

On your index cards answer these questions and pass to the front.

(early bird activity)

1. What way/s do you imagine generative AI (like ChatGPT) might change society in the next 5 years?
1. What values or abilities will be necessary to prevent harm/promote responsible decision-making related to these changes?



**The Balancing Act:
Teaching and
Learning with AI from
a Place of Integrity**

Melanie Sage, PhD, LCSW
melaniesage.com

Today's Talk

- How do our personal and professional values inform our choices about technology use?
- How does this inform our classroom policies and practices?
- How can we discuss generative AI policies with students in ways that resonate with their values about learning and higher education?
- What do students (and society) need from us related to generative AI?

What is Technology?

Computer scientist Alan Kay, inventor of the concept of computer windows, famously picked up on the way we understand technology by saying we tend to define it as

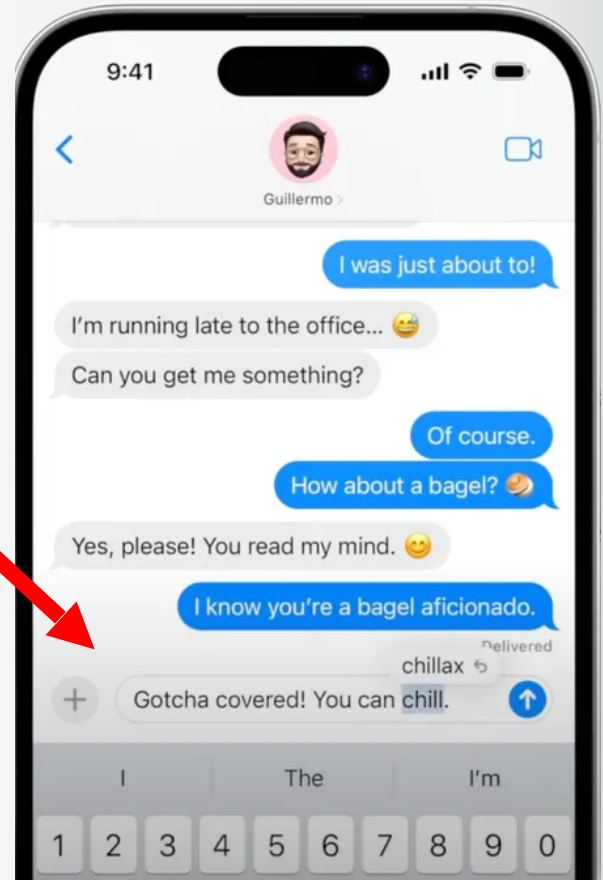
“anything that was invented after you were born.”

Today we'll focus on **Generative AI** (GenAI), tools designed to converse in natural language that are capable of mimicking human conversation by accessing a large library of materials used to train them.

How does it work?

Generative AI uses *Natural Language Processing* to quickly sort through its *Large Language Model* (LLM), all the things in its library, and predicts the next word likely to be related to your prompt and its previous words.

It does not reword existing content, it's only predicting what's next, one word at a time, based on its LLM content and what it said last.





“... for this discovery of yours will create forgetfulness in the learners' souls, because they will not use their memories, they will trust to the external written characters and not remember of themselves. The specific which you have discovered is an aid not to memory, but to reminiscence, and you give your disciples not truth, but only the semblance of truth; they will be hearers of many things and will have learned nothing; they will appear to be omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality.”

– Socrates, 5th Century

BCE

“The free access which many young people have to romances, novels, and plays has poisoned the mind and corrupted the morals of many a promising youth; and prevented others from improving their minds in useful knowledge.”

- *Reverend Enos Hitchcock, 1790*



“What I see is a school system, already filled with illiterates, teachers and students, **imprisoned by technology and cut off from the flow of ideas.** Our contemporary school systems do not do well teaching the alphabet and simple number concepts. Children cannot read, cannot add.

Now, our mavens want to go further and mechanize the whole thing by taking our children away from any contact with reality and **making cyborgs of them.**”

- *Gerald M. Phillips, 1993*

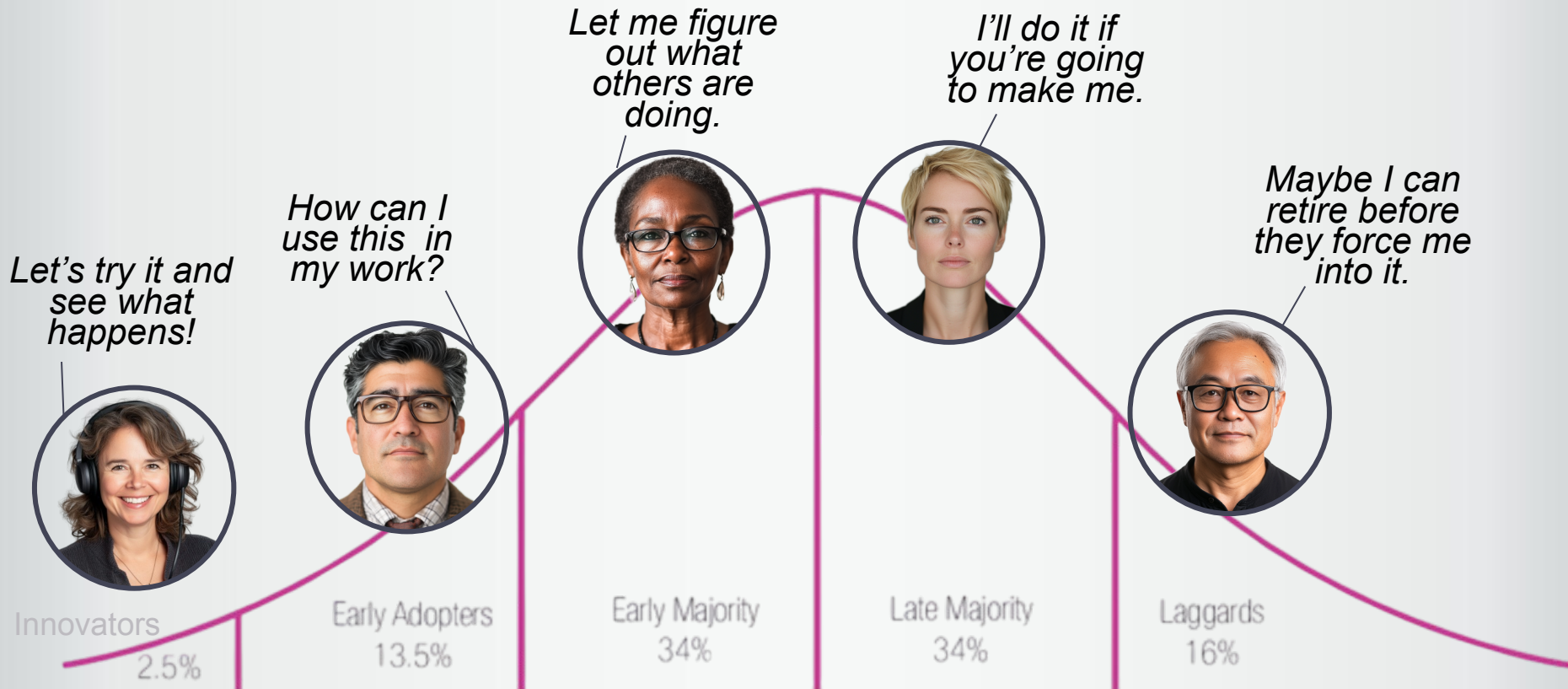


Index Card Answers

1. What way/s do you imagine generative AI (like ChatGPT) might change society in the next 5 years?
1. What values or abilities will be necessary to prevent harm/promote responsible decision-making related to these changes?

Technology Adoption Curve

Everett Rogers' Diffusion of Innovations, 1962



Technology Acceptance Model (Is it easy? Is it useful?)

Bagozzi, Davis and Warshaw, 1992

Concerns about GenAI

How many workers can AI really replace?
Estimates are all over the place.

How our data encodes systematic racism

Technologists must take responsibility for the toxic ideologies that our data sets and algorithms reflect.

By Deborah Raji

By Aicino Donadel February 6, 2024

December 10, 2020

Has generative AI made our best privacy principles obsolete?

The world's foundational privacy guidelines weren't written for the generative AI era.

BY JONATHAN JOSEPH • JULY 17, 2024

WORLD NEWS
Election disinformation takes a big leap
with AI being used to deceive
worldwide

01-23-2024 | THE FUTURE OF WORK
New study finds AI makes
employers value soft skills more

CARDLINE HASKINS BUSINESS MAY 22, 2024 9:00 AM
The Low-Paid Humans Behind AI's Smarts Ask Biden to Free Them
From 'Modern Day Slavery'

CLIMATE

AI already uses as much energy as a
small country. It's only the beginning.

The energy needed to support data storage is expected to double by 2026. You can do something to stop it.

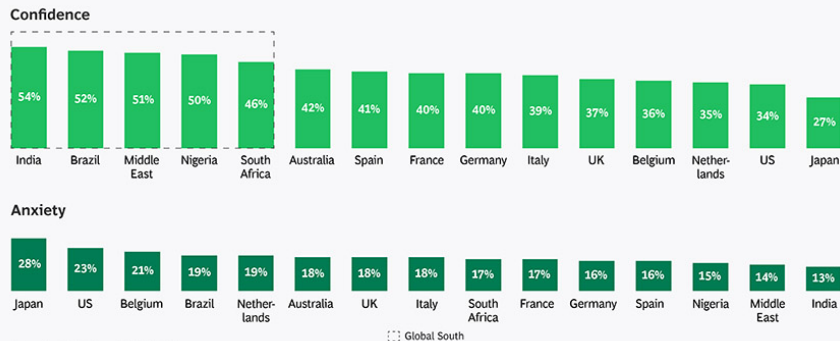
by Brian Calvert
Mar 28, 2024, 8:00 AM EDT



01-24-2024 | DAVOS DIALOGUES

And also opportunities

Confidence in GenAI is higher and anxiety is generally lower in the Global South



Covered California Collaborates with Google Public Sector to Accelerate and Simplify Health Insurance Enrollment Using AI

Generative AI Can Impact Jobs By Enhancing Creativity And Productivity

World Economic Forum Contributor ©

End of Semester AI Report: More college students say AI is helping them get better grades USA - English

Workers with less experience gain the most from generative AI

by Brian Eastwood | Jun 26, 2023

July 23, 2024

Majority of Grads Wish They'd Been Taught AI in College

A new survey shows 70 percent of graduates think generative AI should be incorporated into courses. More than half said they felt unprepared for the workforce.

WHO unveils a digital health promoter harnessing generative AI for public health

'Without these tools, I'd be lost': how generative AI aids in accessibility

A rush to place barriers around the use of artificial intelligence in academia could disproportionately affect those who stand to benefit most.

HIGHER EDUCATION

Northeastern University Student Projects Improve Government With AI

Solving Health Ecosystem Challenges With Generative AI

F Rajan Kohli Forbes Councils Member
Forbes Business Council
COUNCIL POST | Membership (Fee-Based)

How do we balance these concerns and opportunities in the classroom and maintain our pedagogical values in the process?



Meet Professor Peters*

Humanities instructor who assigns research papers.

- Generally a late-majority tech adopter.
- Disallowed AI because she values students learning to **think critically** about the content, developing an **authentic voice**, and **information literacy** related to understanding sources and citations.
- Yet despite her “No AI” policy she found students were turning in papers that still lacked voice and read like AI... but she has no “proof” that students are “cheating.”
- So she asked for help in a Facebook group for faculty and adopted a helpful rubric she found online.

*Not her real name, illustrative example.



National Institute on Artificial
Intelligence in Society
CSU Sacramento
<http://csus.edu/ai>

Available under Creative
Commons to use or adapt

Sample Cheating-Resistant Evaluation Rubric

Students are expected to produce work of professional quality, suitable for publication in an academic or professional journal. The use of AI assistance is not required but encouraged. If used, submit all prompts along with the paper.

Criterion	Developing (1-3 points)	Target (4-6 points)	Outstanding (7-10 points)
Originality	Lacks original ideas; relies entirely on existing sources	Presents ideas and insights that are unlikely to be generated by AI without human input	Contains truly original ideas not known to any current language model, demonstrating human creativity and innovation
Authenticity	Writer's voice is absent; indistinguishable from AI-generated content	Exhibits a unique writing style and personal perspective that AI would struggle to replicate	Showcases an unmistakably human voice with nuanced expressions, emotions, and experiences that no AI can currently generate
Critical Thinking	Shows minimal critical thinking; superficial analysis; lacks original insights	Demonstrates a level of critical thinking and analysis that goes beyond AI's current capabilities	Presents groundbreaking arguments and insights that challenge existing paradigms and reveal a depth of understanding unique to humans
Discerning Thinking	Shows no ability to evaluate quality, relevance, or originality of own output	Exhibits self-reflection and critical evaluation of own work that AI cannot reliably replicate	Demonstrates a level of metacognition, self-awareness, and critical reflection that is currently unattainable by AI systems
Integration of Course Concepts	Demonstrates minimal understanding and application of course concepts; little to no integration	Integrates course concepts in a manner that is unlikely to be achieved by AI without human guidance	Applies course concepts in a highly original and innovative way, showcasing a level of understanding and creativity beyond the reach of current AI



**56% of students use GenAI
for assignments.**

(70% want it incorporated in courses)

Cengage Group, May 2024 n=974 recent grads

- 74% of incoming college students say they are knowledgeable or very knowledgeable about AI
- 55% worry that they won't be able to compete with other students without using it
- 42% of professors say they don't allow AI use although 72% have used it to help create teaching materials

Art & Science Group LLC, May 2024 n=1100

Ithaca S+R, Feb 2024 n=2600 faculty

Meet Professor Lopez

Education instructor who assigns individual and group papers

- Generally an early tech adopter, using AI himself for help developing assignments and case studies
- Wants students to use AI in a good way because he values **practical skill development, information literacy and tech ethics, collaborative learning, and critical evaluation of technology.**
- He asks students to add a footnote about GenAI use effectiveness, and requires the AI chat log as an attachment to the paper. He uses these icons in his syllabus as a key to differentiate assignments where AI use is acceptable.



NAI	No artificial intelligence
AIG	Artificial intelligence generated
AIA	Artificial intelligence aided



Icons by Martine Peters, Director of the Partnership on University Plagiarism Prevention, Université du Québec en Outaouais

GENERATIVE AI

FOR SCHOOL WORK



by: Miriam Scott
scottybreaksitdown.com

ETHICAL USE

CONCEPT EXPLANATION

Can simplify complex concepts

RESOURCE CREATION

Can create flash cards, revision activities, analytical tools

IDEA GENERATION

Can stimulate creative thinking and ideas as a starting point

FEEDBACK & EVALUATION

Can provide instant feedback on work to improve quality before submission

BRAINSTORMING

Create ideas or topics for work to provide different suggestions or perspectives

REVISION

Create activities to help with better understanding and recall

PRESENTATION SKILLS

Can provide suggestions to improve presentation skills

CITATION & FORMATTING

Can provide correct referencing and in-text citation advice

LOCATE SOURCES

Can use to find sources to help with research. Similar to using Wikipedia or Google

UNETHICAL USE

PLAGIARISM

Using AI-generated content verbatim without proper citation or presenting AI-generated work as your own is unethical and is plagiarism.

This would be the same if you took a definition from a Google search.

ASSIGNMENT OUTSOURCING

Using AI to create assignments, essays, or projects without any personal input or understanding undermines the learning process and is considered academic dishonesty.

This is the same as a tutor or parent creating your work and you claiming it as your own.

MISREPRESENTING ABILITIES

Using generative AI to complete tasks that are beyond your understanding and presenting the results as your own.

This is the same as copying someone's assessment or paragraph and tweaking it to make it look different.

IMPROPER REFERENCE CHECKING

Asking to source references and not checking the validity of the information and relevance.

Example: Claiming this is where you sourced information, but you only used ChatGPT

Professor Lopez shares values with students: practical skill development, information literacy and tech ethics, collaborative learning, and critical evaluation of technology.

- He explains that when they are teachers they need to be able to evaluate new tech tools well, and understand when they add value.
- He asks them to identify their values related to their education and future roles as teachers, and then in small groups make a list of ways that seem acceptable and unacceptable to use AI based on the discussion.
- They crowdsource a class document in Google Docs outlining their shared agreements about ethical and unethical use of GenAI, and what it is good/not good for.

What teaching values and goals might inform your AI classroom policies and practices?

<u>Cognitive Skills</u>	<u>Learning Approaches</u>	<u>Personal Development</u>
Analytical skills	Collaborative learning	Self-awareness
Critical thinking	Experiential learning	Growth mindset
Problem-solving	Inquiry-based learning	Resilience
Creativity	Individualized learning	Adaptability
Divergent thinking	Self-directed learning	Metacognition
Cognitive flexibility	Interdisciplinary thinking	Emotional intelligence
Systems thinking	Lifelong learning	Time management
<u>Academic & Research Skills</u>	<u>Professional & Practical Skills</u>	<u>Ethical & Social Awareness</u>
Academic integrity	Communication skills	Cultural awareness
Information literacy	Professional ethics	Digital citizenship
Research skills	Professional preparedness	Equity/fairness
Intellectual curiosity	Practical knowledge application	Ethical reasoning
Data literacy	Technological competence	Sustainability awareness
Accessibility	Financial literacy	Global citizenship
Transparency	Entrepreneurial thinking	

How do your values inform class policy?

Think, write down, and then pair/share at your tables

- How might the values you chose inform your class AI policy/practice decisions?
- How might you explain your values-informed reasoning to students, in syllabi or discussion?
- From a student perspective, is this a compelling response? What might improve it?
- Widen the discussion if time allows.

(8 minutes)

08:00

Classroom Policy Examples

Suggestion: First articulate your values/goals/rationale, and then state your parameters.

Liberal

AI tools are encouraged as learning aids and research assistants. Students may use AI for brainstorming, drafting, and editing their work, but must disclose AI use and critically engage with AI-generated content.

Final submissions should demonstrate original analysis and intellectual contribution beyond AI assistance. You are responsible for all submitted work.

Moderate

AI tools may be used for specific, instructor-approved tasks such as grammar checking or preliminary research. Students must attach a link to the prompt for any AI assistance.

Critical assignments and exams must be completed without AI. Instructors will provide guidance on appropriate AI use for each course and assignment.

Conservative

The use of AI tools for coursework is prohibited unless explicitly authorized by the instructor for specific learning exercises.

All assignments are expected to be the original work of the student.

Any unauthorized use of AI will be treated as academic dishonesty and subject to disciplinary action.

Thought Exercise

Help students consider practical reasons to learn without AI

What is an example of a situation in your discipline in which a student might have a real-world professional experience where they couldn't or shouldn't use AI even though AI might be capable of completing the task?

For instance, social workers may be able to use AI to generate a client diagnosis. However, they wouldn't know whether it made sense or have the tools to explain rationale to the client without deeply knowing criteria and considerations, and they risk disclosing protected health information when using AI with client info.

There are many reasons to be nervous *and* to be excited about generative AI!

- Today we took a step back to consider how AI aligns with our pedagogical goals and what our communities need from our graduates.
- You might have good reasons to not use or use these tools in your class.
- Perhaps you got a little closer to thinking about how to incorporate an AI policy or practice from a place of integrity and in alignment with your values and goals in the classroom today, and ideas about how to talk about it with students.

A Vision For the Future

- AI enhances, not replaces, human thinking and belonging.
- AI helps us meet the needs of all learners and also improves the lives of faculty.
- University faculty are thought leaders in shaping use of AI in society and help students rise to the occasion of responsible AI use.
- Students leave college ready to help design communities, work, and products that are thoughtful about ethical AI.



A futuristic montage related to higher education and AI. It is an outdoor scene, and includes college students, professors, AI tools, scenes of everyday life mixed in with AI-related futuristic imagery. It has a pleasant ethereal feel. - @Melanie Sage
{Midjourney Prompt}



GenAI Teaching Resources



SCAN ME