Using AI for research in the humanities

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Presentation Highlights:

Part 1: Introduction

Part 2: About LLMs

Part 3: Using LLMs to assist in research

Part 4: Hands on application

Introduction

Lori Hennessy

- **Degree:** DMA student in performance, minor in music education, Third year.

- **Research:**
  - **Area:** String pedagogy / Cello pedagogy
  - **Type:** Historical
  - **Methodology:** Process-Tracing
  - **Perspective:** Critical / access oriented

- **Cohort member of the Fall 2025 Roots for Resilience program**

Michele Cosi
Research Data Scientist

Jeff Gillan
Research Data Scientist

Tina L. Johnson
Organizational Development Specialist
Office of the Chief AI officer

Roots for Resiliance

datascience.arizona.edu/r4r

- Interdisciplinary cohort of graduate students and PhD candidates.
- Supports student research with tools in AI and Open Science
- Supports student attendance and learning with stipends.

What is “Open Science?”

Transparency

Accessibility

Shareability

Open Science and the Humanities

**As open as possible,
as closed as necessary**

- **Open Access**
- Open Data
- **Open Methods**
- Open Source Software
- Open Peer Review
- **Open Educational Resources**

Open AI

ChatGPT

Anthropic

Claude

Google

Gemini

What are LLMs?

Large Language Models (LLMs) are AI systems trained on massive amounts of text to recognize patterns in language and generate human-like responses.

What do LLMs do well?

1. Text Analysis

2. Summarizing and synthesizing

3. Advanced Source Searching

4. Interpreting / Clarifying Complex Ideas

5. Organizing information

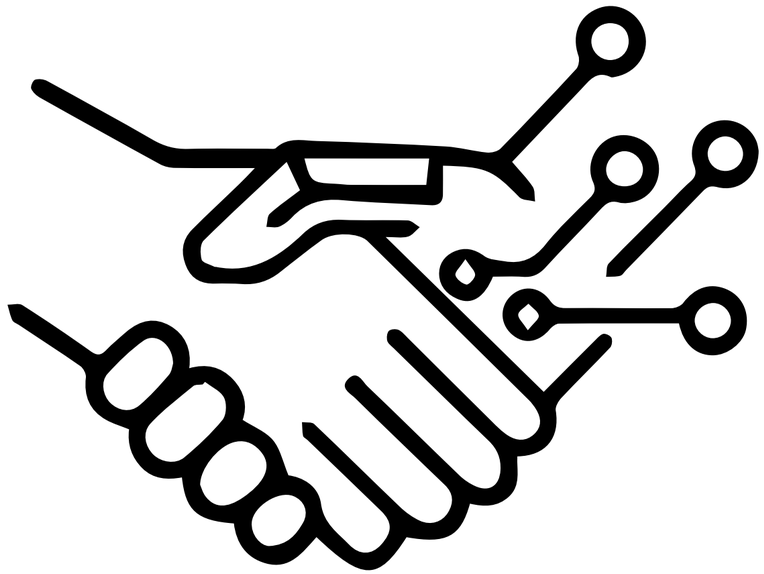
6. Digital support

Chat with a neighbor:

How have you used LLMs to assist with your work?

The human in the loop:

Keeping it ethical and accurate.



NotebookLM

Your student privilege.

Getting Started:

1

Collect PDFs (up to 50!)

THE UNIVERSITY OF ARIZONA

University Libraries

WeLib

2

Add them to a “notebook”

+

NotebookLM

Settings

Recent notebooks

Create new notebook

A Concise History of Women's Work

Nov 17, 2025 · 5 sources

Spiral Curriculum: Habits of Mind and Skills...

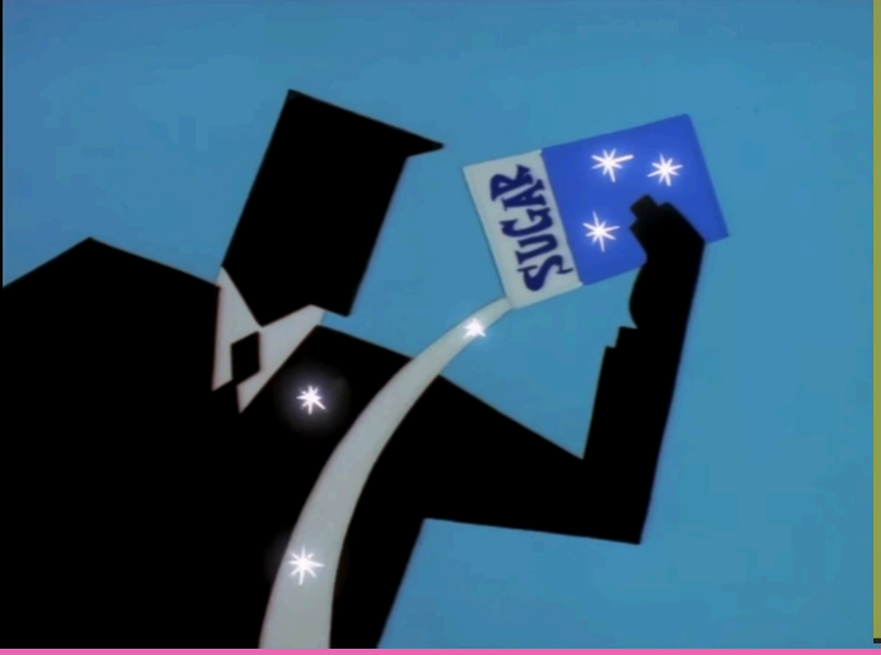
Nov 18, 2025 · 7 sources

Process Tracing: Causation and Levels o...

Nov 18, 2025 · 9 sources

Cello Technique: Principles and Forms of...

Nov 17, 2025 · 9 sources



Strategically create notebooks to get assistance with:

historical context, epistemological analysis, using frameworks, methodology, and more.

Epistemological Paradigm Analysis

Request a table or specify themes.

Create a notebook with epistemological sources and the source you want to analyze to generate analysis.

Apply Methodology

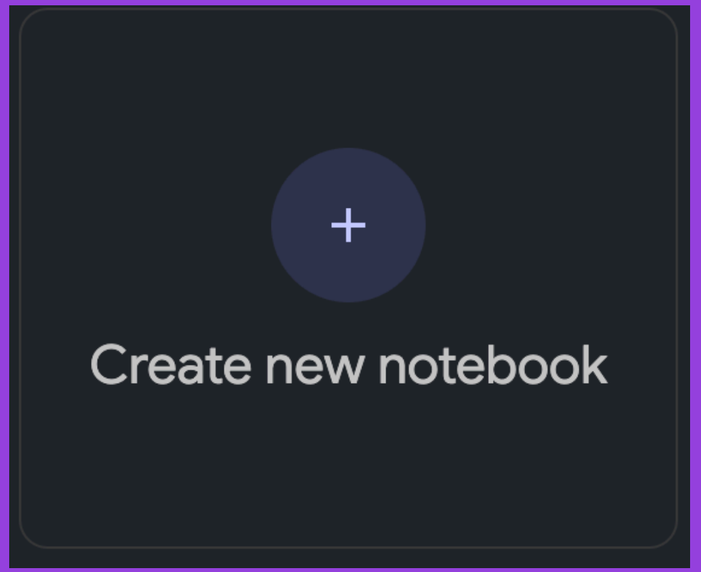
Create a notebook with methodological sources and use AI to gain clarity on those sources or apply them to a different text.

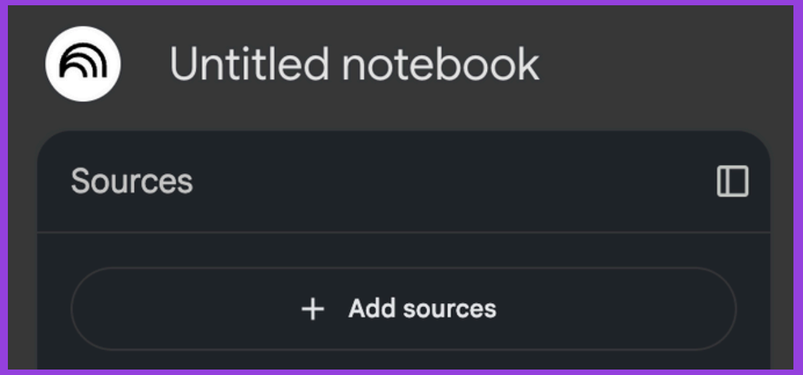
Generate an outline for an article

Create a notebook with the source you want to criticize and the sources you want to use to aid in that criticism.

Let’s try this together!

1. **Open your computer.**
2. **Go to notebooklm.google.com**
3. **Sign in with your UofA credentials.**
4. **Start creating a notebook.**
5. **Generate an outline!**





Any questions?