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Joe Essid
University of Richmond

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WRITING CENTERS & THE DARK WAREHOUSE UNIVERSITY:

Generative AI, Three Human Advantages

by Joe Essid, University of Richmond

AN AI REVOLUTION WE DON'T DISCUSS ON CAMPUS

The Goldman Sachs document in front of me provides a soberingly large number: three hundred million. I had to look at it twice to grasp its implications: the number of workers at risk of losing jobs as generative artificial intelligence (AI) rolls out in the United States and European Union.¹ The jobs most likely to be taken, according to the authors of a McKinsey International white paper, appear to be those involving “a high share of repetitive tasks, data collection, and elementary data processing, all activities that automated systems can handle efficiently.”² Ad-

1 Hartius et al., *Potentially Large Effects of Artificial Intelligence*.

2 Ellingrud et al., *Generative AI*, 8.

ditionally, college-educated workers in jobs involving tasks such as graphic design, data analysis, or generating and editing written work would also have their employment disrupted. McKinsey’s numbers rival the Goldman Sachs projection, estimating that 30 percent of all hours worked today could be automated by 2030.³ In a survey conducted in February 2023, a majority of more than six hundred business leaders replied that AI was already doing a great deal of routine writing tasks at their companies.⁴

Should we worry on campus? Before considering that question, take a moment to distinguish generative AI from other forms of this technology. For the purposes of this article, the term AI refers

3 Ellingrud et al., *Generative AI*, 5.

4 Cardon et al., “Challenges and Opportunities of AI-Assisted Writing,” 260.

ABSTRACT:

Institutions are scrambling, at an unaccustomed pace, to adapt to generative artificial intelligence (AI). While justified concerns focus on plagiarism, the nature of student learning, and changes to assignments, recent scholarship has largely ignored the potential for faculty and staff unemployment that may accompany acceptance and deployment of the new technology. As we ponder seismic changes in higher education, one voice should join, indeed lead, campus discussions. Writing center professionals have proven adept at weathering technological changes, budget cuts, administrative big ideas, and professional marginalization for more than half a century. Early on, centers were sometimes dismissed as mere “fix-it shops” for the least competent writers of academic prose. Recent scholarship reveals, however, that centers have at last moved from the precariat to earn respect as practitioners of effective writing pedagogy. This article discusses how writing center professionals may help in steering campus policy on AI. Thus far three affordances critical to in-person work at writing centers—metacognitive questioning, active listening, and principles of fair use—lie beyond the reach of generative AI. This gap reveals “reverse salients,” areas when a rapidly advancing technology cannot meet its advertised promises. Writing center leadership on this issue could also model adaptation to AI outside academia, in ways that benefit those whose livelihoods stand most at risk of being replaced by a set of algorithms.

to the generative variety, unless otherwise noted. Appropriately, I put the question to ChatGPT 3.5, the AI I have been using for a research project about student work. When asked to give a succinct definition for generalists, my digital assistant replied, “Unlike traditional AI, which is often used for specific tasks, generative AI is capable of producing original and creative output.”⁵ Faculty academic careers may include, but do not focus on, repetitive tasks. We instead engage in scholarship and other content creation, including entire curricula. The sorts of easily automated tasks described in the McKinsey report, such as aggregating and analyzing student data for assessment, we might welcome farming out to AI.

This article suggests, however, that the disruptions caused by generative AI may be revolutionary and unpredictable, rather than evolutionary, as financially insecure campuses face falling enrollment while adopting downsizing models from the corporate sector. As one otherwise favorable study of AI’s potential notes, the technology “challenges a set of skills on which academics pride, and feed, themselves.”⁶ Though recent scholarship may help us partner with AI in our classrooms, systemic resistance to corporate-style management of our academic work will not come from better pedagogy alone, making it “imperative to begin the conversations about social responsibility and about the relationship between labor and capital as more categories of labor are outmoded.”⁷ As part of the needed discussions, we should note how current discourses of resisting neoliberalism, to be outlined later, are ill suited to our current cultural moment. Yet there

5 A full transcript of this and other cited conversations with the ChatGPT AI are available by request.

6 Bowles and Kruger, “Generating Employable, Intelligent Graduates,” 76.

7 Bowles and Kruger, “Generating Employable, Intelligent Graduates,” 77.

exists an alternative form of resistance from the beleaguered humanities, specifically from one of its historically marginalized fields, writing centers.

In the case of writing instruction at institutions of higher education, thus far generative AI lacks at least three key affordances of human-provided feedback common in writing center praxis: metacognitive questioning, active listening, and principles of fair use. These all come from humanistic values that Hjortshoj, in his study of first-year writers, refers to as principles of courtesy and honor for others’ academic work.⁸ No software, even when it accurately assesses technical features of student writing, can replicate this human respect for scholarship. Keith Hjortshoj’s notion, as well as other principles of humanism embodied in writing center pedagogy, point the way to a form of leadership that may help us as higher education changes because of several developments, generative AI being only one. Responses involve the deeply humanistic, rather than neoliberal, concept of servant leadership described by Robert K. Greenleaf.⁹ That role has been embraced for more than five decades in writing center scholarship, arising from historically marginalized, but recently vitalized, writing centers. From the long-standing mission of writing centers serving struggling student writers, newfound respect granted our role aligns with Greenleaf’s notion that others respond well to “individuals who are chosen as leaders because they are proven and trusted as servants.”¹⁰

From the history of writing centers, then, arise strategies for resisting what I call a “Dark Warehouse” university, one embracing an idea that critics of neoliberalism find deeply troubling, humans “serving the ends of what is best for commerce

8 Hjortshoj, *Transition to College Writing*, 144.

9 Greenleaf, *Servant Leadership*.

10 Greenleaf, *Servant Leadership*, 10.

or economic production.”¹¹ Such a philosophy could see our working conditions deteriorate (or end) while ever-more-capable generative AI gets deployed to reduce costs while poorly serving learners. Current scholarly work on pedagogy with AI doesn’t quite address this problem.

An Evolving Scholarly Conversation and an Issue Larger than Pedagogy

A promising start to employing generative AI with students has emerged in recent scholarship. Overnight by academic standards, since the public release of ChatGPT 3.5 in fall 2022, a burgeoning field of study emerged for integrating AI into the classroom. In blogs and other online resources for teachers, examples of prompt engineering abound to teach students how to partner with AI in ethical and pedagogically productive ways.¹² Exploratory studies such as David Baidoo-Anu and Leticia Owusu Ansha’s outline both the limitations and promises of teaching with AI, such as redesigning assignments and detecting AI bias or hallucinations. These authors claim, as did many students in a local survey during the spring semester of 2023, that best practices could prepare students “to thrive in an AI-dominated work environment after school.”¹³ Derek Bruff argues convincingly that in a world where AI can synthesize outstanding responses to reading when given good prompts, a wise strategy may involve flipping the classroom, so readings serve as a basis for in-class discussion rather than busy work while professors lecture.¹⁴

11 Vallier, “Neoliberalism.”

12 Among many strong models, see the resources at Learning that Matters, as well as Bruff, “Assignment Makeover in the AI Age.”

13 Baidoo-Anu and Ansha, “Education in the Era of Generative AI,” 59.

14 Bruff, “Assignment Makeover in the AI Age.”

In my own field of study, college-level writing instruction and writing centers, peer-reviewed work has not yet appeared widely in journals, speaking perhaps to our ongoing concerns about utterly changing classroom practices with AI. In other fields, important work is already being done for using AI as a writing tool, as in a study of 343 business communications instructors who responded to a survey about classroom work and AI literacy.¹⁵ Alternately, the lag may simply reflect how scholarly publications in writing plan out their thematic issues a year or more in advance. It would be fair to say many of us were simply blindsided by AI, amid campuses roiled by other disruptions, including the lingering effects of COVID-19 as well as the 2020 unrest that followed the murder of George Floyd. Locally, the latter consumed an entire semester with meetings, protests, and plans for renaming buildings that commemorated slaveholders and proponents of eugenics. Then, just as things began to settle, AI. Scanning the 2023 issues of *Computers and Composition*, one piece appeared, its author delving into the ethical and pedagogical consequences of the words we use to describe AI, such as “tool” or “collaborator,” but also the human costs associated with (and hidden by) large language models, whose work gets appropriated by tech firms who build AI, then synthesized for profit in the private sector.¹⁶

One leading indicator that research will soon flood the pages of journals in writing pedagogy and research occurred at the International Writing Centers Association (IWCA) 2023 meeting in Baltimore. No fewer than six panels considered the role of generative AI at some point in the process of composing writing or when conducting peer tutoring sessions, akin to Baidoo-Anu and Ansha’s idea of “person-

15 Cardon et al., “Challenges and Opportunities of AI-Assisted Writing,” 263.

16 Anderson, “Places to Stand.”

alized tutoring” with the technology.¹⁷ *Computers and Composition* plans two issues focused solely on generative AI.¹⁸

Any pedagogy we adopt must include a sense of being provisional: AI itself will likely race ahead of our attempts to adapt to it. For example, within six months of testing ChatGPT 3.5, I found that when repeatedly given the same prompt about Frank Herbert’s novel *Dune*, responses greatly improved. Halfway through the testing, the AI texts employed a more engaging style, using close reading techniques, than work composed by most first-year students on our campus. Moreover, when Grammarly’s AI assessed my students’ work in a different experiment, it proved accurate, if overwhelming to writers. That said, our other testing with ChatGPT 3.5, Google Bard, and Anthropic’s Claude AI revealed errors in logic such as contradictions as well as incorrectly cited or invented sources. In a few cases, the AI invented evidence that did not occur in a text or film, perhaps by synthesizing millions of factually challenged reviews, blog posts, and Amazon responses instead of consulting the primary material. Some of these “hallucinations” may also come from the prompts given to the AI; the emergent pedagogy of prompt engineering tends to yield better results.¹⁹

Approaches cited for pedagogically rich engagement with AI help us in the classroom, but systemic thinking about a university’s purpose and each school’s response to generative AI seems in order. Fruitful adaptations to the new technology do not address an underlying concern that has begun to show up in posts on the blogs of professional organizations, such as *Writing Across Borders* for the IWCA. There, a few authors consider genera-

tive AI’s dangers to how we educate students to be more than “mere tools in an economic machine.”²⁰ The worries expressed by Graham Stowe of Canisius College rhyme with ones expressed in this article; he has “deep theoretical and, ultimately, existential concerns” that generative AI will make education merely vocational, citing the “gutting” of the humanities programs at West Virginia University (WVU), the University of Wisconsin (UW) system, and other institutions.²¹

With increased financial stresses, such as those that have roiled WVU and the UW system, may come a call for there to be fewer humans at all involved in the teaching and mentoring of undergraduates. A study of US institutions of higher education published in 2022 showed that 40 percent of all four-year schools faced operational or financial challenges, with roughly half of these in an “at risk” category.²² Those at risk tended to be public institutions with more students receiving federal financial aid. To date, however, most of the closures we have witnessed have happened to for-profit institutions and smaller colleges in rural areas.²³ This may well broaden; Bryan Alexander foresees, among other metatrends that accompany declining enrollment and governmental funding, the erosion of tenure and academic freedoms, elimination of academic programs, consolidation of smaller schools by larger ones, and continued decline in public support for the traditional mission of higher education.²⁴

Perhaps more immediate concerns simply matter more now; only 4 percent of 404 respondents to a survey administered by the *Chronicle of Higher Education* note “work-force downsizing due

17 Baidoo-Anu and Ansha, “Education in the Era of Generative AI,” 56.

18 Blair, “Letter from the Editor.”

19 Anderson, “Places to Stand,” 10.

20 Stowe, “Where Are We Now with AI in Writing Centers?”

21 Stowe, “Where Are We Now with AI in Writing Centers?”

22 Lundy and El-Baz, “Six Key Financial and Operational Metrics.”

23 Georgetown University, “Report: Students Left Stranded.”

24 Alexander, *Academia Next*, 154–56.

to automation” to be a chief concern. Respondents instead cite misuses of AI by students or misinformation provided by the technology. Yet an apparent contradiction reveals itself in a different question. When respondents consider longer-term issues of types of work being “at risk,” faculty, both full-time and adjunct, rank far lower (34 percent and 43 percent, respectively) compared to the top three picks: admissions and enrollment (62 percent), academic advisors and affairs staff (57 percent), and libraries (54 percent).²⁵ The cold comfort these numbers provide to faculty needs tempering: at my institution, we partner continually with reference librarians for student research and with advisors for helping students, especially first-generation and minority students, struggling in a complex system.

Setting the *Chronicle* responses in the context of the Goldman Sachs and McKinsey reports means that in a decade we might be teaching and doing research in a very different world. We could work in a technologically rich utopia, if the hyperbole of industry is to be believed, or in a new Great Depression with attendant social and political unrest, if we witness mass unemployment without a commensurate increase in new AI-related jobs. Alexander calls “delusional” a belief that many new jobs will arise on campuses.²⁶ Those from other industries already feel the pressure; at fall orientation on my own campus, parents who had just written their first tuition checks asked repeatedly how we would prepare their children for using AI in the workplace. These parents, often workers in white-collar service industries, are more likely to lose their jobs to AI than those without a college degree.²⁷ Such disruption would

25 *Chronicle of Higher Education, Perspectives on Generative AI*, 22, 27.

26 *Chronicle of Higher Education, Perspectives on Generative AI*, 29.

27 Goldberg, “Training My Replacement.” See also Ellingrud et al., *Generative AI*, 24.

happen concurrently with an “enrollment cliff” US institutions face as soon as the year 2025.²⁸ That downturn could mandate efficiencies of scale and reduction of costs: faculty salaries, benefits, and our campus physical plants cost a lot of money.

Especially at cash-strapped schools, faculty, students, and parents need to push back at a neoliberal imperative we are already seeing play out with mergers, closures, and reductions in programs in higher education. This article explores one technique for pushing back, offering a start for other investigators. While the findings here confine themselves to the study of writing, the philosophy of partnering with AI to find what it *cannot* do may help in other fields of study as well. In the case of writing instruction and mentoring, AI currently produces technically correct, stylistically varied prose, as well as providing a proofreader’s sentence-level assessment of it. That said, generative AI cannot presently engage in the richly collaborative work that occurs in a one-on-one conference with a fellow writer.

That pedagogical realization, and a few human affordances that AI has not matched, may give us one method for avoiding the worst outcomes for students and faculty alike as AI displaces workers.

Neoliberalism and Dark Warehouse Universities

There is a model from industry here to prepare us for a looming fight ahead at many schools experiencing financial constraints. In 2012, Amazon CEO Jeff Bezos launched a system of Dark Warehouses, with robots managing inventory placement and preparation for shipping. The firm claims that a million jobs have been created, after adopting robots such as Proteus, to move inventory in distribution

28 Drozdowski, “Looming Enrollment Cliff.”

centers, and Cardinal, which sorts packages for shipping. Today a bipedal robot that may replace both, Digit, has pointed to even more autonomy. From the start of its program, the retail arm of Amazon has employed more than half a million robotic drive units, while admitting “speculation was rampant that Amazon was replacing people with robots. But 10 years on, the facts tell a different story.”²⁹ How many old jobs were lost versus new ones created goes unstated. The robots supposedly perform “twisting and turning motions” without the risk of injury a human might face.³⁰

Videos with the article include dozens of robots moving packages with the precision of an ant colony.³¹ The work goes on without so much as a lunch break or dash to the restroom.

Though labor done in colleges and universities seems remote from what happens in an Amazon warehouse, struggling colleges, simultaneously facing an enrollment cliff and rising costs, would be financially prudent to apply Dark Warehouse efficiencies to the teaching and clerical work done in higher education. Already, large state institutions such as WVU can enact enormous cuts to once-sacrosanct programs.

Alexander calls these losses “Queen Sacrifices” of tenured faculty, even entire departments eliminated.³² Or the rot might be slower, a “boil the

29 Amazon Staff, “Ten Years of Amazon Robotics.” This source includes a few YouTube videos that can also be found separately.

30 Amazon Staff, “Ten Years of Amazon Robotics.”

31 Amazon Staff, “Ten Years of Amazon Robotics.”

32 Alexander, *Academia Next*, 137.

frog” approach by senior administration, trustees, and boards of visitors. As Tom Parkinson describes this process in the United Kingdom, we encounter “distinctly business-like rhetoric, emphasizing efficiency, global competition, and value for money and rationalizing higher education funding in terms of macroeconomic return.”³³ A culture of constant assessment is already in place at many schools to facilitate this sort of neoliberal business model; generative AI will collate and assess mountains of student data, including writing portfolios. At the most at-risk

institutions, it is not far-fetched to envision students given workshops on prompt engineering to produce decent AI-assisted drafts to be assessed by other AI, in order to place out of labor-intensive courses in writing and reading. We currently use similarly automated methods for teaching students the rules for US federal laws such as Title IX and the Federal Educational Rights and Privacy Act (FERPA).

With AI as an accelerant for changes spurred by trends in enrollment and funding, all but elite institutions could be hit by reductions in faculty and staff. The dean of computing at Georgia Tech,

who should comprehend both technology and the nature of academic institutions, states bluntly that “higher education will be completely unrecognizable in 15 years because of this technology. We just don’t really know how.”³⁴ Fifteen years is an eternity in Silicon Valley; in higher ed it is tomorrow. The dean seconds what Alexander has been saying for a while,

33 Parkinson, “Being Punk in Higher Education,” 178.

34 Horowitch, “Here Comes the Second Year of AI College.”

Though labor done in colleges and universities seems remote from what happens in an Amazon warehouse, struggling colleges... would be financially prudent to apply Dark Warehouse efficiencies to the teaching and clerical work done in higher education.

that higher education itself will radically change, and soon, because of demographic, economic, and technological changes.³⁵

Weakly Raging against the Machine

Professional organizations have begun to respond in limited ways. In a white paper coauthored by two professional organizations in my field, the authors focus mostly on how AI might upend our working lives through plagiarism, accelerated disinterest by students in reading and writing, more precarious employment among adjuncts, larger class sizes, and increased surveillance of faculty labor by administrators or government.³⁶ Full disclosure here: I have asked to be on the Modern Language Association–Conference on College Composition and Communication (MLA–CCCC) board working on AI, as I feel that their findings in the initial document disregard ongoing troubles in the economic sector of higher education, evidenced by a slow attrition of graduate students in humanities nationally.³⁷ While the MLA has programs in place to support the graduate student precariat in finding jobs and starting careers, the decline in numbers has not slowed.³⁸ Without as many graduate instructors for composition programs, coupled with an evolving technology that can, with good prompt engineering, produce credible academic prose, Dark Warehouse U would be a reasonable neoliberal choice.

Even a former president of the IWCA faced

35 Alexander, *Academia Next*, xiv–xviii.

36 Modern Language Association–Conference on College Composition and Communication (MLA–CCCC) Joint Task Force on Writing and AI, *MLA–CCCC Joint Task Force on Writing and AI*, 7–8.

37 Jaschik, “Humanities Graduate Education Is Shrinking.” Bryan Alexander’s book *Academia Next*, as well as writing on his blog, support these findings with empirical data from many institutions.

38 Modern Language Association, “Career Resources.”

this sort of termination, albeit it from outsourcing to human tutors, in the name of streamlining operations at a for-profit institution. A new university vice president from the corporate world announced eliminating the writing center. All tutoring would then go to a company owned, perhaps not surprisingly, by a good friend of the vice president. Only the director’s carefully cultivated faculty relationships, as well as networking off campus, delayed the ill-conceived outsourcing for a time. She ultimately found the refuge of a position at a state university.³⁹

So how might faculty in the humanities, the ones I know best, respond to the Dark Warehouse University? First, comrades, let’s consider a predictably Marxist critique. Marx claims that laborers get alienated from meaningful work by many forces, including rapid automation. The outcome in Marx’s day proved bleak, where every advance in production “replaces labor by machines, but it throws one section of the workers back into barbarous types of labor and it turns the other section into a machine.”⁴⁰ One need not be an ardent Marxist to see how clearly the economist identifies a problem typifying modern industrialism, based on Frederick Winslow Taylor’s early twentieth-century ideas of maximum production with the least inputs of labor and materials.⁴¹

Such Taylorist alienation can now be applied, without irony, to the postindustrial white-collar workplace. Theorists after Marx recognized how postmodern consumerism, something Marx might have had difficulty imagining, plays an important role in late-stage capitalism. Writers such as Veblen dealt well, if turgidly, with the notion of consumption. Marx and his peers could not, however, foresee a world in which something nonhuman, generative

39 Grogan, “I Feel the Earth Move.”

40 Marx, “Estranged Labor.”

41 Taylor, *Principles of Scientific Management*.

AI, could itself become simultaneously a worker, a means of production for intellectual capital, and a consumer good. As I write this, movie studios have begun to use AI to replace striking writers protesting that technology.

The largest problem with Marxist critique, when it appears outside the pages of scholarly journals, involves how little Marxism will sway parents, alumni, or the very audience trying to downsize, streamline, or outsource campus labor. This same specter haunts another ideology I embrace in my teaching. Recently I was delighted to get an anthology about Punk.⁴² Many articles describe the DIY culture of Punk as a viable counterforce to a corporate model for education. At the same time, one of the most compelling pieces in the collection also notes the irony of anarchist radicalism by the tenured class.⁴³ Anarchy, even of a playful and not destructive sort, will fare no better than Marxism in reversing antipathy to higher education, currently at an all-time high.⁴⁴

So what might help us get a sympathetic hearing if Marxist and Punk critiques, for all their merits inside campus gates, cannot? Enter the least likely person imaginable, the writing center professional.

Buying Time: Doing Three Things AI Cannot (Yet)

Writing centers, unassuming campus operations that help writers through one-on-one conferences, have embodied the notion of servant leadership for nearly half a century. A writing center's work, deeply rooted in collaborative learning, provides a humanistic and pedagogically rich

42 Smith et al., *Punk Pedagogies*.

43 Parkinson, "Being Punk in Higher Education."

44 Alexander, "American Views on Higher Education."

alternative to AI not yet in play. At their start poorly funded and marginal to the curriculum, writing centers now provide a role Greenleaf discusses for "the poor to be prepared to return to their roots and become leaders among the disadvantaged."⁴⁵ We already demonstrate this praxis daily, conducting writing conferences as an alternative to grade-driven assessment, while asking essential (and sometimes essentialist) questions of writers to foster a learner's autonomy. We do so while remaining fellow learners, even peers.⁴⁶ If we have become writing experts, that status did not arise from hubris, but rather from circumstance, as other units and departments on our campuses abdicated their roles in the teaching and tutoring of academic writing. Unlike Marxism or Punk, our pedagogy has never been politically radical, and after half a century, not even pedagogically so.

Were we to interrogate generative AI using everyday practices in writing centers, we would quickly see where this job-threatening technology falls short, as it lacks a few affordances of in-person and remote writing conferences. Here again I find useful Alexander's advice from pre-AI times, that to thrive on neoliberal campuses we must focus on "less easily automated pedagogical functions: discussions, relationship building, creative work."⁴⁷ While what follows might not help faculty outside writing-intensive fields, three shortcomings of AI have emerged: promoting writers' metacognition, engaging in active-listening techniques, and understanding fair use of sources. Each of these gaps for

45 Greenleaf, *Servant Leadership*.

46 North, "Idea of a Writing Center." See also many articles by writing center pioneer Muriel Harris, who founded the first journal in our field, *Writing Lab Newsletter* (now *WLN*). The archives online provide a rich, and rather DIY Punk, early history of writing center development. The earliest typewritten numbers even look like Punk "zines" from the same era.

47 Alexander, *Academia Next*, 190–91.

generative AI gives us time to adopt and employ it as our partner, not our replacement.

A sort of lull before a new technology becomes ubiquitous is hardly new. Thomas Parks Hughes identified temporary slowdowns in innovation as “reverse technological salients,” resembling a strongpoint that might hinder an army’s line of advance.⁴⁸ Such moments in the history of technological progress have been well documented for earlier systemic revolutions, such as technical problems associated with building a national electrical grid using long-distance transmission of alternating current.⁴⁹

Three shortcomings presented here for generative AI as writing coach may hinder our institutions from rolling it out in the name of efficiency and profit, at the expense of learning, thus transitioning into “managed universities.”⁵⁰ Meanwhile, we who do the intellectual labor should ask the hardest questions of management, I mean administration. As long as generative AI cannot break through the reverse salients it faces, those who staff writing centers can provide a salutary history (and pedagogical models) of resisting forces larger and more privileged than themselves.

Writing centers have long standing on campuses, but for much of that time they existed among the lowest of academic castes, even on the verge of merger or elimination. In Stephen North’s highly influential 1984 essay “The Idea of a Writing Center,” he described tutoring spaces in dreary terms we associate with the academic precariat, noting a “castoff, windowless classroom (or in some cases literally, closet), the battered desks, the old textbooks, a phone (maybe), no budget, and, almost

inevitably, a director with limited status.”⁵¹ For many in the field, these remain living memories and, in a few cases, the status quo. What has changed since North published his manifesto involves perception. Writing centers in the 1980s got described too often as proofreading shops. Such characterization appears rare today, luckily for writing centers. Even if job losses prove lower than predicted, proofreaders and copyeditors stand at great risk of losing work to generative AI.⁵²

The work of writing centers remains, moreover, untethered from a suite of expensive offices that might mark turf for an academic department. Even when housed in a well-funded learning center, as our writing center will soon be, the work of writing consultants (or tutors, or coaches, or mentors) remains fluid: conferences occur everywhere; we benefit from the earlier technological advances of ubiquitous laptops, robust word processing software, WiFi networks, and cloud storage for writing. Centers exist as free of space constraints as at any time since Muriel Harris opened the pioneering Writing Lab at Purdue in 1976, with a single room and three tutors. The work of writing conferences, with two or more people sitting together over a draft, has not changed. We still inhabit a low-cost, liminal space at the borders of institutions with lavish amenities aimed to recruit students, attract big-money STEM grants, and feverishly chase rankings in *US News and World Report*.

Our continuing mission of sitting down and talking with writers highlights three human affordances that AI lacks. Each of these reverse salients merits further discussion. This trio all contribute to what Devin C. Bowles and Jessica Sloan Kruger call “caring relationships between educators and

48 Hughes, *American Genesis*, 71–72.

49 Hughes, *American Genesis*, 73–74.

50 See Horner, Review of *Tenured Bosses and Disposable Teachers*, for how such institutions work.

51 North, “Idea of a Writing Center,” 437.

52 Behbahani, “Job Losses Due to Generative AI.”

students.”⁵³ As we strive to continue those sorts of relationships, each of the three pedagogical hurdles generative AI must overcome merits further discussion.

AI and Metacognition

AI talks back to questioners, but not in the same manner as human tutors and instructors. North’s famous dictum that “our job is to produce better writers, not better writing” reveals the largest shortcoming of generative AI.⁵⁴ The software favors product over process and cannot spur metacognitive thinking by asking a writer the simple but intellectually provocative “Why did you choose to emphasize that instead of this?” When answering our requests, it provides general statements and lengthy lists of options. Conversely, the tactic of using a short, metacognitive question stands at the center of effective near-peer tutorials, a pedagogy arising from the theoretical model of collaborative learning pioneered by scholars such as Kenneth Bruffee.⁵⁵ The epistemology, one quite different from the solitary Cartesian *cogito, ergo sum*, emerged as Bruffee observed medical residents working with a senior physician. Judgments about a patient’s condition came from consultation, questioning, and observations leading to a consensus among practitioners. These same peer-to-peer methods soon became ubiquitous at writing centers.

AI proves delightfully affable when collaborating, but fails at metacognitive questions. Consider this edited exchange with ChatGPT 3.5:

AI: I can certainly assist with metacognitive questioning to some extent,

but it’s important to note that my abilities are based on the data and training I’ve received up until September 2021. **Author, following up:** I understand that, but do you ever spontaneously ask a student working with you a metacognitive question, if the student does not prompt you for one?

AI: Yes, I can spontaneously ask a student a metacognitive question even if they haven’t explicitly prompted me for one. For example, if I notice that a student is struggling with a particular concept, task, or problem-solving approach, I might interject with a metacognitive question to encourage them to reflect on their approach.

This sounds promising indeed, but in eight months of testing ChatGPT, I’ve yet to have it “interject” a short, thought-provoking question. The concept of questioning by software is not new, either. Early chatbots such as Eliza, dating from the 1970s and running on personal computers as well as mainframes, were able to question human partners. It responds using keywords from human input like current AI, but the responses quickly devolve into gibberish or facile replies:

- > Hello, I am Eliza. I’ll be your therapist today.
- * Good morning.
- > It is nice to be chatting with you.
- * I want do know if you can ask me some metacognitive questions.
- > Oh.... Let’s move on to something else for a bit. can ask you some metacognitive questions?⁵⁶

Ironically, playing this Rogerian game with the generative AI we have today also quickly reveals stumbling blocks, notably at sparking revision strategies

53 Bowles and Kruger, “Generating Employable, Intelligent Graduates,” 77.

54 North, “Idea of a Writing Center,” 438.

55 Bruffee, “Collaborative Learning.”

56 New Jersey Institute of Technology, “Eliza, a Chatbot Therapist.” A web search for “Eliza chatbot” reveals many other instances of the chatbot for a curious reader to test.

through active listening, a technique needed for metacognitive work in writing conferences.

AI and Active Listening

I told ChatGPT that I would role-play a student writing about a topic covered in one of my classes, to analyze why Lady Jessica in Frank Herbert's novel *Dune* does not fit the model of a feminist protagonist. The AI tried to help, but it failed because it cannot actively listen to prompts, as a human can. In no way does ChatGPT simulate this sort of lively back-and-forth during an effective tutorial.

Active listening has tutors repeat key terms or phrases writers reveal during conferences, usually spontaneously. Quite often, a question such as "Tell me what this paragraph does, in your own words" produces astounding results and "aha" moments, because many student writers lack any critical distance from their texts. When questioned, an epiphany occurs and out comes a far better response than the one originally written. In a formulation by Tracy Santa, she found that even the shortest such tutorial remarks, which she calls "backchanneling," can spur metacognition. Citing Bruffee's work on features of collaborative learning, Santa finds that backchanneling reveals "how listening is *performed* or manifested in the tutorials of aspiring tutors." In particular, she studied transcripts for short verbal responses or quick questions that signal active listening.⁵⁷ Examples from the *Dune* assignment (with a human tutor) would include "I see," or "I have not read the book. Please tell me more about Jessica," or "Where did you find that?"

That manner of response can include picking out important words a writer uses, much as Eliza

⁵⁷ Santa, "Listening In." I do not cover her other affordance of peer tutoring "gaze" here. For now, generative AI lacks physical presence, including eye contact.

or ChatGPT might, but a human would write them down, repeat them verbally, then ask a follow-up question such as "Why do you think the term 'concubine' is so important?" or "I don't understand how 'gender roles' differ from 'gender norms.'" Instead, generative AI tends to provide an exhaustive list of ways to approach the topic, some of them excellent, to be fair. Such lists, for a struggling student, would likely prove overwhelming. To illustrate, using just one idea from the list, I stated to ChatGPT:

Author: She gets called a "concubine" and is not allowed to marry Duke Leto. So that sounds like she's property, not empowered.

AI: Absolutely, you're pointing out an important aspect of Lady Jessica's character that can contribute to your analysis. The label of "concubine" and the limitations on her relationship with Duke Leto do raise questions about power dynamics and agency. [A very long list of advice followed.]

Author: Yeah but what do YOU think?

AI: As an AI language model, I don't possess personal opinions, thoughts, or feelings. My purpose is to provide information, generate responses, and assist with tasks based on the data and training I've received. I'm here to support you in your exploration of topics, guide you through questions, and help you develop your own understanding and analysis.

A human tutor might instead reply, "I've not read *Dune*, but I recommend finding passages where Herbert has characters use the word 'concubine' or where he describes the limitations that being a concubine brings to Jessica." What ChatGPT lacks, for all its natural-language replies, is an ability to listen deeply and respond actively. Instead of a tutor's short backchanneling or short follow-up questions,

OpenAI's brainchild does a data dump, a torrent of help in list form. This shortcoming bears close relation to the final human affordance that our testing discovered.

AI and Principles of Fair Use

Source usage often bedevils students at many levels. Handbooks abound with lengthy and sometimes contradictory advice. Given this arcana surrounding citation, we have students who obsess fruitlessly over a particular format. Some students have far greater problems with the reasons for citing sources, as well as methods for effectively integrating the voices of others into their own prose with direct quotations or paraphrases. Some writers arrive on campus with a relationship to sources based on their home cultures, and that can lead these students to plagiarize.⁵⁸

For some time after ChatGPT went public, version 3.5 of this AI would synthesize material from primary and secondary texts under copyright, directly quoting and providing accurate citations. The AI would also provide sources from the public domain and Creative Commons. Several months into testing the *Dune* prompt, however, the AI began only paraphrasing the text, even while the analysis of the literary work, when compared to that of first-year students, deepened considerably. When asked about the principles of fair use that stand squarely at the center of scholarly discourse, the ChatGPT AI replied as follows:

[T]he determination of fair use can be complex and depends on various factors, such as the purpose and character of the use, the nature of the copyrighted work, the amount used, and the effect on the potential market for the

original work.

Fair use is a legal concept, and its application can vary based on jurisdiction and specific cases. While I can provide information on fair use in a general context, it's essential to consult legal professionals or reference reputable sources for specific advice ... with copyrighted materials.

Writing students and professionals usually do not fear copyright attorneys or hire them. ChatGPT, or more precisely, its makers, do. We found other generative AI even less forthcoming, with two from Google simply saying they could not assist us with any assignment that required direct quotations. Writing tutors and academic mentors, from teaching faculty to librarians, often coach writers into methods for finding evidence and including it wisely, accurately, and ethically. ChatGPT would, at best, reply as it did about metacognition: with an overwhelming list of tips. These replies lack the interactivity of effective writing consultations, during which we coach writers how to incorporate sources directly or indirectly, so the reader will always know who is talking.

At the time of writing, ChatGPT 4.0 seems poised to break through this particular reverse salient; with good prompt engineering, it quotes directly from texts in the Creative Commons or in Open Access journals. The abilities of this powerful AI merit additional study. It may "hallucinate" less than Anthropic's Claude, which has cited sources that do not exist, or ChatGPT 3.5, which incorrectly cited elements of a film or text we studied.

Interacting richly with why we use sources still requires a human mentor. As the employment of generative AI increases, we might pause to consider how to join larger discussions about automation and the value of human labor. The human affordances noted in this article provide only three examples

from one academic discipline. Further study will certainly reveal more reverse salients in areas such as mathematics, software coding, and the visual arts. Humans can then use AI as partner, not adversary, in fostering learning and equity on campus while pushing back against downsizing and outsourcing based solely on empirical measures of efficiency.

Leveraging Our Humanity: Lessons from the COVID-19 Writing Center

More people on campus, aside from tutors, writers, and directors, now have “the idea of a writing center” in their heads. The fortunes of our centers have risen since North’s day, to enjoy some stability in employment and better status.⁵⁹ This has given writing center directors and peer tutors leverage to sit on committees, advise administration and other stakeholders, and write op-eds for the student papers and professional publications that reach a broad audience. We can indeed take the lead, with librarians and other faculty, in developing training for how to employ generative AI ethically and productively. These service roles are nothing new to us.

At the same time, we must guard against being coopted by neoliberal thinking, even though that might raise the salaries of those who remain employed. Writing centers have become, on the one hand, better known, but, on the other, a commodity to be contested in the marketing value of promoting support services to potential students and their families.⁶⁰ Mergers with larger campus units must be done without compromising our mission and peda-

gogy. In fact, generative AI may help us synthesize arguments based on best practices, to avoid administrative fiat.

On the whole, however, writing centers do not face the existential threats and faculty mistrust North described in 1984. Compare his origin story to findings of 2016, that “writing centers are in good standing at this point, particularly in US four-year colleges and universities in terms of how well the community understands the pedagogy and mission.”⁶¹ Moreover, participants in that study of directors’ working lives found that most of them were expected to be institutional “writing experts.”⁶² North himself revisited his earlier misgivings, finding us in better shape while still fretting that centers are seen as a “staff literacy scapegoat” on campus.⁶³ Often that scapegoating arrives in our inboxes as “Why didn’t your tutor do more?” from faculty, amid concurrent demands from administration to prove our value annually with exacting empirical data. While this author cannot imagine writing centers being blamed for student misuse of AI, writing centers are already being asked to step into the fray, because someone needs to lead during this latest writing emergency. English departments, gradually estranged from the formal teaching of academic writing as the field of composition studies matured, have problems of their own, as do the other humanities, with lost majors and declining faculty hires.⁶⁴

We who serve in writing centers, often with a foot in both worlds of administration and faculty, can speak to faculty peers, senior administrators, and others both from a position of memory keepers of difficult times past as well as recently acquired respect. While writing center professionals and

59 Caswell, McKinney, and Jackson, *Working Lives*. An irony here is that the majority of directors profiled in this book have since changed jobs. Ours is a field with a high attrition rate, despite the improved status of our centers.

60 Essid and McTague, “Light at the End of the Service Corridor,” 11–12.

61 Caswell, McKinney, and Jackson, *Working Lives*, 199.

62 Caswell, McKinney, and Jackson, *Working Lives*, 201.

63 North, “Revisiting,” 18.

64 Miller, *Textual Carnivals*.

student near-peer mentors often address the same issues again and again in conferences with student writers, such as a lack of attention to a writing prompt, lapses in focus, or difficulty with sources or grammar, these tasks could hardly be called repetitive. No generative AI can yet provide the empathy and pedagogy of a writing conference with a human peer.

Until AI can match the three human affordances noted earlier, as well as new ones in other fields of study, faculty and tutors have an advantage in adapting to change. I consider how my own institution masterfully “pivoted” to hybrid learning during COVID-19; we all put up with great discomfort and risked serious illness. We taught in quickly converted spaces in our stadium, in an old registrar’s office, in every nook and cranny that could provide social distancing. We isolated those who fell ill and kept going. I held classes from isolation via Zoom, as soon as my COVID fever ebbed enough for me to sound coherent.

At times the edifice creaked and strained under the weight of anxiety and overwork, but we prevailed. Today, many of the same clever minds that helped us endure the worst of the pandemic now turn to the concerns and promises of generative AI. Unlike AI “thinking,” those human minds on campus create new knowledge, mentor students as they develop professional networks, and sit down over coffee when someone is troubled personally or intellectually. Only a small part of our academic work involves providing clever syntheses of existing ideas. For all these reasons, replacing many teacher–student interactions with a Dark Warehouse seems unwise, yet not impossible. We still need to work collectively, across disciplines and lines of academic caste, to be sure that other cherished aspects of academic life do not get outsourced to a talented

chatbot that would save money while poorly serving learners.

In his chapter about servant leadership in education, Greenleaf provides an apt method for how we can collectively adapt to change. He was thinking of the volcanic social changes on campuses during the Vietnam era, but the same strategy might apply today, to “see ourselves as responsible people at the center of an organic process of change that at this time, may be strenuous and confused.”⁶⁵ The progress of AI indeed remains our only constant; its pedagogical and societal implications are both strenuous and confused. We faculty, as coinvestigators of this new technology with our students, must take responsibility for preserving a system that nurtures learners instead of treating them as a marketable commodity. From the world of business communication, we have a healthy reminder that “paradoxically, with advancing technology, classical human skills and liberal arts such as critical thinking, communication, and problem-solving become more rather than less important.”⁶⁶

Luckily, writing center professionals have been engaged in fostering these sorts of skills for decades. Shall we sit down and talk about that?

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65 Greenleaf, *Servant Leadership*.

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