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### Investigating the use of AI tools in Education

Mercedes Byrd

*Rowan-Virtua School of Osteopathic Medicine*, byrdm@rowan.edu

James Martin

*Rowan-Virtua School of Osteopathic Medicine*, martinij@rowan.edu

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# Investigating the use of AI tools in Education

Dr. James Martin II

Assistant Professor, Molecular Biology

Rowan School of Osteopathic Medicine

Mercedes Byrd

PBL Education & Information Services Librarian

Rowan School of Osteopathic Medicine

# Introductions



# HI!

- ❖ Reece's Peanut butter Cups
- ❖ Fireworks
- ❖ Reading

Sewell & Stratford

[byrdm@rowan.edu](mailto:byrdm@rowan.edu)

(856)566.6354



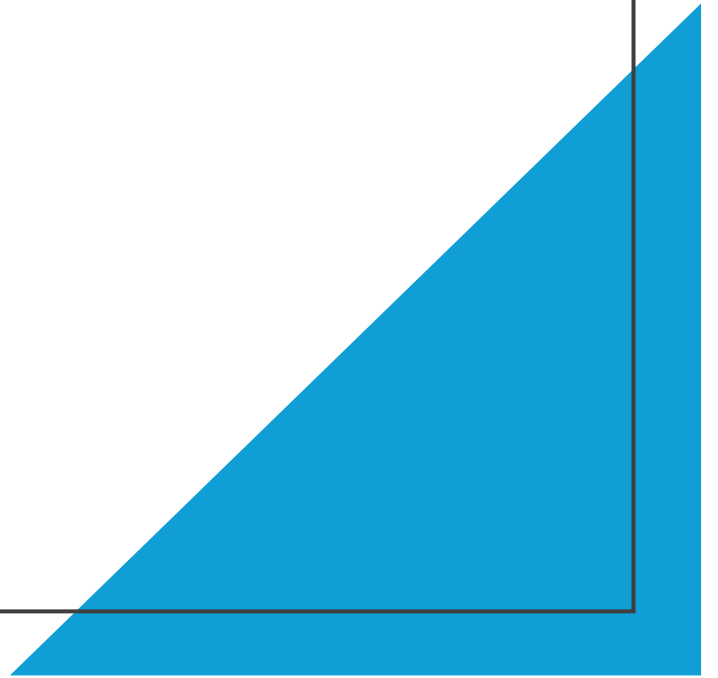
# Objectives

**By the end of this session you should be able to:**

- **Identify reputable resources of information (library site, libguide, course materials), as well as the valid and relevant sources they contain.**
- **Understand what AI and GAI are.**
- **ID the correct AI tool to use for different academic situations.**
- **Have a basic understanding of how to combine these resources with AI to better your learning outcomes.**

# Library Resources

- LibGuides
- Databases
- Workshops
- Exam Prep
- Website





**What is  
generative  
AI and how  
does it  
work?**

## 4 Common AI Tools

**AI tools can learn  
from online data  
and create  
new information**



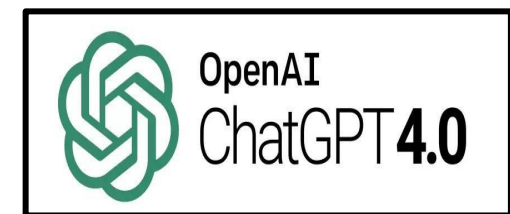
**Microsoft  
CoPilot**



**Anthropic ClaudeAI**



**Google Gemini**



**OpenAI ChatGPT**



# How does AI work & what can it do?

## **Data-driven:**

- AI relies on large amounts of data to learn patterns (3)

## **Neural networks:**

- AI uses deep neural networks to model complex data (5)

## **Self-learning:**

- AI can learn from its own outputs and improve over time by adjusting its parameters and algorithms. (3)

## **Creative:**

- AI can generate original and surprising content (4)

## **Collaborative:**

- AI can interact with humans or other AI systems to co-create content or solve problems. (2)

# What can AI do for You



## Personalized Education

- Help identify student learning styles
- Create individual lesson plans
- Create tools for self-assessment
- Develop practice/formal exam questions



## Research Assistance

- Literature and Database Review and Organization
- Data Analysis
- Academic Presentation and Grant Design



## Job Assistance

- CV Review and Editing
- Interview Prep



**Which tools should be  
used for which tasks?**



# Which tools should be used for which tasks?

## OpenAI ChatGPT

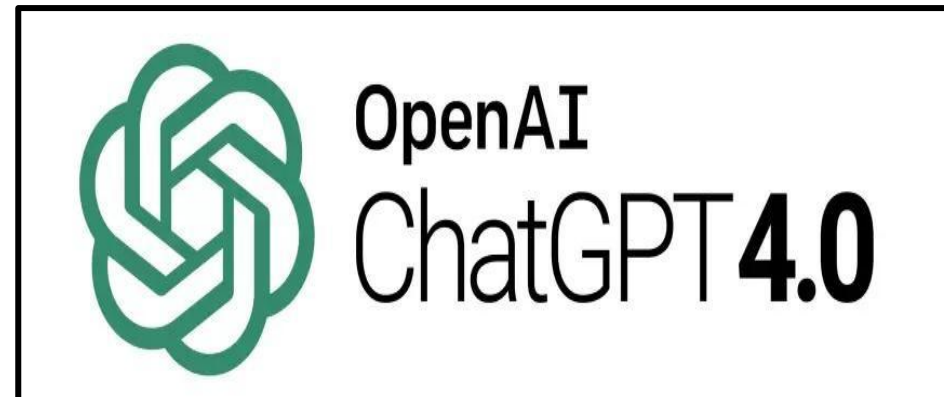
- Can only input images/text
- Offers a lot of add-ins
- Good at mathematical reasoning
- Poor at academic writing and tone

Anthropic ClaudeAI

Microsoft CoPilot

Google Gemini

Google Notebook



# OpenAI ChatGPT

# Which tools should be used for which tasks?

OpenAI ChatGPT

## Anthropic ClaudeAI

- Can receive any type of file as an input
- Fairly eloquent but not as good as copilot
- Best at data organization and summary

Microsoft CoPilot

Google Gemini

Google Notebook



# Anthropic ClaudeAI

# Which tools should be used for which tasks?

OpenAI ChatGPT

Anthropic ClaudeAI

## Microsoft CoPilot

- Can only input images/text
- Integrated into the Microsoft Edge Browser
- Can select AI response "tone"
- Best for writing large blocks of texts (ex. Email/Content)
- Does not store conversations

Google Gemini

Google Notebook



# Microsoft CoPilot

# Which tools should be used for which tasks?

OpenAI ChatGPT

Anthropic ClaudeAI

Microsoft CoPilot

**Google Gemini**

- Easy to export response into Google (Ex. Docs, Sheets, etc.)
- Can edit AI responses in-line to improve AI responses

Google Notebook



## Google Gemini

# Which tools should be used for which tasks?

**OpenAI ChatGPT**

**Anthropic ClaudeAI**

**Microsoft CoPilot**

**Google Gemini**

**Google Notebook**

- Use text/file inputs as the source of learning data
- Useful for creating a searchable library that can be queried and referenced





# Which tools should be used for which tasks?

## OpenAI ChatGPT

- Can only receive images and text as inputs
- Offers a lot of add-ins that can be integrated into websites
- First but the *WORST*

## Anthropic ClaudeAI

- Can receive any type of file as an input
- Fairly eloquent but not as good as copilot
- Best at data organization and summary

## Microsoft CoPilot

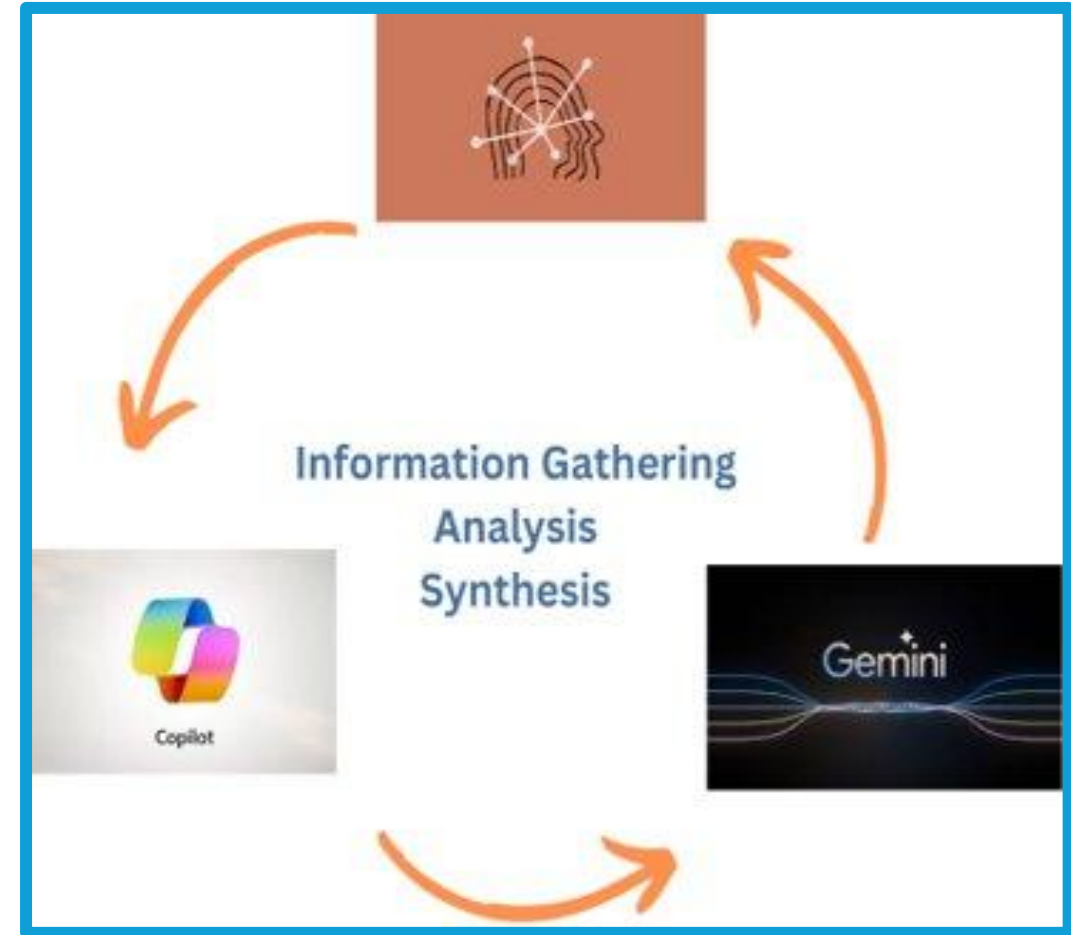
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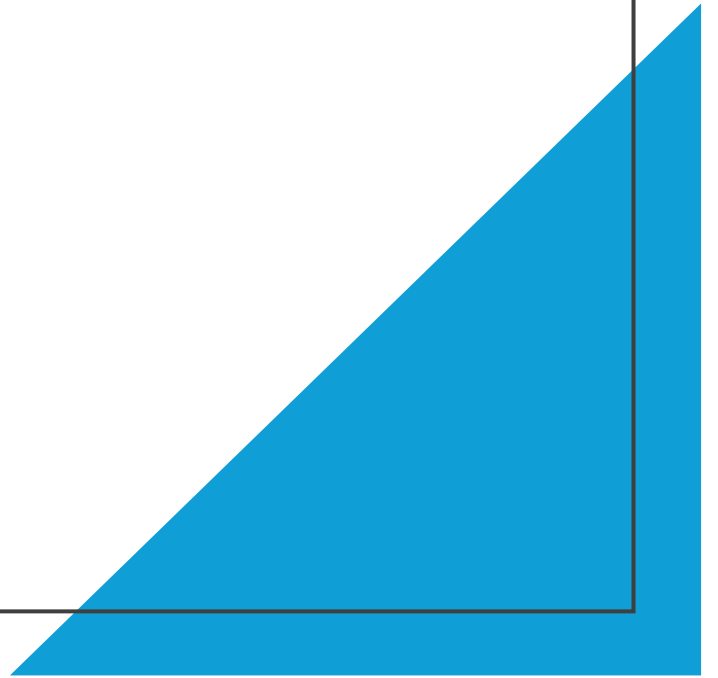
- Use text/file inputs as the source of learning data
- Useful for creating a searchable library that can be queried and referenced



# Tips for generating AI prompts

- 1. Review and refine:** Always review the AI-generated prompts for accuracy, relevance, and clarity. Refine or modify them as needed to ensure they meet your educational objectives.
- 2. Provide context:** When using AI-generated prompts, provide additional context or instructions to guide students in their responses and ensure they understand the expectations.
- 3. Encourage critical thinking:** Use AI-generated prompts as a starting point for deeper analysis and discussion. Encourage students to question, critique, and build upon the prompts to foster critical thinking skills.
- 4. Combine with human expertise:** AI-generated prompts should be used in combination with your own expertise and judgment. Use them to supplement and enhance your teaching rather than relying on them entirely.
- 5. Evaluate and iterate:** Regularly assess the effectiveness of the AI-generated prompts in achieving your educational goals. Seek feedback from students and colleagues and iterate on the prompts as needed to improve their quality and impact.

# AI & the Library – Putting it all together



# Thoughts and Conclusions

- Free AI resources provide students with uniform opportunities to engage with research and analytical tools.
- Fair and accessible utilization of these technologies can guarantee that students' likelihood of success is not influenced by their background but only by their potential.



# References

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