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Is This AI Tool Right for Me?

Important Questions from the Framework

Developments in artificial intelligence (AI) over the last few years have led to an increased desire to learn about AI tools. A survey by LinkedIn Learning[1] found that "4 in 5 people want to learn more about how to use AI in their profession." Similarly, those who will soon enter the workforce also want to learn more about AI. A survey by InsideHigherEd[2] reported that most students (72%) feel their institution should be preparing them "a lot" or "somewhat" for the rise of AI in the workplace, 72% of respondents agreed that the primary focus should be teaching the ethics of using AI, with 62% also indicating an interest in learning skills such as "critical thinking and problem-solving." The philosophy behind the ACRL Framework for Information Literacy for Higher Education underscores these needs in its introduction: "Students have a greater role and responsibility in creating new knowledge, in understanding the contours and the changing dynamics of the world of information, and in using information, data, and scholarship ethically."

Developing the Rubric

Our assistant library director recognized these needs at the State University of New York at Oswego—the need for librarians to learn about generative AI (GenAI) tools for their own edification, and the need to help support faculty and students in learning about GenAI. She provided dedicated time during librarian meetings for us to experiment with a variety of GenAI tools and consider how students might use these tools. During our explorations, we sometimes had difficulty finding information about the tools. For example, at the time this article was written, the Privacy Policy,[3] Terms and Conditions,[4] Cookies Policy,[5] and Disclaimer[6] pages of the ResearchRabbit AI tool loaded but did not have any information on them, and we were unable to determine what data the tool was trained on or how user input would be used. Sensing that our difficulties would also be experienced by others, we were inspired to develop a rubric[7] to help guide students and faculty in determining whether to use a specific GenAI tool.

We chose to create a rubric for a few reasons. First, rubrics are typically used to assess something across several dimensions. Our rubric considers several criteria such as what data was used to train the GenAI tool, how user input is used, and more. Second, we wanted individuals to reflect on and identify the importance of each criterion for *their* needs. For instance, many librarians might be averse to using a specific GenAI tool based on privacy and intellectual concerns. However, we recognize that may not be of concern to other users.

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We are also aware that there may be criteria that vary in importance because of the discipline or specific information need. For instance, a person working on a comprehensive literature review would likely find it very important to evaluate a research-related GenAI tool for comprehensiveness.

We based the rubric on the ACRL Framework for Information Literacy for Higher Education[8] as we felt it served as a logical starting point since many information literacy concepts identified in the Framework are technology- and subject-agnostic. In the following paragraphs, we identify some of these concepts and how they influenced the creation of the criteria in our rubric.

We initially shared the rubric at the SUNY Conference on Writing in October 2023 and encouraged attendees to use the rubric with their students and adapt it to their needs. We have not yet had the opportunity to use this rubric in our instruction sessions. However, the rubric is currently on a LibGuide focused on information literacy resources for faculty, and we plan to do greater outreach with faculty in the fall 2024 semester about how we can assist their students with evaluating and using GenAI tools.

Defining the Information Need

Before one can determine whether an AI tool will meet one's information need, one must be able to articulate that information need—to "formulate questions for research" (Research as Inquiry) and "determine the initial scope of the task required to meet their information needs" (Searching as Strategic Exploration).

The first, and perhaps most important, criterion from our rubric asks students "is the purpose of the tool compatible with your information need?" For example, the Elicit AI tool claims to "automate time-consuming research tasks like summarizing papers, extracting data, and synthesizing your findings."[9] A student working on a literature review assignment might, at first glance, find this tool to be a good fit.

However, we also ask the student to consider "is the information relevant and comprehensive enough for your information need?" In other words, the student must look at the purpose of the AI tool, the content it was trained on, and the results it produces. For example, Elicit uses Semantic Scholar's database of academic literature. While Elicit's website notes that Semantic Scholar "covers all academic disciplines,"[10] Semantic Scholar's website makes it clear that their focus is scientific literature.[11] If the student's literature review is focused on a topic in the humanities or social sciences, Elicit might not be the best tool for their information need.

Information Creation as a Process / Information Has Value: Students as Consumers

We feel that understanding information creation as a process can help students understand that information has value. For example, in an instruction session, it's not uncommon for us to describe the process of creating a peer-reviewed article. We discuss planning the study, having it reviewed by others to ensure ethical behavior with participants, conducting the study, writing about the study and its results, peer review of the manuscript, etc. All these steps lend value to the end product.

We live in a time where people want simple answers without nuance, and AI tools can often provide that—leading its users to make sometimes-premature judgments about their

value. As noted in the Framework, "the novice learner may struggle to understand the diverse values of information in an environment where 'free' information and related services are plentiful" (Information has value). We want students to better understand the creation process used by AI tools—such as where they get their data, and how they use it—so they can make more informed determinations about the tools' value.

In the rubric, students are prompted, "Is the company transparent about where information comes from?"—in other words, what data was the tool trained on, and what data is used for its continued training? If the creation process is obfuscated, a number of problems can be hidden. One such problem is bias. Joy Buolamwini uncovered racial and gender biases in AI facial recognition tools during her time as a graduate student and has since written extensively about bias in AI.[12] Arsenii Alenichev found similar problems in his investigation of the MidJourney AI tool, which "generates images from natural language descriptions, called prompts."[13] Despite entering a number of prompts designed to produce images of Black African doctors and white patients, the tool repeatedly produced images that reinforced "the 'white savior' trope commonly associated with helping children in Africa."[14] More recently, Alenichev has found similar issues when entering prompts about slavery and colonialism.[15] The work of Buolamwini and Alenichev highlights the danger of unmonitored AI and its impact on all of us and is something of which users of AI should be mindful. Another problem is that if a company is not transparent about where their data is coming from, they likely will not be transparent about what they do with user data. This problem is discussed in more depth in the next section.

We also ask students "Is the information/data used by this source acquired in accordance with copyright, fair use, and/or open access best practices?" Unfortunately, many AI tools fail spectacularly at this, including OpenAI's ChatGPT—arguably the best known GenAI tool at the time this column was written. According to OpenAI, ChatGPT is trained with data from three sources: "(1) information that is publicly available on the internet, (2) information that we license from third parties, and (3) information that our users or our human trainers provide."[16] The first and third sources are problematic. Just because information is publicly available on the internet doesn't mean the person who posted it had legal permission to do so, and users may ignore intellectual property rights when entering data into ChatGPT. Comedian and author Sarah Silverman, among others, sued OpenAI and Meta in July 2023 for copyright violation and a number of other claims. Although the other claims were dismissed in February 2024, the copyright violation case is moving forward.[17] Once again, disregard for others' intellectual property rights likely reflects a disregard for the user's intellectual property rights as well. However, it's important not to paint all AI tools with the same brush. For instance, Adobe Firefly is "trained on Adobe Stock images, openly licensed content, and public domain content" and "is designed to be safe for commercial use."[18]

A related question posed in the rubric is, "If this tool makes factual claims, does it provide citations for them? Can you find evidence that the sources exist?" This reinforces the intellectual property issues outlined in the previous paragraph and prompts students to consider whether others are given credit for their work. Second, given the preponderance of GenAI hallucination—presenting misleading, incorrect, or non-existent information as fact—it's logical to second-guess claims made without citations, especially if the information-creation process is unclear and difficult to replicate.[19]

Information Has Value: Students as Commodity

Although the previous section discusses the value of information as related to the creation process, we also want students to consider that the information they input into GenAI tools has value. This led us to develop the following criteria: Is the company transparent about what they do with your data? What does the tool/company do with your (the user's) information?

Depending on the user's information need, the purpose of the chosen AI tool, and the particular user's own individual comfort level, the answers to these questions may be more or less important. For example, tools like Elicit and scite[20] are designed to help people find and understand scholarly research. Most of the data used by these tools is scholarly research, rather than input from the user. This doesn't mean these tools don't gather information from users—but the purpose of the tool may mean that collected user data is less sensitive.

In contrast, tools that rely heavily on user input, such as ChatGPT, should prompt students to think more critically about how their data is being used. Does the company sell user information? Does the tool retain user input to train the tool? Although user input may not result in direct financial gain, its use in training AI models is valuable to the company in a broader sense.

While finding answers to these questions can be illuminating, not finding answers can be equally instructive. Some of the tools we investigated hid information about user data deep within their site or on another site, while we were unable to find this information for other tools. In contrast to the Research Rabbit example provided earlier, we were able to find this information on OpenAI's website, but only after encountering marketing jargon first. Their homepage has a tab labeled "Safety."[21] The information on this page gives users a feel for what OpenAI's priorities are for safety using vague principles like "minimize harm" and "build trust" among others.[22] The subsequent pages make mention of user concerns using examples of improvements made to their tools, but to actually answer the questions our rubric is asking, users must still visit the more traditional Terms of Use[23] and Privacy Policy[24] pages. When students encounter this, we want them to understand that this obfuscation may be a deliberate choice made by companies—and that it prevents the user from learning just what value they have to the company, suggesting that the user's data does, in fact, have value.

In Conclusion

We sought not to be prescriptive in the creation of the rubric—it's not our intent to portray GenAI tools as boogeymen out to steal users' data and intellectual property. That said, there are certainly tools that seem less trustworthy than others. We hope our rubric will motivate not just students but all scholars to look at these tools with a critical eye and to make decisions that are informed by knowledge and their preferences. Our rubric is Creative Commons licensed (CC BY-NC), and we invite our readers to discuss and iterate upon our work.

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Notes

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