technologies are neutral either (Kranzberg, 1986). In fact, this conversation was a wake-up call for us, helping us realize the interface of Grammarly, the tool that George was using, obscured the fact that genAI was integrated into the platform. The result was that both of us built our critical AI literacies (Bali, 2023): George was subsequently more judicious in his uptake of Grammarly suggestions, eliminating the generic language choices that flagged to me as AI-generated, and I became more cognizant of how hard it is for students to navigate AI use, especially with tools like Grammarly, CoPilot 365 and Gemini being built into word processors and search engines: They don’t always know when they’re using it.

Conclusion

Overall, the reflections I collected from my students present conflicting views of agency when writing with AI. While some, like Eric, seem comfortable with a sense of distributed agency, others, like Kalia and Asher, were uneasy with losing control over their work and their learning. At the same time, Asher's reflection demonstrated that students' sense of their agency and their actions aren't always aligned. While he reported feeling a "dependency cycle" with AI, his reflection suggested that he was, in fact, thinking *very* critically about his prompting and the AI output. Meanwhile, George, who thought he was fully in control of his writing, found that AI had taken over without his awareness.

The pedagogical implications of these students' experiences are also complex: On the one hand, given the potential loss of control over their work, it seems important to allow students to "refuse" AI (Sano-Franchini, McIntyre, & Fernandes, 2024). At the same time, when 85% of college students have used AI for coursework (Flaherty, 2025), these students' challenges reinforce the MLA-CCCC Joint Task Force's (2024) assertion that faculty "simply cannot afford to adopt a stance of complete hostility to GAI [or generative AI]: such a stance incurs the risk of GAI tools being integrated into the fabric of intellectual life without the benefit of humanistic and rhetorical expertise" (p. 9). In other words, students need our support and guidance.

In particular, navigating this shifting terrain requires explicit conversations with students around the ways that these technologies challenge traditional notions of authorship and agency. One potential framework is Jiang, Vetter, and Lucia's (2024) concept of a "more-than-digital" AI literacy. Drawing on Latour's (2004) actor-network theory, this framework advances the notion of agency and authorship as distributed, "constantly evolving and embedded within the interactions between student writers, AI technologies, and elements of classroom ecology" (2024, p. 924). Raising the awareness of genAI as an agential technology can help students make more informed decisions about their work, recognizing when it might be influencing their output.

One possible classroom approach is the iterative approach that I took here: Giving students repeated opportunities to choose whether to use AI and asking them to reflect on those choices. This course structure allows students to receive feedback on their process and the rhetorical impact of their work, and it encourages them to consider the effect on their learning. Such an approach doesn't ignore the complex nature of distributed agency. Instead, it allows instructors and students to experiment together, negotiating this tangled, evolving ecology openly, and—hopefully—more successfully navigating our current moment of AI disruption.

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“Embracing Girlmode”: Examining Claims of Agency for Incels in the *Transmaxxing Manifesto*

AJ Siegel, University of Minnesota, Twin Cities

Amidst a so-called ‘masculinity crisis,’ incels (involuntary celibates)—an online male supremacist group characterized by nihilism, anti-feminism, and violent misogyny—are responding to pressure to perform hegemonic masculinity in a new way: transitioning to women. As an offshoot of looksmaxxing, which outlines ways to ‘maximize’ one’s physical appearance, transmaxxing replaces attempts to perform hegemonic masculinity with calls for incels to undergo male-to-female gender transition for “personal gain.” In other words, transmaxxers are renouncing their masculinity to gain access to queer and feminine resources and communities without necessarily identifying as transgender women, effectively co-opting queer identities and experiences for personal power. This online community primarily functions via Discord, with the digitally published *Transmaxxing Manifesto* as its foundational text. Through transition guides, analyses of academic studies, and testimonials, the *Transmaxxing Manifesto* offers incels agency over their lives, social status, and sexuality. However, this appropriation of queer and feminine identities is also a means of reinforcing power over women and trans people. This manifesto aims to grant transmaxxers rhetorical and embodied agency by co-opting trans womanhood, prompting an investigation into how male supremacist groups like incels can manipulate and appropriate queer identities and experiences to (re)gain power over themselves and others.

Amidst a so-called ‘masculinity crisis,’ incels (involuntary celibates)—a male supremacist group characterized by nihilism, anti-feminism, and violent misogyny—are responding to pressure to perform hegemonic masculinity in a new way: transitioning to women. As an offshoot of looksmaxxing, which outlines various ways to ‘maximize’ one’s physical appearance (Held, 2023), transmaxxing replaces attempts to perform hegemonic masculinity with calls for incels to undergo male-to-female gender transition for “personal gain,” framing medical transition as a “body modification akin to ‘bodybuilding’” (Vintologi, 2024, p. 15). In other words, transmaxxers are incels who renounce their masculinity to gain access to queer and feminine resources and communities without necessarily identifying as transgender women. In doing so, transmaxxing is offered to incels as a way to (re)gain agency over their social status, sexual

experiences, and overall lives. However, this practice also co-opts queer and trans womanhood, framing transness not as a liberatory exploration of one's identity, but as a utilitarian means to individual gains and material ends. Collectively, male supremacist groups are a prime example of how extreme ideologies can spread and fragmentize within digital echo chambers (Habib et al., 2022), making transmaxxing an invaluable example of the growing abstraction and appropriation of marginalized identities within online supremacist spaces.

Here, I examine the *Transmaxxing Manifesto* (Vintologi, 2024), the digitally published and foundational transmaxxing document. This manifesto frames gender transition as a way to overcome the issues that incels attribute to women's seemingly unjust power and incels' perceived misalignment with hegemonic masculinity. Transmaxxing is positioned as a way out of incelism and "the cursed male gender straight jacket" (Vintologi, 2024, p. 46), where being a (trans) woman grants more power and agency than being a socially disenfranchised incel. Ultimately, I argue that transmaxxing's framing of gender transition as a utilitarian means to gaining agency rests on a male supremacist understanding of gender and sexuality that perpetuates gendered oppression and violence. Notably, this analysis comes at a time when the rights and safety of trans and gender non-conforming people are under attack, and, particularly in the wake of Charlie Kirk's assassination, bad-faith reporting on transmaxxing has been used to perpetuate transphobia and right-wing attacks (López & Street, 2025). In examining transmaxxing, I do not intend to perpetuate these same harms; rather, I hope to demonstrate how marginalized identities can be troubled, misunderstood, and co-opted within supremacist spaces, so that we are ultimately better equipped to combat said harms.

The Manosphere, Incels, and "—Maxxing"

Transmaxxing's roots lie in the manosphere: a collection of digital subgroups dedicated to anti-feminism and male supremacy. Its activism began in the 1970s with the Men's Rights Movement, which was in response to the feminist movements of the era (Marwick & Caplan, 2018). Since then, anti-feminist organizing has proliferated online, with contemporary groups' ideologies and practices varying widely (Ging, 2019). The manosphere's subgroups are largely connected via anti-feminist ideologies and self-improvement practices, wherein the manosphere's "hatred for feminists stems from the belief that [women] are to blame for the flipped gender hierarchy (where men are oppressed by women)" (Jones et al., 2019, p. 1916). Much of the manosphere's self-improvement offers ways to overcome this flipped hierarchy so that men can maintain—or, from their perspective, *regain*—power in all aspects of society, but most prominently within relationships.

Particularly relevant here are incels, one of the most notorious manosphere subgroups. Although the term ‘incel’ was originally coined by a queer woman who created an online community to connect people struggling to find love (DeCook & Kelly, 2022), it was co-opted by male supremacists, and identifying as an incel is now synonymous with male supremacy rooted in nihilism and violence. Where the rest of the manosphere centers self-improvement as a means to (re)gain social status and overpower feminism’s influences, traditionally, many incels see their suffering and low social status as largely immutable (Vallerga & Zurbriggen, 2022). They understand their lives as being at the whim of those who are more attractive, marking their lack of access to sex an undesired and unavoidable consequence of their self-perceived unattractiveness. Many perpetrators of terror attacks motivated by male supremacism have identified or aligned closely with incelism (Baele et al., 2021; O’Malley et al., 2020). Though not all incels are physically violent themselves, digital incel communities are fraught with praising acts of violence and dehumanizing language about women and more masculine men (Baele et al., 2021).

Fundamentally, the manosphere is a crisis of masculinity and gender. Its subgroups offer answers and camaraderie in a world where men claim to feel increasingly lonely, mistreated, and forgotten. Valorizing hypermasculinity and demonizing women, feminism, and femininity provides a sense of relief because it is a simple explanation for complex social issues and dynamics. As women and queer people gain increased visibility (and rights), the manosphere reaches across nearly every online platform and creates spaces where it is okay to express anger and even fear about social changes. Of course, finding comfort in male supremacist groups does not excuse one’s participation, as most members of the manosphere are entitled, hateful, and violent, either rhetorically or physically. As Angela Chen (2020) argued, “Many people feel unattractive and undatable without believing that others owe them sex or resorting to murder. Still, it’s undeniable that the rage of incels is connected to cultural expectations around men and sex” (p. 41). Thus, while the manosphere reflects rising male supremacism and gendered violence, it also provides insight into how different digital communities conceptualize and cope with the so-called ‘masculinity crisis’ in increasingly unique ways.

Unsurprisingly, most people in the manosphere are heterosexual cisgender men, but there is evidence of gender and sexuality diversity beyond that. For example, anti-feminist women in the manosphere are largely motivated by distaste for current ‘hegemonic’ feminism that is supposedly damaging feminine values (Jarvis & Eddington, 2020). Additionally, Ewelina Prazmo (2024) found that incel terminology exists “to refer to female incels and incels of various sexes and sexual preferences” (p. 79). While misogyny is clearly prevalent in the manosphere, this does not universally translate to homophobia; rather,

some—but certainly not all—realms of the manosphere seem open to and even idolize gay men (Ging, 2019). Some incels and looksmaxxers have also admitted to having romantic and sexual encounters with other men (Osuna, 2023; Sousbois, 2025). Of course, misogyny, homophobia, and transphobia are still much more prevalent and openly expressed than feminine and queer identities in the manosphere. Queer women—particularly trans women—often face even higher misogynistic hostility in and outside of the manosphere, where “not only are they punished for being inherently subordinate to patriarchal masculinity, but they are also punished for failing to adequately conform to heterosexual feminine norms” (Czerwinsky, 2024, p. 164).

Although incels traditionally have seen self-improvement efforts as futile (Vallerga & Zurbruggen, 2022), some have begun exploring ways to ‘maximize’ one’s physical appearance, demonstrating a notable shift from incels lamenting about having no control (or accountability) over their lives to undertaking tangible efforts to improve themselves. Incels engaging in this practice are recognizing that they *do* have agency over their lives, even if such efforts to change are rooted in becoming more attractive, not personally fulfilled. These self-improvement efforts are termed *looksmaxxing*, which includes a range of practices generally categorized as *softmaxxing*, referring to relatively mild practices like dieting, grooming habits, and working out, or *hardmaxxing*, referring to more extreme practices like plastic surgery, skin bleaching, or bone reconstruction (Pražmo, 2024). Such efforts are undertaken to become conventionally attractive and perform hegemonic masculinity ‘correctly,’ enabling them to attract women and ascend out of incelhood (Haplin et al., 2025; Held, 2023). Importantly, looksmaxxing is community-based, and individuals often seek evaluations and advice from others to guide their body modification (Sousbois, 2025). Perhaps unsurprisingly, incels’ understanding of attractiveness centers hypermasculinity and whiteness, as demonstrated in the popular *Just Be White* theory and whitemaxxing, which both essentialize race and understand whiteness as inherently desirable (Gheorghe, 2024). Looksmaxxing itself is relatively understudied, but even less attention has been paid to transmaxxing. As of writing, academic scholarship contains only brief mentions of “trannymaxxing” (Andersen, 2022; Pražmo, 2024; Temel, 2023), which Pražmo defined as “an attempt to change to another gender in order to improve one’s dating chances” (p. 78).

(Re)gaining Agency via Transmaxxing

Transmaxxing (as outlined in the *Transmaxxing Manifesto*, at least) was created by the online user Vintologi, who, notably, does not identify as transgender and has not pursued medical transition. Vintologi’s offline identity is unknown, but investigative journalists describe him as a “Swedish, eugenicist,

pro-life, anti-vaxxer, [and] former (maybe) incel” (Agar et al., 2023, 19:34). His eugenic beliefs heavily influence his approach to incels and transmaxxing, as he believes the world would benefit from the removal of incels, and transmaxxing is a way to address the ‘incel problem.’

The transmaxxing community largely gathers in a Discord server, and although there is also a transmaxxing forum and subreddit, the *Transmaxxing Manifesto* provides the most detailed (and open-access) insight into the ideologies and practices central to transmaxxing. In particular, it emphasizes how transmaxxing will provide happiness, physical attractiveness, and a better sex life, all of which are of the utmost importance within incel culture. Importantly, the *Transmaxxing Manifesto* is a persuasive document, as it makes explicit appeals to incel ideology and content to convince them to transition. Here, I examine how the *Transmaxxing Manifesto* claims transitioning will offer incels agency, and, subsequently, satisfaction.

Agency Over Social Status

Like much of the manosphere, incels’ worldview is based on lookism, which argues that physically attractive people have more power in dating and broader society (Solea & Sugiura, 2023). Though hyper-masculine men are seen as powerful in incels’ social hierarchy, men are also ultimately at the whims of hyper-attractive women because of the seemingly unjust power feminism has granted them (Menzie, 2022). Thus, even as incels try to move up the social hierarchy, a more masculine status is still below that of attractive women. However, transmaxxing is framed as freeing oneself from the constraints of the masculinity hierarchy altogether by presenting and living as women. Incels no longer have to suffer because of their inability to perform hegemonic masculinity because transmaxxing calls for them to abandon it. An unattributed testimonial in the *Transmaxxing Manifesto* explains: “As a woman, I don’t have to worry about looking tough anymore or anyone treating me less than if I don’t appear sufficiently masculine” (Vintologi, 2024, p. 46). Thus, the *Transmaxxing Manifesto* offers transness as a way to ‘game the system’ and get around seemingly insurmountable expectations of masculinity.

Beyond being free from masculinity’s constraints, transmaxxing also allegedly grants higher social status solely by virtue of being a woman. The manosphere is united by the idea that women have unjust power in society (Jones et al., 2019), which the *Transmaxxing Manifesto* uses to argue that living as a woman will grant the same status. Importantly, the manifesto also claims that more traditional masculine-based self-improvement efforts are often unreliable and ineffective, ultimately arguing that “there is no escaping the rat-race without actually changing your sex” (Vintologi, 2024, p. 68).

Beyond a very utilitarian understanding of gender transitioning, transmaxxing also relies on a misogynistic understanding of womanhood, claiming that it is a carefree life of pleasure, in which one has no responsibilities or desires beyond being a sex object. Such framing of (trans) womanhood is obvious glorification and fetishization that completely ignores the genuine dangers, violence, and discrimination that trans women face, and instead assumes that life as a woman will be infinitely easier than as an incel.

Agency Over Relationships

One of the biggest topics in the *Transmaxxing Manifesto* is sexual experiences after transitioning. The document includes several pornographic and fantastical descriptions of sexual encounters while taking hormone replacement therapy, along with emphasizing how much more pleasurable sex as a woman is. Though there is obviously much more to life (and womanhood) than sex, for incels, this supposedly ample access is a major appeal. The incel community gathers around a lack of access to sex, and, consequently, the *Transmaxxing Manifesto* argues that trans women can have as much sex as they want: “Having to compete to get sex... [is] not really a thing among trans girls, then [sic] instead loads of males are going to outdo each other trying to get into your pants” (Vintologi, 2024, p. 34). It furthers that not only will incels be attractive, but they will also be ‘exotic,’ given the supposedly rampant fetishization of trans women.

Interestingly, the manifesto assumes that once presenting as a woman, incels will automatically become attracted to dominant men. This assumption alone maintains heteropatriarchy and hegemonic masculinity, but the manifesto also offers a lot of relationship advice that is largely framed around how to attract hyper-masculine partners. It calls for acting submissive, presenting hyper-feminine, and faking a personality—anything to make oneself seem like a sex object and, therefore, desirable. Such advice is rooted in the manosphere’s digital and misogynistic echo chamber, criticizing women even when trying to convince men to present and identify as women themselves. In doing so, the *Transmaxxing Manifesto* calls for self-sexualization and fetishization not for one’s happiness or liberation, but instead for the attention and pleasure of cisgender dominant men. Though this frames womanhood as a constant state of submission, the manifesto argues that said submission is more freedom and agency than incels would have otherwise, because it grants them access to sex. In other words, the *Transmaxxing Manifesto* distorts the ‘choice’ of being a sex object for the male gaze into a means of enacting agency.

Such agency is largely wrought from the supposed material gains one can “extract” from their partners. The *Transmaxxing Manifesto* calls for transmaxxers to manipulate men into giving them gifts or money, which then further

increases their social standing. As the manifesto argues, “By successfully extracting resources for [*sic*] men you will end up with more freedom when it comes to selecting [another] sexual partner” (Vintologi, 2024, p. 60). Said differently, by improving one’s monetary and social status, they can continue climbing the social hierarchy and partner with even more attractive and wealthy men. Such directives clearly mimic the misogynistic assumption that women only sleep with men for monetary gain, essentially calling for individuals to not only fall into but *enact* these same stereotypes. Thus, transmaxxers’ obsession with feminine sexuality reflects ideologies central to the manosphere writ large, illustrating the contagion of harmful ideas between online subgroups.

Agency Over Oneself

Altogether, the *Transmaxxing Manifesto* argues that transitioning provides incels agency over their lives. Incel ideology places undue emphasis on physical attractiveness and social standing, which this online community understands as impacting every aspect of their lives’ worth. Thus, by arguing that one can become physically attractive, gain a higher social status, and have many sexual encounters, transmaxxing is framed as a way to bring agency over and meaning to one’s life. The manifesto argues that after transitioning, incels will be able to have any partner they want, instantly become physically attractive and desirable, and all of their misery will vanish. Such claims perpetuate harmful conceptualizations of feminine and trans experiences, but they also set unrealistic expectations for individuals who buy into transmaxxing as it is outlined in the manifesto. It downplays the amount of time transitioning takes, instead assuming that everyone will become attractive immediately. It also argues that all of one’s mental health problems will dissipate, essentially framing transitioning as a one-size-fits-all treatment for any mental health concerns. In doing so, the *Transmaxxing Manifesto* offers a glorified and dramatized version of trans womanhood, in which every problem vanishes after transitioning.

These claims are exemplified in Figure 12.1: a remix of the Virgin vs. Chad meme, one of the most well-known incel memes (Held, 2023), in which an incel-type figure is typically contrasted with a hyper-masculine Chad figure. In this case, Chad is replaced with “Stacy Transitioner,” referencing the manosphere’s classification of hyper-attractive women as Stacys (Menzie, 2022). This meme encapsulates the arguments made throughout the *Transmaxxing Manifesto*, in which the Stacy Transitioner is “living in a sexual fantasy 24/7,” “can sleep with men whenever she wants,” and is “actually special and worth remembering” (p. 25). Both the manifesto and this meme go beyond arguing that transmaxxing will make someone more attractive and provide access to sex; it will also bring meaning, purpose, and fulfillment to one’s life, which incels often lack.



Figure 12.1. *Virgin Antidepressant User versus Stacy Transitioner meme from the Transmaxxing Manifesto illustrating the supposed differences between incels and transmaxxers (Vintologi, 2024, p. 25)*

Transmaxxing’s Scope and Significance

Transmaxxers are a small group that is not reflective of or equivalent to incels or trans women. The transmaxxing Discord server has approximately 1,800 members, though even fewer seem to be active participants (Agar et al., 2023). While we can draw conclusions about this group based on documents like the *Transmaxxing Manifesto*, it is difficult and incorrect to attribute these beliefs to every member of that community. Liv Agar and colleagues (2023) found that the members who do embrace the transmaxxing label often define it differently than how Vintologi, the self-proclaimed founder of the transmaxxing movement, originally intended. Rather than transmaxxers solely being incels who transition for sex and power, they instead seem to be trans women emphasizing personal gains wrought from transitioning. While access to this community is limited, a documentary followed self-identified transmaxxer Sammy, who said that they began transitioning “in order to have a better quality of life [and] to be treated better by people” (Channel 4 Documentaries, 2024, 9:44). Thus, rather than being a widespread movement made by incels for incels, in practice, transmaxxing may just be a framework people use to rationalize their desire to transition, particularly in the early stages before they are comfortable truly exploring their gender identity (Agar et al., 2023).

However, regardless of its scale, the ideology and practice as described in the *Transmaxxing Manifesto* is a valuable case study of how male supremacism can warp individual and broader understandings of

masculinity, queerness, and transness. By exploring this group, I do not intend to perpetuate harmful conceptions of transness or draw the line for where someone stops ‘counting’ as trans. Instead, I use transmaxxing as a necessary early investigation into how hate-based groups like the manosphere can make room for and rationalize transness. The manifesto’s framing of transitioning as a means of (re)gaining agency shows how oppressive groups can co-opt marginalized identities for their own purposes, along with exposing just how warped their understanding of said identities is. Incels have become a notorious example of online-bred extremism and supremacist ideology (DeCook & Kelly, 2022), making it vital to examine their fracturing and evolution into newer (and stranger) online subgroups with growing offline impacts. Importantly, though the manosphere, incels, and transmaxxers are interesting examples of misogynistic violence, male supremacist ideology is far from unique to just these spaces, and assuming so risks ignoring the various forms male supremacy takes (DeCook & Kelly, 2022).

Conclusion

The common thread across digital male supremacist communities like incels and transmaxxers is power, particularly the perceived lack thereof due to a ‘failure’ in performing hegemonic masculinity. By relying on extreme and unrealistic expectations of gender, the manosphere has created a fantastical worldview that becomes increasingly limited as members get more involved in these digital spaces. Though tied to queer and trans practices, transmaxxing’s rejection of ‘traditional’ gender and masculinity rests not on a world where people are treated equally and able to challenge cisgender heteropatriarchy. Instead, it maintains the very same limiting and unequal power dynamics. Rather than being an avenue for us to recognize and subvert current understandings of gender, transmaxxing instead is a mere extension of oppression and the dominant tensions surrounding hypermasculinity and misogyny disguised as a form of individual agency. In disguising this oppression as agency, transmaxxing not only perpetuates the mistreatment and misunderstanding of trans and gender non-conforming folks (along with furthering essentialist conceptions of gender that harm cisgender people, too); it also lays the groundwork for continued violence. Especially in a period of rapidly escalating attacks on queer and trans people, we—as rhetoric, composition, and writing studies scholars—must pay attention to how the co-opting, appropriation, and misrepresentation of marginalized identities perpetuates oppression in increasingly novel and dangerous ways, now, more than ever.

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AI in the Loop: Rethinking Agency in Human–Machine Collaboration and Its Pedagogical Implications

Liping Yang, Georgia State University

Three years after the launch of major generative AI tools, scholarly conversations have mostly shifted from initial resistance and uncertainty to exploring collaboration and pedagogy potentials, raising a deeper question: What does it mean to say “writing has always been a technology” when applied to human-machine collaboration and composition? This article explores how large language models (LLMs) like ChatGPT challenge traditional understandings of rhetorical agency by functioning simultaneously as both rhetor and rhetorical audience. Drawing on both theoretical inquiries and classroom experience, I argue that, unlike previous communication technologies that primarily altered writing through changes in modality, AI introduces more than a medium shift: it acts as a co-authoring agent (Hart-Davidson, 2018; Duin & Pedersen, 2021); one that redistributes agency and reshapes how meaning, decision-making, and agency identity are formed in the writing process. In response to this shift, I propose a pedagogical framework grounded in metacognitive reflection and writing process theory to help students critically examine their rhetorical choices and maintain agency control in AI-supported composition. This reflective structure fosters a more intentional and independent relationship with AI, positioning students not as passive users but as intentional strategic communicators in a digitally mediated writing environment. Ultimately, the article calls for writing instruction that treats AI not merely as a functional tool, but as a rhetorical actor; one that invites us to reimagine authorship, agency, and pedagogy in the age of writing with intelligent machines.

AI in the Loop: Rethinking Agency in Human–Machine Collaboration and Its Pedagogical Implications

The launch of ChatGPT marked a new era of human–machine collaboration, introducing affordances that distinguish it from previous communication technologies. For instance, large language models can “generate and translate text and other content and perform other natural language processing (NLP) tasks” (Google Cloud, n.d.), and “generate text outputs (natural language, code, etc.) given inputs consisting of interspersed text and images” (OpenAI, n.d.). While humans have long integrated various tools into communication and writing

practices, the rapid rise of large language models (LLMs) left the fields of communication and composition largely unprepared for their integration.

Now, three years after ChatGPT's release, where do we stand in terms of collaborating with this technology through human-machine collaboration (Anderson, 2023; Li, 2024; Gupta & Shivers-McNair, 2025) and human-machine teaming (Duin & Pederson, 2021; McKee & Porter, 2022; Bedington et al., 2024) in our teaching and research? Since its launch, reactions have ranged from excitement and curiosity to anxiety, crisis, and even backlash. By 2025, however, a noticeable shift has taken place, despite ongoing and sometimes strong resistance (Fernandes et al., 2024; Brown et al., 2025). Drawing on recent developments at composition conferences such as the Conference on College Composition and Communication and Computers and Writing, along with related scholarly discussions, we can see that the initial panic has gradually settled into more normalized and, at times, enthusiastic conversations about AI's role in writing instruction and research.

Similarly, at Computers and Writing 2025, themed "Agency and Authorship," approximately 40% of presentations focused on AI, particularly in the classroom settings. These sessions explored pedagogical strategies, assignment design, critical AI literacy, and administrative perspectives on AI in writing instruction. This shift reflects an increasing strategic investment in AI's role in both classroom practice and writing program administration.

Against this backdrop of rapid evolution in academic discourse, this paper considers how AI is reshaping college writing instruction and practices and the broader theorization of agency positionality in the age of human-machine communication. I draw from current scholarship on digital rhetoric and writing, algorithm studies, critical AI literacy, and my own teaching and writing program administration experience to explore questions of authorship and agency in the context of AI, especially as they relate to this year's conference theme. In particular, I reflect on my recent experience leading a departmental AI working group to develop an AI-supported composition curriculum, as well as teaching freshman composition and an upper-level business writing course that integrated AI throughout the semester. I examine both the administrative and pedagogical implications of this integration and consider how AI can be used to cultivate students' critical and meaningful AI literacy, empowering them to engage with this evolving communicative landscape responsibly and reflectively.

Technology, Computer, and Machine in Writing

Writing has always evolved in a close relationship with technology or technological media (Ong, 1979) and mediums (McLuhan, 1964). From the moment

of its invention, writing was met with criticism. In Plato's *Phaedrus* (*Phaedrus*, 257d-277a; Plato, 2002), he noted that writing would weaken memory by detaching knowledge from the speaker's mind and placing it into an external medium. This critique suggests that writing, as a communicative act, separates meaning from the speaker and embeds it into an external material form, what we now understand as a "medium." As such, the medium has always been central to the study and practice of writing.

The history of composition studies reflects sustained attention to how different media shape writing. From Marshall McLuhan's (1964) famous claim that "the medium is the message" to more recent scholarship in digital writing studies, researchers have explored how technological affordances shape writing practices (Kress, 2009), including delivery, genre, audience, and rhetorical situation. Recent work by Gabriel (2000), Gu (2009), and Boltz (2000) on content creation; Porter (2009), Welch (2013), and Moe (2018) on delivery and production; and Gries (2018) and Ehrenfeld (2020) on circulation continues this tradition, emphasizing how writing is situated within and shaped by its material and technological environments. Across these conversations, we see that writing practices are continually mediated by the conditions of their time.

From ancient inscriptions on clay tablets, bamboo strips, and walls in Egypt and China, to handwritten manuscripts, printed books, and now digital documents on screens, each technological shift has expanded the "available means of persuasion" (Aristotle, 1991/350 B.C.E, p. 37), offering writers new ways to invent (Gallagher, 2020), deliver (Porter, 2009), and circulate (Gries, 2018) meaning. These changes have influenced not only how we produce text but also how we conceptualize writing itself in relation to evolving media and modalities (Selber, 2004). For example, with the introduction of paper, writers could preserve ideas more easily and experiment with layout and handwriting style. The advent of personal computers further expanded these design possibilities, allowing writers to manipulate fonts, spacing, margins, and visual hierarchy, enabling a more automated and efficient writing process with easier revision and editing. The internet introduced hypertext and non-linear reading paths, while also expanding access to a global audience. With the rise of Web 2.0, writing became participatory and socially interactive through blogs, wikis, and social media platforms. Readers became co-authors in the afterlife of digital writing (Gallagher, 2020) through comments, likes, and shares, transforming writing into an iterative, communal, and performative act.

These transitions reveal a central insight: writing is not a static or isolated act. It is a deeply social, cultural, and technological practice, embedded in the tools and communication technologies of its time. With each technological shift, new definitions of literacy emerge, such as electronic literacy, cyber literacy, digital literacy, technological literacy, and 21st-century literacies

(Yancey, 2004; Selber, 2004; Kress, 2009). What was once defined narrowly as the ability to read and write has evolved to encompass a broader set of competencies involving digital tools, multimodal communication, and networked environments. Writers today must not only develop new technical skills but also cultivate heightened rhetorical awareness—what Gurak (2001) refers to as a “consciousness” of composing in technologically mediated environments.

For instance, the shift from handwriting to word processing introduced new considerations such as automatic formatting, font choice, layout, and the use of white space. It also streamlined the processes of writing, revising, and editing, allowing changes without starting over from scratch. Writing for the web further required an understanding of networked writing cultures, including responsive design, hyperlinking, and multimodality, drawing on multiple semiotic modes to create meaning. Social media writing, shaped by the participatory culture of Web 2.0, demanded brevity, scannable formatting, visual emphasis, and awareness of the algorithmic and networked nature of the medium. Writers had to learn how to navigate hashtags, platform conventions, and real-time audience interaction. Each new platform has prompted writers to adapt their strategies and reframe their rhetorical choices through the five classical canons: invention, arrangement, style, memory, and delivery. To effectively craft a message, writers now must consider not only the content itself, but also how rhetorical decisions interact with platform, medium, media, and modality. Each technological shift requires writers to reconsider how writing is invented, arranged, styled, delivered, and circulated, always in relation to the affordances of new platforms and tools. This evolving body of practice and theory is encapsulated in digital rhetoric—the application of rhetorical theory to digital environments (Eyman, 2015). Each shift in modality reemphasizes the importance of intentionality in composing meaning across technological spaces. So, what new competencies are required to engage with the next “tech” moment—AI? What kind of rhetorical decision-making and writerly consciousness will be necessary to compose effectively with this new technological entity?

What sets AI apart from previous technological shifts is that it does not merely introduce surface-level changes in modality, such as page design or platform affordances, but fundamentally alters the underlying logic of meaning-making beyond and behind the surface. This shift exposes the limitations of existing digital rhetoric frameworks and underscores the need to revise both the theoretical foundations and pedagogical practices. Unlike earlier tools, generative AI brings in algorithmic reasoning and machine subjectivity (Gallagher, 2017; Vee, 2017), shaped by processes such as data mining, model training, and probabilistic language prediction. These systems reshape how writing is invented and delivered by generating texts that are semi-automatically co-produced through both user prompts and the model’s pre-trained

knowledge base. Rather than changes happening solely *on* the screen, they now occur *behind* it—within the algorithmic infrastructures that inform AI outputs. As a result, writers must think beyond surface modality and engage with the logics of computation. To write effectively with AI, we must move past viewing it merely as a tool and begin treating it as an interlocutor, a reader, and at times, a co-author.

This is a fundamental rhetorical shift. AI is no longer just a medium to communicate *through*, but a communicative *subject* that we must dialogue *with*. As Andrea Guzman (2018) and Coeckelbergh & Gunkel (2015) have argued, AI should be understood as a “communicative subject,” which shifts AI’s role from not only a medium to communication *through*, but an agent to dialogue *to* and *with*. Therefore, communication is no longer anthropocentrically defined as human-to-human but also human-to-machine, where both parties can co-create meaning. In this sense, AI functions with rhetorical presence, which further makes communication no longer exclusively human-to-human but increasingly human-to/with-machine (McKee and Porter, 2022), with both parties co-constructing meaning. This demands a rethinking of rhetorical agency: if AI can shape discourse, influence audience reception, and co-generate language, then it must be considered as both a rhetor and a rhetorical audience with “rhetorical capability” (Reid, 2020) in this new rhetorical ecology of human-machine collaboration, communication, and composition (HMC).

As the MLA/CCCC (2023) joint statement on AI reminds us, “writing has always been a technology, and, as such, is always open to new technologies.” But what does it mean for writing practice when the technology we integrate now participates in language generation, content invention, and meaning-making and interpretation? In the context of AI, modality shifts are no longer just about on-screen aesthetics or interactivity; they extend to authorship, agency, and the cognitive processes *behind the very* composing, delivery, and circulation. This further challenges writers today to understand how to strategically collaborate with AI, navigate its algorithmic logic, and critically assess how it shapes their agency, writing processes, and rhetorical choices, and adjust the rhetorical strategies and writing knowledge on process, genre, style, and purpose.

In classroom settings, students must be taught not only how to compose with AI, but also how to recognize the *distributed* nature of agency in the writing process. They need to understand how this shared authorship can shape their writing, thinking, and even emotional engagement in unpredictable and often uncontrollable ways. Developing metacognitive awareness is crucial: students must learn to reflect critically on how their rhetorical decisions are influenced, sometimes subtly, by algorithmic responses, and how

those influences affect both their writing process and the meaning they construct in collaboration with the machine.

In the following section, I analyze how distributed agency in human-machine collaboration (HMC) affects writers' consciousness, rhetorical strategies, and writing knowledge. Drawing from my experiences in classroom teaching and program administration in first-year writing, as well as from the core principles of learning and writing metacognition theory, I explore how to respond to the changes that AI has introduced into the writing process. This discussion considers what these shifts mean for concepts of authorship and for developing AI-aware pedagogy (AWAC AI Statement) in the age of human-machine collaboration.

Pedagogical Implications: Cultivating Agency in AI-Supported Writing

Metacognitive Reflection: Before, During, and After

As I began designing assignments that incorporated AI into the writing process, I quickly realized that it wasn't enough to simply introduce students to the tool just because AI is new, or because we can justify its inclusion by citing the idea that "writing has always been a technology" (MLA-CCCC Task Force, 2023). This alone does not ensure that students will engage with AI meaningfully. Nor is it sufficient to provide step-by-step instructions and assume that students will use the tool critically or effectively. Instead, we need to take a step back and reconsider students' roles as writers. What does it mean to say that "writing is a context", one that is social, cultural, and technological? And what does it mean to write *with* technology, or even to rethink what writing is in these emerging contexts? To support this reframing, I ask students to reflect on their own relationship with AI: Why would they choose to work with it? How do they understand their collaboration with it? Too often, students may view AI as a shortcut, something that helps them finish faster, while many instructors fear it as a threat to learning and authorship. My goal, however, is to help students see AI as a powerful but limited writing partner, one that demands thoughtful planning, critical engagement, and purposeful reflection. In doing so, we can begin to cultivate ethical and productive human-machine composition.

In one of McGraw-Hill's webinars, *Developing AI EdTech for Learning: Creating Real Value, Not Hype* (2024), AI's role in education was compared to riding an e-bike: before you can use the e-bike effectively, you have to know how to ride a regular bike. I often extend this analogy in my own teaching to illustrate how writers make rhetorical choices when selecting technologies to

support their writing process (Lockridge & Van Ittersum, 2020). AI can enhance your writing, but only if you already know how to think, plan, research, and write. Or, to extend the metaphor further, as we do in our multimodal recomposition project, the question is never just *what* tool you use (a bike, scooter, roller skates, or e-bike), but *why* you choose it and *how* it helps you reach your destination. In writing, the tool should serve your goals, not replace them. Regardless of the technology, paper, typewriters, computers, the web, or multimodal semiotic modes, these tools are meant to help you shape your narrative, build your argument, and deliver your message. The act of writing is still yours. The tool assists, but it does not author.

To support student agency in human-machine collaboration, I developed a three-stage metacognitive reflection framework (Yang & Harker, 2025) to guide students' engagement with AI as a process of planning, inquiry, and growth. Rather than reacting passively to AI-generated text, students are encouraged to take the lead at each phase of the interaction, ensuring their engagement remains intentional and reflective. The framework is structured around three key moments: before, during, and after using AI. At each stage, students are prompted to pause, reflect on their decisions, and intentionally direct both the writing and learning process. This reflective structure helps students build agency in the context of human-machine collaboration, enabling them to become more independent, confident, and strategic users of AI, fully in control of their choices, supported when needed, and equipped to transfer these experiences to future writing contexts.

Before students begin using AI in their writing, I ask them to pause and plan. This moment of intentionality is crucial. Instead of jumping straight into the tool, students are encouraged to set clear goals and take ownership of their writing process from the outset. They consider what they're trying to accomplish, why they feel the need to use AI or how, at that point, and which stage of writing, whether brainstorming, organizing, or revising, they believe AI can support. Most importantly, they reflect on how they can remain in control of their work, seeing AI as a resource to assist their thinking and planning. This early stage sets the tone, positioning students as the captains of their writing process.

As students begin actively engaging with AI, I remind them that language fluency or surface-level polish does not equate to cognitive depth or reasoning ability. Just because AI-generated text *sounds* polished doesn't mean it is good writing, nor should it necessarily be considered writing in the same way human-authored work is (Markey et al., 2024). In most cases, it is simply generated text. While AI may produce smooth, grammatically correct language, it does not truly comprehend the audience, the writer's purpose, voice, values, or the rhetorical exigency and nuance of the situation. That's where

the student's judgment and analysis become essential. During this phase, I encourage them to treat AI as a conversation partner, not an authority. They are urged to critically evaluate the AI's output by asking: Are the ideas accurate? Does the content reflect bias or assumptions? Does the tone align with the context? And most importantly, does the content support their rhetorical goals? This practice helps students resist the temptation to accept AI-generated text at face value. It reinforces the importance of maintaining their own agency and editorial authority, encouraging critical engagement throughout the writing process.

The final stage comes after the engagement is complete, but the learning isn't. This is when students reflect on what actually happened. They consider what worked and what didn't, whether the AI helped deepen their thinking or merely sped up the task, and whether the time saved upfront was worth the revision effort later, or if engaging with AI introduces greater cognitive or physical labor than completing the task without its assistance. More broadly, they examine what they've learned about themselves as writers: how they approach composition, what habits they rely on, and how AI fits (or doesn't) into that picture.

This post-use reflection is where students begin to build lasting awareness that can be transferred (Haskell, 2000; Moore, 2012; Wardle, 2017). It offers them a framework not only for how to use AI in the present, but also for how to carry and adapt that knowledge across future writing tasks, disciplines, and real-world contexts. Through these stages of intentional engagement, students become more confident, capable, and rhetorically informed writers supported by AI, but never dependent on it. They begin to develop a deeper understanding of what it means to be a writer, what counts as writing, and, in broader terms, what it means to be a thinking, ethical individual.

After applying this model throughout the semester, I found that it helped students cultivate a more critical and independent relationship with AI. More importantly, it supported the development of transferable habits of mind. Whether students are writing for academic, professional, or civic purposes in the future, they carry with them the ability to engage with AI both strategically and ethically. Based on their own reflections, many students reported that this process pushed them to think "more," "deeper," and "broader," and helped them develop stronger critical thinking skills. Some also shared that such practice made them realize that AI sometimes "challenge(s)" their thinking and agency, making them "overthink" their own voice. In short, they emerged not only as more confident writers but also as more literate and informed AI users: future digital citizens capable of making thoughtful, rhetorical decisions grounded in experience, reflection, and purpose—essential qualities in our increasingly AI-mediated communication landscape.

Conclusion

As AI becomes an increasingly common presence in academic scholarship and writing classrooms, and as it continues to be adopted by higher education institutions, the question is no longer *whether* we should integrate it, but *how* we can do so responsibly and meaningfully. This article has argued that human–AI collaboration in composition fundamentally alters the dynamics of rhetorical agency, challenging both writers and teachers to respond accordingly by centering human learning, thinking, and writing. Unlike traditional tools that merely extend human capability, AI introduces a new, shared agency into the writing process.

Therefore, writing instruction must go beyond teaching technical proficiency or basic AI functionality. It must engage with deeper pedagogical questions of authorship, agency, and rhetorical purpose. In composition pedagogy, this means foregrounding metacognition and implementing structured reflection—before, during, and after AI engagement, to cultivate students’ intentional, independent, and ethical relationships with AI. These practices ensure more thoughtful and strategic approaches to human–machine composition (HMC), empowering students to become informed, responsible, and adaptive writers. Ultimately, students learn not just how to write *with* AI, but how to write *as* autonomous communicators in an increasingly complex, AI-mediated world.

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THE PROCEEDINGS OF C&W 2025

This edited collection includes selected proceedings from the 2025 Computers and Writing Conference. In their call for proposals for the conference, which was held at the University of Georgia from May 15th to May 18th, the organizers observed, “The 2025 conference will emphasize place and how specific locales work with digital technologies to provide platforms for expressions of agency borne out of lived, place-based experience. Such consideration for the relationships between place, writing, and the digital world call us to reconsider what it means to come together for this conference in a particular place.”

Christopher D. M. Andrews is Associate Professor in the English Department at Texas A&M University-Corpus Christi. His research explores programmatic issues in writing studies and technical communication, rhetorics of technology, and the use of digital networks to learn and professionalize. **Elena Kaldner-Martin** is Assistant Professor in the Writing, Rhetoric, and Literacy program at The Ohio State University. Her research and teaching interests include technical and professional communication, the rhetoric of health and medicine, social media studies, and feminist rhetoric. **Nicole O’Connell** is a Ph.D. candidate in composition and rhetoric at the University of Massachusetts Amherst. Her research focuses on technical and professional communication, social justice, career education, and public history. **Hua Wang** is Senior Lecturer at Cornell University. Her research is centered around technical and professional communication, rhetoric of health and medicine, cross-/inter-cultural communication, and pedagogy in engineering communication. **Lydia Wilkes** is Assistant Professor of English and Writing Program Administrator at Auburn University. She studies intersections of rhetoric, violence, and writing in public spaces. **Charles Woods** is Assistant Professor in the Department of Literature and Languages at East Texas A&M University. He researches digital rhetorics and technical communication, particularly data privacy, digital surveillance, and emerging technologies.

SERIES EDITORS

Christopher D. M. Andrews and Lydia Wilkes

The WAC Clearinghouse

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