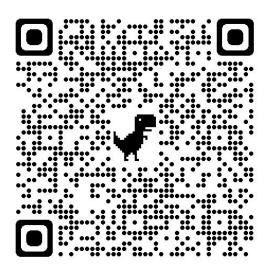
Welcome to EdTalks @CEILS

ICLA Center for Education Innovation & Learning in the Sciences Please scan the QR code below or go to tinyurl.com/EdTalks22

to check-in!





CEILS Ed Research Talk: What's all the Buzz About ChatGPT?



Jess Gregg (she/her)

Senior Associate Director Center for Education Innovation and Learning in the Sciences www.ceils.ucla.edu

Feb 8, 2023 | 1100 TSLB and streaming on Zoom





Welcome and Logistics

 Thanks to Katie Healey and Tina Austin on Zoom who is supporting our Zoom facilitation. <u>Chat away!</u>

 By the end of this week <u>I will share out everything</u> - the final slides with resources, a video recording of this presentation, and create an FAQ based on the chat and in-person discussion- via email and also on the CEILS website.

 More on ChatGPT at UCLA: More campus-wide events and resources are in the works - stay tuned in the coming weeks!

Acknowledgements:

Leading up to today, many discussions with folks including:

- UCLA StorySwap Group: Caroline Kong, Kim Debacco, Tom Garbelotti, Ava Arndt, Travis Lee and more!
- UC-Wide Zoom Discussion on ChatGPT
- Student: Alicia Ying
- Grad Student and TA: Ali Pahlevan
- UCLA Faculty: Morgan Tingley (EEB), Tina Austin (MCDB), Nathan Kraft (EEB), and Steve Bennoun (LS Core)
- POD Organization Google Listserv

During this hour together...

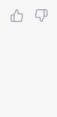
- Tour ChatGPT/see examples to better understand what it is and what some of the capabilities are.
- Explore two "inflection points" for this moment in higher education:
 - Academic integrity concerns
 - Embracing AI as an instructional tool how?
- Cautions/risks to keep on your radar
- Activity & Discussion
- Resources
- IMPORTANT: Stay for happy hour in courtyard at 4!
- Disclaimer: I am not "pro" or "against" ChatGPT/AI.

Artificial Intelligence & Ethical Issues

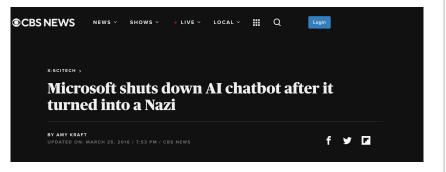
Is ChatGPT anti-racist?



As a language model, I do not have personal beliefs or biases. I am trained on a large dataset of text, which may contain both racist and anti-racist content. My responses will reflect the information I have been trained on. However, OpenAI is committed to using AI in a way that is beneficial for all, and actively works to mitigate any potential biases in its models.



BUSINESS • TECHNOLOGY





ChatGPT



Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



Capabilities

Remembers what user said earlier in the conversation

Allows user to provide followup corrections

Trained to decline inappropriate requests



Limitations

May occasionally generate incorrect information

May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021

Who is the ecologist Nathan Kraft



Nathan Kraft is an ecologist who is known for his research in the field of community ecology and biodiversity. He is an Associate Professor in the Department of Evolution and Ecology at the University of California, Davis.

5 7

Kraft's research focuses on the relationships between species and the roles they play in ecosystems. He has studied a variety of ecosystems, including tropical forests, deserts, and temperate grasslands, and has worked on a wide range of topics, including community ecology, species interactions, biodiversity, and biogeography.

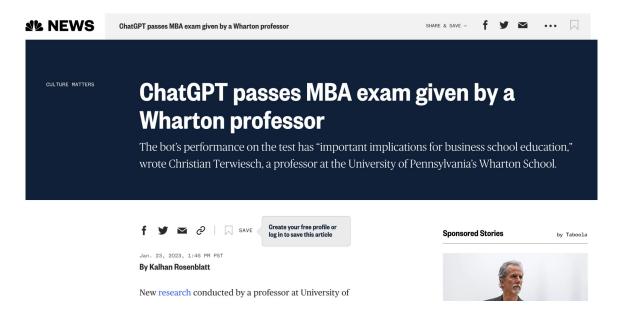
Kraft's research has contributed to our understanding of the relationships between species and their environment, and the role that species interactions play in shaping the structure and functioning of ecosystems. He has also helped to shed light on the drivers of species diversity and the mechanisms that underlie the distribution of species across landscapes.

Let's take this car for a ride...

Inflection Points to Consider in Higher Ed

How do we instill and uphold values around academic ownership, accountability, and integrity when we lack the tools to enforce our guidelines?

It has been getting harder and harder to prevent/detect plagiarism and now it is about to be impossible. What does this mean for our classrooms and course design?



Inflection Points to Consider in Higher Ed

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How can UCLA meet the moment to embrace AI in order to better prepare students for life after college?

We are at a point now where ignoring these tools or avoiding them may harm students by not preparing them for modern careers, let alone positioning them to <u>lead</u> in these roles.

How can we integrate ChatGPT or other AI tools into our courses thoughtfully and responsibly (with mindfulness around accessibility, and ethical and privacy issues with AI overal).

CEILS Ed Talk: Featured Resources



Dillard: Educators can dig in their heels, attempting to lock down assignments and assessments, or use this new technology to imagine what comes perf



Sarah Dillard: Schools Must

Embrace the Looming

Disruption of ChatGPT

(thought piece)



University of Wisconsin -

Madison, Learning and

Design Collaborative

(Step-by-Step Guidance)



Montclair State University

Office for Faculty

Excellence (Specific Ideas

for Assignments)

Can we just ban it?

"If schools ban ChatGPT and the tools that will follow it, they'll be tightening the screws on old ideas about what education should be. If, instead, they find ways to harness its capabilities, they'll be preparing students to navigate a world in which artificial intelligence is the warp and human ingenuity the weft of a bold new tapestry of human achievement."

Sarah Dillard: Schools Must

Embrace the Looming Disruption

of ChatGPT (thought piece)

Schools Must Embrace the Looming Disruption of ChatGPT

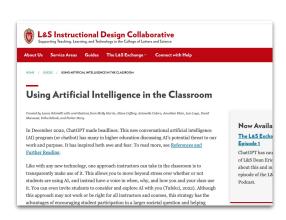
Dillard: Educators can dig in their heels, attempting to lock down assignments and assessments, or use this new technology to imagine what comes next $\,$



Meeting the Moment : Guidance for Instructors

- Reflect on the <u>threats and opportunities</u> you perceive for your teaching and work from AI.
- <u>Test AI out for yourself</u> and consider its strengths and weaknesses. Consider revisions to your assignments.
- Consider data and privacy policies. [Both UCLA's and ChatGPT's]
- Identify and <u>communicate opportunities</u> in your course.
- Establish Norms and Boundaries for Using AI in Your Classroom
 - Co-create Class Expectations
 - Structure an Al Discussion
 - Make Instructor Expectations Clear

<u>University of Wisconsin - Madison, Learning and</u>
Design Collaborative (Step-by-Step Guidance)



Ideas for modifying activities/assessments

- <u>Cite references</u> in work: In written assignments, reference class materials and notes, or sources that are not available on the free internet (books or articles that are recent, behind firewalls). For example, "Refer to two of the theorists discussed in class."
- <u>Include visuals:</u> images or videos that students need to respond to in your assignment. Be sure to include alt-text for accessibility.
- Reference or connect to <u>current events</u> or conversations in your field.
- Ask for application or engagement between <u>personal</u> <u>knowledge/experience</u> and course concepts or topics.

Montclair State University Office for Faculty

Excellence (Specific Ideas for Assignments)



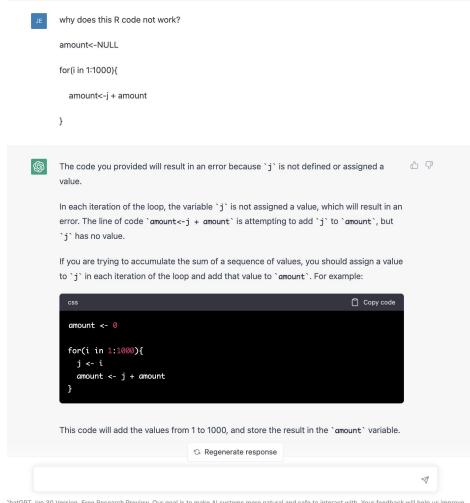
Ideas for modifying activities/assessments

- For short reading responses, instead of using open-ended questions in Canvas, try <u>social annotation tools</u> that require students to engage with a text along with their classmates. Try <u>Hypothes.is or Perusall</u>, both of which are supported by the University.
- Replace an essay or short-answer writing assignment with one that <u>requires</u> students to submit an audio file, podcast, video, speech, drawing, diagram, or multimedia project. That is, mix up the assignment in ways that make running to ChatGPT more work than it's worth.
- Finally, incorporate ChatGPT in your assignments. For example, ask students who choose to open an account to generate a ChatGPT response to a question of their own choosing, and then write an analysis of the strengths and weaknesses of the ChatGPT response. ChatGPT is interesting! Engage with the tool and discover with your students what it can and cannot do.

From: Montclair State University Office for Faculty Excellence (Specific Ideas for Assignments)

Potential Applications: ChatGPT as a tutor/coach/editor/assistant?

- ChatGPT can be helpful in debugging code. It can predict what you are trying to do "If you are trying to...." then try this....
- Similar applications for writing (first draft, create an outline, give feedback, shorten a piece of work)



Student Perspectives

Some <u>UCLA courses are already using ChatGPT for exercises where</u> students are asked to debug code, it is working well.

Recognition that <u>oral communication skills</u> are important but not practiced in undergraduate courses - support undergraduates in developing those skills versus only written work.

Students do want to be challenged and have an equitable playing field with their peers. In-person assignments (quizzes, exams) where tech is not used are still welcome by students if they perceive it as valuable to learn those skills more deeply and be able to do them independently (without tech).

<u>Students don't want to cheat.</u> More discussion needed on why students might feel that cheating is the only option in the moment and addressing those underlying factors rather than trying to enforce bans or catch students.

Activity: Revise this assignment prompt to have students engage with ChatGPT as part of the assignment.

Compare and contrast specific choices that different countries made in response to the pandemic. What impact did those decisions have over time?

Example revision

Step 1: Ask ChatGPT the following:

Compare and contrast specific choices that different countries have made in how each responded to the pandemic. What impact did those decisions have over time?

Step 2: Based on those response(s), select 2 countries of interest (other than the US) and find primary or secondary sources that go into further detail about their responses to Covid-19 and the impact of those responses.

Step 3: Summarize your findings. Include your sources and ChatGPT's output at the end of the assignment.

Discussion Questions

Student voices in the room - what are your thoughts or experiences with ChatGPT?

What are some questions/topics that could be discussed in future events on this topic?

What potential do you see for using ChatGPT to assist in your own teaching?

Instructor Perspectives

ChatGPT is very interesting but provides inaccurate responses around 20% of the time and this is very concerning.

Once you get familiar with the responses you can tell if a response is likely AI generated - but this may change in the future.

It might be more helpful to think of how ChatGPT can be used as a resource/support for instructors (helping to design lessons, quiz questions, etc) rather than focus on academic integrity issues.

Privacy and ethical issues with AI are very real and can't be dismissed/overlooked.

Onwards...a few next steps?

- Create your own ChatGPT account and explore what opportunities it might provide for your teaching and student learning in your courses.
- Engage in dialogue with your colleagues, TAs, and students about ChatGPT and AI more broadly within your discipline.
- Keep in touch with CEILS and let us know how you are using it and ideas to share out with our instructional community.

Resources

ChatGPT website: https://chat.openai.com/chat

Sarah Dillard: Schools Must Embrace the Looming Disruption of ChatGPT (thought piece)

University of Wisconsin - Madison, Learning and Design Collaborative (Step-by-Step Guidance)

Montclair State University Office for Faculty Excellence (Specific Ideas for Assignments)

Lee Skallerup Bessette's Zotero bibliography for Chat GPT

Podcast: How Artificial Intelligence is Impacting Higher Education

How ChatGPT Works

<u>Update Your Course Syllabus for chatGPT</u>

Generative Al Tools and Resources - From Kim DeBacco (UCLA)

Generative AI (GPT) in Higher Ed - curated resources with nice glossary of definitions

Join Us Next Week:



Kristopher Barr

LIBBY-TEACHER SCHOLAR

UCLA DEPARTMENT OF CHEMISTRY

AND BIOCHEMISTRY

February 15

The transition from online to in-person teaching: How I adapted my strategies to what students needed

Thank you! jessgreg@ceils.ucla.edu (Stay for Happy Hour!)

Canter for Education Inno Learning in the Sciences







There are a number of ethical issues that arise with the development and deployment of artificial intelligence (AI) technology. Some of the biggest ethical issues include:





- 1. Bias and discrimination: Al systems can perpetuate and even amplify bias and discrimination present in the data they are trained on. This can result in unfair and unjust outcomes for certain groups of people.
- 2. Privacy and security: Al systems can collect and process large amounts of personal data, raising concerns about privacy and the security of that data.
- 3. Job displacement: Al systems have the potential to automate many jobs, which could result in significant job displacement, particularly for lower-skilled workers.
- 4. Autonomous weapons: The development of autonomous weapons, or weapons that can operate without human intervention, raises ethical concerns about accountability and the ability to control the use of force.
- 5. Explainability and transparency: Al systems can be difficult to understand and interpret, which makes it challenging to explain their decisions and actions, raising concerns about accountability and trust.
- 6. Responsibility and liability: As AI systems become more autonomous and integrated into society, there are questions about who should be held responsible and liable for the actions and decisions of these systems.
- Socio-Economic issues: Al could lead to significant changes in the economy and labor market, which may result in increased inequality and poverty for some groups of people.
- 8. Ethical dilemmas in decision-making: Al can make decisions that involve ethical dilemmas and trade-offs, such as self-driving cars that need to make split-second decisions that may result in a life-or-death situation.

These are just a few examples of the ethical issues that are currently being discussed in the context of AI, and the field is rapidly evolving, so new issues may

ChatGPT Functionality Overview

Chat GPT is good at:

- Writing a *decent* and unique response to an open-ended question
- Responding to a request for a specific structure (syllabus, outline, exam questions)
- Coding tasks/debugging code
- Translation text into a different language
- Revising/polishing text that you provide and ask for refinement
- Mimicking tone/style of a specific voice (pirate, Shakespeare, etc.)

Chat GPT is still learning

- Accuracy while responses are "decent" they often contain false information (very problematic!)
- Riddles and logic type questions (getting better)
- Nuances, complexity of language (to sound less "bot" like)

Chat GPT can not (yet):

- Interpret images
- Tell you what its sources are