



SAN DIEGO
Community College District

AI Literacy in Action: Exploring the Role of AI in Research and Instruction

November 13, 2025

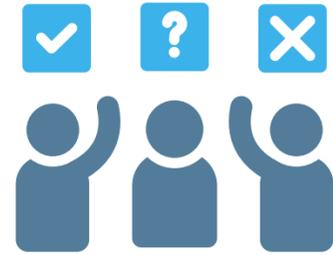
**Presented By:
Dr. Alison Gurganus**



ALISON GURGANUS

- **Online Services Librarian**
 - San Diego Mesa College
- **Innovation & Emerging Technology Faculty Specialist**
 - SDCCCD Office of Institutional Innovation and Effectiveness
- **Special Advisor to the CCCCO on AI & Information Literacy**
 - Digital Center for Innovation, Transformation & Equity
 - State of California

AGENDA



Poll



Some Ethical Considerations



Research and LLM's



Other AI Research Tools

A Quick Poll!

menti.com
code: 5453 7335



- **What's The Biggest Challenge Your Students Face with Research? *(one word)***
- **When You Use AI, You Mostly Use it For... *(one word)***
- **In Your Classes, Students Use of AI is Currently... *(multiple choice)***
- **What Support of Resources Would Make You Feel More Confident Integrating AI into Assignments? *(open ended)***

AI Literacy vs. Information Literacy

5 Basic Principles of AI Literacy

- **Technical Understanding**
 - *Basic Principles of How it Works*
- **Practical Understanding**
 - *Being able to Effectively Interact with the Tools*
- **Critical Evaluation**
 - *Accuracy & Reliability of Output*
- **Ethical Understanding**
 - *Making Informed Decisions*
- **Continuous Learning**
 - *Staying Informed of Major Changes*

Ethical Considerations



Climate &
Environmental Impact

Equity & Accessibility

Bias & Accuracy

Privacy & Data Security

Plagiarism &
Academic Integrity

Social &
Psychological Impact

Human Labor &
Exploitation Practices

Intellectual Property &
Copyright

Transparency,
Accountability & Ownership

Misuse & Misinformation
by Bad Actors

Bias & Accuracy



AI Ethical challenges

Bias & Accuracy

- **Algorithmic Bias**
 - *e.g. Social Media Silos, Systematically Unfair Outcomes*
- **Output is WEIRD**
 - **Western, Educated, Industrialized, Rich, Democratic society**
- **Diversity of Thought and Representation**
 - *e.g. Gender Identity, Ableist, English Language*

Plagiarism & Academic Integrity



AI Ethical challenges

Plagiarism & Academic Integrity

Only 18% admitted to including AI-generated text directly on their submitted work

○ *1,041 student survey*

• *Higher Ed Policy Institute (UK) – Feb 2025*

AI Ethical challenges

Plagiarism & Academic Integrity

- *80% - 90% of undergrads have used AI as part of their college studies (2025 Studies)*
- *Up from 66% in 2024*

- Higher Ed Policy Institute (UK) - Feb 2025
- Cornell University (USA) - Aug 2025
- Digital Education Council (Global) - Aug 2024

AI Ethical challenges

Plagiarism & Academic Integrity

50% of students report they will continue using AI Tools for their classes even if those tools are banned from use

- 3,300 student survey

- Tyton Partners June 2025
 - Education Consulting Firm

AI Ethical challenges

Plagiarism & Academic Integrity

Policies

- *Campus Academic Integrity Policy*
- *Create an AI Syllabus Policy*
- *Consider a “Progressive Policy” if you*
Allow AI Use

AI Ethical challenges

Plagiarism & Academic Integrity

Mesa College Academic Honesty Statement

San Diego Mesa College values honesty, academic integrity, and community. Our goal is to guide our students in maintaining academic excellence, in addition to fostering a sense of belonging to our campus. At San Diego Mesa College, students are expected to create their own work in connection with all lecture and laboratory assessments and assignments, and **will refrain from copying, cheating, plagiarizing, utilizing outside resources**, or any form of academic misconduct. **Students will only use external sources when approved by faculty and will properly acknowledge these external sources.** We understand our students wish to maintain these community standards; however, failure to follow these community standards will be considered a violation of the Student Code of Conduct under Board Policy 5500 and may result in student disciplinary action. We thank our students in advance for adhering to these community standards.



Transparency, Accountability & Responsibility

AI Ethical challenges

Transparency, Accountability & Responsibility

**Tools Don't Carry
Responsibility, People Do**

*Someone Owns the Decision,
the Data and the Outcome*

AI Ethical challenges

Transparency, Accountability & Responsibility

AI Disclosure

*What tool was used, &
what did the human do with that tool*

AI Ethical challenges

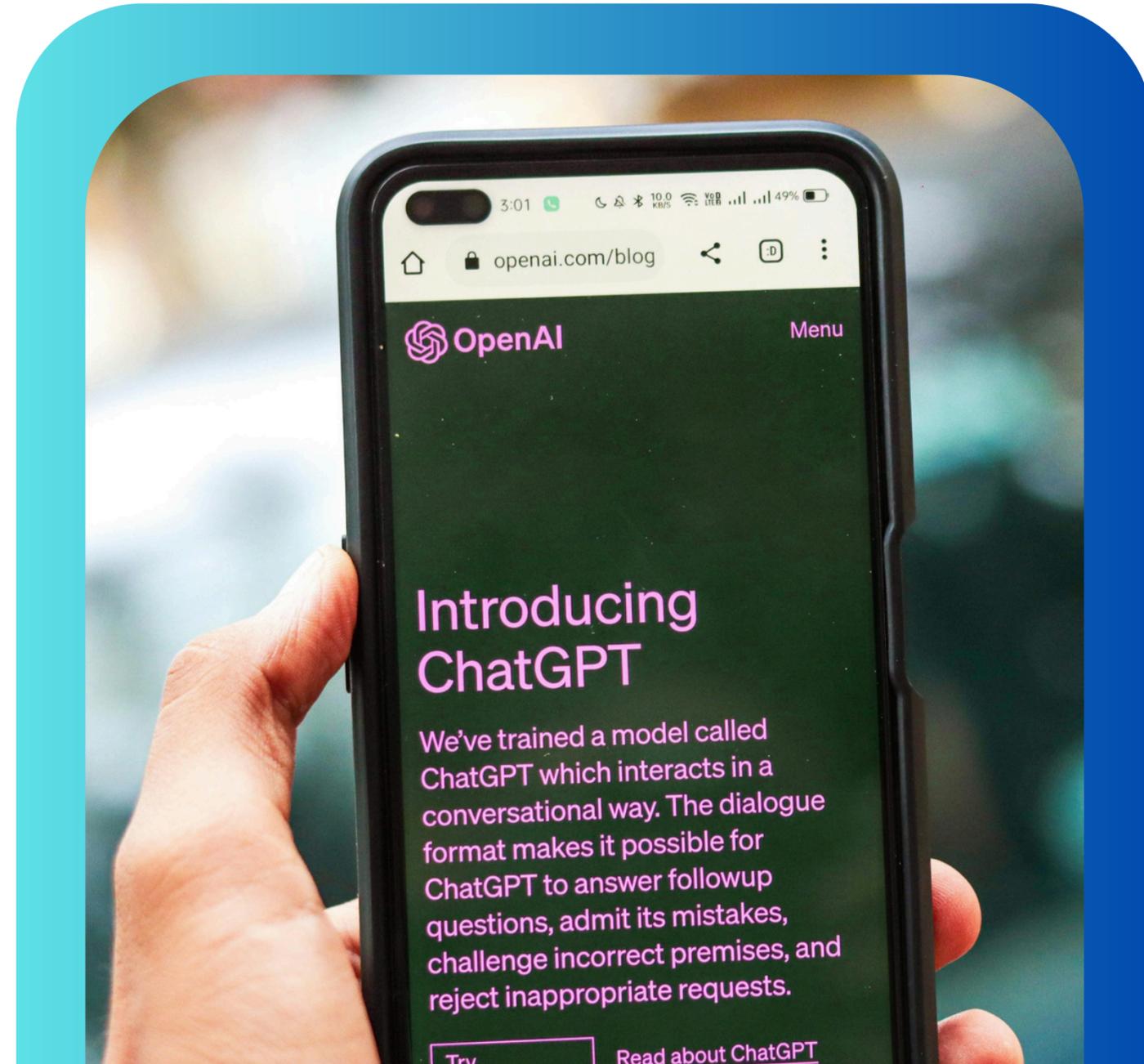
Transparency, Accountability & Responsibility

AI is a Tool Not an Author

*Faculty Assess the Human Contribution
when AI is Used,
and Students Need to Understand How
They Need to Contribute*

USING LARGE LANGUAGE MODELS FOR RESEARCH

- ChatGPT
- Gemini
- Claude
- Perplexity
- CoPilot



LLM BASIC RESEARCH PROMPT

- What Are The Most Effective Solutions for Reducing Plastic Pollution?

MORE ADVANCED RESEARCH PROMPT

I'm researching the topic: What are the most effective solutions for reducing plastic pollution? I'm looking for a well-rounded overview that includes environmental, policy, and technological solutions. Please help me:

- Identify 3–5 of the most commonly studied or implemented solutions
- Summarize what the research says about their effectiveness
- Include references to studies or organizations that support each solution
- Note any controversies or limitations associated with the solutions

MORE ADVANCED RESEARCH PROMPT

- I need an APA formatted reference list and links to full text articles and let me know which are not available

MORE ADVANCED RESEARCH PROMPT

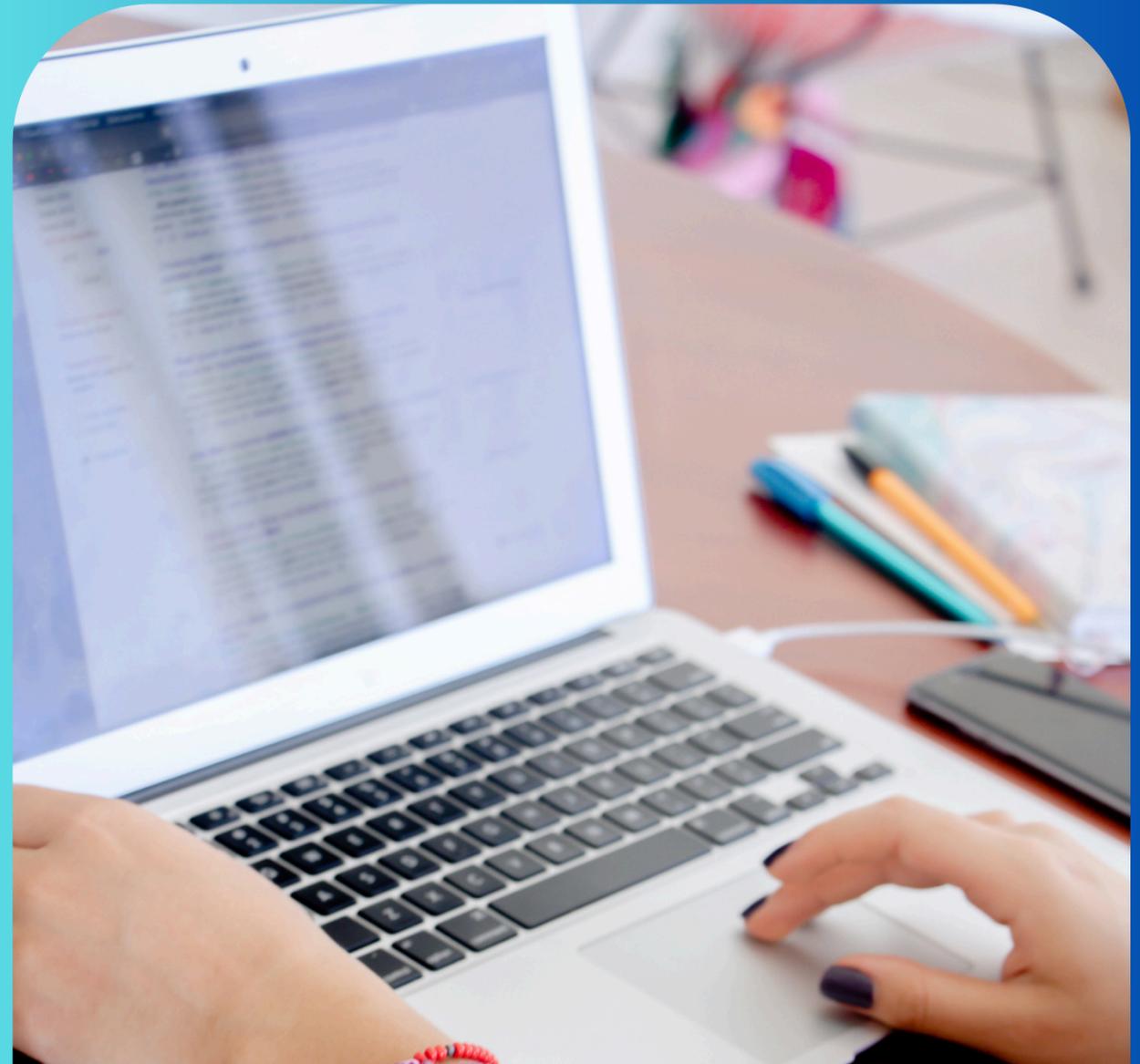
- I can not find the article for number 2:
Plastic waste and recycling in the EU: A
cross-country comparison. Environmental
Science & Technology, 53(12), 7159–7167.
can you give me more information

BOOLEAN LANGUAGE RESEARCH PROMPT

- Next Prompt:
 - Can you break my search down into keywords and boolean language so I can ask a scholarly database for articles on this topic?

USING AI RESEARCH TOOLS FOR RESEARCH

- Semantic Scholar
- Consensus ai
- Research Rabbit
- Elicit
- Scite



SEMANTIC SCHOLAR RESEARCH PROMPT

- Natural Language or Boolean
 - More Precise Data Set with Boolean
- Prompt
 - ("plastic pollution" OR "plastic waste")
AND (solution* OR mitigation OR
reduction) AND (effectiveness OR
impact OR outcome)

CONSENSUS AI RESEARCH PROMPT

- Uses Semantic Scholar For It's Resources
- Can Use Natural Language or Boolean
- Output similar to Perplexity but more accurate
- Prompt
 - ("plastic pollution" OR "plastic waste") AND (solution* OR mitigation OR reduction) AND (effectiveness OR impact OR outcome)

RESEARCH RABBIT RELATED ARTICLES

- Not for Prompt Searching
- Must Populate with Pre Screened Articles
- Great at Finding Related Articles
- Uses Semantic Search For its Resources

Questions?



SURVEY



Alison Gurganus

agurganus@sdccd.edu

