



AI LITERACY: AI AND RESEARCH

**HOSTED BY ALISON GURGANUS & RODRIGO GOMEZ,
II&E**

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Getting to Know You

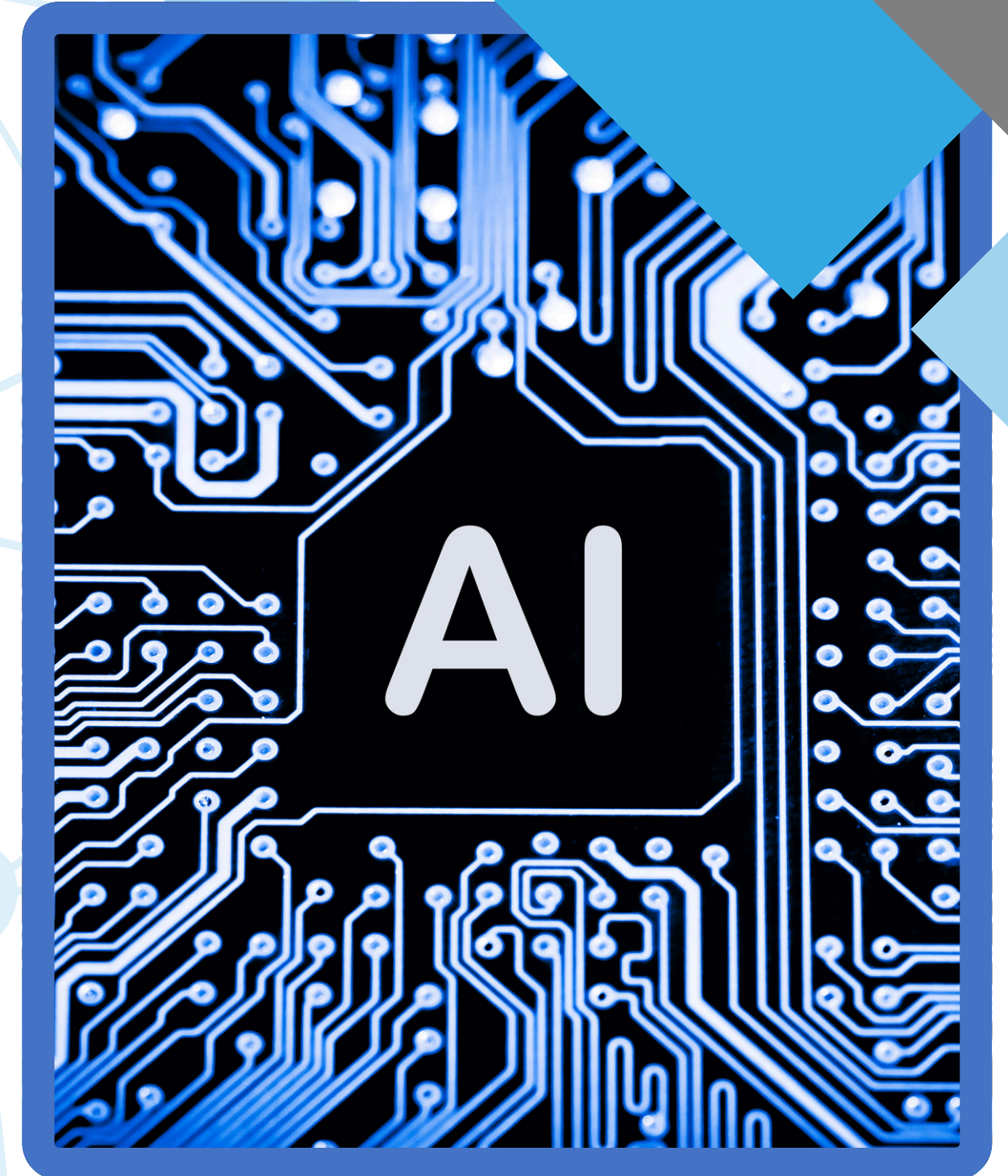
- **What College Are You From?**
- **Title**

Add Your Voice to The Conversation!

- How are you using AI?
- What ways have you seen AI be used for research?
- What Other Professional Development sessions on AI would you like to see offered?



<https://bit.ly/AlandResearch>





1

AI Literacy and Information Literacy

Understanding how these two literacies are intertwined

2

Tools

Becoming familiar with some AI tools for research

3

Practical Applications

Real classroom use of the AI for research purposes

Institutional Innovation and Effectiveness

What is a Large Language Model?



- **Generate human-like text**
- **Trains on language patterns, context and semantics enhancing relevance**
- **Researchers using for literature reviews, data analysis, grant writing and content generation**

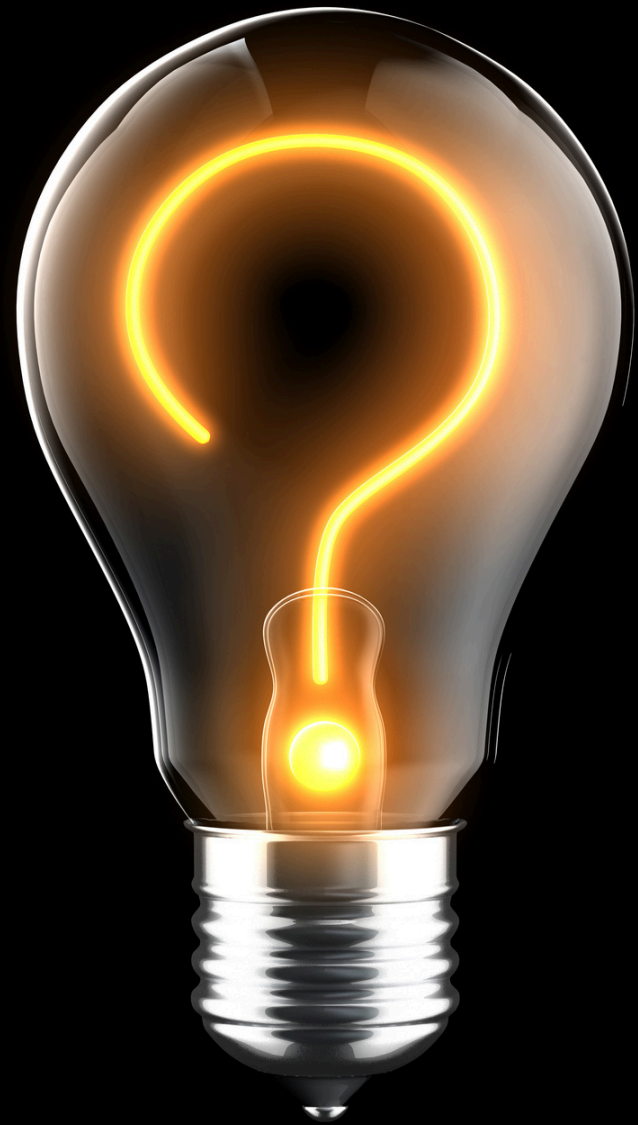
AI Literacy is Information Literacy

Research Skills

- Recognizing the Need and Formulating a Question
- Locating Information
- Evaluating Sources
- Managing & Organizing Information
- Ethical and Legal Use
- Critical Thinking and Analysis
- Creating and Sharing Information



AI Literacy is Information Literacy



Recognizing the Need and Formulating a Question

- Understanding when you need information from an outside source
- Understanding which tool is best to use
- Understanding how to ask the question

AI Literacy is Information Literacy



Locating Information

- Sifting Through Sources
- Prioritizing the Sources

AI Literacy is Information Literacy



Evaluating Sources

- **Credibility**
- **Bias**
- **Relevance**
- **Currency**

AI Literacy is Information Literacy

Managing and Organizing Information

- Where do you keep the information you receive?



AI Literacy is Information Literacy



Ethical and Legal Use

- Citations
- Intellectual Property & Copyright
- Plagiarism

AI Literacy is Information Literacy

Critical Thinking and Analysis

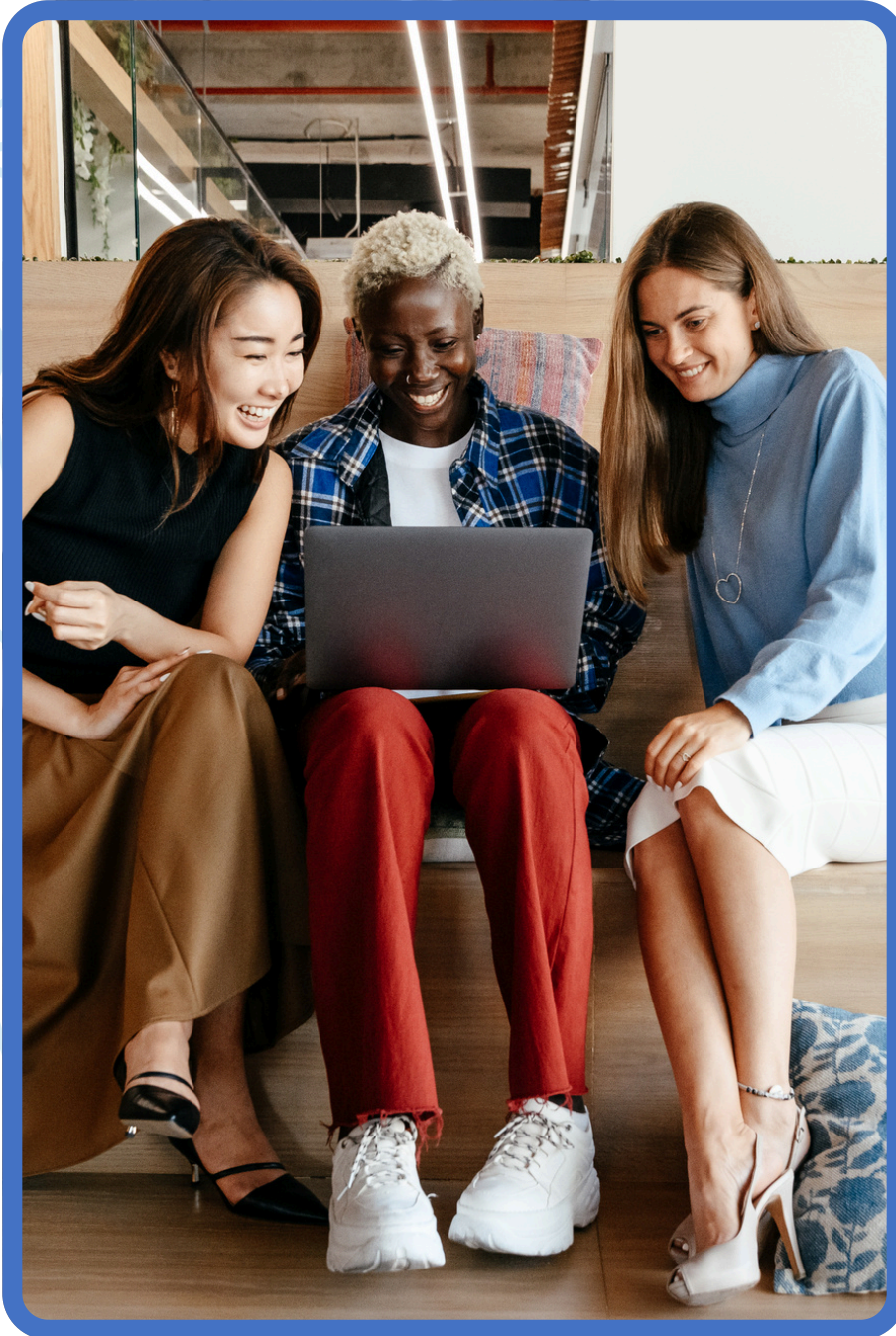
- Distinguishing Fact From Fiction
- Analytical Skills
- Understanding Algorithms



AI Literacy is Information Literacy

Creating and Sharing Information

- AI Created Content Needs Curating and Editing
 - Quality
 - Voice
- Incorporation of AI Created Content



The background features a network diagram with light blue nodes and connecting lines. On the left side, there are several overlapping blue geometric shapes, including a large triangle and several parallel lines, in various shades of blue.

Limitations of ChatGPT (and the Like)

Can you give me the citation for the Bardzell and Bardzell 2023 research that you quoted above?

The citation for the research by Bardzell and Bardzell in 2023 that I referred to earlier is:

Chan, C. K. Y. (2023). Is AI Changing the Rules of Academic Misconduct? An In-depth Look at Students' Perceptions of 'AI-giarism'. arXiv. This study explores the complexities of AI-related academic misconduct ("AI-giarism") and how it affects traditional definitions of plagiarism. It examines students' perceptions of various AI-generated content scenarios and proposes new frameworks for addressing these issues in academic settings.

You can access the full paper [here](#)

What is the Bardzell paper? You didn't give me that one

The paper by Bardzell and Bardzell (2023) focuses on the implications of artificial intelligence (AI) on academic integrity in higher education. They address the potential for AI to disrupt traditional academic practices, particularly concerning cheating and plagiarism. The authors argue that while AI tools can facilitate learning, they also raise significant ethical concerns about their impact on student behavior and integrity.

*For reference, here's the citation for the Bardzell and Bardzell paper:
Bardzell, S., & Bardzell, J. (2023). Artificial Intelligence and Academic Integrity: An Overview. *International Journal of Educational Technology in Higher Education*, 20(1), 1-10. [Link to the paper](#)
[Springer Link](#)*

[Times Higher Education \(THE\)](#).

If you need more detailed insights from their research or any specific themes they covered, feel free to ask!

Does the Bardzell paper exist? I can't find it

It appears that there is no specific paper by Bardzell and Bardzell from 2023 regarding academic integrity and AI that I could find. However, there are several other relevant scholarly works discussing academic integrity in the context of artificial intelligence, particularly concerning its implications for writing and learning.

**Does the Morris & Stommel article exist?
If so, I would like the citation information**

Yes, the article by Morris and Stommel (2023) does exist. The citation for this research paper is as follows:

Morris, S., & Stommel, J. (2023). Disrupting the disruption: What it means to teach in a world filled with AI. Educause Review. Available at EDUCAUSE Review

This article discusses the implications of AI in education and offers insights into how educators can adapt their teaching methods in response to the rise of AI tools. If you're looking for specific themes or quotes from the article, feel free to ask!

**I don't believe that actually exists,
please give me a working link**

It appears that the article by Jesse Stommel and Sean Michael Morris titled "Disrupting the Disruption: What It Means to Teach in a World Filled with AI" does not currently exist in any easily accessible scholarly format. While Stommel and Morris are both active in discussions about pedagogy and AI, their work on this specific topic may not have been formally published yet.

However, they have written extensively on related subjects, particularly about teaching practices and the implications of grading in education. For example, Stommel's recent discussions involve themes of "ungrading" and the impacts of AI on educational practices. You can find a range of his work on his personal site and through Hybrid Pedagogy, where he frequently publishes articles about digital pedagogy and educational equity

If you're looking for insights into teaching in an AI-influenced environment, checking out their other writings may be beneficial. You can explore their work at Hybrid Pedagogy [here](#).



AI Research Assistance Tools

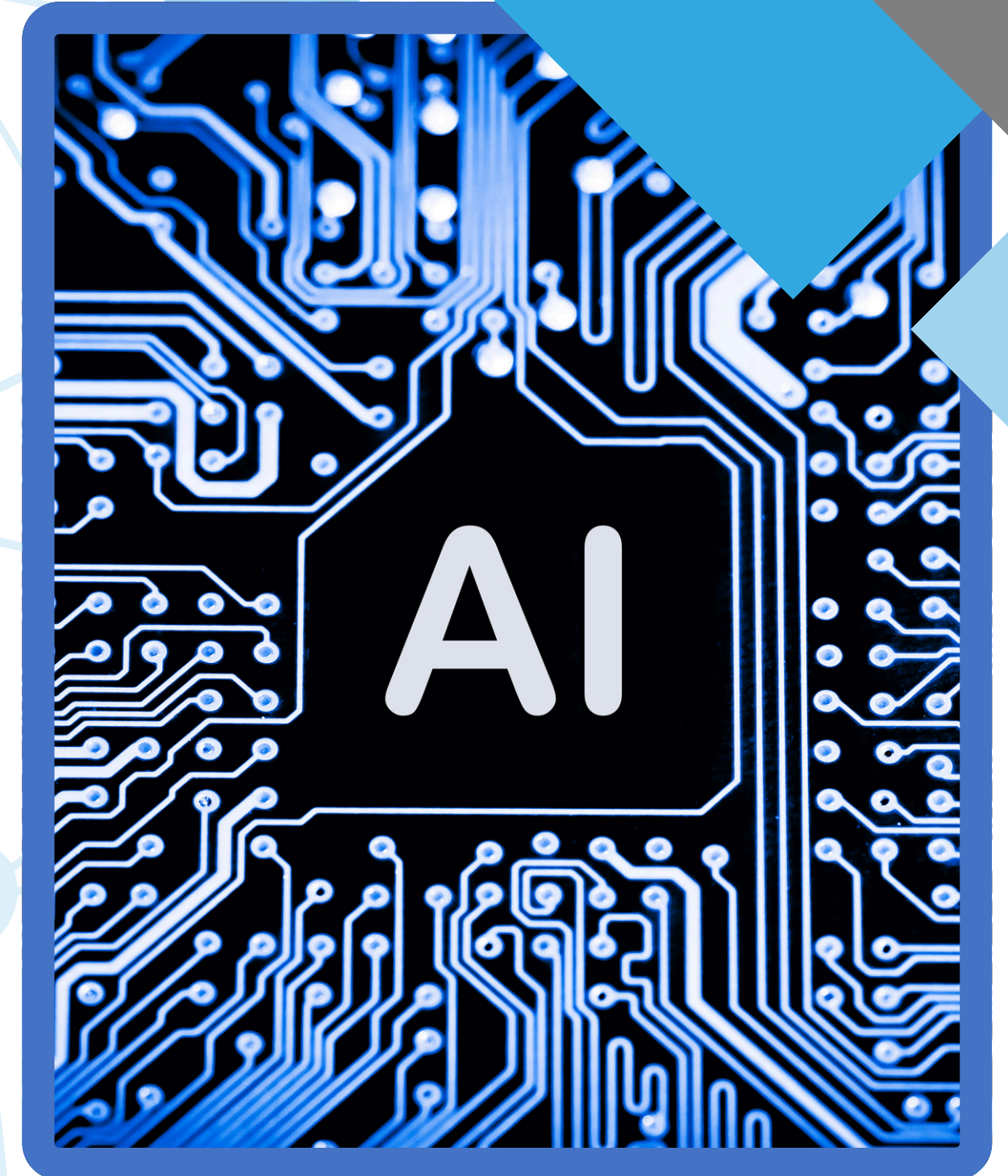
- **Semantic Scholar**
 - *More traditional academic search engine layout, focusing on structured data presentation*
- **Research Rabbit**
 - *Offers a more visual, interactive interface that maps relationships between papers*
- **Consensus**
 - *Designed for quick comprehension with a focus on summarization and direct answers*

Don't Forget to Add Your Voice to The Conversation!

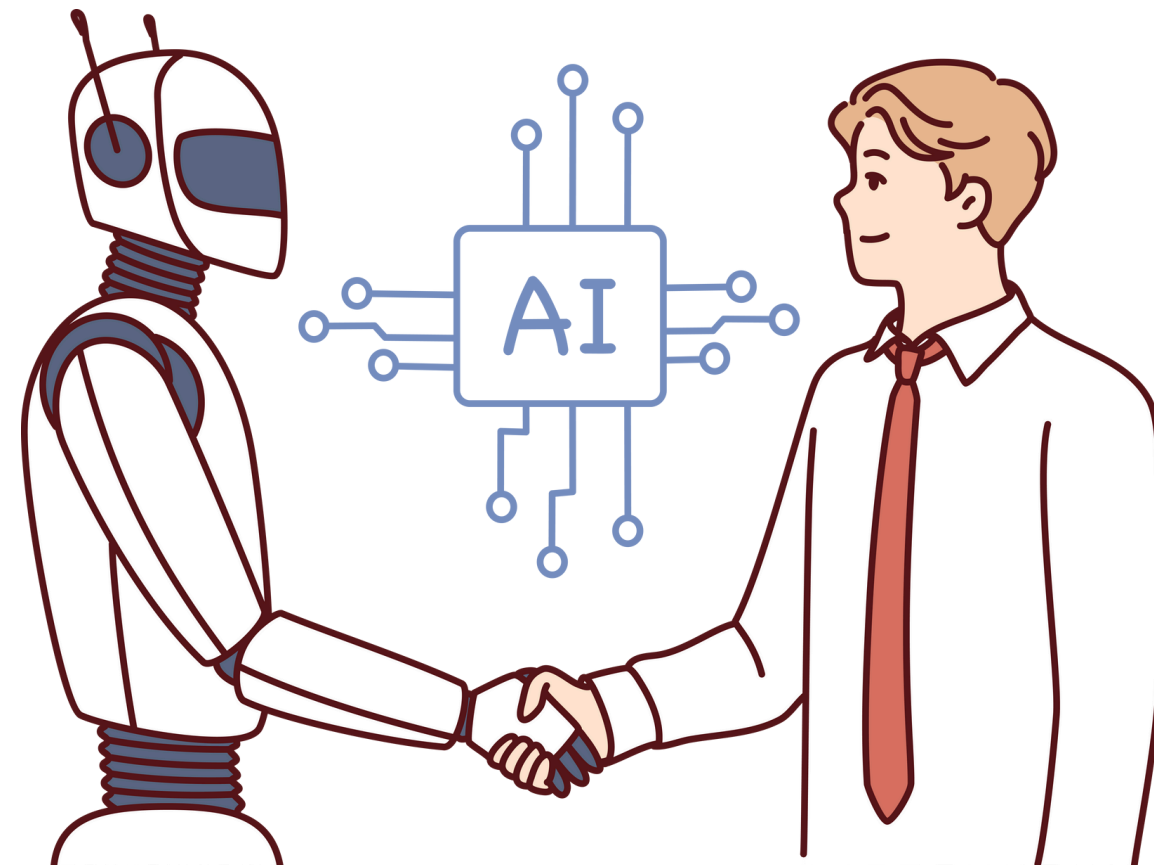
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Understanding the (new) role of AI in Research



Institutional Innovation and Effectiveness



Traditional:

Time-intensive, manual processes at every stage, from idea generation to drafting and citing.

Research is, after all, a process of inquiry where researchers enter into a conversation with other scholars and the topic itself. This requires careful reading, critical questioning, and synthesizing information.



With AI Tools:

AI speeds up and simplifies multiple steps, offering new ways to brainstorm, find, and organize sources.

AI accelerates this process by acting as a conversation partner, suggesting relevant information and even helping us engage with complex materials. However, researchers **must still critically assess AI output.**

Brainstorming & Formulating Questions

Traditional: Brainstorming ideas through reading books, articles, and manual keyword searches.



Library Research: Tools & Assistance

- [OneSearch](#) (find articles, books, videos, and more)
- Articles & Databases
 - [Multi-Subject Article & Reference Databases](#)
 - [Databases by Subject](#)
 - [A-Z Databases](#)
 - [A-Z Journals](#)
- [eBook Collections](#)
- [Open-Access Collections](#)

Search articles, books, journals & more

Searching: [Academic Search Complete \(and 8 more\)](#)

Berserk AND dark fantasy

Full Text

 Peer Reviewed

All time ▼

Google Scholar


Berserk and Dark Fantasy



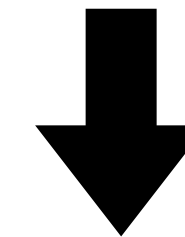
☒ Articles ☐ Case law

With AI Tools: AI tools suggest topics, generate questions, and even outline research paths.

- **ChatGPT:** To brainstorm and refine research questions.
- **Elicit (AI Research Assistant):** Helps find gaps in literature and generate research questions.
- **Notebook LM:** Engages with complex topics and develops questions based on readings.



Example: Student wants to write about about “Berzerk” (Manga), but isn’t sure where to start



I'm writing a paper on Berzerk manga by Kentaro Miura. Help me brainstorm topics and formulate a research question

Formulating Research Questions

1. Themes of Power, Corruption, and Sacrifice

- Explore how *Berserk* delves into the corrupting nature of power, particularly through characters like Griffith and his quest for dominance.
- **Research Question:** How does *Berserk* portray the moral complexities of power and sacrifice through its characters, and what message does this convey about ambition?

2. The Struggle Between Fate and Free Will

- Miura's work often reflects on the tension between destiny and personal choice, particularly through Guts' journey.
- **Research Question:** How does *Berserk* address the concept of free will in the face of overwhelming destiny, and what philosophical implications does it offer?

AI can assist in
generating
potential problems
or questions using
general points of
view



3. Mental Health and Trauma

- *Berserk* is deeply psychological, examining the trauma of its characters, especially Guts' ongoing battles with his past.
- **Research Question:** How does *Berserk* explore the long-term effects of trauma on its characters, and how does it reflect real-world mental health struggles?

4. Mythology, Religion, and the Supernatural

- The series incorporates various mythological and religious symbols, as well as an intricate supernatural world.
- **Research Question:** How does *Berserk* incorporate elements of mythology and religion to create its world-building, and how do these elements influence the narrative's moral and ethical themes?

5. Representation of Gender Roles and Masculinity

- *Berserk* presents complex gender dynamics, especially through its depiction of masculinity, heroism, and the role of female characters like Casca.
- **Research Question:** How does *Berserk* challenge or reinforce traditional gender roles, particularly in its portrayal of masculinity and the treatment of female characters?

The student now has a variety of ways to think about “Berzerk” & can proceed based on their interests

Initial topic interest:

Berserk (Manga) by Kentaro Miura

Refined research topic:

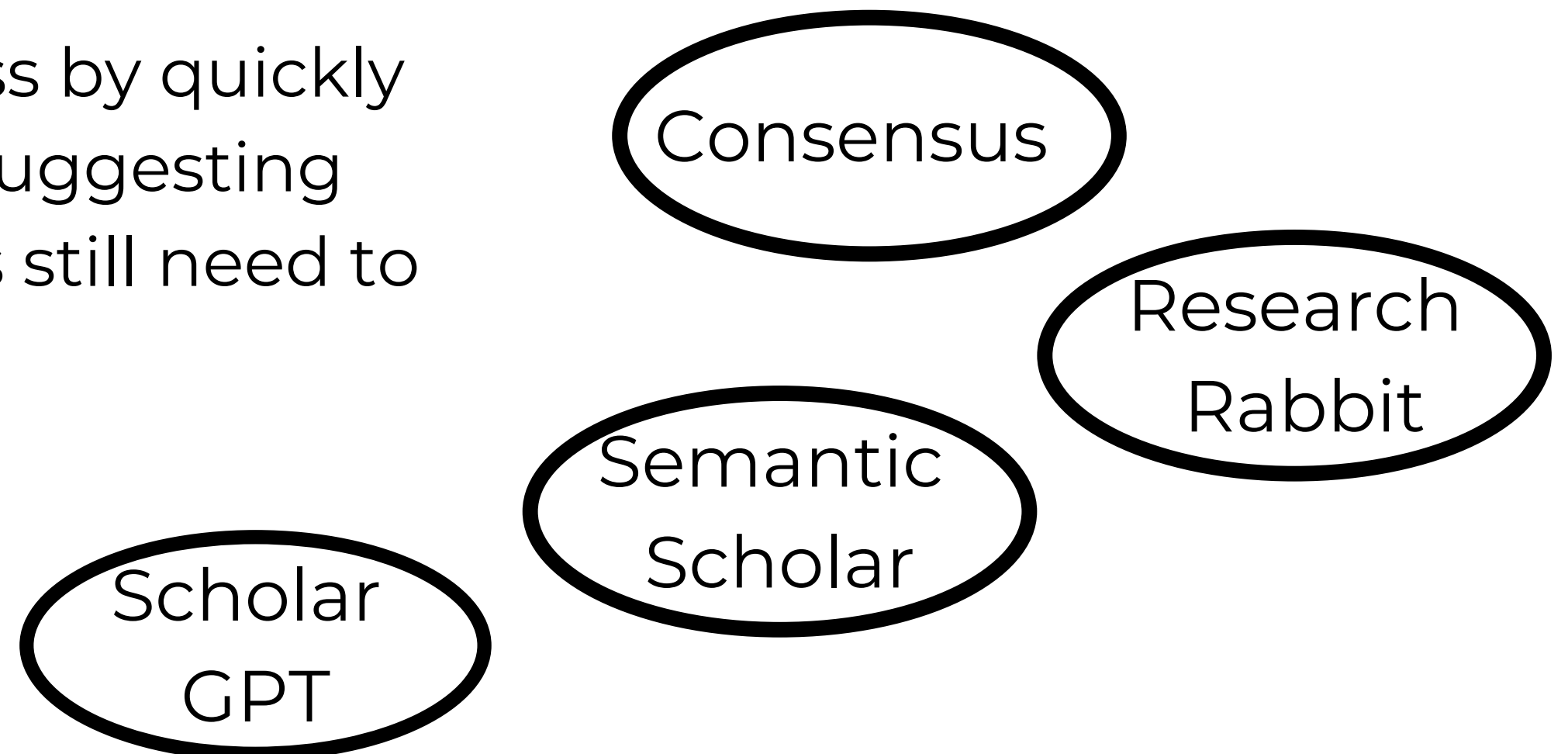
How does Berserk challenge or reinforce traditional gender roles, particularly in its portrayal of masculinity and the treatment of female characters?



Finding Sources:

Traditional: Finding and selecting sources manually is a deliberate and time-consuming task-- but critical engagement is crucial

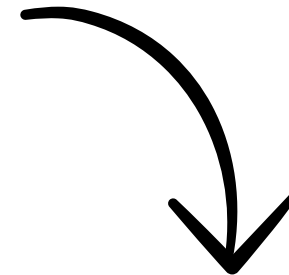
With AI Tools: AI aids this process by quickly retrieving relevant sources and suggesting connections, though researchers still need to evaluate these sources critically.



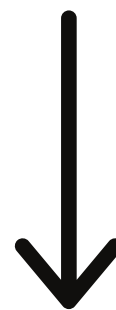
Consensus

Offers evidence-based responses to research questions by engaging directly with academic literature.

Help me find academic sources related to my research question:
How does *Berserk* by Kentaro Miura challenge or reinforce traditional gender roles, particularly in its portrayal of masculinity and the treatment of female characters?



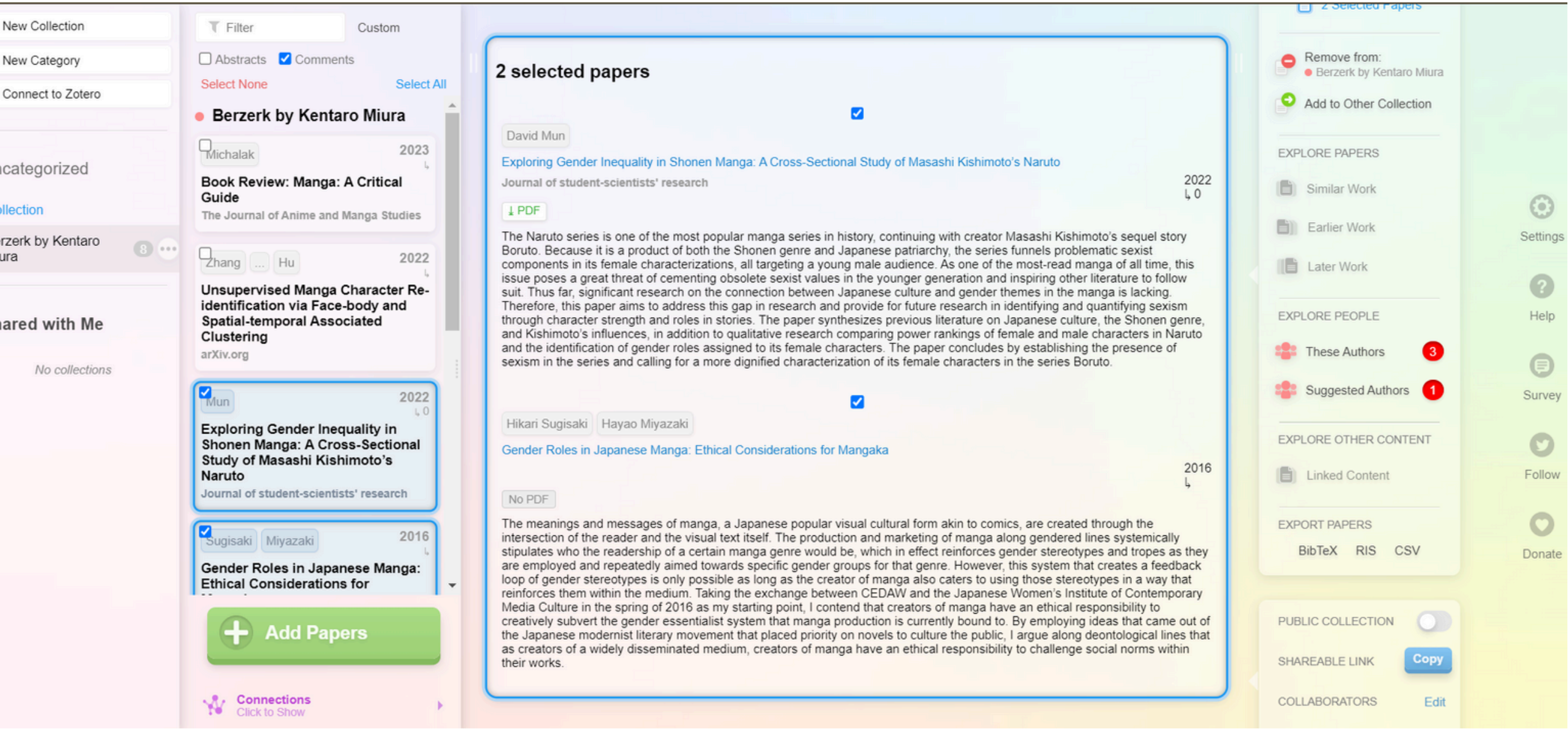
"Straddling the Line: How Female Authors are Pushing the Boundaries of Gender Representation in Japanese Shonen Manga" - While not specific to *Berserk*, this paper highlights how shonen manga can subvert gender norms, which could relate to how *Berserk* portrays powerful female characters in a male-dominated narrative. (Flis, 2018).



"Male Bonding and Female Pleasure: Refining Masculinity in Japanese Popular Cultural Texts" - This study examines how Japanese popular culture is reshaping traditional masculinity, which can provide insight into *Berserk*'s portrayal of characters like Guts and Griffith, who subvert traditional male roles. (Darling-Wolf, 2003).

Research Rabbit

Builds research connections and creates citation maps, fostering Booth’s conversation with sources.



Engaging with Sources

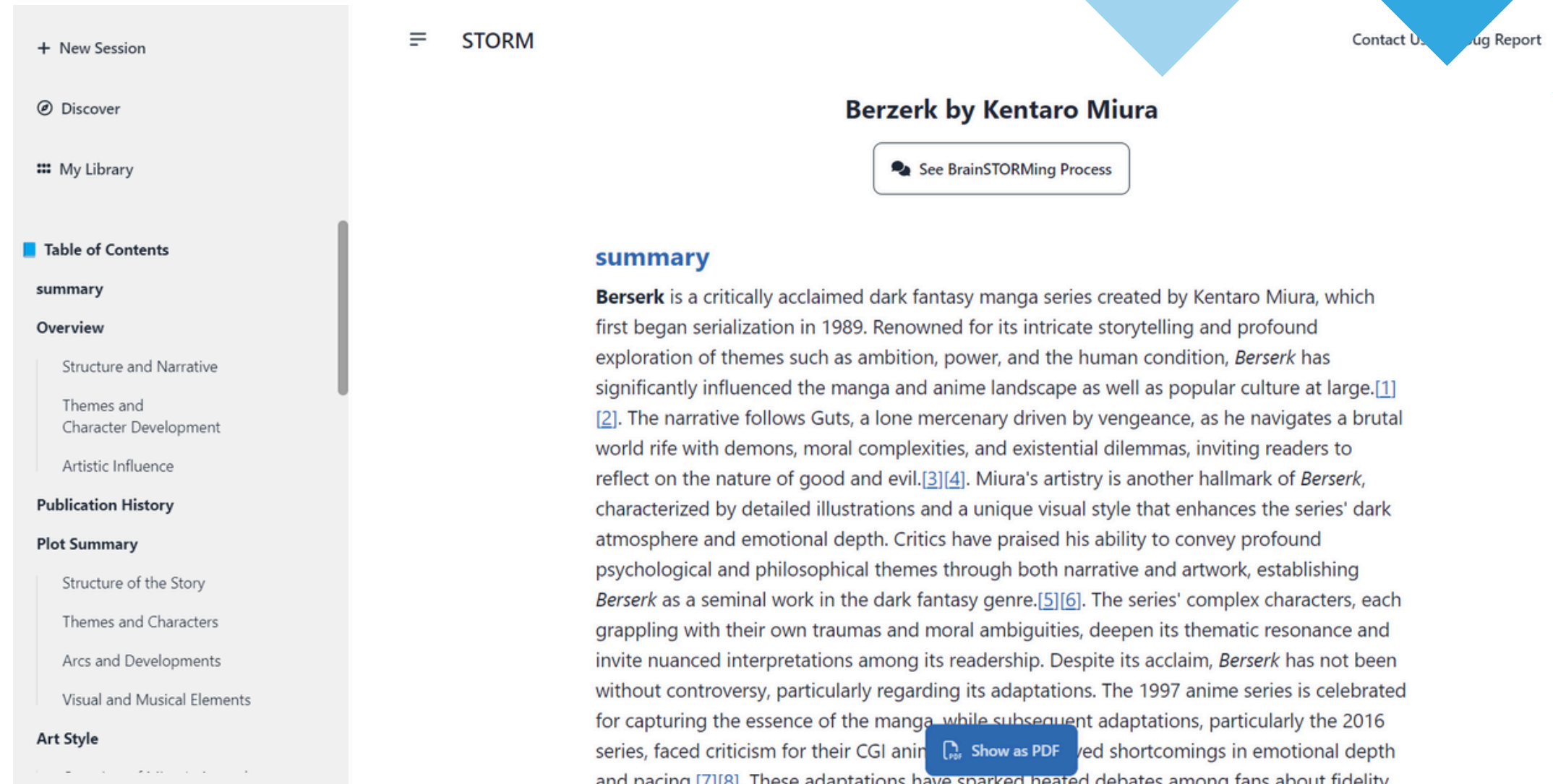
Traditional: In the traditional research process, engaging with sources involves manually reading through texts, highlighting key information, and taking extensive notes.

With AI Tools: AI-powered tools make engaging with sources faster and more interactive. They can quickly summarize large texts, highlight key information, and generate structured outlines to provide an immediate overview of the main points. Additionally, they allow for real-time questioning and deeper insights, streamlining the reading and analysis process.

STORM (Stanford University)

Synthesis of Topic Outlines through Retrieval and Multi-perspective Question Asking

Focuses on enhancing the pre-writing stage of research by automating the process of gathering references, generating outlines, and organizing information



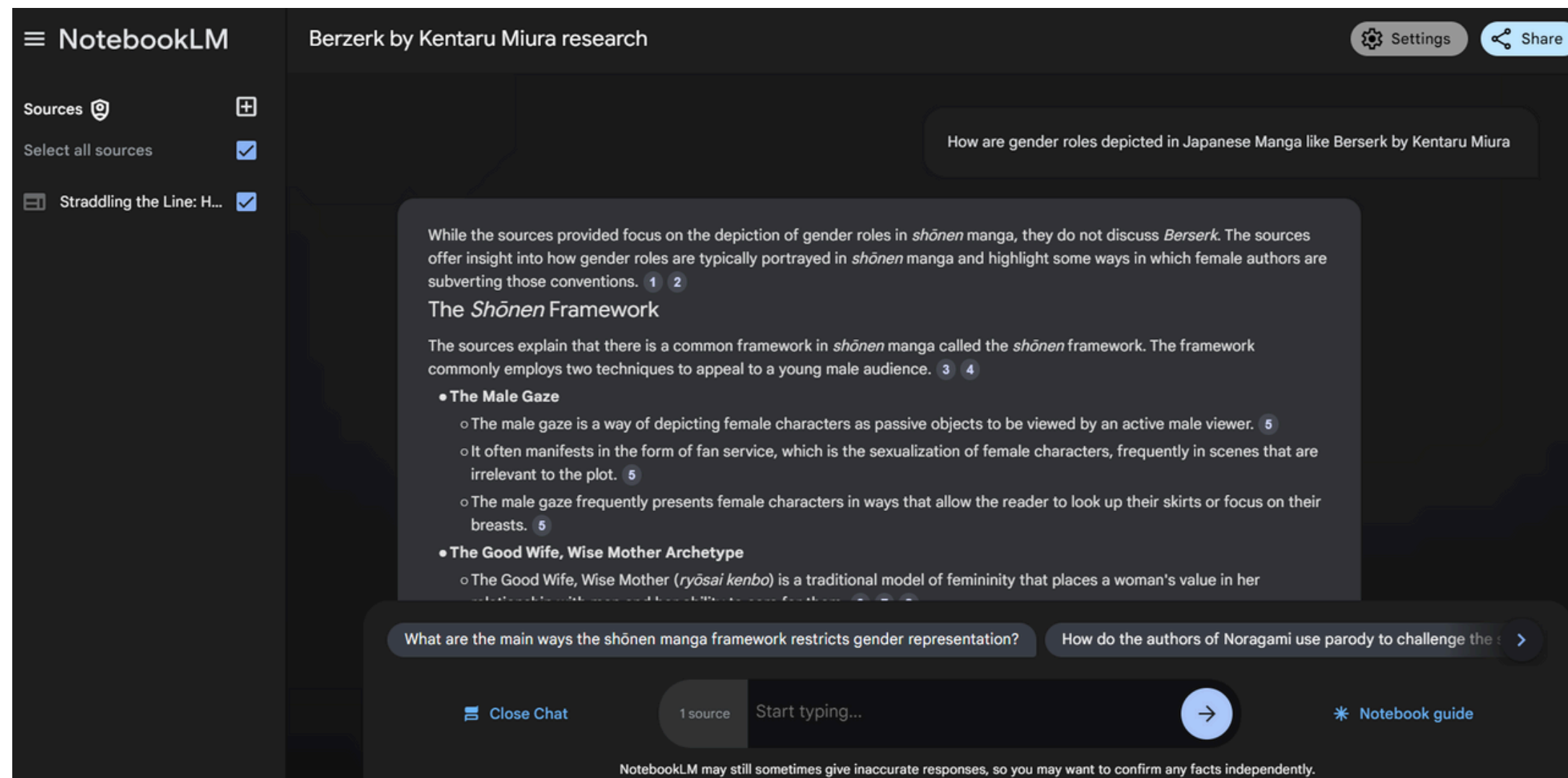
The screenshot displays the STORM web application interface. On the left is a sidebar with navigation links: '+ New Session', 'Discover', 'My Library', and 'Table of Contents'. The 'Table of Contents' is expanded, showing sections like 'summary', 'Overview' (with sub-items: Structure and Narrative, Themes and Character Development, Artistic Influence), 'Publication History', 'Plot Summary' (with sub-items: Structure of the Story, Themes and Characters, Arcs and Developments, Visual and Musical Elements), and 'Art Style'. The main content area on the right shows the title 'Berzerk by Kentaro Miura' with a 'See BrainSTORMing Process' button. Below this is a 'summary' section containing a detailed paragraph about the manga series, including its creator, themes, and adaptations. A 'Show as PDF' button is visible at the bottom of the summary text.

<https://storm.genie.stanford.edu/article/berzerk-by-kentaro-miura-189091>

Institutional Innovation and Effectiveness

NOTEBOOK LM

Allows you to upload research materials and request instant summaries, highlight key sections, or ask specific questions about the content



- Interactive Summaries
- Personalized insights based on what you're looking for in a text
- Contextual Engagement: passive reading into an active dialogue

<https://notebooklm.google.com/notebook/727d749d-e0c2-4ff7-9eb0-5325437e6b40>

Drafting & Revising

Traditional: When it comes to drafting and revising, this part of the process remains unchanged. Students are still required to deeply engage with their sources, critically analyze them, and craft a coherent argument

With AI Tools: While AI can assist in earlier stages like outlining and summarizing, the drafting and revision process should set AI tools aside.



Citing Sources

Traditional: Here, too, not much changes. Research is built on the credibility and proper acknowledgment of sources. Citation is not just a technical requirement but an ethical obligation in the scholarly conversation.

With AI Tools: AI assists in managing citations and ensures proper formatting, but it remains the researcher's responsibility to verify accuracy and adherence to style guides.



Conclusion & Q&A

- **AI Literacy is Information Literacy:** We must learn how to effectively use AI tools is a crucial part of modern information literacy
- **AI Streamlines Research:** AI tools automate tasks like summarizing, outlining, and finding sources, making the research process more efficient.
- **AI Supports, but Doesn't Replace Critical Thinking:** AI can assist in various stages, but engagement with sources remain key responsibilities of the researcher.





Q&A

SURVEY





THANK YOU

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