What Do We Mean By "AI Literacy"? Tensions in Current Institutional Guidelines and Recommendations for a Slow, Reflective Future

Katlynne Davis
University of St. Thomas

Jason Tham
Texas Tech University

Danielle Mollie Stambler
James Madison University

Jialei Jiang
University of Pittsburgh

Jessica Campbell
University of Central Florida

Gustav Verhulsdonck
Central Michigan University

Daniel Hocutt
University of Richmond

Abstract This article examines how educators navigate tensions between efficiency-driven integration and critical approaches to generative AI literacy. Through thematic analysis of twelve institutional AI frameworks and collaborative autoethnographic reflections, we identify significant gaps between policy aspirations and pedagogical realities. While institutions converge around principles of human oversight and ethical consideration, educators face challenges including time constraints and tensions between preparing students for AI-integrated futures while maintaining critical perspectives. We propose a "slow pedagogy" approach that resists efficiency-driven integration in favor of deliberate, justice-centered engagement, offering a reflective heuristic for practitioners across educational contexts.

Keywords generative artificial intelligence, AI literacy, writing pedagogy, reflection, slow pedagogy

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The rapid emergence of generative artificial intelligence (GenAI) across educational and professional landscapes represents one of the most consequential technological disruptions in contemporary higher education. From ChatGPT's public debut in late 2022 to the proliferation of field-specific AI applications across industries, GenAI tools have fundamentally altered not only how knowledge work is performed, but how we conceptualize the very nature of intellectual labor, creativity, and expertise. Within writing studies, technical communication, and design contexts, this technological emergence has been particularly pronounced as the generative capabilities of AI intersect directly with core pedagogical practices and professional competencies. The speed of this transformation has left educators, administrators, and students grappling with fundamental questions about academic integrity, pedagogical relevance, and the evolving nature of disciplinary knowledge itself.

Yet this rapid technological emergence has precipitated what can only be described as a moment of profound pedagogical reckoning, one that reveals the urgent need for critically nuanced definitions of "AI literacy" within our disciplinary contexts (e.g., Liddle & Grant, 2024; Woo et al., 2023). The term "literacy" itself carries significant theoretical weight within writing studies and technical communication pedagogy, encompassing not merely technical competency, but critical awareness, rhetorical sophistication, and ethical engagement with tools and texts (Wysocki & Johnson-Eilola, 1996). However, current institutional responses to GenAI often deploy AI literacy as an under-examined buzzword, conflating basic operational knowledge with the kind of critical, ethical, and theory-informed engagement that AI literacy demands. This conceptual imprecision is particularly troubling within our disciplines, where literacy has long been understood as a complex sociotechnical practice involving critical analysis, ethical reflection, and awareness of power dynamics embedded within communicative technologies and practices.

This imperative for critically examined AI literacy is particularly urgent within technical and professional communication (TPC) and writing programs, where students are explicitly preparing for careers that increasingly demand AI competency. Unlike general education contexts where AI literacy might be treated as ancillary to disciplinary content, TPC and writing programs must grapple with AI as both pedagogical concern and professional necessity. Our students will enter workplaces where AI-assisted writing is standard practice, yet they must also develop the critical capacities to evaluate, resist, and reshape AI applications that perpetuate bias, reproduce inequities, or diminish human agency. This dual mandate of preparing students to work with AI while cultivating critical resistance to its problematic applications positions TPC educators uniquely to develop nuanced

approaches to AI literacy that neither uncritically embrace technological integration nor categorically refuse engagement. For writing program administrators (WPAs) and TPC program directors, this means developing frameworks that support faculty in navigating these tensions while maintaining pedagogical integrity and disciplinary values.

The empirical landscape surrounding AI literacy corroborates our call for more deliberative pedagogical approaches. Peter Cardon and others' (2023) comprehensive survey of 343 business communication instructors reveals a field in profound transition, where rapid technological adoption has outpaced thoughtful pedagogical integration, creating significant anxiety among educators who feel pressured to adapt without adequate support or theoretical grounding. Their findings illuminate precisely the pedagogical crisis we seek to address: While 80% of instructors believe AI-assisted writing will be useful in the workplace and widely adopted, 47% feel nervous or anxious about using it in their courses, and many resist change due to concerns about their ability to adapt or simply lack of time to develop new approaches.

As writing, communication, and design educators find ourselves navigating an increasingly complex landscape of institutional mandates, technological capabilities, and ethical imperatives, we witness a troubling pattern: The rush toward integration often outpaces the deliberative reflection that such consequential pedagogical shifts demand. This urgency to "keep pace" with technological advancement has generated a proliferation of AI literacy frameworks and institutional guidelines that, while well-intentioned, frequently prioritize operational efficiency over the nuanced ethical and social justice considerations that should undergird any meaningful pedagogical transformation.

Yet within this moment of institutional scrambling lies an opportunity for scholar-teachers to pause, reflect, and chart a more thoughtful course forward. Rather than adding our voices to the growing chorus of either wholesale celebration or categorical rejection of GenAI tools, we in this article position ourselves as a collective of educator-researchers committed to what we call a reflexive future, an approach that centers ethical responsibility, social justice, and genuine student advocacy in our pedagogical decision-making processes. Our collaborative inquiry emerges from a shared recognition that the current discourse around AI literacy often fails to adequately address the lived realities of students and educators working within complex institutional constraints, while simultaneously overlooking the broader social implications of uncritical technology adoption.

As a research cluster (Building Digital Literacy, of the Digital Life Institute), our group's scholarly goals reflect a deliberate commitment to the concept of "slow pedagogy," a methodological and philosophical stance that advocates for an alternative understanding of learning that is intentional, contemplative, and embodied as a response to ceaseless productivity (Berg & Seeber, 2017; Holt, 2002; Leddy & Miller, 2024; Payne & Wattchow, 2009; Shahjahan, 2015). We draw from the principles of slow pedagogy to resist the breathless pace of technological adoption in favor of deliberate, reflective engagement that prioritizes ethical consideration and social justice principles (Tham, 2025). Our approach—extended from our collective understanding of digital literacy threshold concepts (Stambler et al., 2025) and our conception of digital life as enmeshed in infrastructural issues of equity and lived experience (Davis et al., 2022)—recognizes that meaningful AI literacy cannot be separated from broader questions of educational equity and the kinds of critical thinking capabilities we hope to foster in our students' everyday lives. We advocate for a socially responsible, justice-centered pedagogy that interrogates not merely how to integrate GenAI tools, but whether, when, and for whom such integration serves genuinely transformative educational purposes.

Our collaborative autoethnographic methodology reflects this commitment to slowed-down reflection, allowing us to examine our own positionalities as both researchers and practitioners while interrogating the institutional contexts that shape our pedagogical possibilities. The methodological significance of our collaborative autoethnographic approach becomes apparent when considered against existing research limitations. While quantitative surveys provide valuable baseline data about instructor perceptions, they cannot access the nuanced, lived experiences of educators grappling with AI integration within specific institutional contexts. Our collaborative methodology offers precisely what current research identifies as needed: sustained, reflective engagement with the complex realities of AI literacy development as it unfolds in practice, not merely as it is anticipated in theory.

This study presents a thematic analysis of existing AI literacy frameworks within pedagogies of writing, technical communication, and design, examining how current institutional approaches navigate, or fail to navigate, the fundamental tensions between efficiency-driven integration and critically engaged pedagogy. Through our collaborative autoethnographic lens, we analyze institutional policies and guidelines not merely as administrative documents, but as representatives of rhetorical frameworks that reveal deeper assumptions about learning, literacy, and the role of technology in educational spaces. Our analysis illuminates significant convergences and divergences in how AI

literacy is conceptualized and operationalized across our institutional contexts, revealing patterns that speak to broader questions about academic labor, student agency, and the social responsibilities of educational institutions. We offer instructors and program directors a "slow," reflective approach to examining GenAI pedagogies and literacies that focuses on considering contextual nuances over dichotomies of refusal or acceptance.

Literature Review

While researchers have begun articulating new paradigms for human-AI collaboration in writing and establishing critical frameworks for understanding the ethical complexities of AI integration, institutional responses have often proceeded without adequate grounding in this scholarly foundation. This disconnect between theoretical development and policy implementation creates a compelling need for systematic analysis of how institutions are currently defining and operationalizing AI literacy. The following review examines three key areas of scholarship—theoretical frameworks for AI-assisted writing, ethical considerations in AI integration, and emerging pedagogical and institutional responses—to establish the foundation for our thematic analysis of institutional AI literacy frameworks and to demonstrate why such analysis is both warranted and needed.

Articulating the Writing Assistant Paradigm

Across our discipline and adjacent fields like education and linguistics, scholars are articulating what may be called the "writing assistant paradigm": a socio-technical framework in which AI systems serve not merely as tools but as rhetorical collaborators that reshape authorial identity and composition processes (Amirjalili, Neysani, & Nikbakht, 2024; Fyfe, 2022; Hutson, 2025; Masters-Wheeler, 2024; Tang, 2021;). This demands new theoretical frameworks that account for collaborative entanglements between human and artificial intelligence. Responding to this need, scholars have begun developing taxonomies to capture the nuances of writing with AI assistants. For example, Heidi McKee and James E. Porter's (2022) taxonomy of human-machine teaming roles—resource tool, assistant, writer, and executive decision-maker—exemplifies this theoretical development by emphasizing the rhetorical intelligence required to navigate these evolving configurations. Building on this foundation, scholars (Deets et al., 2024; Getto et al., 2025; Markauskaite et al., 2022) have examined the dynamics of genre-sensitive task allocation, emotional entanglements in human-AI partnerships, and the broader social conditions that shape AI-mediated writing. Stacey Pigg (2024), for instance, demonstrates an embodied practice framework for writing with AI to describe rhetorical moves that expert writers take to leverage AI functions in research writing. Additionally, Alan Knowles (2024)

discusses rhetorical load-sharing with automation machines via machine-in-the-loop writing methods.

The psychological dimensions of this writing assistant paradigm prove particularly significant. Jerry W. Washington's (2023) critical literature review illuminates how GenAI affects writers' self-efficacy, potentially enhancing creativity while raising concerns about overreliance. This complexity extends through the work of Jing Gao (2024) on writer agency, identity, and affect. Simultaneously, Chenchen Liu et al. (2024) and Jinhee Kim et al. (2025) warn that personalized AI feedback systems may unintentionally mask authentic voice or promote normative conventions that inhibit genuine expression.

These transformations are reverberating across both academic and professional domains, revealing the broader implications of this paradigmatic shift. Hart-Davidson et al. (2024, 2025) situate AI-assisted writing within broader conversations about automation and justice, while Gallagher et al. (2025) provide complementary evidence by documenting how machine learning researchers experience communicative pressure amid AI hype cycles—demonstrating that these tensions affect practitioners across disciplines. Building on these contextual insights, empirical work (Albrecht-Crane et al., 2024; Jiang, 2024; Jiang et al., 2024; Kim et al., 2025; Nguyen et al., 2024) provides crucial evidence of how human-AI writing partnerships evolve iteratively through interlocking negotiations between control and co-authorship. These transformations operate at an infrastructural level that demands critical examination, as scholars like David Gunkel (2023) and Collin Björk (2025) interrogate the epistemological and ethical consequences of extractive AI systems, raising fundamental questions about labor and intellectual ownership that become central to institutional policy considerations.

Specifically, the theoretical foundations underlying human-AI collaboration challenge presumed boundaries between human agency and machine performance. This presumption needs to be acknowledged if we wish to devise institutional frameworks that do not simply echo technological determinism but instead understand AI systems as social artifacts embedded with human values and cultural logics. Of note, Steve Woolgar's (1985) foundational call for a sociology of machines anticipated today's need to examine how sociotechnical systems like AI are co-constructed by and co-constructive of human behavior and institutional norms. Realizing this prescient vision, contemporary studies by Carlo Perrotta, Neil Selwyn, and Carrie Ewin (2024) and Andrea Guzman & Seth Lewis (2020) operationalize this sociotechnical understanding by considering AI not as autonomous actors but as artifacts imbued with human labor, intention, and sociocultural

coding. Virginia Eubanks's (2018) early critique of human labor erasure in AI systems calls for reinvestment in humanities education to retain critical capacity for interpreting and shaping AI-mediated communication.

Moving beyond utilitarian framings, Ann Hill Duin and Isabel Pedersen's (2021) "writing futures framework" situates human authorship within networked ecologies of tools and practices, while Ann Hill Duin and others (2022) theorize AI as a provocateur of pedagogical and epistemological change. Jennifer Higgs and Amy Stornaiuolo's (2024) investigation of how young people articulate ethical concerns through frameworks of care, authenticity, and creative agency reveals that ethical AI engagement involves attending to fundamental human needs rather than simply applying external moral frameworks. These theoretical insights illuminate how institutions might develop policies that honor both technological possibility and humanistic values, recognizing the ongoing negotiations of authorship, embodiment, and meaning-making that characterize human-AI relations.

Navigating Ethical Complexities

While the writing assistant paradigm establishes the theoretical framework for understanding human-AI collaboration, the implementation of this paradigm raises profound ethical questions that institutions must address through their policies and guidelines. The ethical discourse surrounding AI integration reveals tensions that extend far beyond classroom concerns to fundamental questions of agency, justice, and responsibility. These complexities challenge our most basic assumptions about authorship and accountability, demanding new frameworks that institutional policies must address.

Traditional academic integrity models prove inadequate when confronted with AI-assisted writing's fluidity. Scholars (Banville et al., 2024; Deptula et al., 2025; Wise et al., 2023) demonstrate how writing with AI destabilizes established expectations of originality, demanding institutional policies that move beyond detection and discipline toward transparency and shared responsibility. This shift represents not merely procedural adjustment but fundamental reconceptualization of intellectual labor. Marie Alina Yeo's (2023) exploration within TESOL contexts raises critical questions about "contract cheating," procedural fairness, and teachers' roles in cultivating ethical judgment, revealing how technological innovation intersects with educational inequities in ways that institutional policies must carefully navigate.

The theoretical implications for authenticity represent equally challenging terrain for rhetoric (Majdik & Wynn, 2023; Ranade et al., 2025; Wang, 2024a; Wang, 2024b). Drawing from classical and humanistic frameworks, Andrianna Deptula et al. (2025) illuminate the tension between technical proficiency and rhetorical integrity, while Roberto Santiago de Roock (2024) calls for pedagogy that foregrounds agency within datafied ecologies. The implications of these authenticity and agency concerns extend beyond educational contexts into broader public discourse, where Seth C. Lewis et al. (2019) issue parallel warnings against technocentrism and algorithmic objectivity in journalism. Extending this critique to the political sphere, Jamie Littlefield's (2025) concept of "stochastic publics" reveals how AI's probabilistic logic often reinforces power asymmetries rather than democratizing participation.

For these reasons and more, critical attention to algorithmic bias becomes essential for institutional consideration. Antonio Byrd's (2023) critique of linguistic and ideological assumptions in large language model corpora reveals how these systems reproduce colonial and racial hierarchies, while Jennifer Sano-Franchini and Kaytely Carpenter's (2023) interface analysis illuminates how bias operates through design patterns that systematically disadvantage marginalized communities. The pedagogical responses emerging from these ethical complexities point toward the need for institutional policies that actively foreground justice and agency.

Responding Pedagogically and Institutionally

For the reasons scholars have outlined in our growing body of scholarship around AI writing technologies and writing instruction, educators are responding to GenAI with nuanced integration (and refusal) strategies (Mallette, 2024; Noone & Baek, 2024; Reeves & Sylvia, 2024; Shultz Colby, 2025). Some of these responses engage students and other instructors' perspectives (e.g., Bedington et al., 2024; Black & Tomlinson, 2025; Kim & Kim, 2022; Kohnke et al., 2023; Malik et al., 2023). By and large, these responses require institutions to develop new approaches that build AI literacy as a form of critical thinking, revise learning outcomes to include technological collaboration, and create classroom practices that emphasize thoughtful reflection and ethical decision-making (Bond et al., 2024; Hutson & Plate, 2023; Shalamova & Rice-Bailey, 2024).

Reflective thinking emerges as crucial for meaningful AI integration (Bozkurt et al., 2023; Thominet et al., 2024). Liu et al.'s (2023) reflective thinking promotion mechanism demonstrates how structured reflection improves writing performance while reducing

cognitive load, resonating with Mohamed Awad AlAfnan and others' (2024) emphasis on soft skills development and Jason Tham's (2024) vision prioritizing ethical inquiry, creative exploration, and rhetorical adaptability. Experimental studies provide compelling evidence: Sibel Söğüt's (2024) research reveals enhanced student confidence when instructors scaffold AI use with explicit learning goals; Brandon Strubberg et al. (2023) observe the need for diversity in student participants when testing interactivity with AI applications; while Kristen M. Getchell et al. (2022) demonstrate how scenario-based learning helps students internalize professional standards through technological augmentation.

However, current institutional responses reveal regulatory framework inconsistency. Dylan Medina's (2025) comprehensive analysis highlights the critical disconnect between pedagogical possibilities and policy implementation, demonstrating how institutional frameworks often constrain innovative teaching practices. Hind Aljuaid's (2024) systematic review reveals striking policy diversity—from Stanford and University of California's acknowledgment policies to Middlebury College's classroom bans—reflecting fundamentally different assumptions about student agency and educational purpose that often hinder pedagogically effective innovations.

Curricular transformation demands disciplinary assumption interrogation alongside institutional adaptation (Tham et al., 2022). Stephen Carradini (2024) calls for curricula cultivating epistemic humility and deliberative thinking, aligning with Christine Masters-Wheeler and others (2023) and Jialei Jiang and Gustav Verhulsdonck's (2025) assessment frameworks emphasizing generative co-creation. Mary Kalantzis and Bill Cope's (2025) argument for reimagining literacy education through design-oriented approaches rather than legacy integrity notions suggests institutional resistance often stems from deficit models of student agency. The evolution toward multimodal approaches (Getchell et al., 2024; Jiang, 2024) requires policies supporting expanded pedagogical imagination, while Amy Stornaiuolo and others (2023) and Julianna Lopez Kershen and Brianne Johnson's (2025) "platformization" theory reveals how AI infrastructure simultaneously amplifies affordances and inequities.

Institutions increasingly recognize needs for adaptive governance models. Xieliang Chen and others (2022) and Dorcas A. Anabire and others (2024) document shifts toward sustained professional development and community building rather than policy enforcement alone, including updated codes of conduct, faculty training investments, and AI literacy programs. Justice and equity considerations prove central to both pedagogical

reconceptualization and policy development. Cardon et al.'s (2023) emphasis on AI literacy critically aware of algorithmic bias connects to institutional urgency around seemingly neutral policies that reproduce educational disadvantage. Hongqin Li and Lin Pan (2024) and Xiao Tan and others (2025) argue prohibitionist approaches may exacerbate inequities, particularly for multilingual students benefiting from AI-assisted language support, connecting to broader research calling for inclusive frameworks aligned with inclusive design principles (Ghimire, 2025).

Building on these governance insights, scholars have begun developing more comprehensive frameworks for institutional AI integration. Jürgen Rudolph and others' (2024) relational and reflexive governance approach situates AI within broader sociotechnical systems, complementing initiatives documented by the Digital Life Institute's *Adapting to AI Writing* report (Pedersen, 2023), which reveals the extensive coordination requirements for meaningful integration. Meanwhile, Aljuaid's (2024) integration of Technology Acceptance Model, Constructivist Learning Theory, and Community of Inquiry frameworks signals growing recognition that AI evaluation requires multiple analytical perspectives beyond academic integrity concerns. This multifaceted approach extends to workplace preparation, where Gustav Verhulsdonck and others' (2021) integrated approach to design thinking, content strategy, and AI reflects both industry needs and user-centered values.

Despite these promising theoretical and practical developments, the implementation reality reveals significant needs for systematic analysis of how institutions actually define and implement AI literacy through policies, guidelines, and other resources. To this end, our study addresses this gap by examining the artifacts that constitute institutional AI literacy frameworks and educators' lived experiences implementing these frameworks through collaborative autoethnographic analysis, investigating how educators navigate the tensions between institutional guidelines and ethically reflective pedagogy. In the next section, we describe our collaborative analysis process.

Methods: Studying Existing Institutional Guidelines

This study addresses three primary research questions that emerge from our review of current AI literacy discourse:

1. How do existing institutional AI literacy frameworks define and operationalize AI literacy within higher education contexts?

2. What convergences and divergences exist across institutional approaches to AI literacy implementation, particularly regarding the balance between efficiency-driven integration and critically engaged pedagogy?
3. What tensions and unresolved questions characterize current AI pedagogical approaches, and how might these inform more socially just and reflective frameworks?

Our methodological approach combines collaborative autoethnography with thematic analysis, reflecting our commitment to what we refer to as a slow, reflexive response for AI—a deliberate, reflective stance that resists the rapid pace of technological adoption in favor of ethical consideration and social justice principles. This methodological choice aligns with our theoretical positioning that meaningful AI literacy cannot be separated from broader questions of educational equity and critical engagement.

Collaborative autoethnography serves as our primary methodological framework, allowing us to examine our own positionalities as both researchers and practitioners while interrogating the institutional contexts that shape our pedagogical possibilities (Chang et al., 2013). This approach enables sustained, reflective engagement with the complex realities of AI literacy development as it unfolds in practice, addressing what current research identifies as needed: nuanced understanding of educators' lived experiences with AI integration within specific institutional contexts. Our collaborative methodology offers precisely what quantitative surveys cannot access—the contextual, experiential knowledge that emerges from practitioner-researchers grappling with AI integration in real time.

We systematically collected and analyzed 12 institutional AI literacy frameworks (refer to Table 1). In the context of our study, we define a framework as an overarching structure or orientation of an institution's approach to AI; this structure can be gleaned from various institutional artifacts. The 20 artifacts we collected included higher education institutional policies, guidelines, resource lists, and statements from diverse institutional types and geographic locations. These artifacts were identified through purposive sampling, targeting institutions that had texts that were publicly available and specifically addressed AI literacy or pedagogical integration.

Our thematic analysis followed an inductive qualitative coding process informed by grounded theory principles (Charmaz, 2006), allowing themes to emerge from the data rather than imposing predetermined categories. Each framework underwent analysis by 2–3 team members independently, followed by collaborative discussion to achieve coding

consensus. This multiple-coder approach enhances reliability while our collaborative discussion process ensures that diverse perspectives and institutional contexts inform our analysis.

The coding process involved three iterative phases: 1) initial open coding to identify preliminary themes, 2) focused coding to develop more substantial categories, and 3) theoretical coding to establish relationships between themes. Our collaborative autoethnographic approach meant that we simultaneously analyzed the artifacts in each framework while reflecting on our own institutional experiences and constraints, creating a dialogical relationship between data analysis and personal reflection.

From a qualitative research standpoint, our study establishes validity through several mechanisms. Credibility is enhanced through our multiple-coder approach and collaborative analysis process, ensuring that interpretations emerge from collective rather than individual perspective. Our collaborative autoethnographic methodology provides prolonged engagement with the phenomenon under study, as we are not distant observers but embedded practitioners. Transferability is supported through our detailed description of institutional contexts and analytical processes, allowing readers to assess the applicability of our findings to their own contexts. The diversity of our collaborative enhances the dependability of our findings by incorporating multiple perspectives and reducing individual bias. Our inductive analytical approach allows findings to emerge from data rather than confirming predetermined hypotheses.

Table 1. Existing artifacts from 12 universities and two international organizations.

Institution/Organization	Artifacts	Framework Notes
Central Michigan University	Generative AI Resources https://www.cmich.edu/offices-departments/curriculum-instructional-support/select-or-develop-materials-and-tools/artificial-intelligence-AI-resources	General institutional resource collection; teaching-focused guidance
Digital Education Council	AI Literacy Framework https://www.digitaleducationcouncil.com/post/digital-education-council-ai-literacy-framework	Independent educational organization framework; comprehensive

		literacy model
James Madison University	Task Force on Artificial Intelligence https://www.jmu.edu/president/initiatives/ai-task-force/index.shtml	Task force-driven institutional approach; governance-focused development
Pennsylvania State University	Program in Writing and Rhetoric: https://www.pwr.psu.edu/pwr-ai-approach/ Penn State AI Guidelines: https://ai.psu.edu/guidelines/ AI, Pedagogy, an Academic Integrity: https://aiai.psu.edu/ AI Literacy Unit: https://aiai.psu.edu/ailiteracy/	Multi-departmental comprehensive approach; includes discipline-specific (writing & rhetoric) and institution-wide policies
Texas Tech University	AI Teaching Resources https://www.depts.ttu.edu/tlpdc/ai-resources/teaching-with-ai.php	Teaching and learning center resources; faculty development focus
UNESCO (United Nations Educational, Scientific, and Cultural Organization)	AI Competency Framework for Teachers https://www.unesco.org/en/articles/ai-competency-framework-teachers	International policy framework; teacher competency model for global implementation
University of Central Florida	Faculty Multimedia Center – Home for Artificial Intelligence https://cdl.ucf.edu/the-fmc-is-your-home-for-artificial-intelligence/	Faculty technology center approach; technology integration focus
University of Groningen	Basic Rules for the Use of AI in Teaching https://www.rug.nl/about-ug/organization/quality-	European institutional context; regulatory compliance

	assurance/education/artificial-intelligence-ai/?lang=en	emphasis (GDPR)
University of Pittsburgh	Teaching with generative AI (University Center for Teaching and Learning): https://teaching.pitt.edu/resources/teaching-with-generative-ai/ AI and academic integrity (University Center for Teaching and Learning): https://teaching.pitt.edu/resources/encouraging-academic-integrity/ Acceptable uses of generative AI (Pitt IT): https://www.technology.pitt.edu/acceptable-use-generative-artificial-intelligence-tools AI policy (Writing Center): https://www.writingcenter.pitt.edu/ai-policy White paper on procuring public-sector AI (Pitt Cyber): https://www.cyber.pitt.edu/sites/default/files/AI/Procuring%20Public-Sector%20AI.pdf	Multi-unit comprehensive approach; includes IT policy, teaching center guidance, and departmental policies
University of Richmond	Guidelines for Generative AI Use https://genai.richmond.edu/guidelines/index.html	Institutional guidelines with user autonomy emphasis
University of St. Thomas	AI and Academic Research: https://libguides.stthomas.edu/ai White Paper, Crossing the Threshold Together: Bridging Innovation and Integrity in the Age of AI: https://www.stthomas.edu/_media-library/_documents/about/ai-white-paper.pdf	Research-focused with institutional white paper; values-based approach
University of Toronto	AI Task Force and Guidelines	Canadian institutional context;

	https://ai.utoronto.ca/guidelines/	task force governance model

We acknowledge that our sample of 20 artifacts representing 12 frameworks, while diverse, cannot represent the full range of institutional approaches to AI literacy. Our focus on publicly available artifacts may exclude innovative practices occurring at classroom or departmental levels. Additionally, our collaborative's disciplinary positioning within writing studies and technical communication may limit our perspective on AI literacy approaches in other fields. The rapid evolution of AI technologies and institutional responses means our analysis captures a particular moment in an ongoing transformation.

Positionality Statement

As a collective of educator-researchers working across diverse institutional contexts—including research universities and regional institutions—we bring varied perspectives to AI literacy implementation. Our collaborative represents scholars in writing studies, technical communication, and design, positioned as both practitioners navigating AI integration within our own classrooms and researchers studying these phenomena. This dual positioning shapes our methodological choices and analytical perspectives, as we are simultaneously subjects and objects of the very institutional frameworks we analyze.

Our shared commitment to social justice and ethical technology engagement influences our analytical lens, leading us to prioritize questions of equity, student agency, and critical reflection over efficiency or technological determinism. We acknowledge that our disciplinary backgrounds in rhetoric and writing studies predispose us toward critical, humanistic approaches to technology integration, which shapes both our selection of artifacts for analysis and our interpretive frameworks.

Coding Results

Our thematic analysis of the 20 artifacts and corresponding 12 institutional AI literacy frameworks yielded a comprehensive coding structure that evolved through our collaborative analytical process (refer to Appendix A for coding worksheet). Table 2 presents the cumulative outcomes from our initial coding phase, which identified representative codes and preliminary categories, and our focused coding phase, which developed these into substantial categories with detailed descriptions. The initial coding

process generated specific, descriptive codes that captured discrete elements within the frameworks, while the focused coding phase consolidated these into broader thematic categories that reveal patterns across institutional approaches. This iterative coding process allowed us to move from granular observations to conceptual frameworks that illuminate how institutions are structuring their responses to AI literacy challenges. The eight substantial categories that emerged from this analysis—ranging from AI Governance Infrastructure to Community & Industry Relations—represent the primary domains through which institutions are operationalizing AI literacy initiatives and reveal the complex, multi-dimensional nature of institutional AI integration efforts.

Table 2. Cumulative outcomes from step 1 (initial coding) and step 2 (focused coding) analysis.

Initial Coding: Representative Codes and Preliminary Categories	**Focused Coding: Substantial Categories and Descriptions**
Institutional Governance & Strategic Positioning • AI task forces/working groups • Institutional oversight and committees • Cross-institutional collaboration • Values-based governance • Granular policy-making within institution • Institutional approval requirements • Large-scale faculty recruitment • National/international responsibility • Institutional strategies for relevance • Campus-directed expectations • Educational institutions must evolve	**AI Governance Infrastructure** Institutions establish cross-functional governance bodies that develop comprehensive policy frameworks incorporating risk assessment protocols and compliance mechanisms. These structures prioritize data protection through temporary policy frameworks that enable granular institutional control while ensuring regulatory compliance with standards like GDPR and FERPA. Strategic workforce development initiatives integrate security and risk management considerations, facilitating proactive institutional engagement that promotes administrative efficiency integration across organizational units.
Pedagogical Innovation & Integration • Backward design approaches • Alternative/authentic assessments • Syllabus adaptation and flexibility • Transparent discussions with students • Pedagogical flexibility and adaptation	**Educational Transformation** Institutions implement comprehensive curriculum redesign strategies alongside assessment innovation that emphasizes authentic assessment approaches within inclusive pedagogy frameworks. Faculty development programs and professional

• Reframing assignments • Rubric-based assessment • Critical thinking focus • Process-oriented instruction • Student reflection and metacommentary • Archive deliverables for assignments • AI as tutoring tool • Regularly updated resources provision	development workshops receive strategic resource allocation to support pragmatic pedagogical integration that positions AI as a collaborative tool. Educational transformation encompasses AI tutoring integration with personalized and adaptive learning systems, supported by template and tool provision through structured guidance frameworks.
Student Agency & Competency Development • AI literacy development • Citation ethics and disclosure • Critical awareness of limitations • Academic honesty concerns • Student choice and consent • Personal accountability • Unique learning paths • Equal access to tools • Immediate application focus • Career preparation and workforce readiness • Creative output capacity • Check with instructors for clarity	**Learning Empowerment & Literacy** Institutions cultivate critical digital citizenship through academic integrity frameworks and responsible use protocols that emphasize skill-building across speaking, writing, and conceptual-operational domains. Students develop skeptical engagement capabilities alongside bias detection skills and evaluation criteria mastery that support authority and expertise development. These literacy initiatives maintain a human-centered attitude while advancing domain expertise development that prepares students for future career demands through comprehensive competency-building approaches.
Ethical Dimensions & Human Values • Privacy and data security • Accuracy/trust/validity concerns • Bias and discrimination awareness • Environmental awareness • Copyright and plagiarism • Human-centered mindset • Academic integrity maintenance • Honest and realistic uses • Emotional intelligence and creativity • Post-critical stance on technology	**Values Integration & Ethics** Institutions develop ethical decision-making frameworks that integrate global ethical standards with institution-specific values, including Catholic intellectual tradition and faith-based perspectives that ensure community values alignment. These frameworks incorporate social justice considerations and sustainability promotion while maintaining algorithmic bias awareness that protects against discriminatory outcomes. Values integration emphasizes teacher rights protection and human agency preservation as fundamental principles that

	guide ethical AI implementation across institutional contexts.
External Engagement & Partnerships • Federal partnerships and grants • Private industry connections • Policy making influence • Public engagement • Community-engaged teaching • Cross-institutional leadership • Industry bridging and collaboration • Collective production of knowledge • Societal implications awareness	**Community & Industry Relations** Institutions foster public-private collaboration and cross-sector discussions that enhance government services while contributing to national and global policy discussions. Workforce development initiatives and professional development programs emphasize future career preparation that promotes accessibility and equity across diverse populations. Economic development focus drives societal impact initiatives through global collaboration platforms that facilitate knowledge sharing and partnership building.
Risk Management & Compliance • Data protection protocols • Security compliance • Staff training requirements • Environmental impact awareness • Bias mitigation strategies • Academic integrity violations • Institutional and extreme caution • GDPR compliance • Plagiarism detection unreliability	**Technology Risk Frameworks** Institutions implement comprehensive risk assessment protocols with ongoing monitoring and evaluation systems that enable continuous improvement through sustained stakeholder engagement. These frameworks incorporate failure risk alerting mechanisms while exercising caution regarding AI detection tools, recognizing that disciplinary variation requires tailored approaches to risk management. Legal compliance frameworks integrate accessibility reviews to ensure equitable access while maintaining institutional responsibility for identifying and mitigating potential harms. Risk management strategies emphasize proactive identification of technological vulnerabilities alongside responsive adaptation to emerging challenges and regulatory requirements.
Professional Development & Autonomy • Policy support for instructor autonomy	**Professional Empowerment**

• Syllabus flexibility and options • Final responsibility for assessment • Human oversight requirements • Self-enrollment opportunities • Faculty Learning Communities • Workshops and training availability • Consultations and support • Encouraged vs. required participation	Institutions prioritize faculty choice and flexibility through competency development programs that recognize subject matter expertise while incorporating digital mindset assessment to support professional growth. These empowerment initiatives foster new pedagogical relationships that advance through progressive competency levels, integrating knowledge, skills, and values development within foundational understanding frameworks.
Institutional Leadership & Mission • University must lead community • Modeling wise AI application • Guiding toward relevant careers • Developing community capacity • Administrative applications integration	**Strategic Institutional Positioning** Institutions embrace educational leadership roles that provide community guidance while responding to institutional evolution imperatives that demand strategic positioning for continued relevance. Mission-driven decision-making serves as the foundation for these positioning efforts, ensuring that AI integration initiatives align with core institutional values and purposes.

Following initial and focused coding, theoretical coding (step 3) has led to the next set of insights that illuminate how institutions are navigating the complex landscape of AI literacy implementation. Through this final analytical phase, three primary themes emerged that characterize institutional responses to generative AI in educational contexts. First, we examine how institutions currently define and operationalize AI literacy within their frameworks. Second, we analyze the significant convergences and divergences in institutional approaches to AI integration. Finally, we explore the persistent tensions and unresolved questions that continue to challenge institutions as they develop AI pedagogical approaches, revealing the ongoing struggles between competing priorities and values in educational technology adoption.

Findings 1: Current Definitions and Operationalizations of AI Literacy

Our analysis reveals that institutions are conceptualizing AI literacy as a fundamental educational capacity requiring systematic competency development rather than optional technical skill acquisition. The Digital Education Council AI Literacy framework exemplifies this approach, "tak[ing] a human-centred approach to AI literacy, emphasising the importance of human skills such as critical thinking, creativity, and emotional intelligence" while "offer[ing] higher education institutions with structured guidance on developing AI literacy approaches that will equip individuals with key foundational AI competencies."

Across frameworks, AI literacy encompasses multiple dimensions including critical evaluation capabilities, ethical reasoning skills, and technical operational competencies. Institutions consistently emphasize preserving human agency within AI literacy development, positioning humans as active decision-makers who leverage AI tools while maintaining oversight, authority, and values-driven judgment. The University of Groningen (UG) makes this explicit, emphasizing that "Students must always be able to take responsibility for verifying and analysing information, and for their own academic substantiation" and that "Lecturers bear final responsibility for the assessment of students and the content of the teaching."

This approach suggests institutional consensus that effective AI literacy requires strengthening rather than replacing human capabilities, with competency frameworks designed to enhance rather than substitute for critical thinking, creativity, and ethical reasoning. The movement toward progressive competency levels indicates recognition that AI literacy development requires scaffolded learning approaches that advance from foundational understanding through applied expertise to innovative integration within disciplinary contexts. UNESCO's framework demonstrates this progression by outlining "15 competencies across five dimensions" that are "categorized into three progression levels: Acquire, Deepen, Create."

Findings 2: Convergences and Divergences in Institutional Approaches

Institutions demonstrate remarkable convergence around core principles while diverging significantly in implementation strategies. Universal commitments include maintaining human oversight, preserving academic integrity, and ensuring mission alignment.

UNESCO's framework exemplifies this convergence, having been "Developed with principles of protecting teachers' rights, enhancing human agency, and promoting sustainability." Similarly, the University of Pittsburgh acknowledges that "it is imperative to uphold the principles of academic integrity and ethical conduct" while recognizing "both the potential benefits and the challenges of using generative AI technologies."

Yet institutions adopt fundamentally different governance philosophies. A critical distinction emerged between resource-provision models that support informed faculty decision-making and prescriptive approaches that establish specific policies and compliance requirements. This philosophical divide reflects deeper tensions about professional autonomy and institutional control. The University of Pittsburgh represents the flexible approach, acknowledging that "all instructors will approach generative AI in their classrooms according to their own levels of knowledge, skill, and comfort with this new technology." In contrast, the UG provides "ten basic rules" while noting that "additional rules may apply at the level of your faculty, degree programme, and course unit."

Systematic variation patterns also emerged across institutional types: research-intensive universities emphasize AI's innovation potential and economic development impact, while teaching-focused institutions prioritize pedagogical integration and student learning outcomes. Geographic and regulatory contexts create additional divergence, with European institutions emphasizing regulatory compliance while US institutions focus on institutional autonomy and faculty choice. Despite these differences, institutions explicitly recognize the need for contextual adaptation. As the UG states: "There is no one-size-fits-all approach for this, as the impact varies per degree programme and per discipline."

Despite these differences, all institutions operate within multi-stakeholder governance networks involving government agencies, industry partners, and international organizations, suggesting that effective AI governance requires collaborative approaches that span organizational boundaries.

Findings 3: Tensions and Questions in AI Pedagogical Approaches

The analysis identified significant tensions that institutions continue to navigate without clear resolution. A central tension exists between viewing AI integration as an institutional survival strategy versus optional enhancement, with multiple institutions explicitly

recognizing being at an educational "crossroads" that demands fundamental pedagogical transformation. This creates both urgency and uncertainty about appropriate response strategies, as evidenced by Penn State's acknowledgment that "The AI landscape is evolving rapidly, with its capabilities constantly improving and new tools being released daily" and that "these guidelines for AI use may change as the field progresses."

The University of Pittsburgh captures this institutional tension, describing how "The revolution in the capabilities and availability of generative AI tools has caused both excitement and consternation in higher education, not always in equal measure." This urgency manifests in institutional imperatives for workforce preparation, as James Madison University (JMU)'s task force explicitly aims to "Prepare students to use AI as they enter the workforce" while ensuring the institution develops "AI-related policies that are just and equitable to all stakeholders."

Additional tensions emerge around balancing faculty autonomy with institutional coordination, as sophisticated professional development models attempt to provide structured support while preserving individual choice and professional judgment. The UG attempts to navigate this balance by stating that "The UG aims to train its students within the context of their degree programmes to become competent and responsible users of AI tools" while acknowledging that "Faculties can therefore supplement the UG policy with their own rules and activities to suit their own context."

The democratization of educational technology governance through increased student voice and agency amplification raises questions about traditional authority structures and decision-making processes. Perhaps most significantly, institutions struggle with the requirement that AI initiatives align with core institutional mission and values while adapting to rapidly evolving technological capabilities, creating ongoing tension between innovation and institutional identity. The University of Pittsburgh acknowledges this challenge, recognizing that "As a new and rapidly evolving tool that will powerfully affect education and most other social and cultural domains, generative AI presents fundamental concerns" and that institutions "will all need to pivot frequently and reassess how we use those tools." The rejection of one-size-fits-all approaches, while pedagogically sound, generates implementation challenges around consistency, quality assurance, and institutional coherence that remain largely unresolved.

Vignettes of Local Programmatic Approaches

Following our systematic analysis of existing institutional artifacts and their respective frameworks, we turn to collaborative autoethnographic reflection on our own local programmatic approaches to AI integration. These six vignettes—drawn from our experiences at James Madison University, Central Michigan University, University of Richmond, University of St. Thomas, University of Pittsburgh, and University of Central Florida—provide concrete illustrations of how the theoretical tensions identified in our framework analysis manifest in practice. Rather than prescriptive models, these accounts offer grounded perspectives on the lived realities of implementing AI literacy initiatives within specific institutional constraints and cultures. Each vignette covers both successes and ongoing challenges in our attempts to balance efficiency pressures with ethically reflective pedagogy, revealing how local contexts shape the translation of broad institutional frameworks into classroom practice. Through these reflective accounts, we illuminate the gap between policy aspirations and pedagogical realities while demonstrating how educator-researchers navigate competing demands for technological integration and social–justice-oriented teaching. We provide a summary of these narratives in Tables 3A and 3B. A full version of these accounts is included in Appendix B.

Table 3A. Summary of local programmatic approaches to AI integration (Mollie, Gustav, Daniel).

Educator	Mollie	Gustav	Daniel
Program Context	James Madison University (JMU) Technical communication program; teaches required writing courses for undergraduates	Central Michigan University (CMU) Undergraduate technical communication major; graduate technical communication program; teaches specialized TPC courses	University of Richmond Communication & Writing department; teaches professional writing and communication courses
Current Institutional Approaches	Task force exists to develop recommendations; no specific university-wide policies yet implemented	Small institution with resources available but no organized institutional approach yet; faculty have autonomy to experiment	Institutional approach emphasizes academic integrity concerns; guidelines focus on detecting and preventing misuse rather than pedagogical integration
Key Activities	Case studies examining AI dangers and limitations; comparative brainstorming exercises (traditional methods vs. AI); reflective writing assignments on responsible AI use	Image AI prompting lessons; plans to develop assignments using multiple AI bots in conversation; designs restricted GenAI assignments to maintain critical thinking	Cover letter generation comparison exercises; critical analysis of AI capabilities and limitations; experimental use of institution-provided AI tools

Primary Challenges	Significant time constraints with multiple new course preparations; balancing critical perspectives on AI with workplace preparation needs; lack of clear institutional guidance	Preventing decrease in critical thinking skills; preparing students for AI-saturated professional environments while maintaining humanities values	Fear-based institutional approach limits pedagogical innovation; emphasis on integrity concerns rather than learning opportunities
Personal Stance	Experiences tension between preparing students for AI-integrated professional futures and personal alignment with "refusing GenAI" movement	Advocates "critical futuring" approach—examining how AI-integrated futures might work and how to make those futures better for humanities disciplines	Embraces technology with appropriate caveats; seeks to move beyond institutional fear toward thoughtful integration

Table 3B. Summary of local programmatic approaches to AI integration (Katlynne, Jialei, Jess).

Educator	Katlynne	Jialei	Jess
Program Context	University of St. Thomas (UST) Multiple writing courses across curriculum; Writing Center and program administration roles	University of Pittsburgh Composition program; First-Year Writing	University of Central Florida (UCF) Undergraduate Technical Communication program; brings industry practitioner perspective

Current Institutional Approaches	Strongly pro-GenAI institutional messaging; administration encourages integration and experimentation; extensive resources provided	Comprehensive institutional guidelines emphasize ethics, inclusivity, and responsible use; multiple resources across teaching center, IT, and writing center	Faculty Multimedia Center provides AI resources and support; institution encourages exploration and experimentation
Key Activities	ChatGPT prompt comparison exercises for definition writing; students serve as AI adoption consultants; critical evaluation of AI outputs and processes	Scaffolded multimodal composition projects; critical analysis of AI-generated content emphasizing whose voices/norms are encoded; ethics-focused revision exercises	Discussions of AI ethics guidelines with students; facilitates student experience sharing about real-world AI use; conversations about responsible professional use
Primary Challenges	Junior faculty time constraints for pedagogical development; rapid platform changes require constant adaptation; access to resources does not equal time to implement mindfully	Tool access inequities among student populations; data privacy restrictions limiting certain pedagogical approaches; navigating between comprehensive policies and classroom realities	Not yet integrated into major assignments; balancing student readiness with pedagogical development; learning from students' existing AI practices
Personal Stance	Caught between "push away from hype" (maintaining critical perspective) and "pull toward preparation" (equipping students for AI-integrated workplaces)	Strong social justice commitment guides implementation; asks students to consider "Whose language, whose norms, whose imagination is encoded in GenAI's output?"	"Positively concerned"—sees value in AI tools while maintaining strong ethics focus; emphasizes student agency and responsible use

Together, the vignettes reveal three primary tensions educators navigate when implementing AI literacy initiatives. First, educators face significant challenges working within institutional constraints that often conflict with pedagogical innovation. The institutional frameworks vary dramatically, from the absence of policy at JMU and CMU to fear-based restrictions at Richmond to enthusiastic promotion at UST. This variation creates a persistent gap between what educators believe students need to learn about AI and what institutions actually support or allow. Second, all educators express a fundamental tension between preparing students for an AI-integrated future while maintaining critical perspectives on the technology. Mollie articulates this most directly:

> I feel torn between the need to prepare students to use GenAI as part of their future careers, the priorities of assistant professor life that make keeping up with rapid technology change and related pedagogy challenging, and really resonating with "Refusing GenAI in writing studies."

While this tension manifests differently across contexts, it remains a universal concern among all contributors. Third, time and labor constraints pose significant challenges, particularly for junior faculty who struggle with the additional labor required to thoughtfully integrate AI pedagogy. As Katlynne explicitly notes, "access to resources does not mean instructors have the time to translate those into mindful teaching practices," highlighting a critical gap between institutional expectations and the support provided for implementation.

Despite these diverse contexts and challenges, several shared pedagogical strategies emerge across the vignettes. Most educators employ comparative analysis exercises, having students compare AI-generated content with human-created work through activities involving cover letters, definitions, and brainstorming sessions. Critical reflection appears as another common thread, with educators incorporating reflective writing and discussions about AI use, limitations, and ethical implications into their courses. Many also adopt scaffolded integration approaches, starting with traditional methods before introducing AI tools, ensuring students understand foundational concepts before engaging with technological augmentation. Perhaps most notably, all educators emphasize ethics, focusing on responsible use, bias awareness, and critical questioning of AI systems and their outputs. As Jialei explains, this approach "encourages students to ask, 'Whose language, whose norms, whose imagination is encoded in GenAI's output?'"

The vignettes also provide valuable insights into student engagement patterns, particularly through Jess's observations of how students actually use AI in their daily lives:

> Many used ChatGPT for things like helping to summarize notes from courses for studying; a few mentioned using it for help in math courses to simplify how to solve math problems; many English as a Second Language (ESL) students suggested they used it to help revise their emails and other professional communication in the workplace.

Importantly, students appear to view AI as an "enabler rather than doer" and demonstrate awareness of its limitations, suggesting a more nuanced understanding than institutional policies often assume.

These local approaches collectively reveal that effective AI literacy pedagogy requires institutional flexibility that balances guidance with instructor autonomy, explicit support for faculty development including time allocation, recognition of AI literacy as an ongoing process rather than one-time training, integration of social justice perspectives addressing access, equity, and bias, and student-centered approaches that acknowledge varied needs and uses. Gustav's reflection on his "critical futuring" approach captures this complexity: "If we aren't addressing critically how futures with AI 'work,' how can we make those futures better for the humanities?" The vignettes demonstrate that while institutional frameworks provide structure, meaningful AI literacy development occurs through educator innovation within—and sometimes despite—these constraints. The persistent gap between policy and practice suggests a need for more responsive, educator-informed institutional approaches that support rather than constrain pedagogical experimentation, recognizing that as Mollie asks, "How can I teach students meaningfully about GenAI when I feel like refusing it, have so many other learning objectives to meet, new course preparations almost every semester, and the rest of my job to do?"

Further Discussions: The Need for Slow and Reflexive AI Literacy

This analysis of our institutional frameworks and instructors' local contexts illustrates the complexities of responding to this pedagogical moment in TPC writing instruction. In alignment with writing studies scholars' articulations of the writing assistant paradigm, many institutional frameworks present AI literacies as an interplay of technical, ethical, and critical competencies in which careful human involvement is key. Such an approach emphasizes the necessity of human interpretation and collaborative negotiation with AI systems, rather than perfunctory adoption. Even so, some institutions may communicate

conflicting messages about GenAI by encouraging GenAI use while simultaneously positioning this use as an activity that needs to be policed to avoid cheating or plagiarism. Students and instructors understandably need guidance on how GenAI use may support or fail to support learning, but as discussed in our reflections, some institutions have not offered specific policies to help instructors communicate the nuances involved in producing writing with GenAI. Further, presenting student GenAI use as something to be suspicious of furthers a negative, distrustful view of students that limits pedagogical innovation and collaboration.

Also evident in these frameworks is an underlying ambiguity around how to locate and implement specific GenAI pedagogical practices, how and when to make use of any available institutional resources, and how to navigate instances where institutional guidance might be unavailable or conflict with equity, justice, and student-centered instruction. Instructors are not always clear on how to approach GenAI pedagogy in specific, prescriptive ways that might support key competencies. Some institutions do offer concrete practices for teaching with GenAI. In analyzing our individual experiences, we noted successful activities and assignments centered on GenAI that we had tried out in our courses. However, our reflections noted the challenges of cultivating the many dimensions of student AI literacies; for us, this means preparing students for professional roles in which they might work with GenAI while also preparing students to critically respond to GenAI use that promotes oppressive practices. Moreover, as instructors, we need to be able to prepare ourselves to develop the pedagogies that will best benefit our students. Providing lists of resources about GenAI activities or assignments, syllabus statements, or the technical details of GenAI does not mean instructors are provided with the focused time needed to craft mindful AI pedagogy. Institutions stress the urgency of retooling pedagogy to respond to GenAI, but this sense of urgency may not always be applied to providing instructors with support for the work required to do so.

In examining our institutional and individual contexts, we argue for a reflective, reflexive, and justice-centered heuristic that program leaders in TPC, communication design, and related writing studies fields can draw from when developing AI curricula. As instructors, we often ask our students to think metacognitively about their writing practices with the goal of strengthening those practices, but we may not always ask ourselves as writing instructors and administrators to slow down and reflect on how we approach GenAI in our classrooms, departments, and institutions. This emphasis on "slowing down" is rooted in slow pedagogy, which itself was precipitated by the increase of slow movements in food, art, travel, and many other areas (Leddy & Miller, 2024; Shaw, Cole, & Russell, 2013). Slow

pedagogy represents deliberate, intentional, reflexive, and contemplative practices that attempt to counter cultural expectations about learning as being time-efficient, productivity-focused, and a means to the "end" of acquiring a high-paying job. As Leddy and Miller explain, "Slow involves a way of being in the world, one that is thoughtful, engaged, located, relational, and reflective; it is praxis" (p. 85). A slow pedagogy is a mindset in which learning is about facilitating sustained attention and reflection in the classroom. Such a mindset is difficult to foster specifically in a culture in which technologies like AI develop at break-neck speeds. Similar to sentiments expressed in the AI refusal movement in writing studies (Sano-Franchini et al., 2024), slowing down in relationship to technology does not mean instructors must reject all technologies outright—instead, instructors make intentional choices about when and how to involve technology in learning, or if it should be involved at all. Slow pedagogy also functions as a decolonial teaching methodology that foregrounds equity, inclusivity, and justice.

In crafting a "slow" reflective heuristic, we draw from Leddy and Miller's (2024) tenets of "slow pedagogy" to generate questions for considering AI pedagogies and curricula development. Leddy and Miller identified these tenets by analyzing overlapping conceptions of slowness in both European and Indigenous traditions. Together, these tenets hold that slow pedagogy is:

- Experiential: embodied and lived
- Place-conscious: tied to physical, material spaces
- Deeply relational: focused on examining relationships with others and our world
- Connecting inward: attention to emotions and spirituality (pp. 65–66).

We use each of these tenets to anchor our questions about how students, instructors, departments, and institutions might experience GenAI pedagogies. The questions presented here are not intended to be exhaustive, but rather a starting point for a slow, intentional praxis that cultivates critical AI literacies. To operationalize these principles, we suggest a reflective heuristic designed not as an exhaustive framework but as a starting point for ongoing institutional dialogue about AI literacy development. These questions come from the tensions and challenges identified in our analysis and are organized around the key relationships that shape literacy initiatives.

Table 4. Reflective heuristic for AI literacy development efforts.

Level	Guiding Questions for Reflection and Action
Educators	How do I feel about writing and teaching with AI platforms? What are my embodied experiences of using AI for writing, research, or teaching? What pedagogical labor do I perform when considering AI integration in writing instruction? What is my experience of this labor? Do I feel supported? How can I maintain critical perspectives on AI while preparing students for AI-integrated futures? What practices can I learn from my students' experiences with AI that might inform my pedagogical approaches?
Students	How do students feel about writing with AI? How do their positionalities (e.g., linguistic, cultural, economic) affect their attitudes about and access to AI? How are students using AI in meaningful ways that support their writing processes? How can we center student voices in AI literacy curriculum development rather than positioning them as passive recipients of institutional policies? What do students' existing AI practices reveal about their needs and capabilities?
Programs & Departments	How can we better support all instructors (graduate students, adjuncts/contingent faculty, pre-tenure faculty, etc.) in learning about AI? What professional development opportunities address both technical competencies and critical reflection? How do we balance pedagogical innovation with institutional compliance requirements?

	What resources and time allocation do we provide for thoughtful AI integration?
Institutions	What is our orientation toward AI? How is it presented or discussed, internally and externally? Does our institutional approach consider the social and material impacts of AI beyond campus boundaries? What support do we offer instructors, students, and staff related to AI? Are opportunities to support pedagogical work available? Do we have partnerships or contracts with AI platforms? How might these partnerships affect students, instructors, and departments? How do our AI policies align with our stated institutional values and mission?

One of the challenges of implementing a "slow" pedagogical approach to teaching AI literacies revolves around time. In a world of fast-paced technological development where efficient productivity is praised, it may not always be feasible for faculty or students to "slow down" and spend additional time reflecting on their writing interactions with GenAI. However, a slow, reflective approach does not have to result in increasing the amount of time spent on the writing process. Instead, it might mean practicing intentional use and non-use of these platforms.

Conclusion

To summarize, our analysis reveals that while institutions demonstrate remarkable convergence around principles of human oversight and ethical consideration, the persistent gap between policy aspirations and pedagogical realities suggests that current approaches inadequately address the labor, equity, and implementation challenges that meaningful AI literacy development requires.

The tensions we identified across both institutional frameworks and educator experiences point toward a fundamental reconceptualization of AI literacy as an ongoing process of critical reflection rather than a set of competencies to be efficiently acquired. Our

collaborative vignettes demonstrate that educators are already developing innovative pedagogical approaches that balance preparation for AI-integrated futures with critical engagement, yet they do so often despite rather than because of institutional support structures. This suggests that effective AI literacy initiatives must move beyond resource-provision toward sustained investment in the kind of reflective practice that slow pedagogy enables, recognizing that thoughtful integration requires time, support, and institutional commitment to complexity over simplicity.

The reflective heuristic we propose offers one pathway toward more socially just AI literacy development, but we acknowledge significant limitations in our analysis that constrain the generalizability of our findings. Our sample of 20 artifacts representing 12 institutional frameworks, while diverse in institutional type and geographic location, cannot represent the full range of approaches to AI literacy currently emerging across higher education contexts. Our focus on publicly available artifacts, such as policies, guidelines, resources, and statements, necessarily excludes innovative practices occurring at classroom and departmental levels that may not be captured in formal institutional documents. Additionally, our collaborative's disciplinary positioning within writing studies and technical communication shapes our analytical perspective in ways that may limit insights relevant to AI literacy development in other disciplinary contexts.

For TPC programs, writing program administrators, and professional writing faculty specifically, our findings suggest that AI literacy development cannot be treated as a discrete competency to be efficiently transmitted through workshops or policy documents. Rather, it requires sustained engagement with the ethical, rhetorical, and social justice dimensions that have long characterized our disciplinary commitments. TPC programs are uniquely positioned to lead institutional conversations about AI integration precisely because our field has always understood literacy as a complex sociotechnical practice rather than mere operational skill. The slow pedagogy approach we advocate aligns with TPC's established traditions of user-centered design, ethical communication, and attention to power dynamics in technological systems. For program administrators, this means creating structures that support faculty experimentation and reflection rather than mandating uniform approaches; providing time and resources for pedagogical development rather than expecting instantaneous adaptation; and centering conversations about justice, equity, and student agency in all AI-related decision-making. For faculty teaching in TPC contexts, our heuristic offers questions to guide thoughtful integration that honors both professional preparation imperatives and critical pedagogical commitments.

We encourage scholars across disciplines to examine how AI literacy development unfolds within their specific contexts, particularly attending to the experiences of students, contingent faculty, and educators working within resource-constrained environments whose voices are often absent from institutional policy development. Future research might explore how the tensions we identified manifest differently across institutional types, disciplinary cultures, and student populations, while investigating the long-term effects of different AI literacy approaches on student learning, faculty well-being, and educational equity. The slow pedagogy heuristic we propose offers not a final answer but an invitation to sustained dialogue about how educational institutions might chart more thoughtful paths forward amid continuing AI development.

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Appendix A: Coding Worksheet for AI Artifacts & Frameworks

Please use this worksheet for your coding of the curated generative AI artifacts and frameworks. **When you've finished coding, please include your worksheet in the Complete Coding Worksheets folder under the appropriate institution/organization.**

This first phase of coding focuses on the audiences that are most likely to be considered or implicated in generative AI frameworks: **academic institutions, instructors, students, and other/additional audiences.**

Use the table below to keep track of significant pieces of language, ideas, or themes that emerge from the AI framework as pertaining to these audiences.

Framework Title: [Write Title or Website of Framework here.]

Audiences	Descriptions	Codes (Highlighted; can include verbatim quotes)	Possible Themes
Institutions	Organizations and administrative entities responsible for implementing AI literacy initiatives at systemic levels, including policy development, resource allocation, and organizational frameworks.		
Instructors	Educators directly responsible for delivering AI literacy instruction, encompassing pedagogical approaches, curriculum design, and classroom implementation strategies.		
Students	Learners across educational contexts, focusing on competency development, skill acquisition, and learning outcomes.		
Additional Audiences	External stakeholders beyond traditional academic contexts, including industry professionals, policymakers, community members, and broader societal considerations.		

You can also keep track of any emerging codes or possible themes that might not fit in the audience-focused categories above. Feel free to include those here below:

- …

Appendix B: Full Version of Local Programmatic Vignettes

Mollie - James Madison University (JMU)

At the institutional level, JMU has had a task force made up of faculty and staff from across the university working on understanding potential uses and implications of AI, but as an ongoing project, specific guidance in terms of policy/practice has yet to be determined. As instructors, we are largely on our own beyond a couple of specific directives (like many places, we are not to put protected/proprietary/private data into unapproved AI systems, and DeepSeek AI is specifically banned). Personally, I feel torn between the need to prepare students to use GenAI as part of their future careers, the priorities of assistant professor life that make keeping up with rapid technology change and related pedagogy challenging, and really resonating with "Refusing GenAI in writing studies" (Sano-Franchini et al., 2024).

Currently, I teach courses in health and medical writing and research methods in writing, rhetoric, and technical communication. I focus on weaving what I'll call loosely critical technology literacy into all my courses, with some focus on GenAI. I often spend a day or week talking with students about how GenAI works, its limitations, and how to use it ethically. For example, in a food and health rhetoric course last semester, we talked about the perils of GenAI through a case study of AI-written mushroom foraging books with deadly mistakes. I also incorporate a brainstorming activity when it's time to choose research/writing topics: first, I ask students to do "old-school" brainstorming through freewriting, mind mapping, or exploring (search engines, Wikipedia, social media); next, they pair up and complete a modified version of Helen Choi's prewriting interview activity (2022); and lastly, they brainstorm with GenAI using their own prompts and/or ones I provide. As a full class, we then discuss affordances and limitations of the different modes, and I push us to think about GenAI's replication of systemic oppression, issues of linguistic justice, and impacts on the environment and different groups of people. I also incorporate reflective writing, and lately have included a question asking students to discuss if they used AI while completing the assignment, and if so, what they learned about writing from it. My overarching goal is to prepare students to ask critical questions of and about the tools they use, how those tools might replicate or perpetuate harm, even if indirectly, and therefore how to work toward better collaboration and co-creation with technology. I'd like to do more, but my ongoing challenges are time and focus—how can I teach students meaningfully about GenAI when I feel like refusing it, have so many other

learning objectives to meet, new course preparations almost every semester, and the rest of my job to do?

Gustav - Central Michigan University (CMU)

My institution currently is somewhat small, and so addressing AI is not really organized in a meaningful way (although a university-wide committee is looking at how we can integrate AI). Currently, I am in a business information systems department, so some of the concerns of a humanities department may not be present as much. However, that doesn't mean it does not inform my approach. This leaves me with a much wider ability to experiment. I am thinking about institutional goals, classroom learning and new work (composition, design) practices introduced by GenAI. In this, I am currently interested in developing different work methods surrounding GenAI for my students, and how to teach with (multiple) AI bots in conversation. I assume many in the humanities may shudder at the thought of integrating GenAI, but my approach is that of a *critical futuring* approach: If we aren't addressing critically how futures with AI "work," how can we make those futures better for the humanities?

Approaches to GenAI in my classroom have been at the introductory phase, with lessons on image AI prompting and introducing them to GenAI-enabled design and ideation (with a heavily restricted one assignment allowing GenAI). For the future, I am interested in integrated AI tools that subscribe to different AI bots (ChatGPT, Claude, Gemini, Perplexity, but also Dall-E, Ideogram) and allow students to put these bots in conversation with each other in knowledge work. That is, these models allow for bot-stacking where multiple people can work with multiple AI models in the same conversation. For instance, a person may prompt ChatGPT on a topic, then take that input and use Perplexity to get strictly bounded sources, then ask Claude to take that output and revise, and ask Dall-E to generate a visual based on the text within the same window. I am concerned about the decrease in critical thinking skills and the increase of system 1 thinking (automatic thinking) over systems 2 thinking (deep thinking). At the same time, I feel challenged by how people in various professional contexts (business, but also education, marketing, insurance, medicine) are using multiple AI bots in their workflow to get things done. The great challenge, for me, is to address not just equity and social justice (making sure that students recognize bias and help underrepresented populations), but to recognize that GenAI represents a new type of work practice, and I am needing to prepare students for that AI-enabled work world while challenging them to fully develop as humans and critical agents in their thinking and writing.

Daniel - University of Richmond

Small Top-25 Private Liberal Arts University in the Mid-Atlantic Region

My institution's approach to AI has focused largely on ensuring that students' academic integrity remains intact, since students have the ability to engage generative AI in writing. The impetus for this approach seems to be based largely on fear and concern: Fear that students will use generative AI to think and write for them, and concern that AI may encourage or enable LLMs and bad actors to thwart the educational mission of the institution. The headlines of the student AI usage guidelines offer insight into these fears and concerns, shown in the order they appear on the student guidelines page:

- Academic integrity
- Intellectual property
- Perspective and bias in AI
- Data privacy and security
- Effective use
- Important questions to ask

The "effective use" section appears to be the only portion of the guidelines to highlight possible benefits of AI use, possibly implying the expectation that students are more likely to use AI for harm than good.

My approach to AI in the classroom has been to embrace the technology as a tool with caveats rather than warn students away from the technology. I ask students to use different generative AI tools (using our home-built generative AI tool rather than asking students to use their own generative AI accounts) to generate cover letter versions for an employment project after first generating their own cover letter. Students are then asked to examine similarities and difference between the cover letter they authored and those generated by generative AI tools, and then to examine differences among the generative AI versions as well, in order to unravel some of the different ways that LLMs are created and used to generate content, and also to examine capabilities and drawbacks of using generative AI in professional writing scenarios. While multiple scaffolded goals are at work in this assignment, the generative AI component of the assignment seeks to unveil some of the concerns raised by our institutional approach while also encouraging experimentation with the capabilities of generative AI in non-academic settings. It is my hope that this approach provides both critical tools for analysis and practical approaches for using AI in the workplace.

Katlynne – University of St. Thomas (UST)

I feel both a push away from and pull toward GenAI pedagogy—a push away from the onslaught of hype and quick adoption of GenAI platforms and a pull toward the responsibility to help students prepare for the ways they will undoubtedly encounter these platforms in their lives. My institution has been very pro-GenAI in its messaging to faculty by making clear statements that faculty should *thoughtfully* integrate platforms into teaching and research. Personally, I resonate more with those in TPC and related fields about the threats that GenAI poses to issues of equity, such as linguistic diversity, environmental sustainability, students' cognitive development, and the labor market. These justice-centered concerns can't be ignored in our teaching.

In feeling caught between the push and pull, I've tried to implement some GenAI pedagogical activities in my courses that balance GenAI use and critical assessment of GenAI. One activity asked students to input slightly different prompts asking ChatGPT to define TPC. We then compare the output. The objective is for students to consider how important it is to think critically about the wording of prompts and to simply have them spend some time engaging with a GenAI platform. In a separate activity, I have also had students act as consultants who are charged with determining whether their mock organization should integrate a specific GenAI platform. I saw this exercise as taking a step back from jumping right into GenAI use; instead, I wanted students to spend time evaluating what GenAI platforms do and if they should be used. Both activities went well enough, though I've walked away from these classes not sure if they were enough to deepen students' thinking about GenAI. The big challenge I feel that I face is related to time – as junior faculty, I feel I don't have the time to do the research, practice, and overall preparation it would take to thoughtfully prepare students for the work they might do with GenAI. This is made even more complicated by the rapid development of these platforms. As they change, our pedagogy might need to change, which then requires time to make changes. GenAI has and will continue to be deeply integrated into our lives, meaning that if instructors are to promote critical AI literacy, the labor of developing GenAI pedagogies must be supported more explicitly. Like other institutions, my university created a hub of GenAI resources. But access to resources does not mean instructors have the time to translate those into mindful teaching practices.

Jialei - University of Pittsburgh

As a digital media and technical communication instructor at the University of Pittsburgh, my integration of GenAI into the classroom is informed by both institutional guidelines and

a commitment to social justice. Two current practices I've implemented highlight how I navigate GenAI in alignment with my institution's evolving AI policy with a strong focus on ethics and inclusivity. One of the primary ways I integrate GenAI is by designing scaffolded multimodal composition assignments that build students' critical AI literacy. For instance, students begin by composing digital artifacts such as posters, podcasts, or short videos using traditional creative tools. Then, in a second phase, they revise or remake their compositions with the assistance of GenAI tools such as Adobe Firefly and DALL.E. This comparative approach invites students to reflect on not only the efficiency or novelty of GenAI but also its influence on their design choices and agency. This project encourages students to ask, "Whose language, whose norms, whose imagination is encoded in GenAI's output?" By foregrounding reflection questions like this, students learn to recognize the potential disconnect between GenAI's output and their design visions, evaluate the ethical implications of machine-generated content, and assert their creative agency as digital media designers and technical communicators. This practice aligns with University of Pittsburgh's emphasis on supporting GenAI use that "respects diverse student voices" and promotes "inclusive learning practices."

A second practice involves asking students to conduct critical analyses of AI-generated content in both everyday and professional writing genres, such as résumés, infographics, or health communication materials. Students examine the outputs produced by ChatGPT or other GenAI systems and assess them in terms of their tone, accessibility, accuracy, and potential bias. The students then revise the outputs through the use of plain language, cultural inclusivity, and user-centered design. This project not only develops students' technical writing skills but also highlights ethical concerns related to misinformation, stereotyping, and linguistic erasure. As Pitt's policy advises, "the human touch is still required." These exercises help students develop their skills in refining and revising GenAI's output.

These practices, however, come with challenges. One challenge is the limitations regarding tool access. My institution acknowledges the importance of accessibility, yet not all students have equal familiarity or comfort with GenAI platforms, and it remains difficult to bypass the paywall if students are interested in using the paid versions of GenAI tools. I've responded by building in scaffolded digital literacy supports and assigning collaborative work to foster peer learning. Another challenge is navigating data privacy concerns, especially given my institution's caution against inputting student-generated content into free GenAI tools. I've had to limit certain activities, such as open-ended AI testing, and instead emphasize hypothetical scenarios or anonymized data. Still, these

projects demonstrate the pedagogical value of integrating GenAI critically and ethically. My institution's refusal to endorse unreliable AI detectors, primarily due to their disproportionate harms on non-native and multilingual students, also helps me to develop trust-based and formative assessment over surveillance. Rather than treating GenAI as a shortcut or a threat, I position the technology as a sociotechnical artifact that students can reshape through critical reflection, cultural creativity, and ethical engagement.

Jess - University of Central Florida (UCF)

As an industry practitioner, I find it valuable to incorporate AI in the classroom to allow the opportunity for students to understand and practice responsible use of AI. I have implemented conversations of AI through discussions. In one discussion, I asked students to first read about the ethics of AI in writing and then discuss two or three guidelines that "technical communicators should abide by in order to be responsible users of AI." In this discussion, I had students generate a list of "AI ethics statements" that would guide their use of AI in the classroom.

I often say that I learn more from my students then they learn from me—mostly because students are likely coming in the course with more technical knowledge then I have and have kept up with the use of sophisticated technology. Thus, in another discussion, I asked students about their use of AI and to discuss the strengths and limitations of AI.

I was delighted to learn about students' various uses of GenAI. Many used chatGPT for things like helping to summarize notes from courses for studying; a few mentioned using it for help in math courses to simplify how to solve math problems; many English as a Second Language (ESL) students suggested they used it to help revise their emails and other professional communication in the workplace because their style and tone did not fit their audience (one student even said that it has helped improve their communication at work significantly). One student mentioned they used it to revise their social posts to be more attention-grabbing, and one student used it to synthesize recipes for cooking in the way they wanted. I was excited that all of these uses appeared to be relevant to their unique need and responsible. They appeared to be using AI just like any other digital tool that improves humans' abilities. We use many digital tools to increase our productivity, reduce manual workload, and enable us to extend our cognitive capacity. Students appear to use AI for these reasons, and they were aware of the "hallucinations" AI could have and appeared to consider AI as an enabler rather than a doer.

Overall, I have not yet incorporated the use of AI in major assignments, but have stimulated conversations of AI to gain students' perspective and bring attention to

responsible use. I have started to use the phrase, "positively concerned," when discussing AI in the context of TPC. I believe this captures the idea that AI has value and students should learn how to use AI effectively, but the concern part underscores the need to incorporate ethics and responsibility within the framework of using AI in the classroom.

Author Information

Katlynne Davis is Assistant Professor of technical and professional writing in the English Department at the University of St. Thomas in St. Paul, MN. As part of her work with the Building Digital Literacy (BDL) research cluster with the Digital Literacy Institute (DLI), she studies the pedagogical labor involved in preparing to teach with generative AI platforms. She also studies the digital labor of technical communication as it relates to content strategy and user experience. Her work has been published in *Communication Design Quarterly* and *The Journal of Interactive Technology & Pedagogy*.

Jason Tham is Associate Professor of technical communication and rhetoric at Texas Tech University. He serves as Assistant Chair of the English department and teaches courses in user experience, design, and research methods. He is author and collaborator of several books, including *Design Thinking in Technical Communication* (2021), *Writing to Learn in Teams* (2023), and *The Rhetoric of Design Thinking* (2025). He is chief editor of *Computers and Composition*. Additional information about his ongoing projects is available at www.jasontham.com.

Danielle Mollie Stambler is Assistant Professor in the School of Writing, Rhetoric, and Technical Communication at James Madison University. Stambler studies wellness and disability rhetorics, literacies and digital life, and UX, and has scholarship in publications including *Technical Communication Quarterly, Rhetoric of Health and Medicine*, *Communication Design Quarterly*, and *Peitho*.

Jialei Jiang is Teaching Assistant Professor in the department of English at the University of Pittsburgh. She is interested in exploring issues related to critical AI literacy, multimodal composition, and socially-just writing pedagogy. Her co-edited collection is titled *Designing for Social Justice: Community-engaged Approaches in Technical and Professional Communication* (Routledge, 2025). Her works have appeared in *College Composition and Communication*, *Computers and Composition*, *Technical Communication Quarterly*, and edited collections.

Jessica Campbell holds a PhD in Texts and Technology and a Master's in English – Technical Communication from the University of Central Florida (UCF). Her expertise lies at the intersection of technical and professional communication (TPC) and human-computer interaction (HCI), with a focus on healthcare. She brings extensive disciplinary and industry knowledge in user experience (UX) research and design. Her research centers on mixed-methods studies of health information technology (HIT). Jessica authored the text, *User Experience Research and Usability of Health Information Technology* and has

published in venues including the *Journal of Technical Writing and Communication*, IEEE's International Professional Communication Conference, and SIGDOC proceedings. Her academic interests extend beyond healthcare to TPC pedagogy, where she explores how students engage in social justice work, address wicked problems, and strengthen digital literacy. Through both scholarship and teaching, Jessica emphasizes equity, user-centered design, and interdisciplinary approaches to communication and technology.

Gustav Verhulsdonck is Associate Professor in Business Information Systems at Central Michigan University. He has co-authored *UX Writing: Designing User-Centered Content* (Routledge, 2023) together with Jason Tham and Tharon Howard. He was a Stanford d. School Faculty Innovation Fellow from 2023–2025 and Visiting Researcher at DesignLab at the University of Twente, The Netherlands in 2024. His research interests focus on generative AI and the implications for design and communication practices. His research has appeared in *International Journal of Human-Computer Interaction*, *Journal of Business and Technical Communication*, *Technical Communication Quarterly*, *Journal of Technical Writing and Communication*, among others.

Daniel Hocutt serves as Web Manager on the marketing and engagement team and teaches as Adjunct Professor of liberal arts at the University of Richmond School of Professional and Continuing Studies in Richmond, Virginia. His research interests align at the intersection of rhetoric, user experience, and technology. Specific areas include data analytics and artificial intelligence in technical communication, posthuman rhetorical agency, and digital literacies. He's published in *Programmatic Perspectives*, *Technical Communication*, *Technical Communication Quarterly*, *Computers and Composition*, *Present Tense*, and the *Journal of User Experience*, along with several edited collections.