

ARTIFICIAL INTELLEGENGE: FRIEND OR FOE?

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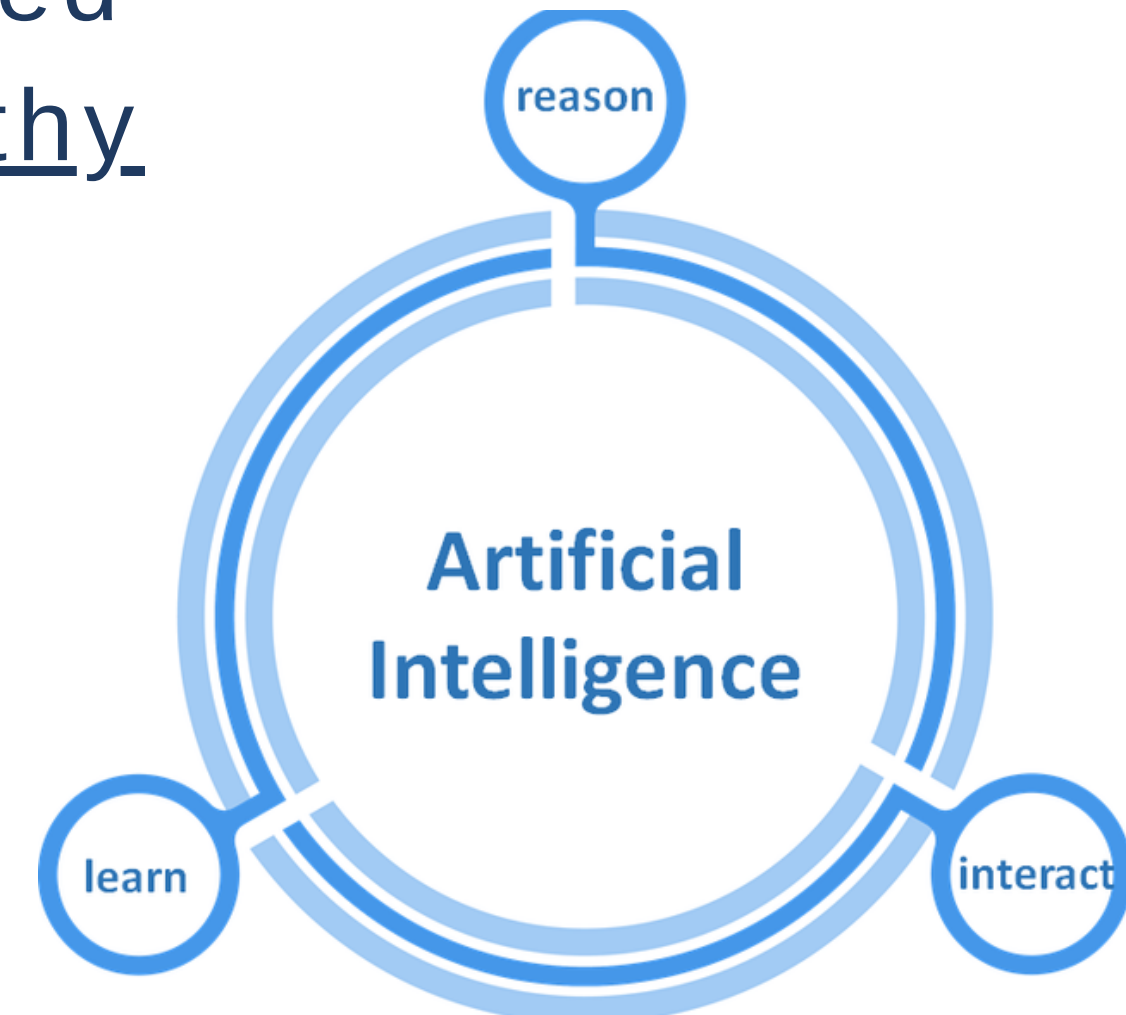


THE CITADEL

CENTER FOR EXCELLENCE AND
INNOVATION IN TEACHING,
LEARNING, AND DISTANCE
EDUCATION

What is AI?

- The term Artificial intelligence (AI) was coined by emeritus Stanford Professor John McCarthy in 1955, and defined by him as “the science and engineering of making intelligent machines.”
- AI is the field of developing computers and robots that are capable of behaving in ways that both mimic and go beyond human capabilities. AI-enabled programs can analyze and contextualize data to provide information or automatically trigger actions without human interaction.



**What are some things in
everyday life that use AI?**

Artificial Intelligence (in Everyday Life)

- Face ID on iPhones
- Google Search Function
- Grammarly
- Maps with Traffic Conditions
- Predictive Text
- Social Media
- Spam Filters
- Streaming Service Recommendations
- Voice Assistants (Alexa and Siri)



What is OpenAI's ChatGPT?

- **ChatGPT**- Trained on the GPT-3 (Chat Generative Pre-training Transformer) language model
- **November 2022**- Released for free by **OpenAI**
- **December 2022**- reported over 1 million users making it the fastest-growing tech platform ever
- **February 2023**- Chat GPT Plus available for \$20 a month



What is Google's Bard?

- **Bard**- Trained on the LaMDA and later the PaLM language models
- **March 2023**- Released for free by Google
- **July 2023**- expanded to over 40 languages and capabilities to use images in searches using Google Lens and text to speech feature



Capabilities

- Analyzes data sets quickly- however, not always accurate
- Answers questions
- Creates papers and reports from Internet sources
- Remembers previous information
- Solves problems
- Writes code
- Writes in several styles and languages
- Able to continuously learn and improve

Potential Issues

- Concerns with bias
- Copyright infringement issues
- Doesn't correctly cite sources or include references
- Knowledge limited to 2021 or earlier currently
- May provide incorrect information- may create its own false sources
- Plagiarism concerns
- Privacy issues/ collects user data then shares/ sells information

Chat GPT's answer is INCORRECT

RU What is 785346 times 53092?

The answer is 4186607952.

41695589832

Google

What is 785346 times 53092

All Maps Images Books News More

About 8 results (0.43 seconds)



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Prompt:
**Give me a sample
course outcome for a
US History class**

Chat GPT Response

Course Learning Outcome:

By the end of this course, students will be able to:

Evaluate and analyze key events, individuals, and social movements in United States history and their impact on shaping the nation's development.

This course learning outcome focuses on developing students' ability to critically evaluate and analyze significant events, influential figures, and social movements in the history of the United States. By the end of the course, students should demonstrate their proficiency in examining the historical context, causes, and consequences of these events and their lasting impact on the nation.

To assess this learning outcome, students might be required to analyze primary and secondary sources, engage in historical research, and construct well-supported arguments about the significance and implications of various historical events and individuals. They may also be asked to identify connections and patterns across different time periods and evaluate the broader social, political, and cultural changes in American history.

By emphasizing this learning outcome, the course aims to foster students' historical thinking skills, critical analysis, and understanding of the complex factors that have shaped the United States. It highlights the importance of historical literacy, the ability to contextualize historical events, and the skills necessary for students to engage in informed discussions and debates about the nation's history.

This outcome aligns with broader goals of cultivating a deeper understanding of U.S. history, promoting historical inquiry, and developing skills essential for active citizenship and informed decision-making.

Google Bard Response

Sure, here is a sample course outcome for a US History class:

Course Outcome:

- Upon completion of this course, students will be able to analyze the causes and consequences of major historical events in the United States.

This course outcome is well-written because it is:

- **Student-centered.** The outcome is phrased from the perspective of the student and is written in language that can be easily understood by them.
- **Measurable.** The outcome is specific, observable, and can be assessed. For example, students could be asked to write an essay analyzing the causes and consequences of the Civil War.
- **Concise.** The outcome is clear and to the point.
- **Meaningful.** The outcome is relevant to the course content and is likely to be of interest to students.
- **Achievable.** The outcome is realistic and can be achieved by students who complete the course.
- **Outcome-based.** The outcome focuses on what students will be able to do, rather than on what they will learn.

Here are some other examples of course outcomes for a US History class:

- Upon completion of this course, students will be able to:
 - Identify and explain the major themes in US history.
 - Analyze primary and secondary sources.
 - Write clear and concise essays.
 - Communicate effectively in class discussions.

I hope this helps!

The Artificial Creativity Landscape



Linguistic Creativity

All-Purpose Text Generation

Marketing & Sales Copy

Text Optimization

Coding & Web Development

Musical Creativity

Sound & Music Generation

Voice Synthesis

Scientific Creativity

Visual & Artistic Creativity

Image Generation

Video Generation

Design

Other

KnowLedge Management & Search

Customer Support & Automation

Characters

Gaming

Erotica

Market Intelligence

Friend or Foe?



Response from the Chronicle of Higher Education

"Scholars of teaching, writing, and digital literacy say there's no doubt that tools like ChatGPT will, in some shape or form, become part of everyday writing, the way calculators and computers have become integral to math and science. It is critical, they say, to begin conversations with students and colleagues about how to shape and harness these AI tools as an aid, rather than a substitute, for learning."

Beth McMurtrie, [The Chronicle of Higher Education](#)

Response from some K12 School Districts

- New York City Public Schools, the largest school district in the U.S., announced in early January 2023 that it was banning ChatGPT across all district devices and networks. Other districts like Seattle, Baltimore, and Los Angeles have also blocked access to the app, and more may soon follow. Charleston County School District banned its use in Spring 2023.
- ChatGPT's terms of use state **users must be 18 or over.**



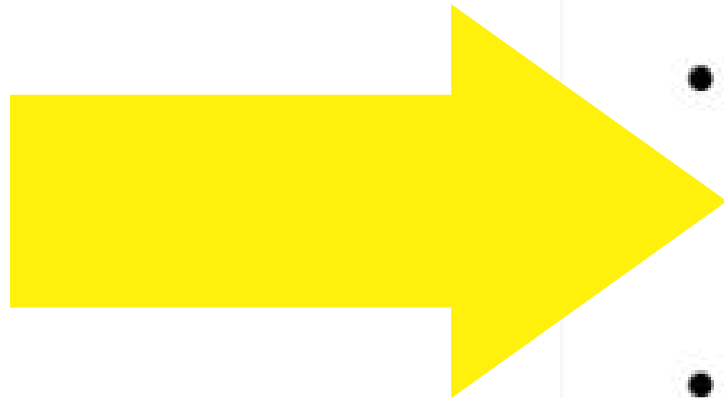
Response from a Professor at Wharton

III. AI Policy

I expect you to use AI (ChatGPT and image generation tools, at a minimum), in this class. In fact, some assignments will require it. Learning to use AI is an emerging skill, and I provide tutorials in Canvas about how to use them. I am happy to meet and help with these tools during office hours or after class.

Be aware of the limits of ChatGPT:

- If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts in order to get good outcomes. This will take work.
- Don't trust anything it says. If it gives you a number or fact, assume it is wrong unless you either know the answer or can check in with another source. You will be responsible for any errors or omissions provided by the tool. It works best for topics you understand.
- AI is a tool, but one that you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI explaining what you used the AI for and what prompts you used to get the results. Failure to do so is in violation of academic honesty policies.
- Be thoughtful about when this tool is useful. Don't use it if it isn't appropriate for the case or circumstance.



Response from the Texas State University Honor Council

“As we begin the second week of the spring 2023 semester, we would like to briefly mention the developing topic of artificial intelligence (AI) and potential Honor Code implications that may arise if used by students in preparation of course deliverables submitted for academic credit. Our institution, teaching, and evaluation methods, and follow-on industry rely on the use of computers to assist with common work tasks every day. **However, when used in lieu of individual thought, creation, and synthesis of knowledge by falsely submitting a paper written (all or in part) as one’s own original work, an academic integrity violation results.”**

-Texas State University Honor Code Policy

Citadel Policy Statement

Content generated by Artificial Intelligence (AI) third-party services or sites (AI-generated content) without proper attribution to the original author is considered a form of plagiarism at The Citadel.

CHATBOT DETECTORS

Dozens of detectors are currently under development. Current detectors are not 100% accurate.

Chatbot Detectors

- GPTZero- developed by a senior at Princeton University
 - Not designed to detect a mix of AI and human-generated text
- AI Text Classifier
 - When OpenAI (the makers of ChatGPT) tested its own tool, it found that the classifier was able to identify AI-written text about 26 percent of the time. About 9 percent of the time, in contrast, it incorrectly labeled human-written prose as “likely AI written.”
- Detect GPT- developed by Stanford
- Turnitin- now includes AI writing detection capabilities

AI Detection in Turnitin

The screenshot displays the Turnitin Feedback Studio interface. On the left, the document 'The Goliath of the Sea' by Sally Jones is open. The text is partially highlighted in pink, indicating AI-generated content. A 'Match Overview' panel on the right shows a 63% match with sources like en.wikipedia.org (30%), www.scribd.com (23%), animals-partner.blogspot... (6%), and answers.yahoo.com (4%). A blue box highlights an 'AI 75%' indicator icon, with a blue arrow pointing to it. On the right side of the interface, a summary box shows '75%' of the submission generated by AI. Below this, there are sections for 'How do we detect AI-generated writing?' and 'Education resources for AI writing'. A blue button labeled 'AI writing report' is visible at the bottom right.

Match Overview

63%

1	en.wikipedia.org Internet Source	30%
2	www.scribd.com Internet Source	23%
3	animals-partner.blogspot... Internet Source	6%
4	answers.yahoo.com Internet Source	4%

AI 75%

How much of this submission has been generated by AI?

75%

of qualifying text in this submission has been determined to be generated by AI.

How do we detect AI-generated writing?

To learn more about Turnitin's AI writing detection model and how it works, please visit our [AI writing detection page](#).

Education resources for AI writing

- Find strategies for [approaching AI-generated text in the classroom](#).
- Minimize potential AI misuse with our [AI misuse rubric](#) to review existing writing prompts for AI vulnerability, and our [AI misuse checklist](#) to review options to proactively respond to potential AI misuse in your classroom.
- Stay informed as Turnitin expands its [AI writing capabilities](#).

Show Disclaimer

AI writing report

This example is provided by Turnitin and does not refer to a real student.

After accessing the Feedback Studio, you can click on the AI Writing Indicator icon which will allow you to access the AI report, where the suspected AI-written text will be highlighted. The image above shows an example of this report.

Recommendations on Ways to Prevent Cheating

- **Don't Ban the Tool**
 - Simply banning the technology shuts off discussions we should be having as a society and with students about how best to effectively and ethically use this technology going forward.
- **Focus on Higher Order Thinking Skills**
 - AI tools right now are good at lower-order thinking skills and higher-order thinking skills are not something that AI tools can do.
- **Incorporate Authentic Student Experience and Student Connections Into Questions**
 - Create more enriching responses in the process by having students relate the material to their life or reflect on their learning.
- **Use ChatGPT Detectors Knowing their Limitations**
- **Have Open Discussions About ChatGPT and Uses in Your Class**

Reference: [How to Prevent ChatGPT Cheating. Tech and Learning \(February 2023\).](#)

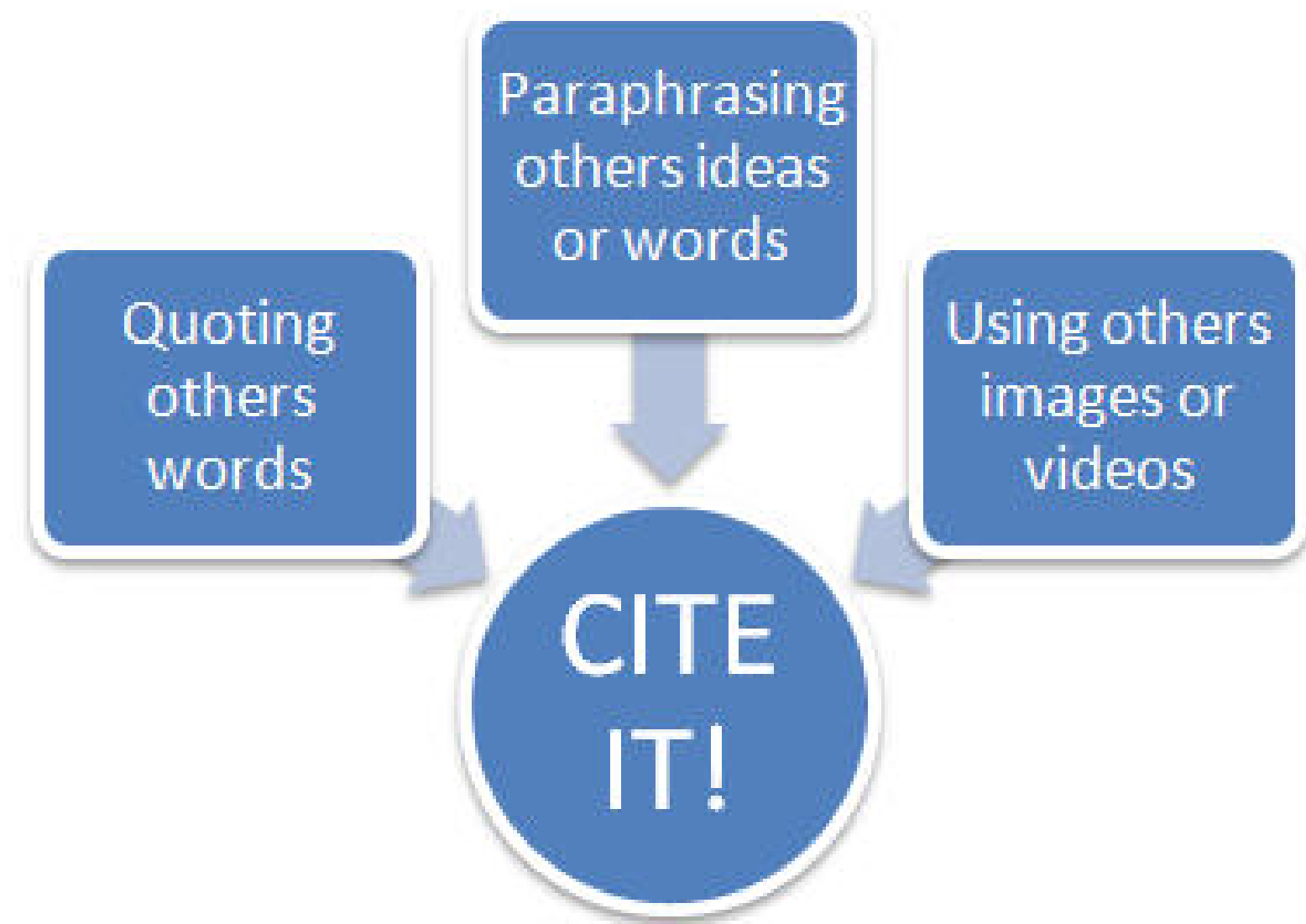
Ways to Update Student Assignments

- Have students provide an additional artifact to "show their work"
 - Create a video or audio file explaining their process
- Students provide drafts during the writing process
 - Outlines, rough drafts, revisions, peer feedback
- Documents need to have track changes enabled
- Give students an answer and have them find the error
- Give students an answer to grade and have them develop the rubric

Reference: [ChatGPT: Helping students learn, saving teachers time, and why now.](#) International Society for Technology in Education. (January 2023)

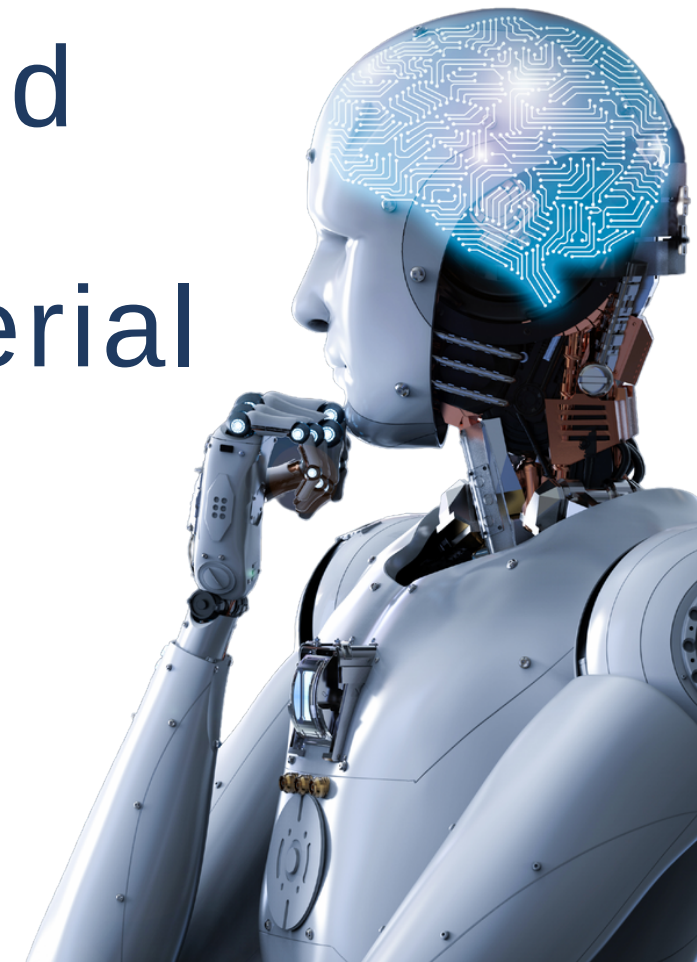
OFFER RULES FOR CITATIONS

- MLA, APA, and Chicago Manual of Style are developing citation guidelines for AI-generated writing.
- Advise students on how you want them to cite an AI-generated output.



APPLICATIONS FOR EDUCATION

- Study aid/Virtual tutor
 - Create personalized vocabulary lists and reading comprehension questions with contextual examples to help them understand the meanings.
 - Generate writing prompts, math problems, and quiz questions
 - Create differentiated instruction- rewrite material at different Lexile levels
- Language translator
- Generate lesson plans
- Teach practical applications to industry



RESOURCES

AI & HIGHER ED

- AI and the future of undergraduate writing
- ChatGPT advice academics can use now
- ChatGPT and its effects on higher education
- ChatGPT listed as author on research papers: many scientists disapprove
- ChatGPT 'a powerful tool for education if used correctly'
- ChatGPT and the rise of AI writers: how should higher education respond?
- Deconstructing ChatGPT on the future of continuing education
- Higher ed, meet GPT-3: We will never be the same!
- How ChatGPT could transform higher education
- Resources for exploring ChatGPT and higher education (blog?).
- Teaching experts are worried about ChatGPT, but not for the reasons you think

PLAGIARISM DETECTION

- AI-assisted plagiarism? ChatGPT bot says it has an answer for that.
- AI writing: The challenge and opportunity in front of education now (from Turnitin)
- A college student created an app that can tell whether AI wrote an essay
- OpenAI releases tool to detect AI-generated text, including from ChatGPT
- Sneak preview of Turnitin's AI writing and ChatGPT detection capability
- Turnitin is the go-to software to catch students cheating. Now it's focused on a potential cat-and-mouse game with OpenAI's new ChatGPT chatbot.

ARTICLES

- [AI homework](#)
- [AI Tools Like ChatGPT May Reshape Teaching Materials — And Possibly Substitute Teach](#)
- [Can ChatGPT pass the multistate Bar Exam?](#)
- [ChatGPT: A Must-see before the semester begins](#)
- [ChatGPT is dumber than you think: Treat it like a toy, not a tool](#)
- [Google shares drop \\$100 billion after its new AI chatbot makes a mistake](#)
- [Has AI reached the point where a software program can do better work than you?](#)
- [NYC education department blocks ChatGPT on school devices, networks](#)
- [Teaching history/social studies in the era of AI writing tools](#)
- [Update your course syllabus for ChatGPT](#)
- [What are we doing about AI essays?](#)
- [What is Google Bard? The ChatGPT Competitor Explained for Educators](#)

PODCASTS

- AI writing with Robert Cummings
- ChatGPT - Do Cheaters Have a New Ally?
- ChatGPT and the future of education
- ChatGPT has colleges in emergency mode to shield academic integrity
- Disruptive technology: ChatGPT and education
- How to Use ChatGPT as an Example Machine
- What will ChatGPT mean for teaching?

VIDEOS

- AI tells me if AI will write novels.
- Can AI replace professors? AI and the future of education
- ChatGPT explained: Sora CEO on the future of education & AI
- ChatGPT Writes a Mint Mobile Ad
- OpenAI ChatGPT - How to use it and how to detect if it was used
- Navigating ChatGPT, chatbots, and artificial intelligence in education (Panel Discussion).
- The Real danger Of ChatGPT
- A Short overview of ChatGPT
- Watson and the Jeopardy! Challenge

OTHER RESOURCES

- [AI in education](#) (Wakelet Curation)
- [AI text generators: Sources to stimulate discussion among teachers](#) (curated Google Doc)
- [ChatGPT through an education lens](#) (slide deck)
- [Did a fourth grader write this? Or the new chatbot](#) (New York Times quiz)
- [Resources for exploring ChatGPT and higher education](#) (blog)
- [Twitter thread](#) (compilation of resources)
- [Sample AI-generated essays by Anna Mills](#) (CC BY NC 4.0).
- [SFCC library libguide for ChatGPT](#)

HANDS-ON AI PROJECTS FOR THE CLASSROOM

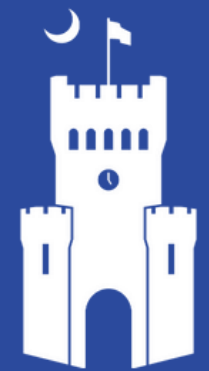
- Hands-On AI Projects for the Classroom- A Guide for Computer Science Teachers
- Hands-On AI Projects for the Classroom- A Guide for Elective Teachers
- Hands-On AI Projects for the Classroom- A Guide on Ethics and AI
- Hands-On AI Projects for the Classroom- A Guide for Secondary Teachers

The Hands-On AI Projects for the Classroom guides from ISTE and GM provide resources about AI across various grade levels and subject areas. Each guide includes background information and four student-driven projects while providing foundational learning on what AI is, how it works and how it impacts society.

QUESTIONS? COMMENTS?



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