CHAPTER 7.

AI USE IS A NATURAL SKILLSET

✨ *AI IS A LEARNED LITERACY*

Lisa Bell
Utah Valley University

Joni K. Hayward Marcum
James Madison University

Despite the prevalence of water on our planet, not everyone learns to swim. This does not mean that drowning is inevitable for everyone but that a non-swimmer entering the water would not fare as well as someone with lessons and structured, skill-level-appropriate practice. Similarly, the assumption that generative artificial intelligence (GenAI) skills come naturally stems from the ubiquity of digital technology, specifically GenAI technology. Students ranging from preschool to college are commonly depicted as deftly navigating smartphones, tablets, and computers, which often leads to assumptions about their ability to understand and use complex digital tools like GenAI. In reality, not all students are using digital devices and tools in the same way, including GenAI. In fact, GenAI companies have been broad in their creation of general GenAI tools and rely on users to determine specific or best use (Mollick, 2024). While GenAI may be all around us, it does not come with uniform instructions or expectations, let alone an even level of access. Yet, assumptions about student uptake and myths of digital natives persist, despite ongoing scholarship to the contrary (Eynon, 2020; Helsper, 2021; Ladd et al., 2023). In short, the use of GenAI is not a natural skill set—like all digital skills, it is a learned literacy. As quoted by Ellen Helsper (2021) in *The Digital Disconnect*, "Simply because students today appear to be exposed to new technologies does not necessarily denote literacy (Looker & Naylor, 2010, p. 135)" (p. 77). Being AI literate means having a basic understanding of how to use AI, and crucially, how AI tools work (MLA-CCCC Joint Task Force on Writing and AI, 2024). Knowing the behind-the-scenes elements of how AI models are designed and trained and how they are beneficial and flawed is essential to GenAI literacy. With GenAI "now inextricably part of how students will write in the academy and beyond" (Dobrin, 2023, p. 20), educators must resist assumptions about students and GenAI literacy. It is time to reacknowledge and recenter the idea that teaching writing involves

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multiliteracy, including GenAI literacy, instruction. To accomplish this, writing instructors should understand GenAI's impact on writing pedagogy, reveal the hidden curriculum of values and norms not explicitly taught, and commit to teaching critical GenAI and digital literacy integrated intentionally with writing instruction. Such literacy is central to the learning and writing processes and prepares students as ethical and effective writers in the digital era.

Just as it seems unreasonable to lead a new swimmer to water and then walk away, assuming they will fare fine teaching themselves to swim, students do not become GenAI literate simply by being exposed to platforms or GenAI interfaces or by using GenAI without expert guidance. As with swimming, navigating GenAI involves learning. Educators' assumptions that learners have the innate ability to use and understand how GenAI works masks the intricacy underlying GenAI literacy. While inputting prompts and getting coherent outputs appears easy, this limited skill set falls short of the knowledge required for effective and ethical GenAI use. Operational ability does not equate to actual GenAI literacy. GenAI literacy is a layered literacy dependent on prior literacies, metacognition, and ongoing guided practice.

Educators often assume students come to campus with established literacy levels or receive literacy instruction prior to arriving in the classroom. However, helping students develop GenAI literacy is shared work, even across disciplinary divides. As with writing, the foundational and disciplinary conventions and expectations surrounding GenAI use matter, and we cannot assume students can learn or transfer this learning without educational assistance. We cannot pretend that writing with GenAI happens without knowledge of and experience with both GenAI and writing. Moreover, we cannot expect students to navigate the whiplash of uneven access to and familiarity with GenAI as part of their academic experience. For example, a student's aviation science program may offer access to upgraded versions of GenAI as essential tools within that field. In contrast, in that same student's required history course, those GenAI tools may be banned and their use equated to cheating or avoiding learning. Without a clear explanation of how to use GenAI tools ethically in both contexts, the student is left with exposure to GenAI in one discipline and fear of GenAI in another or uncertainty about how GenAI expectations and applications change across contexts. Additionally, as educators, we cannot assume that all university students share proficiency in the literacies needed for college-level, GenAI-integrated writing. As GenAI technologies advance, every educator must ensure that learners are not merely treading water when using digital tools but developing effective ways to learn with rather than learn around GenAI.

While educators need to develop GenAI policies and adjust assignment prompts, it is our pedagogy or approach to teaching that needs the most

attention if we want to impact GenAI literacy and learning. It is not enough for educators to assign GenAI and writing—we should be explicitly teaching it. Without integrating GenAI education into classrooms, teachers risk creating a "technology facade" (Tomei, 1999, as cited in Selber, 2004, p. 5) in which GenAI literacy learning appears more robust than it is. Understandably, recentering our attention to think beyond policies and prompts requires significant mental and emotional energy to re-imagine and revise engrained approaches to teaching writing and our rationale for instructional approaches. Where curriculum determines what is taught, pedagogy determines how it is taught. As curriculum expands to include GenAI, educators need new pedagogical approaches and the ability, time, and space to re-envision established ones. Rethinking pedagogy in the context of GenAI involves imagining how GenAI might impact learning outcomes. It involves determining where and when GenAI is the right tool to have students use and how and to what extent they should use it. It involves deciding where GenAI might facilitate learning and where it might frustrate it. This includes making it clear to students where GenAI appears to save time but ends up bypassing needed learning. For example, without guidance, a student may use GenAI to fully generate an annotated bibliography and then be unfamiliar with those sources when writing their research paper. In contrast, with intentional and visible scaffolding, the student may understand the connection between annotated bibliographies and research papers, and the instructor can integrate GenAI tools at suitable points in the process. Thus, rather than throwing learners in the deep end or confining them to the shallows, educators must intentionally integrate GenAI literacy with writing instruction based on the learning needs and levels of their students.

Rather than ignoring digital and GenAI literacy-based barriers to writing, we must address them with multiliteracy instruction. According to Stuart Selber's 2004 framework, developed in the context of the emerging personal computers and wide availability of the internet, multiliteracy addresses three distinct categories of digital literacy: functional literacy (technical skills), critical literacy (analytical skills), and rhetorical literacy (creative and reflective skills). This framework remains relevant at a time of emerging GenAI technology and ongoing multiliteracy needs. Each category matters for learners building digital skills, and each category requires specific pedagogical approaches. Leaving these crucial elements of multiliteracy unaddressed, according to Selber, is likely to result in weaker pedagogical practice and negative societal outcomes: "it is precisely when teachers ignore technology and its contexts that the real pedagogical and social damage is likely to be done" (2004, p. 13). Writing instructors, for example, may still apprehensively approach GenAI in their classrooms and in their pedagogy. However, it is precisely in their classrooms and through their pedagogy

that learners need structured opportunities to develop the functional, critical, and rhetorical skills that new GenAI tools demand.

Since writing no longer happens separately from digital technologies, starting a course by evaluating each student's existing skills and knowledge is crucial to meeting learners where they are and building tailored digital and GenAI literacy scaffolding into instruction. This might include a low-stakes diagnostic or a survey about previous experiences. Based on the results, educators can address gaps and build on strengths. Some students may need basic digital literacy training before moving on to other activities, while others might need more advanced guidance on digital tools and GenAI evaluation at the start. For specific assignments, learners might benefit from the explicit explanation of multiliteracy skills as part of the required tools or learning goals, alongside writing, critical thinking, and analysis of course content and concepts. Flexibility is key to accommodating a range of skill levels. By framing writing instruction in a multiliteracy and layered literacy context, we gain a more accurate picture of the digital waters students are navigating.

Writing classrooms are spaces where GenAI literacy can be developed and reinforced, but they also are spaces well positioned to address the hidden GenAI curriculum of layered literacies, metacognition, and experiential learning (Lesh, this volume). As writing instruction increasingly involves multiliteracy work, educators are poised to help students understand GenAI literacy as a layered literacy. To develop the skills required for GenAI literacy, students must have a foundational understanding of reading, writing, information literacy, and digital literacy. These layered literacies are not only necessary to effectively and ethically use GenAI, but they are needed to participate in the metacognitive work required of GenAI. This metacognitive work involves an awareness of one's own learning processes and patterns (Franzetti & Ou, this volume). As part of GenAI literacy, metacognition involves planning how to use GenAI, evaluating one's own use of GenAI throughout the process, and critically assessing GenAI output and experience. Writers must understand that GenAI may reduce the cognitive work needed to complete an assignment, but it increasingly demands metacognitive labor (Tankelevitch et al., 2024). GenAI literacy also demands experience. Just as writers learn to write by writing and swimmers learn to swim by swimming, students learn to use GenAI by engaging and experimenting with GenAI.

In a writing classroom, attending to the hidden GenAI curriculum means making learning visible to students and providing low-stakes assignments where students can practice integrating GenAI and writing instead of focusing solely on the product submitted for points. Such learning includes modeling the use of GenAI on tasks and walking through the literacies and metacognition needed. For instance, an instructor might model using GenAI for outlining and

lead a class discussion evaluating the GenAI output. The instructor may then ask whether students want to refine the outline using GenAI, collaborate with GenAI on revision, consult with peers, or move forward independently. Making the range of possibilities clear allows students to test and become confident in the new waters of GenAI-assisted writing and learning.

What happens when you bring a new swimmer to the water—show them the pool, and walk away? Is it sink or swim? If you walk away, you won't know how they truly fare in the water; you can only hope for the best. What if the swimmer only stays in the shallow end? What if they never relinquish their flotation device? What if they never swim at all? This is how educators treat learners by assuming their exposure to digital tools means they will become skilled at them. Instead, as GenAI and writing become increasingly enmeshed, educators and students need to immerse themselves in writing as multiliteracy learning and attend to the hidden GenAI curriculum as an inherent part of writing within higher education.

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