Assessment in the Age of AI: A Writing-Based Approach in a Psychology Research Methods Course

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For years, my psychology research methods 1 course has followed a structured progression designed to build foundational research literacy. First, students develop a research question in their area of interest. Then, they identify and summarize primary-source journal articles related to it using a set of guiding questions. These summaries serve as building blocks for formulating hypotheses based on existing literature. When students learn to connect concrete, empirical processes to answering theoretical questions, they meet one of the course's core objectives: to teach students how to read, interpret, and use primary-source research articles.

In recent semesters, I have become increasingly concerned that some students are bypassing the learning process by relying on generative AI tools to complete their work without ever even opening the articles. These students submitted highly detailed summaries that eloquently articulated complex research concepts. Yet, when asked about them in class, they were unable to answer basic questions about their article like "Who did the researchers study?" At best, my queries elicited responses like "I don't know" or "I forgot." At worst, they were met by blank looks and silence. While AI can produce assignments that appear polished, its use sidesteps the engagement with research literature that lies at the heart of the course. My concern is not simply about academic integrity, but about missed opportunities for students to develop the knowledge, skills, and confidence that come from grappling directly with the material.

To address this concern, I made a small but intentional change this past semester to how I assess learning in the course. Because I was trying this approach for the first time, I introduced open-ended test questions as extra-credit opportunities rather than as graded components. These questions were designed to engage students directly with one of the research articles they had se-

lected. More importantly, each prompt asked students to apply core concepts from the course to the article of their choosing, encouraging them to make meaningful connections between research principles and concrete examples from a study that interests them. One series of questions that I asked, for example, was "How did the authors of your article operationalize their main variables? Provide specific examples. Which of the types of measurement that we covered in class were these operational definitions?" These questions were closely aligned with the learning objectives of the course, but they moved beyond the summary assignment. They were designed not just to elicit factual knowledge about the article's content, but to learn if students were connecting that content with key concepts from the course and applying those ideas in a personalized way.

While I expected students' responses to give me clearer insight into who had engaged with their articles, I did not expect the emotional reactions I would have while reading them. The responses fell into three distinct groups. The first, and most concerning, group provided no response whatsoever to the questions about their articles. Some of the students who submitted the most detailed, eloquent article summaries wrote not a single word when faced with a prompt about them. I was dismayed to see students, when asked to demonstrate even general understanding of their own article, simply opt out. This empty space suggested these students had likely used AI or other shortcuts to complete their summaries without ever reading the very articles they selected, rendering them unable to recall even basic information about them. With no information about the article, they were unable to apply course concepts to the research.

The second groups' responses showed some familiarity with the research, but the responses were lacking depth. They could provide general descriptions of research approaches, for example, but struggled to articulate specific details or connect these to our course concepts. These responses suggested a level of knowledge that could be gained from skimming or reading only portions of the article, rather than deeply engaging with it.

Then, there was the third group: the students whose answers reminded me why I love teaching this course. Their responses were detailed, with clear references to the articles they had read. They showed not only familiarity with the content, but thoughtful application of course concepts to it. They could discuss how variables were operationalized and apply their knowledge of course content to determine the type of research strategy that the researchers used. Their responses made it clear that they were engaging in the reading and reflecting that builds learning, even in an era of easy AI shortcuts.

The contrast between non-responders and deeply engaged students made me more certain that these open-ended questions served a purpose. They reminded me that even small changes in assessment design can prompt learning; this valuable insight will shape my teaching practice moving forward. Simple knowledge-check questions are insufficient when AI can generate plausible-sounding responses based on limited information. Instead, I want to implement assessments that invite students to apply and synthesize what they learned in ways that connect directly to their own research interests. Given this, I have decided to incorporate these types of open-ended questions into future tests as for-credit components, rather than extra credit. While I initially introduced them cautiously, what I observed confirmed their value. It was heartening to see that, even in a time when shortcuts are readily available, some students showed that meaningful engagement with research literature is still very much possible. The detailed responses from engaged students showed that when students do read and analyze their selected articles, they develop precisely the critical research literacy skills the course aims to build.

Moving forward, I plan to build this kind of assessment into other parts of the course through brief in-class writing activities. I am considering a progressive approach that begins with guided, in-class analysis of a research article that I provide to the entire class. Starting with a shared article ensures that all students are working from the same foundation, which allows for modeling of important skills like identifying research questions and operational definitions. This shared experience can help demystify primary research articles for students new to this type of literature. It also creates opportunities for learning from classmates, where students can observe how others interpret and apply course concepts. With that base established, students will move on to analyzing their own selected articles in class, giving them repeated chances to practice and make meaningful connections. Because these activities happen during class, they reduce the risk of AI overuse while also supporting formative learning.

I have also reflected on how these changes align with the broader disciplinary values articulated in the American Psychological Association's (2023) Guidelines for the Undergraduate Psychology Major. The document addresses multiple core goals in the discipline, but two are particularly relevant to my new goal for assessment in my research methods 1 course. The first, Goal 2, addresses interpretation, design, and evaluation of psychological research. The second, Goal 4, addresses students' ability to clearly articulate psychological concepts in writing and discussion. By asking students to apply course concepts to their own selected articles, especially in ways that require original thought, I am reinforcing both of these goals. The aim is not to "catch" students using AI, but to give them reasons to think critically and communicate clearly, which are skills they will need far beyond this course.

I never expected that my efforts to address AI in my class would have such an emotional impact on me. It was dejecting to see students leave questions blank when they were being asked to write about something they chose themselves. It was inspiring, however, to see others answer in ways that demonstrated thoughtfulness about the research. Reading those responses from students who applied course concepts to their articles reminded me about my passion for teaching this material in the first place. Not only did this small change in assessment teach me about student learning, but it also renewed my motivation and enjoyment of teaching. Designing work that invites students to think for themselves, and seeing them rise to that challenge, has made the classroom feel more alive again. Not only is AI prompting me to change how I assess learning, but it is also helping me to refocus on what I value most as a teacher: helping students connect to the work of doing research.

Reference

American Psychological Association. (2023). APA guidelines for the undergraduate psychology major: Version 3.0. https://www.apa.org/about/policy/undergraduate-psychology-major.pdf