

# AI Literacy Handout

## How do we define AI Literacy?

* “A set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace” ([Long & Magerko, 2020](https://aiunplugged.lmc.gatech.edu/wp-content/uploads/sites/36/2020/08/CHI-2020-AI-Literacy-Paper-Camera-Ready.pdf)).
* “By critical, I mean this in multiple senses of the word. One is critical as in critical thinking, as in skepticism and questioning. The other is critical as in critical pedagogy, so focusing on social justice dimensions and inequalities something may exacerbate, reproduce, or create. Another is critical, as in, critique it for its potential harms, and critique the credibility/accuracy of its outputs/outcomes…” [(Bali, 2023)](https://blog.mahabali.me/educational-technology-2/what-i-mean-when-i-say-critical-ai-literacy/).

## What are examples of AI Literacies?

These examples are adapted from [Ng et al., 2021](https://www.sciencedirect.com/science/article/pii/S2666920X21000357), but by no means is this list exhaustive. As you review these, consider how these literacies can be integrated within your classroom (e.g. learning outcomes, assessments, in-class activities, etc.)

### Know and understand AI

*Knowing the basic functions of generative AI and understanding how generative AI applications work*

* Which AI applications are my students most likely using? (OpenAI’s [GPT-4](https://chat.openai.com/) , [Anthropic’s Claude](https://claude.ai/login?selectAccount=true&returnTo=%2Fchats), or [Microsoft CoPilot](https://copilot.microsoft.com/))
* How do AI systems work? (language learning model, tokens, making decisions/recommendations)
* What are the capabilities of AI? (pattern recognition, machine learning, image generation)
* What are the limitations of AI? (“hallucinations,” computational errors, biased training data)
* Resource: Ethan Mollick ‘[One Useful Thing](https://www.oneusefulthing.org/)’ substack: [FAQs](https://www.oneusefulthing.org/p/what-people-ask-me-most-also-some) & [AI video series](https://www.youtube.com/watch?v=t9gmyvf7JYo)

### Apply AI

*Applying AI knowledge, concepts, and applications to different contexts*

* What techniques and strategies should I use to interact effectively with AI?
* What are AI’s practical applications for teaching and learning?
* What role does AI play in various disciplines/contexts?
* Resource:  [AI Pedagogy Project: AI Guide](https://aipedagogy.org/guide/)

### Create and Evaluate AI

*Situating the creation and evaluation of AI within higher-order thinking skills (e.g., evaluate, appraise, predict, design)*

* How do I design and collaborate with AI on a deeper level?
* How can I critically assess the outputs of AI?
* How do I understand prompt engineering (aka prompt literacy) as a key component of creating/evaluating while using AI?
* Resource: [University of Michigan Prompt Literacy Resource](https://genai.umich.edu/resources/prompt-literacy) & [AI Pedagogy Project Sample Assignments](https://aipedagogy.org/assignments/)

### Consider AI Ethics

*Understanding human-centered considerations (e.g., fairness, accountability, transparency, ethics, environment, safety) when using AI*

* What are the positive and negative implications of AI on society?
* How can biases be embedded within AI?
* When should I use AI and when should I refrain?
* How can we build ethical guidelines/strategies to address concerns around AI?
* Resource: [Teaching AI Ethics](https://leonfurze.com/2023/01/26/teaching-ai-ethics/comment-page-1/)
  + [Full series](https://leonfurze.com/ai-ethics/)

For additional resources, check out the [Poorvu Center’s AI Guidance](https://poorvucenter.yale.edu/AIguidance) and [Yale faculty AI teaching examples](https://poorvucenter.yale.edu/ai-teaching-examples)*.*