

UNLIKELY ALLIES: THE NEED FOR TECHNOLOGY LIBRARIANS IN SOTL

ACRL Framework for Information Literacy For Higher Education

Approved in 2016, the framework focused on research in the context of voluminous information and misinformation online. Artificial intelligence continues the trend towards more plentiful while simultaneously less vetted information. The ACRL Framework is a valuable lens for teaching students how to research in light of AI tools and AI-generated content.

FRAMES: AUTHORITY IS CONSTRUCTED / CONTEXTUAL & INFORMATION CREATION AS A PROCESS

Lesson: The ROBOT test: The goal of this test is to critically assess the information that is produced about AI technologies and the implications they can have. The acronym ROBOT (reliability, objectivity, bias, ownership, and type) helps to remember which aspects should be evaluated (Wheatley & Hervieux, 2023).

Lesson: Hidden Layer: Intellectual Privacy and Generative AI: Seven classroom exercises that build on one another to explore a range of intellectual privacy implications of AI, including personal data, intellectual property, synthetic media, hallucinations, and misinformation (Hartman-Caverly, 2023).

Lesson: Card games to teach how machine learning algorithms work: Use playing cards to learn about the nearest neighbors machine learning algorithm. Make a grid of playing cards, indexed by suit and number. Students decide to put down a blue or red backed card depending on color of nearby cards (Bell & Talboom, 2023).

FRAMES: SEARCHING AS STRATEGIC EXPLORATION & RESEARCH AS INQUIRY

Lesson: Search tools comparison: Have students break into groups and each group research the same topic on 3 styles of website (Google Scholar, chat bot, article database like Academic Search Complete). In groups, work through a list of discussion questions to discuss findings (Fitzgibbons, 2023).

Lesson: Teaching prompt engineering with an analogy to shooting pool: Shoot the shot, then look how the balls lie, and strategize for the next shot. At the very start, it's not possible to know the strategy that you will use several shots later (Nesbitt & Stilwell, 2023).

Lesson: The Unsolved Hallucination: Teaching Advanced Search Techniques with AI: Introduces students to advanced search options as they solve the mystery of which source is fake and which source(s) are real! (Reagan, 2024a)

FRAMES: SCHOLARSHIP AS CONVERSATION & INFORMATION HAS VALUE

Lesson: Engineering AI Prompts to Develop Keywords: Students learn how the research process works by starting with a broad prompt with AI (Reagan, 2024d)

Lesson: Building Confidence in using AI to Generate Citations: Have a chat bot format citations in APA, then check those citations for mistakes (Reagan, 2024b).

Lesson: AI & Personal Information: An Investigation: Teaches students how generative AI platforms commodify personal information while focusing on how to interpret data policies (Reagan, 2024c)

WILHELMINA RANDTKE, HEAD OF TECHNOLOGIES AND SYSTEMS
KEVIN REAGAN, INSTRUCTION & OUTREACH LIBRARIAN

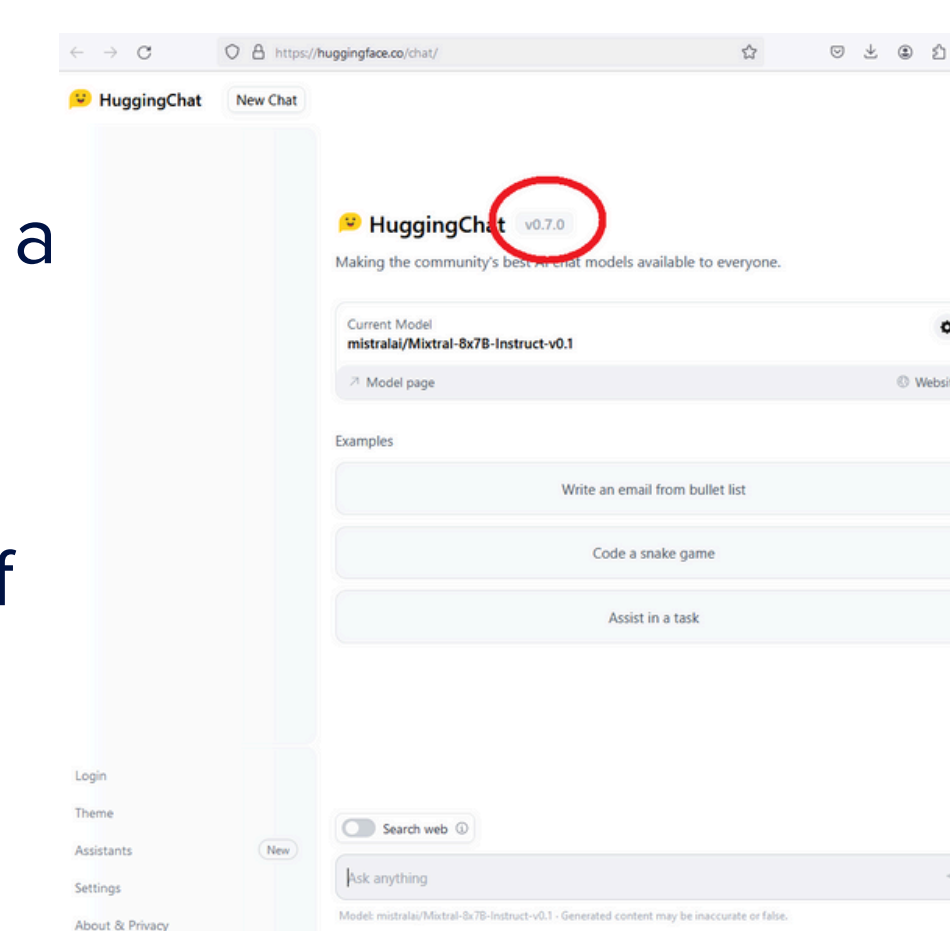


ABSTRACT

This poster addresses strategies to teach AI as part of research. We know that generative artificial intelligence (AI) is here to stay. Rather than avoid it, or stay mired in tradition, there is an opportunity to teach strategies for using new AI tools. Once upon a time, search engines were new. Librarians were pioneers in refining strategies for using search engines, and now teach use of search engines for everyday tasks and research (for example, see Fonseca, T., & King, M., 2000). Today, librarians are positioned to lead in teaching how to use AI. Specifically, we are gathering examples of exercises which teach how to use AI as part of the research process, with a focus on classroom exercises compatible with library one shot instruction sessions, and we are organizing our classroom exercises around the ACRL Framework for Information Literacy (ACRL, 2016).

TECH TIPS

The online chatbot Hugging Face's HuggingChat is a good choice for classroom use for two reasons. First, it does not require a log in or account, so is good for privacy and quick casual access. Second, the homepage of HuggingChat shows the version number. If you plan a lesson on one version, you can quickly confirm whether or not the software was updated between planning and class.



SOURCES

- Association of College and Research Libraries (ACRL) (2016). ACRL Framework for information literacy for higher education. Chicago, IL: American Library Association. <http://www.ala.org/acrl/standards/ilframework>
- Bell, M. and Talboom, L. (2023). More Than Just Algorithms: A Machine Learning Club for Information Specialists. In *The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries* (pp. 61-70). Association of College and Research Libraries.
- Fitzgibbons, M. (2023). Concordia University Library, April 2023. Search tools comparison (jigsaw group activity). ACRL Sandbox. <https://sandbox.acrl.org/library-collection/search-tool-comparison-activity>
- Fonseca, T., & King, M. (2000). Incorporating the Internet into Traditional Library Instruction. *Computers in Libraries*, 20(2), 38.
- Hartman-Caverly, S. (2023). Hidden layer: Intellectual privacy and generative AI. ACRL Sandbox. https://sandbox.acrl.org/system/tdf/resources/HiddenLayer_LessonPlan_CCBYSA_HartmanCaverly_2023.pdf
- Nesbitt, T. and Stilwell, K. (2023, October 4-6). AI and the Meta Poster [Conference presentation]. Georgia Library Conference, Athens, GA, United States. https://www.canva.com/design/DAFJUH6kXU/BErazVEJP_thvjN5ZoQOw/view
- Reagan, K. (2024a). The Unsolved Case of the Hallucination. <https://sandbox.acrl.org>
- <https://georgiasouthern.libguides.com/informationliteracyai>
- Reagan, K. (2024b). Building citations with AI. <https://georgiasouthern.libguides.com/informationliteracyai>
- Reagan, K. (2024c). AI & Personal Information Commodification. <https://georgiasouthern.libguides.com/informationliteracyai>
- Reagan, K. (2024d). Engineering AI prompts to develop keywords. <https://georgiasouthern.libguides.com/informationliteracyai>
- Wheatley, A. and Hervieux, S. (2023). Separating Artificial Intelligence from Science Fiction: Creating an Academic Library Workshop Series on AI Literacy. In *The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries* (pp. 61-70). Association of College and Research Libraries.