

While GenAI (generative artificial intelligence) tools appear to work instantaneously, almost like magic, they rely on immense amounts of data and computing functions. GenAI is the product of humans' work in advanced mathematics, statistics, computer science, engineering, linguistics, and more, and GenAI tools perform tasks that typically require human decision-making, such as understanding natural language, recognizing patterns in data, making predictions, and even learning from experience. The "intelligence" of AI refers to its ability to simulate human cognitive functions, including learning from new and preexisting knowledge to solve problems. However, users of GenAI observe that its processes and outputs often require the supervision and intervention of critically thinking humans.

AI Literacy

Ethical and effective use of GenAI technologies is emerging as an essential skill that students must develop in order to live, learn, and work. Yet GenAI comes with potential pitfalls for students—from the risk of being accused of academic misconduct to missing out on foundational skills in reading, writing, research, and learning.

Developing literacy with a tool means becoming a more skilled and thoughtful user of that tool. For example, developing literacy in reading means being able to reread, tackle increasingly difficult texts, and do research in order to further build your capability as a reader. Literacy also assumes you have enough knowledge to question and evaluate what you are studying.

Similarly, developing AI literacy requires that you learn certain basics about how GenAI works, how to use it, and how to evaluate its output. You should also learn when not to use it. Developing GenAI literacy should be your starting point for using this technology. When you build skills and habits for using GenAI ethically and effectively you will establish yourself as a thoughtful creator and consumer of GenAI content as technologies change over time.

You are becoming a literate user of GenAI when you can do the following:

1. You have a basic understanding of how GenAI technologies work.
 - You can distinguish between AI and GenAI.
 - *AI* refers to systems that predict outcomes based on statistical models derived from large datasets.
 - *GenAI* produces text, images, and videos in response to prompts. Large language models (LLMs), a type of GenAI, use a diverse range of text, often drawing on digitized texts and text from the internet, to produce text that is near or even indistinguishable from text composed by a human.
 - You can explain that LLMs essentially predict the likelihood that parts of words will appear successively, producing text based on their training on digitized forms of human-written text.
 - You can identify that LLMs involve various forms of human intervention, including feedback and content moderation, that influence their performance.
2. You understand the policies and frameworks for the ethical use of GenAI outlined by your instructors and institutions.
 - You can identify and follow relevant guidelines on using GenAI for academic purposes.
 - You credit GenAI contributions in your work through appropriate citation or attribution.
 - You can discuss your process transparently with your instructors and peers.

3. You know how to prompt GenAI to produce useful outputs.
 - You can provide a prompt that suits the purpose of a learning task.
 - You use effective techniques, including experimenting, practicing, and refining prompts, to achieve desired outputs.
 - You use flexible strategies to adapt to new and evolving GenAI tools.
4. You evaluate the relevance, usefulness, and accuracy of GenAI outputs.
 - You select strategies appropriate to the context, purpose, and audience for a task.
 - You can analyze GenAI outputs to determine whether the results align with the purpose of a task.
 - You recognize when using GenAI is not appropriate for a writing or research task.
 - You check the accuracy, correctness, and relevance of GenAI outputs against credible sources.
5. You monitor your own learning as you use GenAI tools.
 - You understand and can articulate why you used GenAI in a writing, reading, or research task.
 - You can explain how using a GenAI tool for writing contributed to your work.
 - You can reflect on how your use of GenAI affects your creativity and development as a writer.
 - You can reflect on your learning needs and make effective decisions about when to avoid relying on GenAI as a learning tool.
6. You recognize that GenAI is fundamentally different from human communication.
 - You can explain differences between text produced by a GenAI tool and authentic human communication.
 - You recognize that while GenAI is a useful aid in writing, written communication happens only between human writers and readers.
 - You can evaluate whether the output from a GenAI prompt used as part of your writing process or product might result in miscommunication.
7. You understand the potential harms of GenAI, both those inherent to the technology and those that arise from misuse.
 - You can identify how the growth of AI technologies impacts the environment.
 - You can identify how the growth of AI technologies impacts labor.
 - You can evaluate GenAI outputs for bias in language, culture, gender, ethnicity, and other social biases.
 - You can examine and explain privacy, intellectual property, and data security risks of GenAI.
 - You can assess the implications of bypassing human feedback and communication in writing processes.

This guide was written by participants of the Critical AI Literacy for Reading, Writing, and Languages Workshop, an initiative of the [MLA-CCCC Task Force on Writing and AI](#).

