



ACADEMIC SENATE FOR CALIFORNIA COMMUNITY COLLEGES

What Do We Tell Students about ChatGPT?

Finding and Building English Open Educational Resources (OER) about Al Writing Assistance

Anna Mills and Elle Dimopoulos

ASCCC OERI host Selena Silva

February 24, 2023



• Please introduce yourself in the chat and, if you like, share what you teach and where

Slides: https://bit.ly/OERaboutAl

Welcome! Agenda

- Introduction to AI text generators/ChatGPT
- Examples of open-licensed materials that can help educators respond
- Q&A

Slides: https://bit.ly/OERaboutAl

This is a big topic. Don't worry – if we don't get to everything there is a lot more help out there. :-)



- For more on OER: <u>The Academic Senate for California Community Colleges Open</u> <u>Educational Resources Initiative (ASCCC OERI)</u> offers introductory and advanced resources.
- For more on OER for English: The <u>ASCCC OERI Open Educational Resources and English page</u> has recorded webinars as well as lists of textbooks and other materials aligned with writing and literature courses.
- For more on ChatGPT and other AI text generators in higher education, see <u>AI</u>
 <u>Text Generators and Teaching Writing: Starting Points for Inquiry</u>, a resource area hosted by the Writing Across the Curriculum Clearinghouse.

Quick questions? Ask in the chat – Elle can answer. Longer questions? Put them into Menti as they occur to you and upvote other questions you like. We'll answer at the end.

Go to Menti.com and enter 1109 6356



What does a text generator do? You ask it for what you want, and it generates a response.

ChatGPT screenshot with one of five paragraphs it generated:



Write an essay describing the ways in which Twitter may improve and/or degrade academic discourse.



Twitter is a microblogging platform that allows users to share short text-based messages, known as tweets. It has become a popular tool for academics to share their research and engage in discourse with their peers. However, like any social media platform, Twitter also has its drawbacks when it comes to academic discourse.

What is ChatGPT?

- An AI text generator or large language model created by the company OpenAI, released November 30.
- OpenAl is largely funded by Microsoft.
- ChatGPT is built on GPT 3.5, an updated version of GPT-3, which has been available since 2020.
- ChatGPT and GPT-3.5 are considered the most capable publicly available language models.
- Open-source LLMs also exist. Google and Meta have also built LLMs that are not currently public.

Here's a user requesting a comparison of MLK and Gandhi. ChatGPT begins to generate.



Describe the differences between Martin Luther King's rhetorical style and Gandhi's. What do these differences suggest about their philosophies and leadership styles?



Martin Luther King Jr. and Mahatma Gandhi were both influential leaders who used the power of words to effect change. However, their rhetorical styles were quite different.



Martin Luther King Jr. was a Baptist minister and civil rights leader in the United States during the 1950s and 1960s. He was known for his powerful and emotive speeches, delivered in a deep, resonant voice. He often used biblical allusions, metaphor, and repetition to make his points, and employed a formal, polished speaking style. His speeches, such as "I Have a Dream" and "Letter from Birmingham Jail", were characterized by a strong sense of righteous indignation and a call for immediate action.

On the other hand, Gandhi was a political leader in India who led the country's struggle for independence from British colonial rule in the early 20th century. He was known for his simple, direct, and unassuming speaking style. He often used anecdotes, parables, and rhetorical questions to make his points, and employed a conversational, informal speaking style. His speeches and writing a "History Country" - Violent Resistance", were characterized by a str

How? What is ChatGPT's nature?

- The software is designed to generate a series of words based on its statistical analysis of huge volumes of text.
- It works by copying patterns and predicting likely next words, not by copying its training data verbatim.

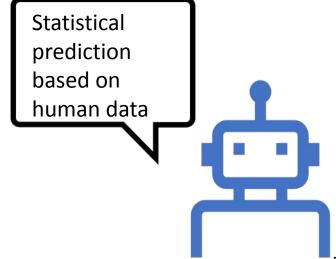




Janelle Shane Twitter profile photo

Researcher and "AI humorist" Janelle Shane explains it this way: the algorithm is designed to play a guessing game.

What would the humans write next? How would a human writer likely continue on from the prompt?

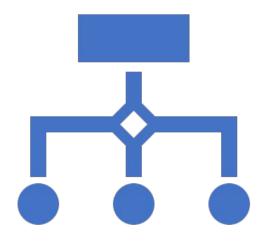


Presentation by Anna Mills, licensed <u>CC BY NC 4.0.</u>



It can take in and incorporate background information, sources, quotations, and lists of ideas.

- You feed it the information it needs (up to around 2,000 words).
- Give it anything you have that will help it produce the piece of writing.
- Describe the style, length, and any other requirements.



It can produce multiple original word combinations to respond to one prompt

- Its outputs are not usually copies of human-written text.
- If you don't like one, you can request a different one.
- Two users may put in the same prompt and get different results.

What's the quality of ChatGPT outputs? Often solid academic prose in some respects



Grammatically correct



On topic



Academic style



Sounds plausible

0 But let's be clear: there's no understanding or coherent intention behind its text

- It's what Emily Bender and Alex Hanna call a "mathy math."
- We can see contradictions in claims from one sentence to the next or one output to the next.
- It doesn't "think" or "claim" or "believe" anything, though we might be tempted to describe it that way because the writing is so human-like. Until it makes a mistake and then we realize.

0 It's often biased because the texts it's trained on contain many human biases

- The system is based on statistics of the human-written text scraped from the Internet, Reddit, Wikipedia.
- Its content is skewed as the Internet is skewed toward developed nations, English, wealth, maleness, and whiteness.
- These biases are "baked in" and there is no easy or reliable way to remove them.

0 Its structure is designed to produce plausible, not necessarily true text.

- Erratic performance around sources and facts.
- Outputs may be untrue or even nonsenical.
- Sometimes it refuses to give sources, sometimes it makes up plausible ones, and sometimes it gives real ones.
- ChatGPT doesn't search to back up claims, though the new Bing and other apps have begun to try to combine language model capabilities with search. Google says it will soon release a chat with search.

A host of other concerns around the training and use of language models

Copyright

Privacy

Labor

Energy consumption

And that's not all we have to wrap our heads around! Yet more change coming soon...

- Since the November 30th release there have been <u>five updates</u> to ChatGPT.
- The new Bing combines ChatGPT capabilities with search (imperfectly).
- Google plans to release a competitor, Bard.
- GPT-4 is rumored to be coming out this year and to be significantly better than GPT-3 or ChatGPT.

What word describes how you are feeling now about AI text generators in education?

Menti.com 1109 6356

(Use arrows to go to next slide)



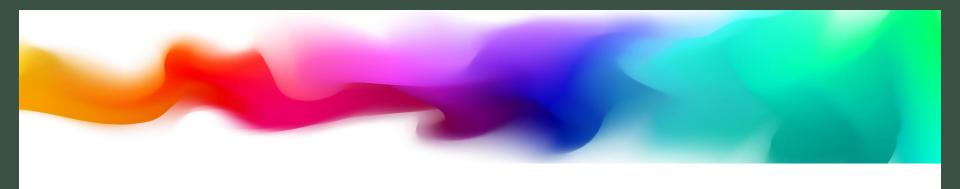


So what should we tell our students?

Do we teach about text generators?

Do we ban them?

Do we teach with them?



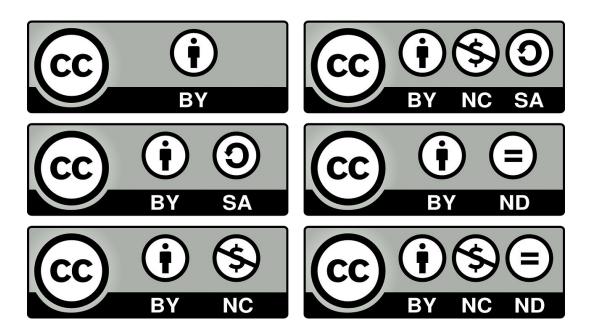
One thing is sure: We will need teacher-facing and student-facing materials that can be adapted and shared quickly and easily. Open licenses help!

The 5R Permissions of OER

Make and own copies Retain Use in a wide range of ways Reuse Revise Adapt, modify, and improve Combine two or more Remix **Share with others** Redistribute

How Do You Know if Something is OER and Not Just Free?

Look for Creative Commons licenses:





- Online availability for widespread, immediate use
- Resharing and republishing allowed (no "stealing" guilt)
- Allows for adaptation according to opinions on the controversial questions
- Allows for adaptation as the technology changes rapidly

We need materials for teachers on how we prevent learning loss due to misuse of text generators

What do we do if we are concerned students will attempt to pass off ChatGPT text as their own?

Many approaches have been proposed. No one approach seems likely to be both foolproof and without undesirable side effects.

Some approaches are not controversial:

- Encourage intrinsic motivation
- Explain how writing helps us think and learn
- Build relationships with students





Emphasize purpose and engagement

- If students see meaning in the writing assignment and understand what they will get out of wrestling with it, they are more likely not to resort to a text generator.
- Writing and revision help us clarify our thinking and arrive at insights we didn't have at the beginning.
- The value of writing assignments is more in the process than the product,

Popularity of other approaches in a recent webinar poll



this should prioritize We



Should we incorporate text generator use into our teaching?

- **Ethics**: Can we justify using a particular tool given concerns about labor, environmental impacts, data rights, bias, and others?
- **Privacy**: Are we requiring students to submit their data to platforms that will not keep it private?
- **Opportunity costs**: Are the ways we might use it better than existing and alternative teaching practices? Even if we ask students to critique or improve its outputs, is spending time reading and critiquing them really better than reading and critiquing human-written texts?
- **Preparation**: Are we ready to explain the technology, show students its pitfalls, and make sure they can identify problems on their own?

OER Example 1: Recommendations for Pedagogy: https://bit.ly/CAISteps

Anna co-authored "Adapting College Writing for the Age of Large Language Models Such as ChatGPT: Some Next Steps for Educators" with Lauren Goodlad of the Critical Al Institute at Rutgers. We put a CC BY NC license on it so any department or teaching and learning center could take it as a starting point and update, add, cut, and revise to offer their own recommendations (with attribution).

CRITICAL AI: ADAPTING COLLEGE WRITING FOR THE AGE OF LARGE LANGUAGE MODELS SUCH AS CHATGPT: SOME NEXT STEPS FOR EDUCATORS

Uncategorized

3 comments



Angel McNall photography

Adapting College Writing for the Age of Large Language Models such as ChatGPT: Some Next Steps for Educators

By Anna Mills and Lauren M. E. Goodlad (licensed CC BY NC 4.0)

Large language models (LLMs) such as ChatGPT are sophisticated statistical models that predict probable word sequences in response to a prompt even though they do not "understand" language in any human-like sense. Through intensive mining, modeling, and memorization of vast stores of language data "scraped" from the internet, these text

Open licensing can help our work reach more audiences

Juan David Gutiérrez, a professor of public policy and law at the Universidad del Rosario in Colombia, translated the <u>Critical Al piece from the previous slide</u> into Spanish and republished it on his blog, still under a CC BY NC license.

24 ENERO, 2023 JUAN DAVID GUTIÉRREZ R.

Adaptando la escritura universitaria a la era de los Grandes Modelos de Lenguaje como ChatGPT: Próximos pasos para educadores

Por: Anna Mills y Lauren M. E. Goodlad (CC BY NC 4.0)

Traducido por: Juan David Gutiérrez. Texto original en inglés disponible acá.

Los Grandes Modelos de Lenguaje [LLMs, por sus siglas en inglés], como ChatGPT, son sofisticados modelos estadísticos que predicen secuencias de palabras probables en respuesta a una consulta a pesar de que no "entienden" el lenguaje en ningún sentido similar al humano. A través de un intenso minado, modelaje y memorización de vastos almacenes de datos lingüísticos «raspados» de Internet [en inglés, web scrapping], estos generadores de textos ofrecen algunos párrafos con cada consulta que se asemejan a la escritura humana. Este texto sintético no es directamente "plagiado" de algún original, y usualmente está bien elaborado gramatical y sintácticamente.

We also need sample academic integrity policies and syllabus language that can be discussed and adapted

- Rules for Tools by Christian Spannagel, January 5, 2023, CC BY SA 4.0
- <u>Syllabus Resources</u> from the Sentient Syllabus Project by Boris Steipe, CC BY NC SA 4.0.
- Course Policies related to ChatGPT and other Al Tools by Joel Gladd, January 5, 2023, CC BY 4.0.

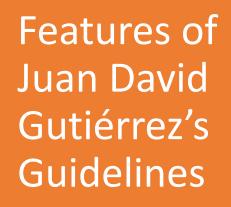
"Guidelines for the Use of Artificial Intelligence in University Courses" by Juan David Gutiérrez, Universidad del Rosario, CC BY 4.0



Guidelines for the Use of Artificial Intelligence in University Courses

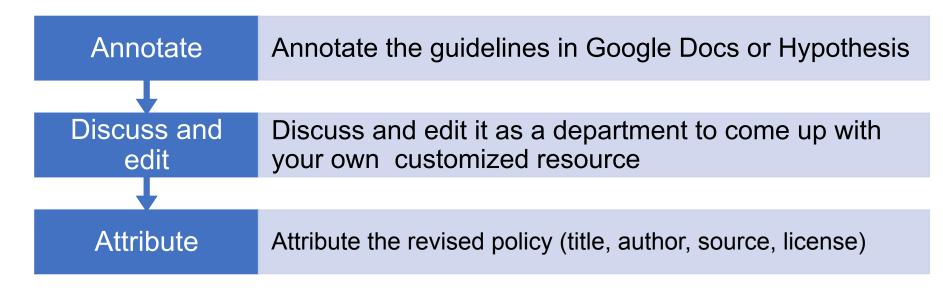
Prepared by Juan David Gutiérrez, Universidad del Rosario¹

Version 4.3 (21/02/2023). License C.C. BY 4.0



- They distinguish between low risk and high risk uses of text generation
- •They offer in-text links to updated resources
- They explain why guidelines are needed and educate about AI risks:
 - Inaccuracy
 - Bias
 - Missed opportunities for critical thinking practice
 - The tendency to anthropomorphize

A department or college might use an existing open-licensed document like those guidelines as basis for discussion and adaptation



Critical Al literacy? please!

We can start by introducing the concept of statistically generated text and dispelling any notion that Al is sentient, authoritative, or neutral. Teach students to watch for problems in AI outputs.

We need open-licensed course materials

- About AI in general and its risks and ethical considerations
- About text generators/large language models and their uses, risks, and ethical considerations
- Materials for discussion and adaptation
 - Handouts
 - Slides
 - Assignments
 - Lesson plans



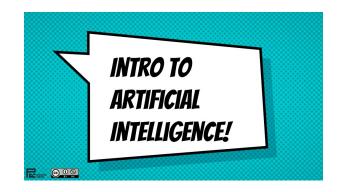
OER examples

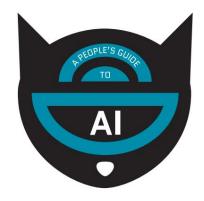
- Daily-Al workshop, designed by MIT educators
- A People's Guide to Al from Allied Media
- Intro to ChatGPT (and other LLMs), a video by Mark Marino, made with SteveAl

Intro to ChatGPT (and other LLMs)









ARTIFICIAL INTELLIGENCE

101 creative ideas to use AI in education



A collection edited by Chrissi Nerantzi, Antonio M. Arboleda, Marianna Karatsiori and Sandra Abegglen

Contributors: Educators and students

Curated by #creativeHE 2023



ChatGPT: Wolf in sheep's clothing conversation starter

Author: Maha Bali

Contact details: bali@aucegypt.edu @bali_maha on Twitter

Role: Educational developer/educator

Institution/organisation: American University in Cairo

My idea: Use the meme I made to start conversation about unethical practices in ChatGPT's process of creating an ethical AI (exploitation of Kenyan workers)

Context: Time magazine article on exploitation of Kenyan workers

What I am aiming to achieve: I am aiming for students to do the research and find the above article or something like it or all the ethical issues connected to AI or chatGPT

Where the inspiration comes from: that article above and also <u>Autumm Caines</u> and <u>Chris Gilliard and Pete Rorabaugh's article.</u>

Tool used: Just a place to share the image with students

Link to more information: linked above

References: linked above

Wolf in Sheep's clothing is a good metaphor for ChatGPT's unethical practices in the process of creating "ethical AI"



Image edited by Maha Bali on Canva

Original image by Sarah Richter on Pixabay https://pixabay.com/photos/wolf-in-sheepclothing-wolf-sheep-2577813/

CC-BY Photo of Wolf head in sheep body with text on it being a metaphor for unethical practices by ChatGPT: edited by Maha Bali on Canva. Original without text by <u>Sarah Richter on Pixabay</u>

Critical Al Literacy and Critical Assessment

Author: Anna Mills, @EnglishOER, armills@marin.edu

Role: Writing instructor at College of Marin and OER textbook author

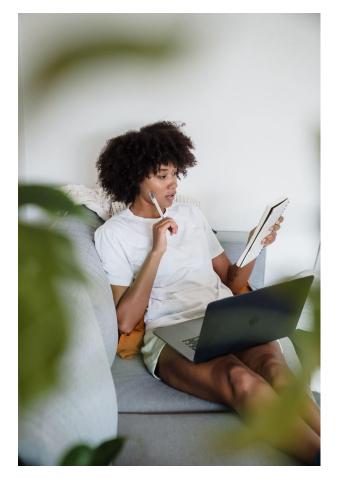
My idea: Students watch video and annotate orientations to ChatGPT, then read a NYT article and a sample ChatGPT critical assessment alongside a sample human-written assessment. They reflect on what ChatGPT misses and what they can learn about language models from the contrast..

Context: Complements the open text <u>How Arguments Work</u>.

What I am aiming to achieve: Understanding of language model as statistical text predictors, not thinkers. Familiarity with common deficiencies in their outputs. Increased skill and confidence with critical assessment.

Link to more information: <u>View the activities on Canvas</u> or <u>Canvas</u> <u>Commons</u>

References: Gary Marcus's Scientific American article <u>"Al Platforms like"</u> ChatGPT Are Easy to Use but Also Potentially Dangerous." Leon Furze's <u>Teaching Al Ethics</u> and others.



A Canvas Commons module



Preview

Details

Version notes

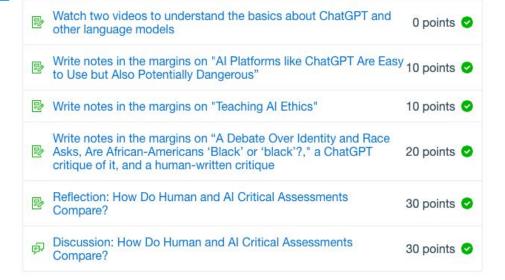
Modules (1)

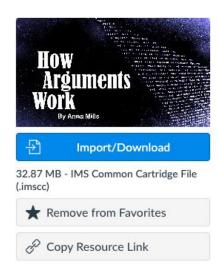
Assignments (5)

Discussions (1)

Files (3)

Critical Al Literacy and Critical Assessment







What did ChatGPT miss? What did its output get right?



How do those observations match what we learned about how language models work?



How might the sample essay have turned out if the student had started with the ChatGPT output and revised from there?



What lessons do you draw from this comparison?

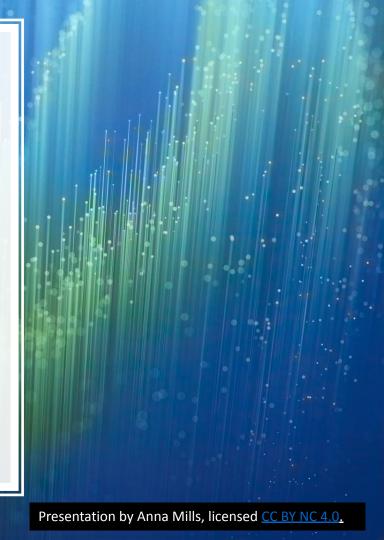
Ask students to reflect on the differences between ChatGPT's critical assessment and the human-written assessment

We need so many more!

Updated materials on the nature of language models

Updated materials on the uses and perils of Al writing assistance

Materials on best practices for use of AI text generators as assistive technology



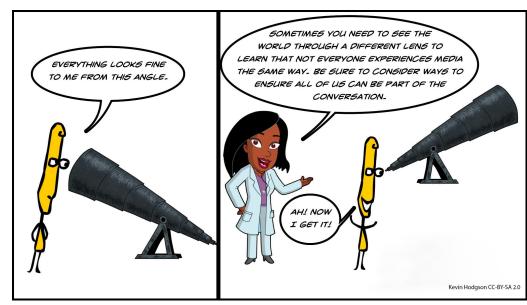
Al Text Generators as Assistive Technology (Elle)

More materials are needed to support people who use AI as assistive technology to access the world both directly through ChatGPT and indirectly through API's.

API examples: Text to speech, speech to text, captions and language translations, word completion, gestures recognition, text summaries, recommendation engines...

How can we leverage these technologies to support learning? What are the possible pitfalls?

Assistive technologists already teach students and Faculty how to leverage these technologies. ChatGPT is just one more tool in the toolbox.



What kinds of OER resources related to Al would be most useful?

- •Go to Menti.com and enter 1109 6356
- •You can suggest more than one kind of resource.



Share: Easy ways to put your own OER materials out there

- Put an open license on any public online materials (See <u>Creative Commons</u> to help you choose a license) and post on social media
- If you use Canvas, share on <u>Canvas Commons</u> under an open license
- Submit to 101 Creative Ideas to Use AI in Education, curated by #creativeHE by 3/31
- Annotate readings on AI and language models <u>publicly using Hypothesis</u> (public domain by default). We might put discussion questions in the margins in this way.

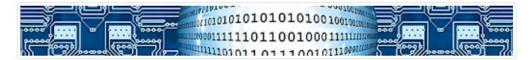




Further Resources https://bit.ly/AlwritingEDU

A Writing Across the Curriculum
Clearinghouse resource area to stimulate discussion about text generators among educators, "Al Text Generators and Teaching Writing: Starting Points for Inquiry"

Home / Repository / Collections / Al Text Generators and Teaching Writing: Starting Points for Inquiry



Al Text Generators and Teaching Writing: Starting Points for Inquiry

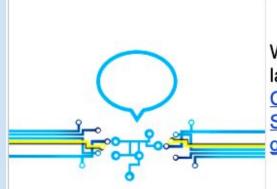
Introduction

What do teachers who assign writing need to know about AI text generators? How should we change our pedagogical practices, given the recent advances in AI Large Language Models (LLMs) such as OpenAI's GPT-3, as recently covered in *The New York Times*, *The New Yorker*, *The Chronicle of Higher Education*, and *Inside Higher Ed*? How should teachers participate in shaping policies around these technologies in our departments, institutions, and society?

Al Text Generators: Sources to Stimulate Discussion among Teachers

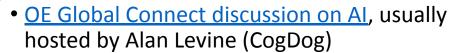
- About Al Text Generators/Large Language Models
- Implications for Higher Ed Writing Assignments
- Audio and Video
- Sample Policy Statements about Text Generators
- Student Perspectives and Marketing to Students
- Course Materials on Al Text Generators
- Assignments That Incorporate Text Generators
- Peer-Reviewed Papers
- Short Pieces on the General Topic of Al
- Books on the General Topic of Al
- <u>Using Language Models</u>, <u>Including ChatGPT</u>
- Detecting Al-Generated Text
- <u>Using Text Generators for Help Preparing Courses and Assessing Students</u>
- Organizations
- Calls for Papers and Proposals

Sample Al-Generated Essays



Welcome! This list of sample academic prose generated by "Al" large language models was compiled by <u>Anna Mills</u> for the <u>Writing Across the Curriculum Clearinghouse</u> as part of a collection: <u>Al and Teaching Writing: Starting Points for Inquiry</u>. You are welcome to <u>submit samples you have generated</u>. Licensed <u>CC BY NC 4.0</u>.

Type of Essay	Title
Research Paper	"Transgender in Turkey"
Summary	"Today's Masculinity Is Stifling"
Critical Assessment	An Article by Thomas Page McBee
Critical Assessment	"The True Meaning of Juneteenth"
Critical Assessment	"Juneteenth Reminds Us"



- Various <u>options for participation through</u> <u>the WAC Clearinghouse</u> resource area (a listserv, comments on Google Docs, public Hypothesis annotations)
- English OER listserv
- Facebook group led by Laura Dumin
- Twitter (Anna is <u>@EnglishOER</u>)
- Mastodon (Try the <u>https://mastodon.oeru.org/</u> instance): follow #OER, #ChatGPT, #ChatGPTedu, and #Altextedu

Ways to connect with others interested in OER and Al

Questions?

- •Go to Menti.com and enter 1109 6356
- •If you have a second question and it doesn't let you post, put it in the chat.







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Questions?
Here's to many more open-licensed resources to share information and guide our students around AI in writing!

Anna Mills, ASCCC OERI English Discipline Lead: amills@ccsf.edu
Elle Dimopoulos, College of Marin, edimopoulos@marin.edu

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