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## The CARE approach for academic librarians: From search first to answer first with generative AI

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### ABSTRACT

Students and faculty are increasingly beginning their research by asking AI systems for explanations rather than by searching library resources. Chatbots and AI enhanced search tools now deliver fluent answers before users ever see a list of sources. This commentary argues that this “answer first” environment changes the starting point of academic inquiry and calls for a corresponding shift in academic librarianship. Librarians need an answer first mindset that recognizes AI responses as texts that require interpretation. I propose two related constructs to support that stance, a brief “answer typography” that helps librarians notice what kind of work AI answers are doing, and the CARE approach (Classify, Assess, Review, Enhance), which articulates a critical way of engaging those answers with users. Together, these ideas position librarians as leaders in helping their communities read, question, and build upon AI generated answers in ways that keep human judgment and scholarly evidence at the center of inquiry.

### Inquiry now begins with AI answers

Academic librarians are accustomed to thinking of inquiry as starting with a search. A typical story runs like this: a student has a question, opens a database or discovery layer, retrieves a set of sources, and then begins evaluating and synthesizing them. Our instruction, reference work, and systems design have been built around this sequence. Much of our information literacy guidance still assumes that the first serious object of attention is a results list.

That story no longer describes the reality for many users. Students and faculty now often begin by asking AI systems directly. They type prompts such as “Explain the causes of the French Revolution,” “Summarize recent research on burnout in doctoral students,” or “Help me understand the differences between qualitative and quantitative methods” into ChatGPT or Perplexity. OpenAI’s analysis of ChatGPT usage shows that explanation seeking and information seeking requests are now the dominant patterns of use (Chatterji et al., 2025). At the same time, search engines are changing. Google’s AI Overviews and similar tools present AI generated paragraphs at the top of search results, and studies show that many users on mobile devices do not scroll beyond that first answer.

Librarians are beginning to document this shift. Meakin (2024) critically examines how generative AI alters students’ use of library resources, noting both reduced reliance on traditional search tools and new patterns of engagement. Wetzel and Kani (2024) explore how AI

chatbots can be integrated into information literacy instruction and argue that AI outputs can become productive prompts for teaching critical reading and verification skills. Madunić and Sovulj (2024) show how ChatGPT can be used to design course materials for information literacy instruction while still emphasizing the need for librarians’ expertise in shaping and evaluating what the AI produces. Kim (2025) describes academic libraries repositioning themselves as more proactive knowledge facilitators in environments shaped by generative AI. These studies share a common thread. Generative AI is increasingly present at the front end of students’ interactions with information, and librarians are being called upon to respond thoughtfully.

By the time a student arrives at the reference desk, joins an instruction session, or opens a library database, they may already have read a polished explanation. That explanation is not simply background. It acts as a frame for what seems plausible, what seems relevant, and what kind of answer feels complete. In other words, inquiry is now often answer first rather than search first. If librarians continue to think of our work as beginning once a user initiates a search, we risk missing the moment when the first interpretive move has already been made for them.

My contention is that academic librarians need an answer first mindset. We need to recognize AI answers as texts in their own right and bring our expertise in critical reading, evaluation, and instruction to bear on them.

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## Answer typography as a supporting lens

The phrase “what ChatGPT said” hides the fact that AI systems produce different kinds of answers. In my AI literacy work, I have found it useful to distinguish four broad patterns, not as a strict taxonomy, but as a way of noticing what sort of work a given answer appears to be doing.

Some answers are **factual**. They respond to prompts like “What is open access?” or “When was the Meiji Restoration?” with concise statements that resemble dictionary or encyclopedia entries. Others are **interpretive**. They answer “why” and “how” questions, weaving together explanations or comparisons, as in “Why did the Roman Empire fall?” or “How does constructivism differ from behaviorism in education?”. A third pattern is **constructive**, seen when users ask for paragraphs, outlines, or sample responses such as “Write a paragraph introducing climate justice” or “Outline an essay on data literacy in libraries.” These answers provide scaffolding for users’ own writing and products. The fourth pattern is **strategic**. These are plans and procedures in response to prompts like “How should I study for an exam?” or “What steps should I follow to conduct a literature review?”

Constructive and strategic answers can look similar, since both produce text. One practical way to keep them distinct is to focus on their role. Constructive answers concentrate on *what* to say or produce in a piece of writing. Strategic answers concentrate on how to act, the process or workflow a user might follow. A single response can mix these elements, but asking whether an answer is shaping content, process, or both helps clarify what kind of support a user may need next.

I refer to these four patterns as an answer typography. The categories blur at the edges. The value lies in prompting one simple question: what kind of answer is this? If we can help students and faculty see that a response is an interpretive narrative, not a neutral fact, or a generic strategy, not a context aware plan, we open space for critical engagement. Answer Typography gives us language for what kind of work an AI answer is doing. CARE, in turn, names how librarians can respond to that answer with users.

### CARE: An approach for engaging AI answers

If inquiry is increasingly answer first, librarians need a way to talk about what it means to work with those answers. CARE is one way of naming four moves that I see as central to a critical stance: Classify, Assess, Review, and Enhance. These are not entirely new. They resonate with long standing practices in reference and instruction. Naming them provides shared language for librarians and teaching partners in an AI context.

CARE also sits alongside familiar evaluation frameworks such as the CRAAP test and Caulfield’s SIFT model (Blakeslee, 2004; Caulfield, 2019). Those approaches focus on verifying web-based sources and tracing claims back to their origins. CARE is tailored to synthetic text generation. It assumes that the starting object is an AI produced answer rather than a web page or article. The final step, Enhance, which centers co creation and revision of AI text with users, marks a particular shift that reflects the interactive nature of generative systems.

#### Classify

Is the recognition stage. Here, the librarian and user identify what kind of answer they are dealing with. Is this answer factual, interpretive, constructive, or strategic? Asking that question out loud can shift a conversation. For example, when a student shows an AI response to “Why is peer review important?”, a librarian might begin by asking, “Does this feel like a definition, an explanation, or a set of recommendations?”. This quick classification encourages the student to think about the function of the text rather than accepting it as a generic answer. It ties answer typography directly into practice.

#### Assess

Involves looking closely at the content and tone of the AI answer. Librarians are accustomed to asking whose voices are present, what evidence is used, and what might be missing in any source. Those questions translate directly to AI outputs. With interpretive answers, a librarian might prompt, “Whose perspective on the fall of the Roman Empire does this reflect? Are there causes or viewpoints not mentioned here?”. With strategic answers, the questions might be, “Does this plan take into account your actual assignment, your time, and your institution’s policies?”. Assessment encourages users to treat the AI answer as a constructed text rather than a neutral authority.

#### Review

Reconnects AI answers to the collections and tools under our stewardship. After classifying and assessing an answer, librarians can help users see how it aligns, or does not align, with scholarly sources. This might involve checking key claims in subject databases, comparing the AI explanation with peer reviewed articles, or using encyclopedias and handbooks as benchmarks. In Wetzell and Kani’s (2024) study, students who used AI in an information literacy class were guided to verify chatbot outputs against library resources, turning AI into a starting point rather than an end point. Madunić and Sovulj (2024) likewise stress that librarians must remain essential intermediaries when AI is used in designing instructional content.

Review does not require a full systematic search each time. Sampling one or two central claims against trusted sources can model the habit of verification. This is also the point where an answer first workflow loops back into search. The AI answer surfaces terminology, names, and tentative claims that can be turned into more precise keywords, subject headings, or database strategies. In that sense, AI functions as a pre-search tool, and librarians help users translate an initial answer into an informed search of the scholarly record.

#### Enhance

Describes the step where users begin to rewrite, extend, or otherwise transform the AI answer. This might mean revising a constructive answer so it better fits disciplinary conventions or the student’s own voice. It might mean expanding a factual answer with nuance found in scholarly sources, or modifying a strategic answer so that it fits the specific demands of a class. Librarians can encourage this by asking, “How would you change this answer now that you have seen other sources?” or “What would you add or revise to make this more accurate or more appropriate for your assignment?”. Enhance is where users move from passive consumers of AI outputs to active shapers of their learning. It is also the most distinct element of CARE, because it treats AI output as a draft to be improved rather than an object to be accepted or rejected.

A brief example makes this sequence concrete. Imagine a student in a reference consultation who holds up a laptop and says, “ChatGPT explained peer review like this. Is it right?”. The librarian might first ask the student whether the response feels more like a definition, an explanation of why peer review matters, or advice on how to use it. This is **Classify**. Together they might then read the answer and ask which aspects of peer review are present and which are missing, perhaps noticing that power dynamics or disciplinary variation are not mentioned. This is **Assess**. The librarian could then pull a short handbook entry or a relevant article from a database and compare two or three key claims, modeling how to use the AI answer as a map into the literature. This is **Review**. Finally, the librarian might invite the student to rewrite the original answer in their own words, incorporating what they have learned from the scholarly source and the expectations of their assignment. This is **Enhance**. The interaction is recognizably traditional reference work, but it is now oriented around an AI answer as the first

text.

CARE can be used in reference consultations, instruction sessions, and faculty conversations. In a workshop on AI and research, a librarian might introduce CARE as a simple way to think about AI answers: first we classify the answer, then assess its content, review what scholarship says, and finally enhance it. Faculty can pick up these terms and integrate them into assignment prompts or classroom discussions. Students can use CARE as a mental checklist when they encounter AI answers on their own. The framework does not require new technology. It requires a shift in how we talk about AI and a willingness to position librarians as guides at the first interpretive step.

### Libraries as answer first partners

Recasting inquiry as answer first has practical and strategic implications for academic libraries. It suggests that our work increasingly begins at the moment a user encounters an AI answer, not only at the point of search. Adopting an answer first mindset means that we see AI outputs as objects of literacy in their own right. We bring to them the same critical instincts we have always brought to information: curiosity, skepticism, and a commitment to evidence.

The Answer Typography and CARE introduced here are offered as tools to support that mindset. They give librarians language to recognize different kinds of AI responses and to engage those responses in ways that keep our professional values intact. They also sit comfortably alongside existing evaluation models such as CRAAP and SIFT. Those models help users decide whether to trust what they see on the open web. CARE focuses on how to work with what AI writes. Together, they can structure a more complete response to a world where users move fluidly between search results and synthetic text.

These constructs may also help us communicate our role more clearly to faculty and administrators. Rather than being peripheral to AI developments, academic libraries can be seen as central partners in shaping how AI is interpreted and used in the academic community. CARE does not ask librarians to approve or reject AI answers on sight. It asks them to help users read those answers as texts that can be questioned, verified, and improved.

This commentary cannot resolve all the questions that arise when AI moves into the first step of inquiry. It can, however, suggest that academic librarians are well placed to lead. I would invite colleagues to ask: In what ways are you already practicing CARE without calling it that? How might Answer Typography help you talk with students about the kinds of answers they are seeing? Where might these concepts need adaptation or critique in your context? Those are conversations worth

having now, and academic libraries are a natural place to host them.

### CRedit authorship contribution statement

**Leo S. Lo:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing.

### Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the author used ChatGPT (GPT 5.1, OpenAI) in order to assist with copyediting and to generate alternative sentence structures. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Data availability

No data was used for the research described in the article.

### References

- Blakeslee, S. (2004). The CRAAP test. *LOEX Quarterly*, 31(3), 6–7. <https://commons.emich.edu/loexquarterly/vol31/iss3/4>.
- Caulfield, M. (2019). *Web literacy for student fact checkers*. American Library Association. <https://digitalcommons.liberty.edu/textbooks/5/>.
- Chatterji, A., Cunningham, T., Deming, D., Hitzig, Z., Ong, C., Shan, C., & Wadman, K. (2025). In OpenAI (Ed.), *How people use ChatGPT*. [https://www.nber.org/system/files/working\\_papers/w34255/w34255.pdf](https://www.nber.org/system/files/working_papers/w34255/w34255.pdf).
- Kim, J. (2025). Academic library with generative AI: From passive information providers to proactive knowledge facilitators. *Publications*, 13(3), 37. <https://doi.org/10.3390/publications13030037>
- Madunić, J., & Sovulj, M. (2024). Application of ChatGPT in information literacy instructional design. *Publications*, 12(2), 11. <https://doi.org/10.3390/publications12020011>
- Meakin, L. (2024). Exploring the impact of generative artificial intelligence on higher education students' utilization of library resources: A critical examination. *Information Technology and Libraries*, 43(3). <https://doi.org/10.5860/ital.v43i3.17246>
- Wetzel, D. A., & Kani, J. (2024). Enhancing information literacy through generative AI in the library classroom. *Pennsylvania Libraries: Research & Practice*, 12(1), 1–18. <https://doi.org/10.5195/palrap.2024.302>