

Beyond Fake Citations

Equipping students to be
AI-savvy researchers

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Welcome Poll

What do you think about student researchers using AI?



Respond at pollev.com/cshanley or scan the QR code

Goals for this session

- Explore AI-powered tools aimed at researchers
- Reflect on how they may help or hinder students
- Consider a framework for assessing these tools
- Paired Activity
- Discuss and wrap-up



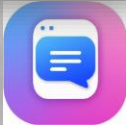
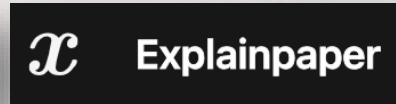
AI Research Tools

- Popular chatbots, plugins



AI Research Tools

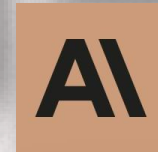
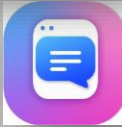
- Popular chatbots, plugins
- New AI-enabled research tools





AI Research Tools

- Popular chatbots, plugins
- New AI-enabled research tools
- AI features in existing tools



Why this matters

New tools are launching, and new AI features are fast becoming part of tools we already use.

Student researchers may trust these tools without understanding how they work.

describe the latest peer-reviewed research on urban farming in philadelphia

View other drafts

Philadelphia's vibrant urban farming scene has attracted considerable research attention, and several recent studies offer valuable insights:

Social and economic aspects:

- ✓ "Practices of Care and Relationship-Building: A Qualitative Analysis of Urban Agriculture's Impacts on Black People's Agency and Wellbeing in Philadelphia" (2023): This study explores how community gardens in Philadelphia contribute to Black residents' agency and well-being, fostering a sense of ownership, community, and cultural resilience.
- ✓ "Is Urban Agriculture Financially Sustainable? An Exploratory Study of Small-Scale Market Farming in Philadelphia, Pennsylvania" (2017): This research delves into the financial viability of small-scale market farming in Philadelphia, highlighting the challenges of land access, market competition, and limited financial support.
- ! "The Role of Urban Agriculture in Philadelphia: A Sociological Analysis from a City Perspective" (2015): This study examines the broader social and environmental impacts of urban agriculture in Philadelphia, emphasizing its potential for community development, food security, and environmental sustainability.

Environmental and ecological aspects:

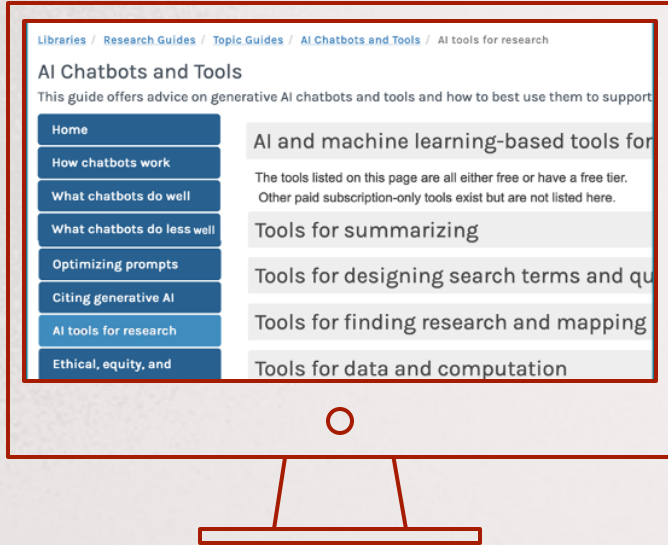
- ✗ "Assessing the climate change mitigation potential of urban agriculture in Philadelphia" (2022): This research uses spatial modeling to assess the potential of urban agriculture in Philadelphia to mitigate climate change through carbon sequestration and energy reduction.
- ✗ "Urban Agriculture and Stormwater Management in Philadelphia" (2008): This study highlights the role of community gardens in managing stormwater in Philadelphia, reducing runoff and improving water quality.
- ! "Urban agriculture and other green uses: Remaking the shrinking city" (2010): This research explores the potential of urban agriculture to revitalize vacant and underutilized land in Philadelphia, contributing to urban greening and ecological restoration.

Policy and planning:

- ! "Philadelphia's Urban Agriculture Plan: Growing from the Root" (2022): This comprehensive plan outlines Philadelphia's vision for a sustainable and equitable urban agriculture system, focusing on policy, resource allocation, and community engagement.
- ✗ "Urban Agriculture Zoning in Philadelphia: A Critical Assessment" (2021): This research examines Philadelphia's zoning regulations for urban agriculture, identifying areas for improvement to foster a more supportive and inclusive environment.
- ✗ "Community-Based Urban Agriculture Policy: A Comparative Analysis of Philadelphia and Seattle" (2018): This study compares and contrasts urban agriculture policies in Philadelphia and Seattle, offering insights into effective policy approaches for supporting diverse urban agriculture initiatives.

Types of Features

- Summarizing
- Literature searching, mapping, recommending
- Extracting information across items
- Working with data
- Multifunctional “research assistants”



AI Chatbots guide

guides.temple.edu/ai-chatbots/research



How AI research tools may help

- Text summarization
- Conversational, natural language interfaces
- Semantic search algorithms
- Information and data extraction across sources
- Data search, analysis, and visualization
- Writing and publishing utilities

How AI research tools may hinder

- Generative AI pitfalls still a factor: hallucinations, vagueness, bias, and inaccuracies
- May not be obvious where generative AI is used
- Cost
- Lack of transparency about what they search
- Data security and privacy
- Overbroad claims and promises

Unleash scientific research
Search papers, get answers.

Explore the scientific
literature

Reliable academic search engine

Search in published academic papers

Unearth precise academic research effortlessly

AI-powered

search engine for exploring scientific literature

Discover the world of Scientific Literature

Comprehensive Academic Search

**Evidence-Based Answers,
Faster.**

Effortless research

AI-savvy student researchers

- Critically judge the quality of AI outputs
- Recognize when they lack adequate expertise to judge
- Use tools with transparent documentation
- Read the documentation to understand how they work
- Match the right tool to the task
- Have multiple tools and techniques in their toolkit

Framework for assessing AI research tools

Access

Is there a cost to use this tool? Is it accessible to me?

Sources

How much scholarly information does this tool access? Are its sources comprehensive?

Accuracy

Are the tool's outputs accurate? Are they sufficiently detailed for my needs?

Relevancy

Are search results and recommendations relevant? Do the most relevant sort to the top?

Chatbot

Do conversational features show common chatbot pitfalls?

My Data

How will this tool use my personal data?

Goals








Will using this tool help me achieve my learning goal, or could it undermine my learning?



Suggested lesson

AI Tools Report Card

Name of tool:

Criteria	Grade	Rationale
 Access Do you have access? Is there a cost to use this tool?		
 Sources Does this tool have access to scholarly information? Are its sources comprehensive for your discipline or topic? How does it deal with retracted research? Does it have access to actual data sources?		
 Relevancy Are results and recommendations relevant? Are the most relevant articles at the top of search results?		
 Accuracy Are summaries (and other information extraction) accurate and sufficiently detailed?		
 Chatbot How well do the conversational features work? Do they show common pitfalls of generative AI chatbots (e.g. bias, hallucinations, limited training data)?		
 My Data How will my chatbot conversations and personal data be used?		
 Goals What am I hoping to learn? Will using this tool help me achieve that goal, or will it undermine my learning?		

AI Tools Report Card

Use this activity:

- In class
- Online
- Asynchronously

Find it on our guide:

guides.temple.edu/ai-chatbots/research

The image features a light beige background with decorative red wavy lines in the corners. The word "Questions?" is centered in a large, bold, dark red serif font.

Questions?

Think/Pair/ Share

Consider your current teaching practices.

How might you incorporate the AI Tools framework to help students use AI more critically?



Discussion



Library Workshops on AI

library.temple.edu/workshops



Working with AI Chatbots

Feb 19, 3pm



AI Research Tools

Mar 14, noon



AI in STEM

Mar 19, noon



AI in Business

Apr 3, 1pm



AI and Creativity

Apr 23, 1pm

Getting Help

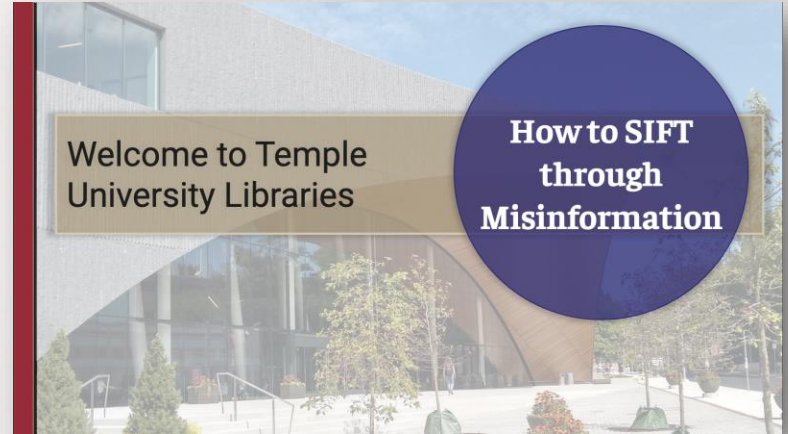
The library can help with:

- Consultation about AI tools for research
- AI literacy, research best practices instruction for your course

Make an appointment: library.temple.edu/appointments

Request an instruction session: library.temple.edu/forms/library-instruction

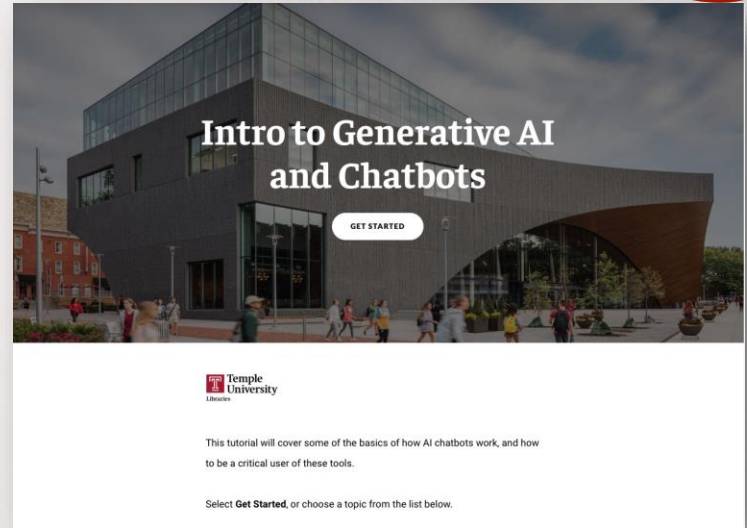
Use library tutorials: library.temple.edu/tutorials



Coming soon!

NEW interactive tutorial:

- Intro to Generative AI and Chatbots
- **Get notified when this tutorial is available**



library.temple.edu/webpages/intro-to-generative-ai-and-chatbots

Thanks!

Do you have any questions?

- asktulibrary@temple.edu
- guides.temple.edu/ai-chatbots

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Generated with AI using Bing Image Creator