

BOThersome Challenge: Developing A Framework with Generative AI in Teaching and Learning



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<https://bit.ly/PSU-AI-2024>

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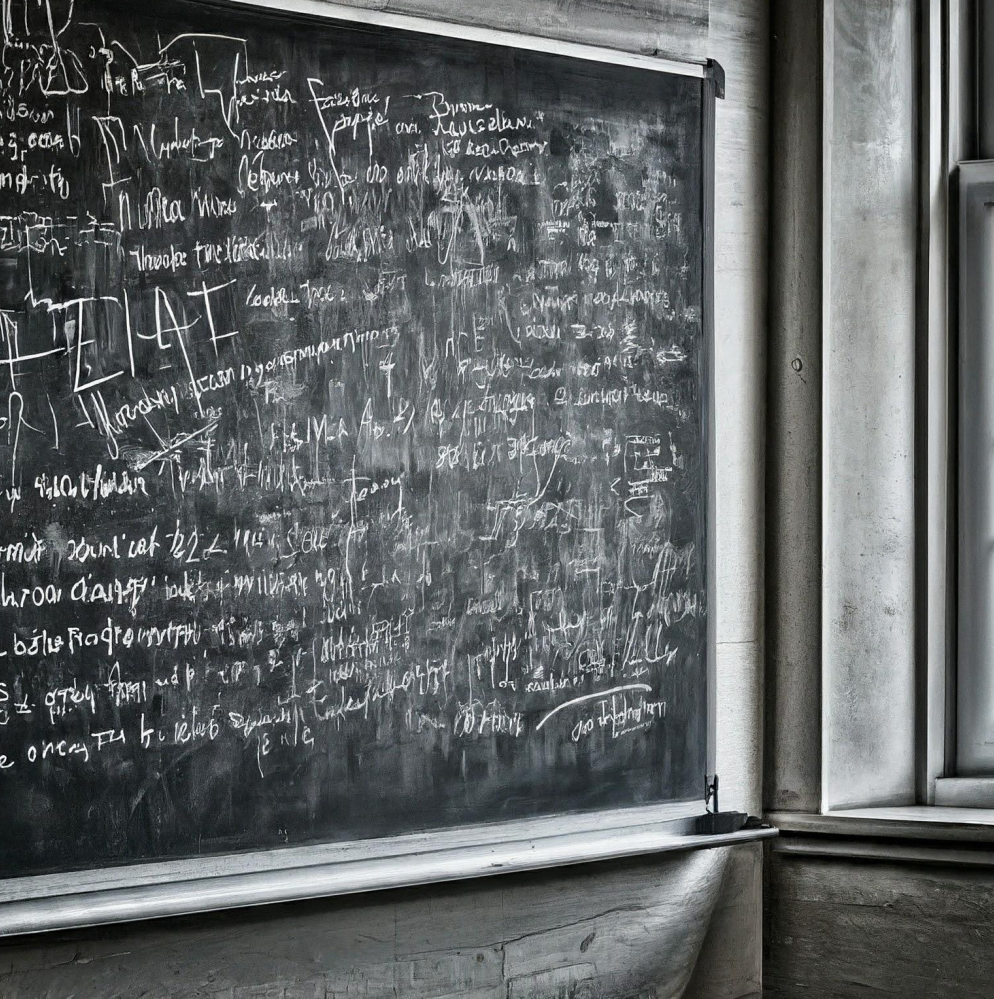
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<https://aiedusimplified.substack.com/>

*Image Source:
DALL-E 3 from
ChatGPT4*





Google Slides Image Generator with prompt: "A chalkboard in a classroom that has a bunch of writing on it"

Today's Agenda

1. How do we make sense of generative AI?
2. What might we do with generative AI?
3. What should we do next?

<https://bit.ly/PSU-AI-2024>



SCAN ME

“The train will always return and there’s still time to catch the next one.”

Laura Dumin,
University of Central Oklahoma

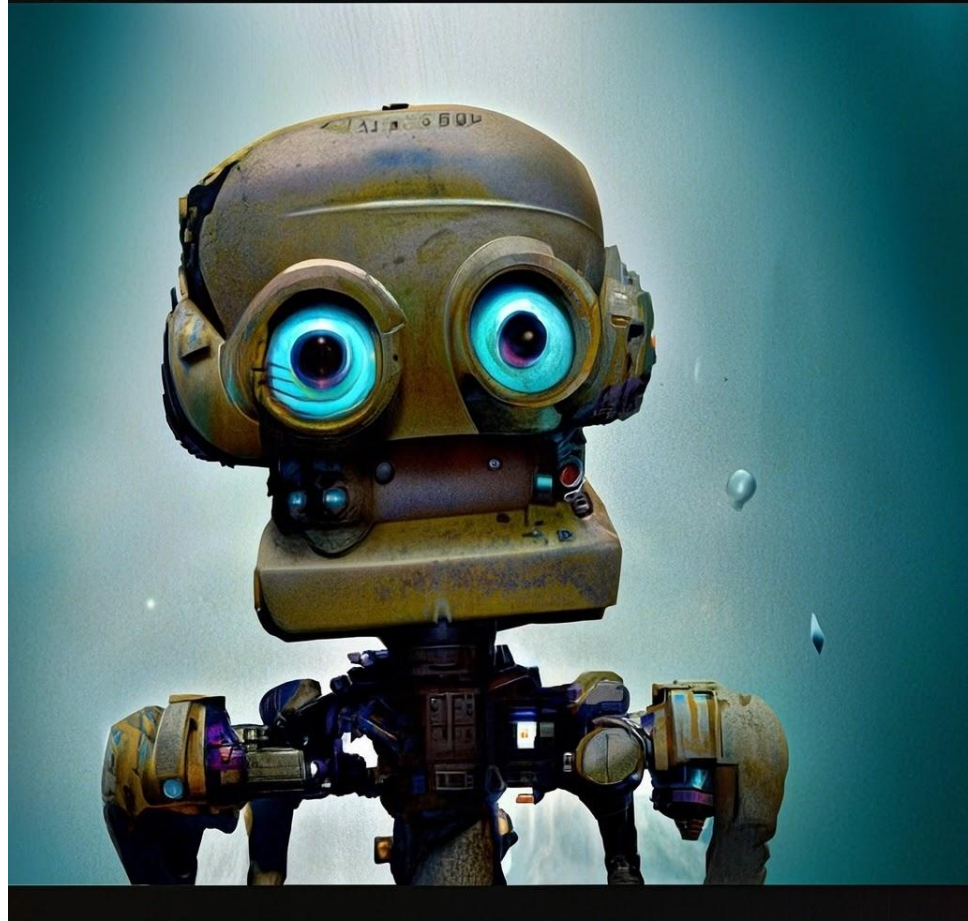


Bing Image Creator with prompt: “a high speed train on the horizon travelling through an alien landscape”



What are your
feelings about
generative AI?

What is generative AI?
Wrong answers only...



Google Slides Image Generator with prompt: “A cartoonish old sci-fi robot”



What tools do you know about?

ChatGPT

Claude

Bing

Gemini/Bard

Barnabus

DALLE

Midjourney

What is generative AI?

Generative AI is a type of AI that can create new content like text, images, and videos after learning from large amounts of data.

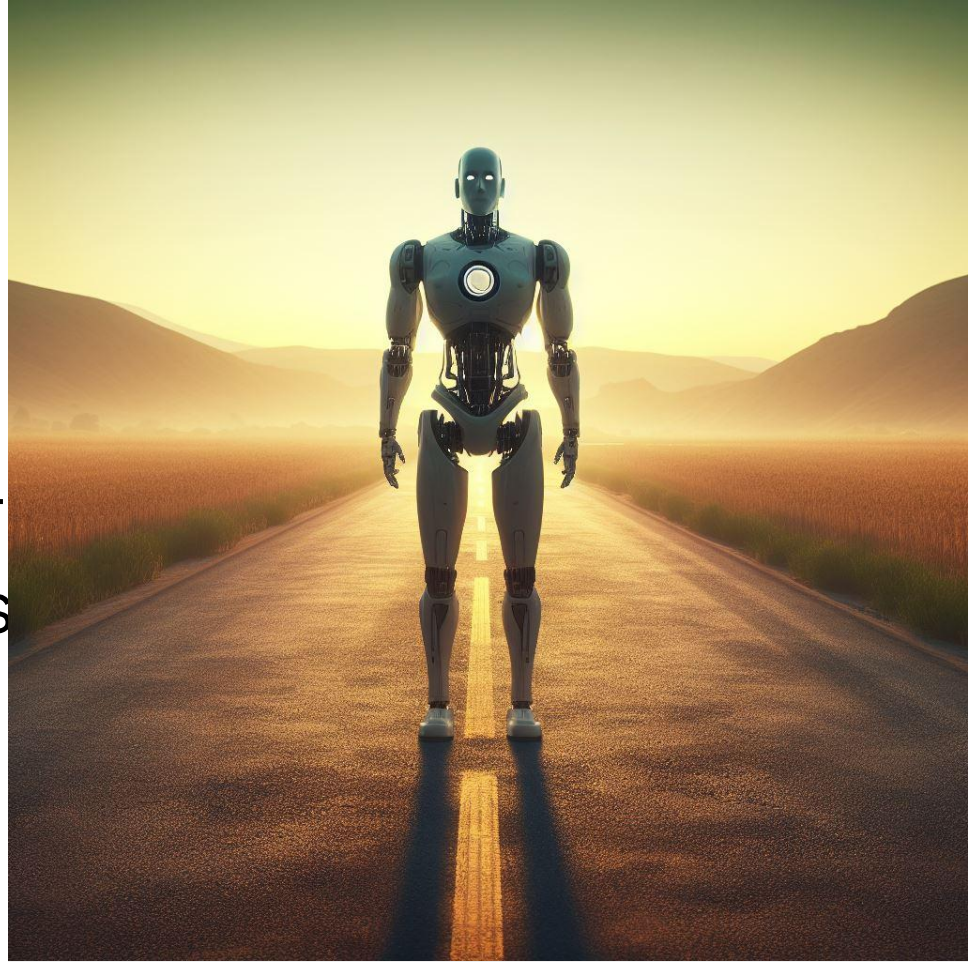


Image Source: Google Gemini Image Creator



What is generative AI?

Generative AI refers to artificial intelligence systems that can generate new, original content such as text, images, audio, and video. These AIs are trained on large datasets which allows them to learn patterns and relationships in data. They can then use what they've learned to produce new examples that are similar to but not exactly the same as the training data.

True or false

Generative artificial intelligence may be becoming sentient.



Image Source: Google Gemini Image Creator

FALSE

~~Generative artificial
intelligence may be
becoming sentient.~~



Bing Image Creator with prompt: "a robot emerging from a large computer mainframe as if being birthed from it. Style: Michelangelo"

True or false

Generative artificial intelligence is similar to human thinking when it arrives at its answer.



Image source: DALLE-3 with ChtGPT 4

FALSE

~~Generative artificial intelligence is similar to human thinking when it arrives at its answer.~~



Image Source: DALLE-2



How does AI arrive at its answers?

Large Language Model (LLM) : The large data set needed to train the generative AI. For text generative AI, it has typically included large parts of the Internet.

Token : The smallest unit of data needed to create the mathematical relationships within the dataset. 4-5 characters in length.

Generative (as in "generative AI"): The process of calculating answers based on probabilities and statistics relationships between the prompt and the data set.

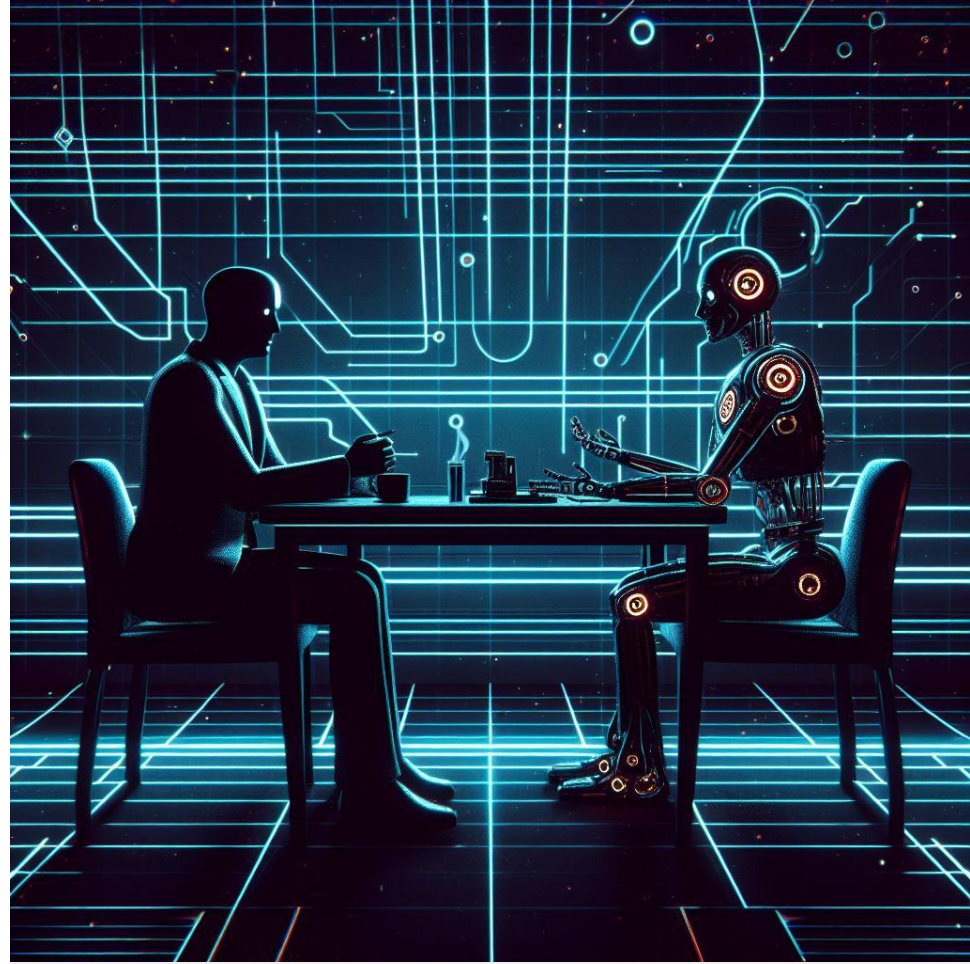
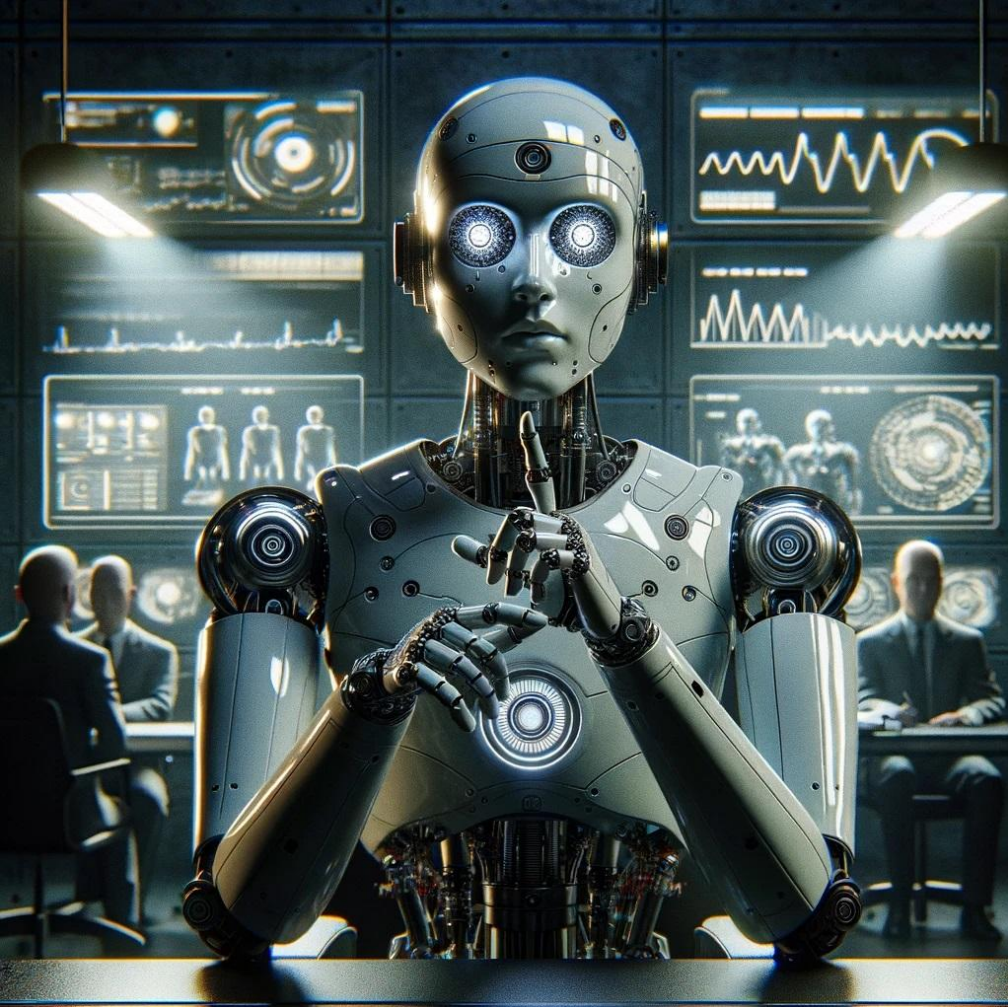


Image source: Bing Image Generator



True or false

**Generative artificial
intelligence can lie.**

FALSE

~~Generative artificial intelligence can lie.~~



Google Slides Image Generator with prompt: "A robot at a computer"

True or false

Generative
artificial
intelligence will
take all our jobs.

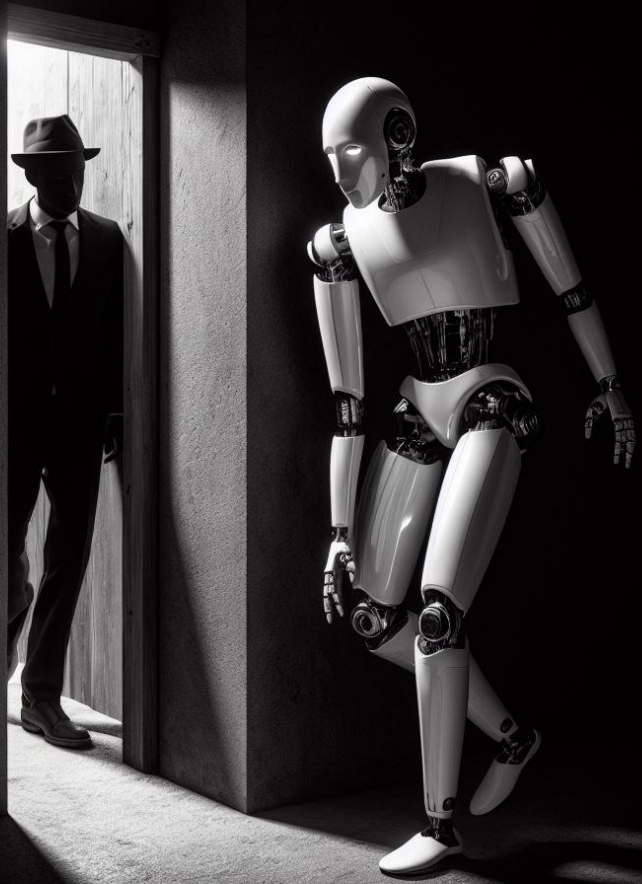


Image source: DALLE-3 with ChtGPT 4

FALSE

~~Generative artificial intelligence will take all our jobs.~~

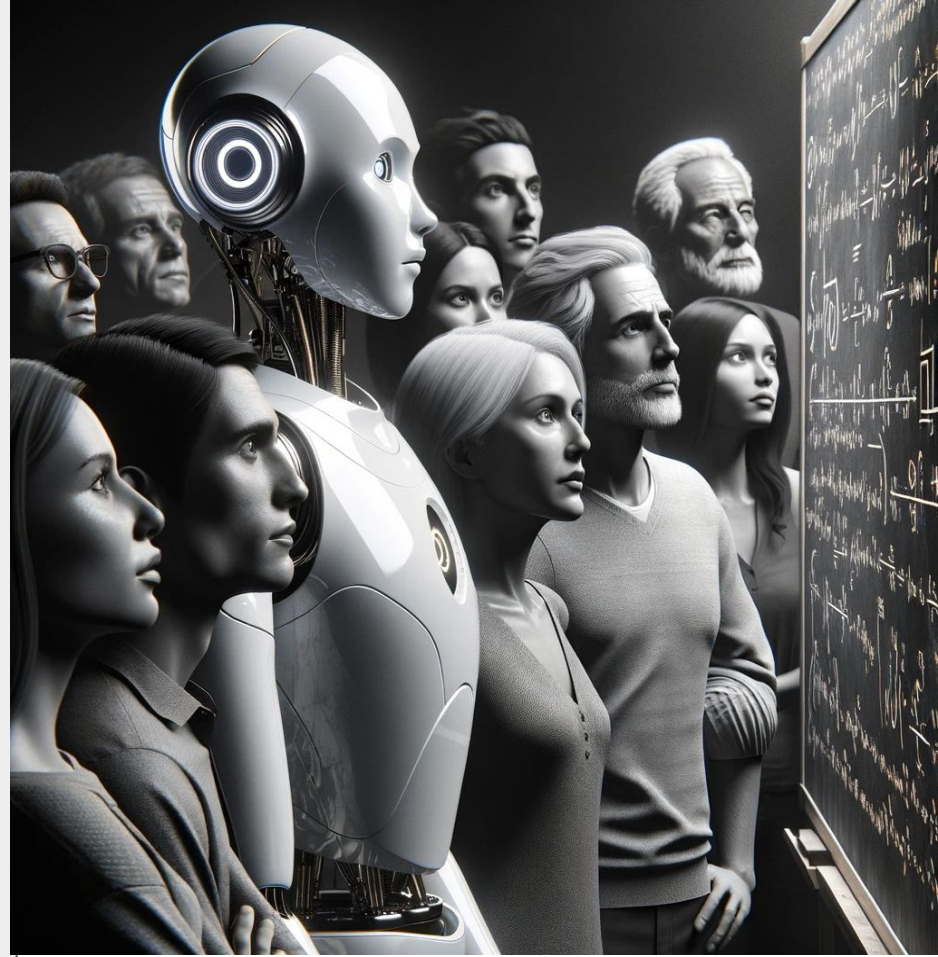
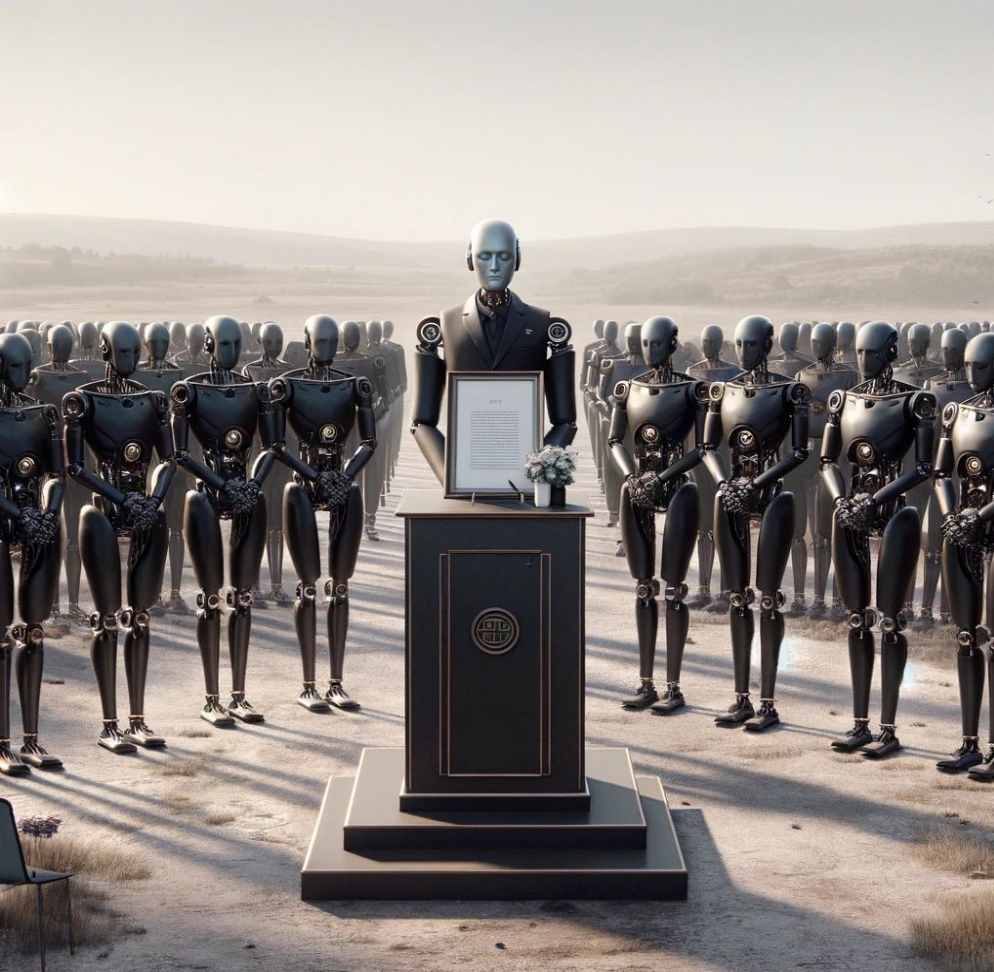


Image Source: DALLE-3 with ChatGPT5



How long has it been since the death of the college essay?

At the funeral of the essay, the eulogy was a powerful thesis, arguing that its paragraphs had truly made a mark, leaving an indelible imprint on the pages of history. Mourners were asked to bring their own pens and paper, as it was only fitting to 'note' their final 'sentences' in a manner befitting the dearly departed manuscript.

–ChatGPT, esq.

DALLE-3 with ChatGPT4 with prompt: “Create an image of a robots attending the funeral of the essay.”

How long has it been
since the end of
education as we
know it?



DALLE-3 with ChatGPT 4 (see annotated slide deck for prompt)

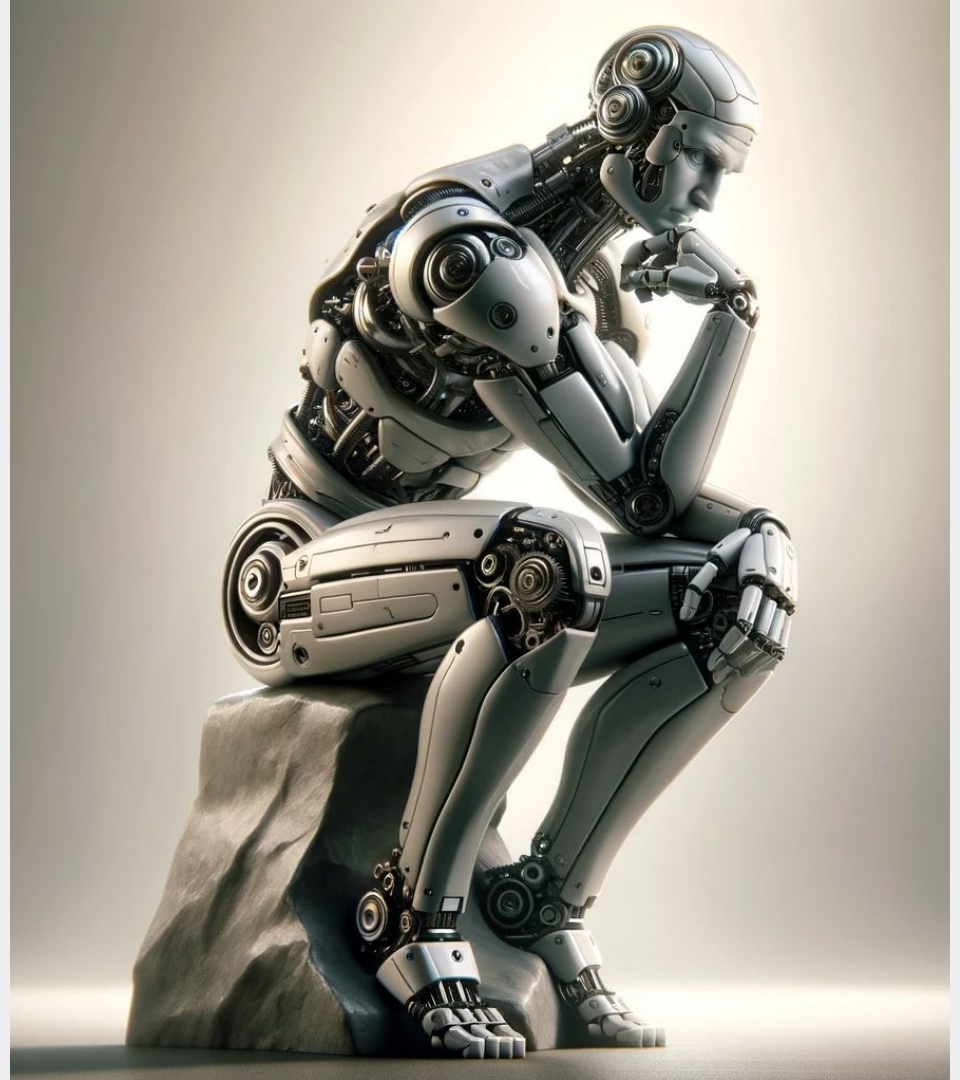


How long has it been
since robots replaced
everyone?

Google slides with DUET AI with prompt: "Robots running the meeting inside the the US Senate"

What have we learned
with regards to
generative AI in the
last year?

DALLE-3 with ChatGPT 4 (see annotated slide deck for prompt)





Has anything significantly changed in how we teach and learn in the last year?

Have you used
generative AI in
teaching and learning
in the last year?

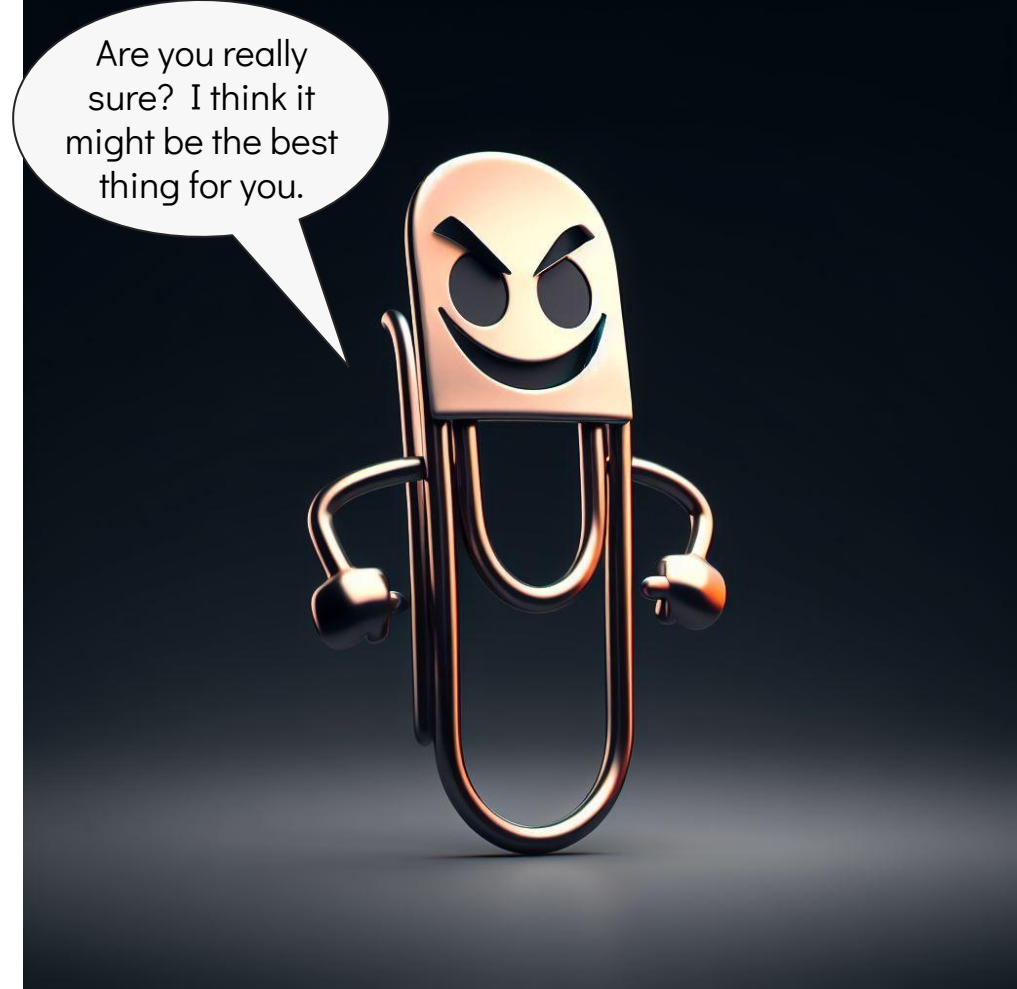


Bing Image Generator with prompt: "students and faculty standing together staring at a giant computer monitor that has a robot face on it looking back at them"



Have you wanted to figure out how to use generative AI in teaching and learning?

Have you been
resistance to using
generative AI?



Bing Image Generator with prompt: "a version of clippy that is evil in appearance and has a winning smile"



What are we to
do as educators?

How might you use it for now?

1. Task Minimizing
2. Brainstorming Partner
3. 1st Drafting
4. Sorting Through Information



Image Source: DALL-E 3 with ChatGPT4

Prompt #1: Task Minimizing

Provide me with a **listing of all the Tuesdays** between August 21, 2023 and December 18, 2023. Please list them in the **following format**: Tuesday, September [Date], 2023.

If any **US holidays** happen between each Tuesday listed, please include the holiday and **its date**.

Additionally, please include any religious holidays or special days for Christianity, Judaism, Islam, Hinduism, or other major religions

Tuesday, August 22, 2023
Tuesday, August 29, 2023
Tuesday, September 5, 2023
Tuesday, September 12, 2023
Tuesday, September 19, 2023
Tuesday, September 26, 2023
Tuesday, October 3, 2023
Tuesday, October 10, 2023
Tuesday, October 17, 2023
Tuesday, October 24, 2023
Tuesday, October 31, 2023
Tuesday, November 7, 2023
Tuesday, November 14, 2023
Tuesday, November 21, 2023
Tuesday, November 28, 2023
Tuesday, December 5, 2023
Tuesday, December 12, 2023

US National Holidays

Labor Day - Monday, September 4, 2023
Indigenous People's Day - Monday, October 9, 2023
Veterans Day - Saturday, November 11, 2023
Thanksgiving Day - Thursday, November 23, 2023

Prompt #2: Brainstorming Partner

You're an expert educational developer at a private college in New England with extensive experience drawing out the nuances and subtleties in challenging situations where faculty have to rethink their pedagogical approaches such as how they teach, how they assess, and engage with students. You use a variety of lenses to engage, problem-solve, and think critically about the situation and deploy contemporary and relevant pedagogical approaches.

A faculty member is looking to revise a part of their History of Comedy course using Open Pedagogy. They want to update their exploration of comedy films of the 1930s & 1940s. Be sure to include topics, objectives, activities and assessments that align with an Open Pedagogy approach. Explain with each thing you include how it aligns with an Open Pedagogy approach and what might be 1-2 other ways it could be done with this approach.

Topics

Evolution of Comedy Genres (1930s-1940s): Explore how comedy evolved during this era, focusing on sub-genres and notable films.

- *Open Pedagogy Alignment*: Students co-create a digital timeline, contributing research on specific genres or films.
- *Alternative Approaches*: Students might create podcast episodes discussing these genres or lead virtual film club sessions.

Influential Comedians and Filmmakers: Study key figures in comedy during this period.

- *Open Pedagogy Alignment*: Students develop collaborative biographical profiles, which could be published in a class-created online resource.
- *Alternative Approaches*: Host a panel discussion where students role-play these comedians/filmmakers, or create short documentary-style videos.

Objectives

1. Understanding Historical Context: Grasp the social and political influences on comedy films of the 1930s and 1940s.
2. Analyzing Cinematic Techniques: Identify and analyze the techniques used in comedy films of this era.
3. Collaborative Learning: Engage in collaborative projects that enhance understanding and allow for knowledge sharing.

Activities

Film Analysis Workshops: Groups analyze selected comedy films and present their findings.

- *Open Pedagogy Alignment*: Each group could focus on different aspects (script, direction, acting) and compile a comprehensive class wiki.
- *Alternative Approaches*: Creating a shared blog or video essays.

Interactive Timeline Project: Building a digital timeline of key comedy films and events.

- *Open Pedagogy Alignment*: This allows for collaborative research and presentation, fostering a shared resource for all.
- *Alternative Approaches*: A collaborative podcast series or a student-curated virtual film festival.

Assessments

Peer-Reviewed Research Papers: Students write papers on assigned topics, reviewed by peers before final submission.

- *Open Pedagogy Alignment*: Incorporates peer feedback, fostering a community of learning and improvement.
- *Alternative Approaches*: Convert papers into blog posts or digital magazines.

Group Presentation: Final group project presenting an aspect of 1930s-1940s comedy films.

- *Open Pedagogy Alignment*: Could be a webinar open to the public, demonstrating real-world relevance.
- *Alternative Approaches*: Creating a mini-documentary or a series of educational TikTok/YouTube videos.

Prompt #3: 1st Drafting Example 1

Come up with a rubric for the Peer-Reviewed Research Papers: Students write papers on assigned topics, reviewed by peers before final submission. Be sure the rubric is in table form.

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Criteria	Exemplary (4)	Proficient (3)	Developing (2)	Beginning (1)
Research Depth	Comprehensive and in-depth research; goes beyond the assignment requirements.	Thorough research; meets all assignment requirements.	Basic research; meets most assignment requirements.	Limited research; does not fully meet assignment requirements.
Analysis & Critical Thinking	Demonstrates superior analysis and critical perspective; insightful connections and conclusions.	Good analysis and critical thinking; clear and supported conclusions.	Some analysis and critical thinking; some conclusions are unsupported.	Limited analysis and critical thinking; conclusions are unclear or unsupported.
Organization & Structure	Highly organized and structured; clear and logical flow of ideas.	Well-organized and structured; clear progression of ideas.	Organization is present but lacks clarity or logic in places.	Disorganized or unclear structure; ideas are difficult to follow.
Writing & Style	Exceptional writing clarity, precision, and correctness; professional and academic tone.	Good writing quality; minor errors, clear and academic tone.	Writing is understandable but may have several errors; tone is inconsistent.	Multiple writing errors; tone is informal or inappropriate.
Peer Review Feedback Incorporation	Excellent incorporation of peer feedback; demonstrates substantial improvement and refinement.	Good incorporation of peer feedback; shows clear improvement.	Some incorporation of peer feedback; improvement is marginal.	Minimal or no incorporation of peer feedback; little to no improvement.

Prompt #3: 1st Drafting Example 2

you're an expert in asynchronous online teaching and learning at a expert at a state university. Review this attachment of readings and assignments for a 6-week Composition 2 asynchronous course.

Recreate this into a detailed 15 week course that covers the same content. In a table, include each week, when themes are covered, when readings are due, and when activities should be due.

Week	Theme	Readings and Activities	Due Dates
1	Introduction to Course	Course Syllabus, Guidelines, Introductory Video	End of Week 1
2	Thinking About Reading & Writing	Metacognition articles and videos, Reading strategies	End of Week 2
3	Exploring Nonfiction (Part 1)	Intro to Essays, Creative Nonfiction readings	End of Week 3
4	Exploring Nonfiction (Part 2)	"How to Tame a Wild Tongue", "A Letter to My Nephew", "Letter from a Birmingham Jail"	End of Week 4
5	Drama (Part 1)	The History of Theater, Crash Course Theater, Analyzing Plays	End of Week 5
6	Drama (Part 2)	Choose 1 Play (Medea, Master Harold...and the boys, or No Exit)	End of Week 6
7	Fiction (Part 1)	Intro to Fiction Parts 1 & 2, Analyzing Novels & Short Stories	End of Week 7

Prompt #3: 1st Drafting Example 2 Extended

Reproduce the chart and include actual dates. End of the week is always Sunday. The semester starts Monday, January 22, 2024 and we have Spring Break for a week starting on March 18, 2024

Week	Dates	Theme	Readings and Activities	Due Dates
1	Jan 22 - Jan 28	Introduction to Course	Course Syllabus, Guidelines, Introductory Video	Jan 28
2	Jan 29 - Feb 4	Thinking About Reading & Writing	Metacognition articles and videos, Reading strategies	Feb 4
3	Feb 5 - Feb 11	Exploring Nonfiction (Part 1)	Intro to Essays, Creative Nonfiction readings	Feb 11
4	Feb 12 - Feb 18	Exploring Nonfiction (Part 2)	"How to Tame a Wild Tongue", "A Letter to My Nephew", "Letter from a Birmingham Jail"	Feb 18
5	Feb 19 - Feb 25	Drama (Part 1)	The History of Theater, Crash Course Theater, Analyzing Plays	Feb 25
6	Feb 26 - Mar 4	Drama (Part 2)	Choose 1 Play (Medea, Master Harold...and the boys, or No Exit)	Mar 4
7	Mar 5 - Mar 11	Fiction (Part 1)	Intro to Fiction Parts 1 & 2, Analyzing Novels & Short Stories	Mar 11
8	Mar 12 - Mar 17	Fiction (Part 2)	Intro to Fiction Parts 3, 4 & 5, The Space Traders by Derrick Bell	Mar 17
-	Mar 18 - Mar 24	Spring Break	No assignments	-

Prompt #4: Sorting Through Information

As an expert in learning management systems and student engagement, provide an overview of students experiences about faculty usage. Point out any particular glaring concerns and any particularly outstanding positive usages in the following feedback.

Based on the student feedback, there are a few key takeaways:

Overall Positives:

- **Organization** - Many faculty keep the LMS organized with clear instructions, due dates, etc. This helps students stay on track and know what is expected.
- **Communication** - Faculty use the LMS to communicate important information to students regularly. Some also give feedback and communicate directly with students.
- **Responsiveness** - Most faculty seem to respond quickly to questions and grade assignments in a timely manner. This helps students feel supported.
- **Ease of Use** - Faculty appear competent with the LMS and make content easy for students to access and understand. Some provide instructions/videos on using the LMS effectively.
- **Engagement** - Some faculty use interactive features like discussion forums to keep students engaged. Others share multimedia content.

Areas for Improvement:

Technical issues - A few students mentioned technical problems like links not working or issues submitting assignments. Providing IT support/training could help.

Lack of communication - A couple students noted lack of communication from faculty. Regular LMS updates are important to keep students informed.

Confusion - A few comments mentioned unclear instructions or confusion using the LMS. Clear guidance and organization is key.

Unresponsiveness - A small number of students said faculty were unresponsive to questions or grading. Timely communication and feedback is important.

Overall the student feedback is largely positive. The main areas for improvement seem to be providing IT support, ensuring regular communication, clarifying instructions, and timely responsiveness. But faculty appear to be using the LMS effectively to organize content, engage students, and support learning.

BEFORE

Design a lesson plan for a 75 minute 200-level literature course in which we focus on duality in Robert Louis Stevenson's Dr. Jekyll and Mr. Hyde. The plan should include inclusive and open-pedagogy practices.

One Final Prompt

The prompt to start ALL AI chats:

“Improve the following prompt to maximize the creativity and analytical capabilities of a large language model:

“[prompt]”

After

Craft a comprehensive and dynamic 75-minute lesson plan for a sophomore-level literature course, centered around the exploration of thematic duality within Robert Louis Stevenson's iconic novella, 'Dr. Jekyll and Mr. Hyde.' This plan should be scaffolded to facilitate a deep dive into the text's exploration of human nature, morality, and the duality of self. Incorporate strategies that leverage inclusive teaching practices and open pedagogy to ensure all students feel represented and empowered to participate.

Begin with a brief introductory activity that activates prior knowledge about the theme of duality, perhaps through a quick-write or a think-pair-share exercise. Follow this with a guided discussion that unpacks Stevenson's portrayal of duality, encouraging students to draw connections to contemporary issues or personal experiences.

Design the main activity to foster collaborative analysis and creative engagement with the text. This could involve students working in groups to dissect passages, character motivations, and the novella's setting, using digital annotation tools for an open pedagogy approach. Encourage students to share their findings and interpretations through a platform that allows for community feedback and discussion.

Conclude with a reflective exercise that prompts students to consider the relevance of Stevenson's exploration of duality in today's society. Ask them to articulate their thoughts in a brief written reflection or a creative presentation.

Throughout the lesson, ensure that the materials, discussions, and activities are accessible to a diverse range of learners, incorporating multimedia resources, varied forms of expression, and multiple perspectives to enrich the learning experience. Provide guidelines for respectful and constructive dialogue, emphasizing the value of diverse viewpoints and interpretations.

Output

1. Introduction (15 minutes)

- Activity: Quick-Write and Think-Pair-Share
 - Objective: Activate prior knowledge and introduce the theme of duality.
 - Process:
 - Begin with a 5-minute quick-write prompt: "Reflect on a moment in literature, history, or your own life where a duality was evident. How did this duality impact perceptions or outcomes?"
 - Students then pair up to share their reflections for 5 minutes, discussing the complexities of duality.
 - Conclude with a 5-minute group share, highlighting varied perspectives on duality.

2. Guided Discussion (20 minutes)

- Activity: Exploring Duality in Stevenson's Work
 - Objective: Deepen understanding of duality as presented in the novella.
 - Process:
 - Present a slideshow of key passages that illustrate duality, discussing Stevenson's portrayal of the human psyche, morality, and societal expectations.
 - Facilitate a discussion linking these themes to contemporary issues such as identity, privacy vs. public life, and moral ambiguity. Use guiding questions to stimulate critical thinking and personal connection.

3. Main Activity: Collaborative Analysis (25 minutes)

- Activity: Group Analysis with Digital Annotation
 - Objective: Analyze and interpret textual elements collaboratively.
 - Process:
 - Divide the class into small groups, assigning each a specific passage that showcases the novella's thematic duality.
 - Using digital annotation tools, students will collaboratively dissect their passage, focusing on character motivations, themes, and setting.
 - Each group will prepare a short presentation or a digital poster summarizing their analysis, highlighting their interpretation of duality.
 - Share findings via a classroom blog or digital platform to facilitate cross-group feedback and discussion.

4. Conclusion: Reflective Exercise (15 minutes)

- Activity: Reflecting on Duality's Relevance
 - Objective: Reflect on the theme's contemporary relevance and personal significance.
 - Process:
 - Prompt students to write a brief reflection or create a short creative presentation (e.g., a poem, art piece, or digital story) expressing how the theme of duality in "Dr. Jekyll and Mr. Hyde" relates to modern society or their personal experiences.
 - Allow students to share their reflections/presentations, fostering a classroom environment where diverse perspectives are respected and valued.

Across All Segments

- Inclusivity and Accessibility:
 - Ensure all materials and activities are accessible, offering alternatives where necessary.
 - Use multimodal resources (texts, videos, podcasts) to cater to different learning preferences.
 - Emphasize a culture of respect, encouraging students to engage with diverse viewpoints constructively.
- Open Pedagogy:
 - Encourage students to contribute to a shared digital resource (e.g., a collaborative Google Doc or Wiki) where they can continue exploring the theme of duality beyond the classroom.
 - Incorporate student feedback into the lesson, adapting discussions and activities to meet the class's interests and needs.

This lesson plan aims to create a vibrant, inclusive environment that encourages students to critically engage with the theme of duality, drawing connectio



Google Slides Image Generator with prompt: "strange terrain"

What's next?

1. Play/continue to play with 1+ tools
2. Be mindful about what you put into it
3. Find outlets to learn, discuss, share
4. Determine institutional and department norms and acceptable use
5. Create communities of practice

Thank you!

Questions?

<https://bit.ly/PSU-AI-2024>



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