

Writing Spaces

Assignments Archive

NotebookLM–Assisted Annotated Bibliography

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NotebookLM–Assisted Annotated Bibliography

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Overview

This multi-step assignment invites students to compare their own scholarly reading practices with AI-generated analyses within the context of annotated bibliography writing. By incorporating NotebookLM—a document-grounded research tool—students engage in a guided exchange with artificial intelligence as they draft, revise, and refine their understanding of academic sources. Unlike general-purpose language models, NotebookLM generates responses strictly from uploaded documents and provides citation-linked outputs tied to specific passages. Because its design limits responses to user-supplied texts, it reduces the occurrences of fabricated claims and foregrounds evidence tracing. These constraints make the tool especially appropriate for activities that demand careful attention to argument, methodology, and disciplinary framing. In addition to text-based summaries, the platform reorganizes source material into structured formats such as study guides, glossaries, timelines, note cards, and podcast-style conversations. Presenting the same material across multiple formats allows students to approach complex scholarship from different cognitive angles while maintaining accountability to the original text.

Although conversations about AI in writing classrooms often center on prompt engineering or academic integrity, fewer pedagogical models examine how document-based systems reshape foundational research practices. This assignment addresses that gap by demonstrating how document-grounded AI systems can strengthen students' source-based reading practices, particularly when differences between human and AI interpretations prompt careful re-examination of the text. This activity is well-suited to upper-division undergraduate or graduate research writing courses.

Time Commitment

3–4 weeks

Materials

This assignment requires access to a computer with internet connectivity and a Google account to use NotebookLM. Students must have three to five peer-reviewed scholarly articles in compatible formats (PDF or Google Docs) for upload. Access to institutional library databases and shared documents for collaborative comparison is also helpful.

Assignment Process

Part I – Research Question and Human Annotation

- Students will develop a focused research question and select three to five peer-reviewed scholarly sources directly relevant to that question.
- Students will read each source closely and compose a human-authored annotated bibliography entry for each text. Each annotation should include:
 - A concise summary of the central argument or claim.
 - An evaluation of the source's credibility and methodological approach.
 - An explanation of how the source contributes to the student's emerging research project.
- Students may use the following guiding prompt while drafting:

- What is the author's central claim, and how is it supported? What theoretical framework or methodology structures this argument? How does this source advance or complicate my research question?
- Annotations should reflect close reading, attention to theoretical framing, and awareness of disciplinary conventions.

Part II – AI-Generated Interpretation and Cross-Document Synthesis

- Students will upload the same sources into NotebookLM and, using targeted prompts, generate AI-produced summaries and analytic responses. Students may begin with prompts such as:
 - Summarize the central argument of this article in 150–200 words using only the uploaded text. Provide citation references for each major claim.
 - Identify the author's primary research question and methodological approach. Cite specific sections.
 - What key concepts structure this article's argument? Define them using language from the text.
- To enable cross-document comparison, students will then compile all selected texts into a single notebook and prompt NotebookLM to produce cross-document syntheses. Suggested prompts include:
 - Compare the central arguments of these sources. Where do they converge and where do they diverge? Provide citation-linked references.

- Identify recurring themes across the uploaded articles and explain how different authors approach them.
- Compare methodological approaches across the sources. What similarities or contrasts emerge?
- Students should save and organize all citation-linked responses for later comparison.

Part III – Comparative Analysis and Verification

- Students will compare their human-authored annotations with the AI-generated outputs. In doing so, they should identify:
 - Areas of alignment between interpretations.
 - Instances of oversimplification or compression of nuance.
 - Omissions of key theoretical or methodological detail.
- Students may use prompts such as:
 - What claims in the AI summary flatten or reframe the author's argument? Provide textual evidence.
 - Show the exact passages that support this interpretation.
 - What nuances or counterarguments were omitted in the AI-generated synthesis?
- Students will examine NotebookLM's citation-linked responses and verify all AI-generated claims by cross-checking them against the original texts. This step

foregrounds evidence tracing and interpretive accountability.

- After verifying AI-generated claims against the original texts, students will revise their annotations to clarify nuance, strengthen evaluative commentary, and address interpretive gaps revealed through comparison.

Part IV – Reflective Synthesis

- Finally, students will compose a reflective memo analyzing what this comparative process revealed about:
 - Disciplinary reading practices.
 - The affordances and limitations of document-grounded AI.
 - The role of verification in responsible research writing.
 - How AI reshapes early stages of literature review development.
- Students may draw on the following reflective prompts:
 - What differences emerged between my interpretation and the AI's? What do those differences reveal about disciplinary reading?
 - How did verification change my understanding of the source?
 - In what ways does AI support or constrain interpretive precision?
- The memo should move beyond description and articulate

broader implications for academic knowledge production.

Learning Outcomes

Students engaging in this assignment will:

- Develop stronger annotated bibliography writing skills grounded in close reading and evaluative reasoning
- Analyze differences between human and AI interpretations of scholarly texts
- Practice evidence verification using citation-linked AI outputs
- Strengthen metacognitive awareness of disciplinary reading and synthesis practices

Learning Accommodations

- Assignment guidelines should be presented in multiple formats, including written instructions, recorded walkthrough videos, and visual step-by-step demonstrations to support varied processing preferences.
- Students may submit the reflective memo in written, audio, or video format to accommodate diverse communicative strengths and reduce barriers related to written fluency or language anxiety.
- NotebookLM's multimodal outputs—including summaries, structured outlines, timelines, mind maps, FAQs, and podcast-style audio explanations—may be used to support different modes of comprehension and engagement with complex texts.
- Guided annotation templates and structured comparison

worksheets should be provided to scaffold research analysis for students who are new to academic genres or AI tools.

- Alternative non-AI peer-comparison activities should be available for students who prefer not to use generative AI technologies for accessibility, ethical, or personal reasons.
- Opportunities for collaborative discussion should be incorporated to allow students to verbally process interpretive differences between human and AI-generated summaries and to support collective meaning-making.

Further Reading

Brown, Victoria, and Daniel Saurez. "NotebookLM: Revolutionizing Learning for Students with Neurodivergent Challenges Using AI and Universal Design Principles." *FDLA Journal*, vol. 9, 2025, article 22.

Google. "NotebookLM Help." *Google Support*, 2025, support.google.com/notebooklm/answer/14278184.