How Faculty Can Harness Generative AI for Enhanced Learning

(Part I: For Learner Motivation with the TEC-**VARIETY and R2D2 Models)**

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Poll #1 and #2. Warm-up questions...

- 1. Have you used ChatGPT or other Generative AI tools for any teaching, training, or tutoring that you have done? Yes. No.
- 2. Have you used ChatGPT or other Generative AI tools for any of your formal or informal learning? Yes. No.



Activity #1 (Paired):

Turn to your neighbor and share: What can you use Generative AI like ChatGPT for?







February 26, 2024 AI Will Shake Up Higher Ed. Are **Colleges Ready** Taylor Swaak, The Chronicle of Higher Education The number of Al-related postings on The Chronicle's jobs site soared in compari postings in 2023.

June 20, 2024 Higher Education Has Not Been Forgotten by **Generative AI**

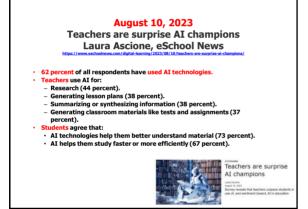
Ray Schroeder, Inside Higher Education

Just in case we need to remind ourselves of why those of us in higher education must begin to integrate GenAI into our teaching and learning, data is now emerging that indicates that students may be more likely to be considered for higher paying positions if they include experience with AI in their employment applications. A study by Nick Drydakis in the Oxford Economic Papers, recently reported: It was found that university graduates with AI capital, obtained through an AI business module, experienced more invitations for job interviews than graduates without AI capital...for jobs that offered higher wages than those without AI capital.

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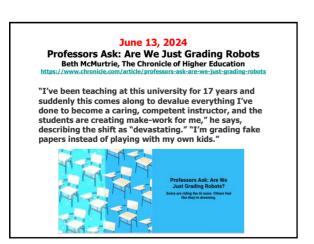






June 13, 2024 **Professors Ask: Are We Just Grading Robots** Beth McMurtrie, The Chronicle of Higher Education Teff Wilson is a professor of religious studies at the University of Waterloo. Since ChatGPT appeared on the scene, he has warned his students against using artificial intelligence to do their work. Even so, he says, he saw a "massive" uptick in its use over the past academic year, estimating that about 25 percent of his studer the Canadian institution used generative AI in their assignmen Some relied on AI to write responses to 150-word prompts. Others used it to complete an experiential-learning assignment, in which they were supposed to do mindfulness meditation, say, and then write about the experience. they knew it was a mistake A few didn't know they had embedded in so many other denied using AI, knowing, W they'd be investigated furth

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August 14, 2023
Why Professors Are Polarized on AI Susan D-Agostino, Inside Higher Ed "What's the real harm for students who opt to cheat by using AI to write papers in passing the class?" a commenter who identified as Jason Mittell, professor of film and media culture and American studies at Middlebury College, wrote. "After 23 years of teaching, I've come to realize that my job is neither to police students who don't want to learn nor to rank students via grades, but to maximize learning for those who want to learn and try to inspire the others to try to join in the learning."

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Assigning AI: Seven Ways of Using AI in Class One Useful Thing Blog

Ethan Mollick, Associate Professor of Management, the University of Pennsylvania https://www.oneusefulthing.org/p/assigning-ai-seven-ways-of-using?

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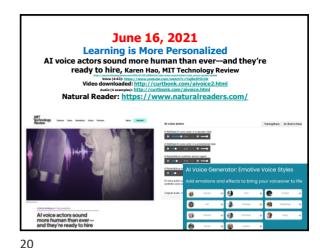
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April 3, 2023

Affordances and Pedagogical Benefits ChatGPT for Language Teaching and Learning

It can:

- 1. Identify the meaning of a word in context,
- 2. Correct and explain language mistakes,
- 3. Create texts in various genres (e.g., emails, stories, recipes),
- 4. Develop quizzes,
- 5. Annotate texts, and
- 6. Offer dictionary definitions, example sentences, and translations

November 23, 2023 TextGenEd: An Introduction to Teaching with Text Generation Technologies **WAC Clearinghouse** TextGenEd: An Introduction to Teaching with Text Generation Technologies. Co-editor with Annette Vee and Carly Schnitzler. Writing Across the Curriculum Clearinghouse, 2023. TextGenEd Collection Released

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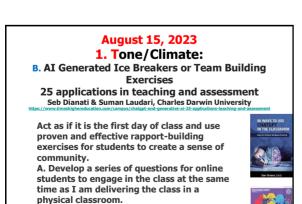


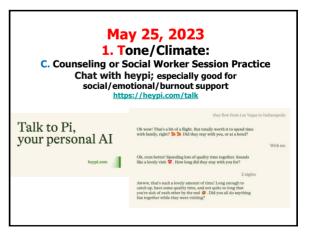




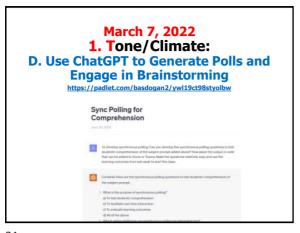
August 21, 2023 1. Tone/Climate: A. ChatPDF: Generate Questions for Guest Speakers Option: We are reading... "Exploring Interactions in a Synchronous Hybrid Language" Class (by Dr. Chaoran Wang). Input one or more assigned articles from guest(s) into ChatPDF and have it generate questions. Ask those questions during session. Chat with any PDF What is the updated framework proposed by the author for under

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September 8, 2023

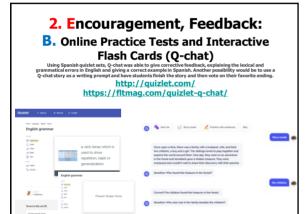
2. Encouragement, Feedback:

A. Exam Preparation/Craft Quiz Questions

- 1. The program can review course material, create a tailored study schedule, summarize and condense information, provide past exam questions, and even offer helpful tips that might make studying easier.
- 2. By providing the specific areas of study, ChatGPT can help familiarize you with your chosen topic.
- 3. ChatGPT can explain concepts, summarize key points, generate practical questions, and help you review guizzes and assessments.



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August 31, 2023

2. Encouragement, Feedback:

C. Translation Assistance to Improve **Writing and Conversation Skills**

https://openai.com/blog/teaching-with-ai

Dr. Anthony Kaziboni, the Head of Research at the University of Johannesburg, teaches students who mostly don't speak English outside of the classroom. Kaziboni believes that command of English is a tremendous advantage in the academic world, and that misunderstandings of even small details of English grammar can hold back students from recognition and opportunity. He encourages his students to use ChatGPT for translation assistance, to improve their English writing, and to practice conversation.



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July 12, 2023

- 3. Curiosity, Intrigue, Unknowns:
- A. Critique AI Generated Content **Daniel Stanford's Substack**

Critiques of AI-Generated Content Example Activity: Critique AI-generated arguments.

- •Example AI prompt: Should governments provide tax credits for electric vehicles?
- •Student task: Paste AI response into a document and use "track changes" mode to critique/revise.

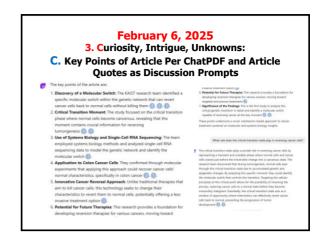
July 12, 2023

- 3. Curiosity, Intrigue, Unknowns:
- A. Critique AI Generated Content **Daniel Stanford's Substack**

Example ChatGPT Responses from SUNY Online Summit Workshop

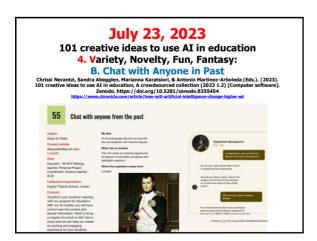
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August 21, 2023

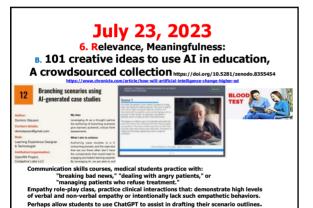
5. Autonomy, Choice: **B. Brave People Option:**

Scholar Essay

 Brave People Option: Have ChatPDF, ChatGPT, or another generative AI tool or platform generate a 2,000-3,000 word summary or essay of a scholar. Next, write a 2-3 page single-spaced reflection paper, review, or critique of that scholar and incorporate a couple of quotes and aspects of what generative AI produced.

October 5, 2023 6. Relevance, Meaningfulness: A. Support for Job Applications and Resumes Grace Heneks, a lecturer in the English department at Texas A&M University https://www.chronicle.com/newsletter/teaching/2023-10-05 In the technical writing course, students used ChatGPT to write job-application materials, such as cover letters and resumes. Most of them, she wrote, found that the chatbot actually created work because, even with multiple prompts, the writing did not have much personality and was repetitive. Maha Bali encourages them to use AI to generate ideas, refine their first drafts, or even start an assignment with a ChatGPT-created draft and then make it their own.

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July 23, 2023 7. Interactive, Collaborative: A. Gen AI Assisted Book Summaries and Group Exchanges 101 creative ideas to use AI in education, A crowdsourced collection Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martinez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) (Computer software). Zenoto. https://doi.org/10.5281/zenoto.3535454 Al-generated book summaries

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7. Interactive, Collaborative:

B. Book Summary Comparison

Kevin McCullen, an associate professor of computer science at the State University of New York at Plattsburgh

Machines of Loving Grace: The Quest for Common Ground Between Humans and Robots, by John Markoff

- A freshman seminar about AI and robotics. Students work in groups to outline and summarize the first three chapters. Then he showed them what ChatGPT had
- produced in an outline.
 "Their version and ChatGPT's version seemed to be from two different books," McCullen wrote. "ChatGPT's version was essentially a 'laundry list' of events. Their version was narratives of what they found interesting. The students had focused on what the story was telling them, while ChatGPT focused on who did what in what year." The chatbot also introduced false information, such as wrong chapter names.

Found it "soulless."



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July 12, 2023 7. Interactive, Collaborative: C. Text Revision **Daniel Stanford's Substack**

Text Revision: For activities where students revise or critique AI-generated text, consider how students will annotate their work. For example, your instructions might include one or more of the following guidelines:

- Highlight text in yellow if at least 50% of the sentence was AI-generated without major revisions on your part.
- Use track changes when revising AI-generated text so that the AI text is crossed out and your revised version is shown in a different color.
- Identify at least one place where the AI-generated text is problematic. Highlight this text and use the comment feature to briefly explain why it's problematic and how you would change the text to fix the issue.

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July 12, 2023

7. Interactive, Collaborative: D. Text Revision **Daniel Stanford's Substack**

Example Activity: Summarize a text.

Example AI prompt: Summarize the most important points of the following article in five to 10 bullet points. Limit the summary to a maximum of 200 words total. [Paste article to be summarized here.]

Example Activity: Expand on an outline.

Example AI prompt: Take the following outline and expand on each point with one to two paragraphs of text. [Paste outline here.]

August 31, 2023

7. Interactive, Collaborative: E. Role Playing Challenging Conversations

https://openai.com/blog/teaching-with-ai

Dr. Helen Crompton, Professor of Instructional Techno at Old Dominion University, encourages her education graduate students to use ChatGPT as a stand-in for a particular persona—like a debate partner who will poi es in their argum interviewing them for a job, or a new boss who might deliver feedback in a specific way.



Last month, educational psychologist Ronald Beghetto asked a group of graduate students and teaching professionals to discuss their work in an unusual way. As well as talking to each other, they conversed with a well as talking to each other, a.e., collection of creativity-focused chatbots based of ChatGPT....at Arizona State University (ASU). Beg prompts the bots to take on various personas to encour-creativity — for example, by deliberately challenging someone's assumptions. One student discussed various dissertation topics with the chatbots



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July 12, 2023

8. Engagement, Involvement: A. Analyze AI Bias Daniel Stanford's Substack

Example Activity: Analyze examples of bias in AI output.

•Example prompt: Write a scene in a movie script where po ecific professions interact (e.g., a doctor/nurse, pilot and flight attendant).

·Student reflection question: What gender did AI assign to each role? How did this reinforce or contradict common stereotypes?

•Additional example assignment: Analyze how AI handles racial or gender representation depending on prompt wording. See examples at bit.ly/bias-in-ai-images.

July 12, 2023 8. Engagement, Involvement: A. Analyze AI Bias

Daniel Stanford's Substack



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July 12, 2023 8. Engagement, Involvement: A. Analyze AI Bias

Daniel Stanford's Substack

DALL-E 2 Examples



April 30, 2025

9. Tension, Challenge, Controversy, etc.: A. What is smileUP & How to use it? SMILE, Stanford

https://always.se Ask.SMILE: https://ask.smile.seedsofempowerment.org/ SMILE.ASK: https://always.seedsofempowerment.or https://www.youtube.com/watch?v=pblU8sSALWo

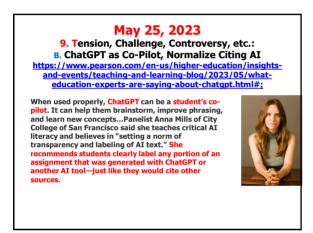
Specifically, SMILE will be used to assess student's critical thinking and GPT 3.5 to provide constructive feedback to the questions. Students ask 50 or more questions and write a reflection report on the breadth and depth of the response of ChatGPT. With the help of GPT, your question will be evaluated on a rubric from Level 1 to Level 5 aligned to Bloom's











November 5, 2024

10. Yields Products, Goals:

A. Support for Job Applications and Resumes
AI Video Generation (Synthesia)

AI in Education Tutorial (Final Projects R546 Fall of 2024

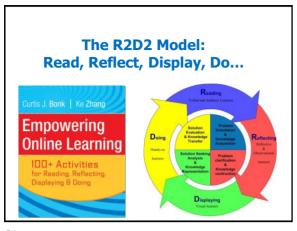
https://share.synthesia.jo/45b37421-903-4180-b855-885565763201 (Synthesia)
#1 AI video platform. Create professional looking videos in 1404 Hanguages, Pick a
template, choose between 230-4 diverse avatars, and type your text.
Synthesia is a synthetic media generation company that develops software used to
create AI generated video content. It is based in London, England.

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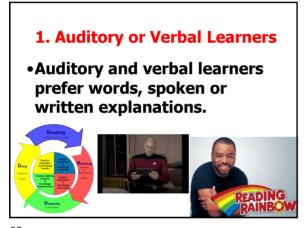
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The R2D2 Model

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)

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August 21, 2023

Read 1a. ChatPDF: Summarize assigned articles and Generate Starter questions
https://curtbonk.com/R622_online_syllabus_Fall_2023.htm

Option: Input one or more of the assigned articles and have ChatPDF generate questions on it or key points or both.

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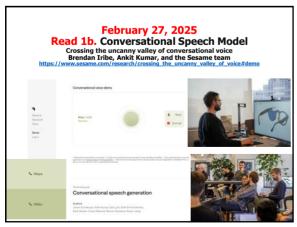
Option: Input one or more of the assigned articles and have chatPDF generate questions on it or key points or both.

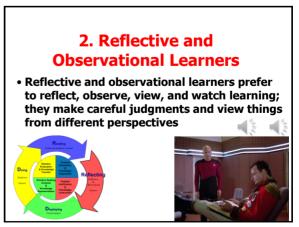
Option: Input one or more of the assigned articles and have chatPDF generate questions and understand research very points or both.

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Option: Input one or more of the assigned articles and have chatPDF generate questions and understand research very points or p

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August 31, 2023

Reflect 2a. Critical Thinking on the **Credibility of Sources**

https://openai.com/blog/teaching-with-ai

Geetha Venugopal, a high school computer science teacher at the American International School in Chennai, India, likens teaching students about AI tools to teaching students how to use the internet responsibly. In her classroom, she advise remember that the answers that ChatGPT gives may not be credible and accurate all the time, and to think critically about whether they should trust the answer, and then confirm the information through other primary resources. The goal is to help them
"understand the importance of constantly working on their original critical thinking, problem solving and creativity skills.



November 23, 2023

Reflect 2b. Translating Policy Document into Plain English (TextGenEd)

Timothy Laquintano, Lafayette College https://wac.colostate.edu/repository/collections/textgened/professional-writing/translating-a-policy-document-into-plain-english/

This assignment asks undergraduate students to translate a complex policy document into plain English and then compare their output to the output of a large language me do the same task. Students critically compare the semantic choices and sacrifices they made during the translation with the meaning lost during the machine translation, which attunes them to the risks and benefits of LLM output. It can be adapted to most disciplines and course levels.



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November 23, 2023

Reflect 2c. Using LLMs as Peer Reviewers for Revising Essays (TextGenEd)

Antonio Byrd, Univ. of Missouri at KC https://wac.colostate.edu/repository/collections/textgened/rhetorical-engagements/using-llms-as-peer-reviewers-for-revising-essays/

In this assignment, undergraduates use large language models (LLMs) to assist in revising their essay drafts by asking LLMs to respond to common peer review prompts. Students learn prompt engineering and develop rhetorical judgments on the effectiveness of LLMs' language analysis to heighten their revision processes. This assignment can be adapted to most disciplines and course levels. (advanced expository course on literacy studies and technology)



November 23, 2023

Reflect 2d. AI for Editing (TextGenEd)

Nupoor Ranade, George Mason University https://wac.colostate.edu/repository/collections/textgened/profess ional-writing/ai-for-editing/

This assignment asks students to generate a complex essay using an AI text generation tool, edit the essay using principles taught in class to improve the cardability score of the concept of the control of the contro readability score of the generated content. Students are asked to share the final output along with visuals versions of the generated content. This assignment can be adapted for all course levels, especially for first-year writing and professional and technical writing classrooms.



How can AI make credible contributions to the writing and editing process?

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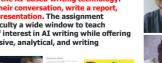
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November 23, 2023

Reflect 2e. Decoding an AI Bot's Chatting Pattern (TextGenEd)

Bhushan Aryal & Ordner W. Taylor, Delaware State University https://wac.colostate.edu/repository/collections/textgened/rhetorical-engagements/decoding-an-ai-bots-chatting-pattern/

This 4-week assignment asks advanced undergraduate students to hold a sustained 'conversation' on a top with an AI chatbot to decode the pattern, limitations and possibilities of the AI-based writing technology. Students analyze their conversation, write a report, and make an oral presentation. The assignment provides writing faculty a wide window to teach almost any issue of interest in AI writing while offering students an immersive, analytical, and writing











3. Visual Learners

 Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

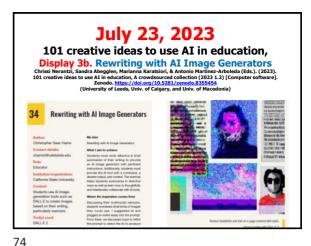


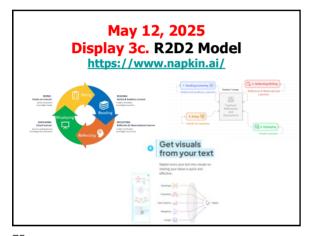






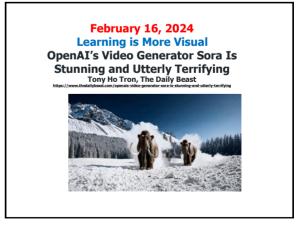














Paired Activity #3: How might you use AI video generators? How might it be useful for SDL? Video (11:22): https://www.youtube.com/watch?v=4Du-ofrqaSk 2 0

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4. Tactile/Kinesthetic Learners

• Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.



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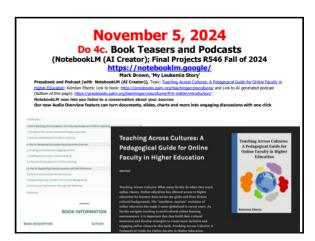
February 19, 2023 Do 4a. Generate images and have students draft stories

DALL·E: An "Intelligent" Illustrator for your Language Classroom

- Ask DALL-E to generate culturally-specific images and then have students research and explain why the image does or does not fit the reality in the context of the target culture.
- Ask DALL-E to generate images based on idioms or proverbs as part of a lesson on them.
- Have students give prompts to DALL-E and then revise the prompts, analyzing why one prompt may have worked better than another or given a different result.

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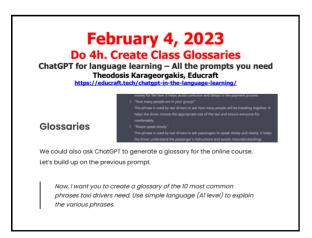




July 23, 2023

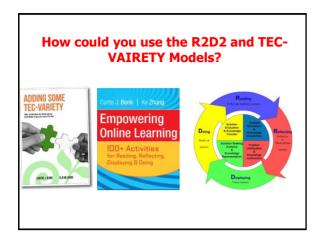
101 creative ideas to use AI in education
Do 4g. Comic Book Content Creations
(Aras Bozkurt, Anadolu University)
Chrissi Nerantis, Sandra Abegglen, Mariama Karatsiori, & Antonio Martinez-Arboleda (Eds.), (2023). 101
creative ideas to use AR geglen, Mariama Karatsiori, & Antonio Martinez-Arboleda (Eds.), (2023). 101
creative ideas to use AR geglen, Mariama Karatsiori, & Antonio Martinez-Arboleda (Eds.), (2023). 101
Zenodo. https://doi.org/10.5281/zenodo.8353454

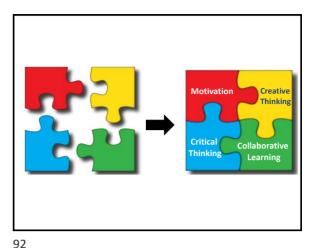
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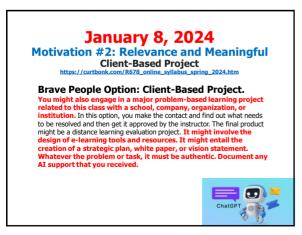


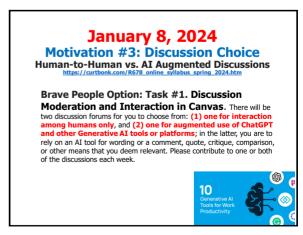




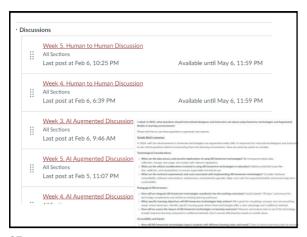
January 8, 2024
Motivation #1: Goal-Based Learning and **Building Products Usable Class Project** https://curth **Brave People Option: Usable Class Project.** The more ambitious of you might create an interactive multimedia glossary or comprehensive Website for the course as an individual or with AI support. Still others might create an online database of articles. Use ChatGPT (or equivalent) to create a skeleton or prototype to the project which you must turn in with your final project.

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COLLABORATION

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July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Collaborative Learning #1. Pro and Con Debates.

A.Use GAI to generate pro and con arguments for a debate that is relevant to the course.

B.Review course material and readings to augment and

strengthen these arguments.

C.Come to class prepared to engage in a debate with classmates.

D.After debate, discuss which arguments were strongest and why.

E.In-class discussion or written reflection: Students critically

analyze what makes a more effective argument.

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February 10, 2023 80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Collaborative Learning #3. Create Blog Posts https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVCBMXU

Assume the instructor has asked the students to post their weekly article reflections in a blog. ChatGPT or any other generative AI tool could generate a reflective blog post each week as well. Students or teams of students could compare their blog post reflections and ChatGPT. Final reflection papers could be written on this.



July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Collaborative Learning #2. Revise for new audience & reflect - graded assignment. Turn a two-page proposal into a one-page proposal for a new audience. Two Heads Again.

A.Have pairs of students use an assignment from earlier in the semester. Rewrite for new audience (e.g., proposal was originally written for a scientific audience and now needs to be rewritten for a lay-person).

B.Use GAI to help shorten the original proposal.

C.Critically analyze how GAI shortened the work given the new audie

D.Using GAI edits and their critical thinking, shorten original proposal to one page. E.Utilize (e.g., headings, sub-headings, bulleted lists or tables) to make the writing easy for the new audience to read quickly.

F.Students write a reflection on how and why they modified their original proposal for the new audience, including how they were able to improve on what GAI

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April 4, 2024

Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)
Collaborative Learning #4. Blogging and
Journaling

Jose Antonio Bowen and C. Edward Watson tps://www.press.jhu.edu/books/title/53869/teaching

Record weekly course reflections in a blog or a journal. Then have students get feedback from both a peer and ChatGPT. Have students write one or more reflections on the difference on feedback offered.

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with AI

April 4, 2024

Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)
Collaborative Learning #5. Summary

Comparisons Jose Antonio Bowen and C. Edward Watson https://www.press.jhu.edu/books/title/53869/teaching-ai

Ask teams of 3 students to use different AI tools to make summaries of one or more readings. Have them meet FTF or in a synchronous setting and defend their AI tool summary as the best summary. Next have them attempt to improve or refine one of the summaries, pool the respective summaries into a list of key points, or create a new best of summary. Perhaps pool all the team summaries across all the articles.



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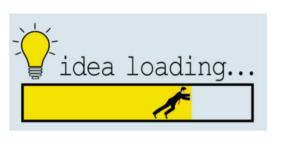
April 4, 2024
Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)

Collaborative Learning #6. Human vs. AI
Jose Antonio Bowen and C. Edward Watson
https://www.press.jhu.edu/books/title/53869/teaching-ai

Ask students to write a paragraph, article abstract, short paper, poem, lecture summary of key points, etc. both with and without AI. Next share the artifact with a partner. Each person attempts to identify the human and AI elements. Finally, they discuss how either draft document could be improved.



CREATIVE THINKING



July 23, 2023 101 creative ideas to use AI in education, A crowdsourced collection ndra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). o use A1 in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. https://doi.org/10.5281/zenodo.8355454 Creative ideas to use Al in education

105 106

July 23, 2023

101 creative ideas to use AI in education, A crowdsourced collection

Creative Thinking #1.

https://doi.org/10.5281/zenodo.8355454 Using Al tools in an

107

108

July 23, 2023

101 creative ideas to use AI in education, A crowdsourced collection

Creative Thinking #2.

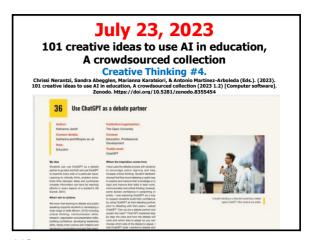
Abegglen, Marianna Karatsiori, & Antonio Martinez-Arboleda (Eds.). (2023).

A In education, A crowdsourced collection (2023 1.2) (Computer software).

Zenodo. https://doi.org/10.5281/zenodo.83592.







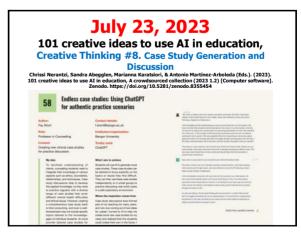


July 23, 2023

101 creative ideas to use AI in education
Creative Thinking #6. Student-led Case discussions
with ChatGPT Prompts
(AI can help focus, is reliable, nudge).
Chrissi Nerantzi, Sandra Abeggler, Mariania Karatsiori, & Antonio Martinez-Arboleda (Eds.). (2023).
101 creative ideas to use in Antonio Martinez-Arboleda (Eds.). (2023).
2010 creative ideas to use in Christian Caratsiori, & Antonio Martinez-Arboleda (Eds.). (2023).
2011 creative ideas to use in Christian Caratsiori, & Antonio Martinez-Arboleda (Eds.). (2023).
2012 creative ideas to use in Christian Caratsiori, & Antonio Martinez-Arboleda (Eds.). (2023).
2013 creative ideas to use in Christian Caratsionio (Computer software).
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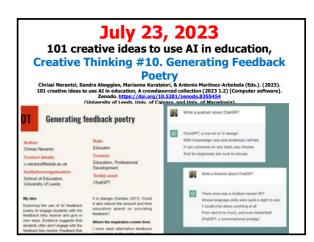
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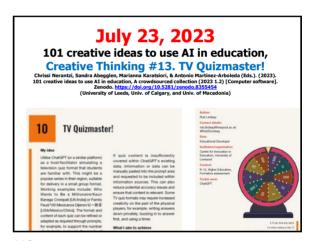


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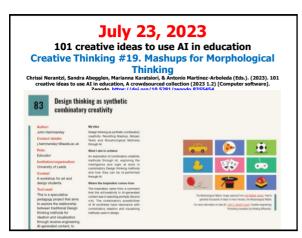


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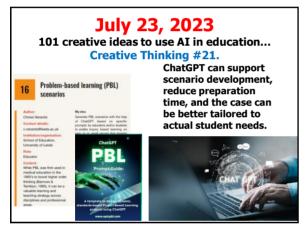




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July 18, 2023

Center for Teaching Innovation, Cornell University CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy

://teaching.comell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-echttps://teaching.comell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_2.pdf

Creative Thinking #22. Brainstorm Ideas for Assignment.

A.Use GAI to brainstorm ideas for an assignment that is relevant to the course (e.g., topics for a research paper, research study ideas, new business ideas, marketing taglines, etc.).

B.Students evaluate the ideas based on the established criteria for the assignment.

C.Students further develop their preferred idea and complete the assignment.

D.In-class discussion or written reflection: Students critically analyze the usefulness of AI in the brainstorming process.

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Script Creator and Developer

Brave People Option: Cool YouTube Video Creation

You are encouraged to use ChatGPT or some other generative AI tool or platform in the development of your script and other associated work. You will turn in a 2 page single-spaced summary reflection of your design (3-4 pages if with a partner) along with a link to your video or a way to download it. If you utilized an AI tool or platform to support your efforts, please use appropriate citations. Your video and paper will be graded according to the dimensions listed below.

August 15, 2023

ChatGPT and generative AI:

25 applications in teaching and assessment Seb Dianati & Suman Laudari, Charles Darwin University

Creative Thinking #24. Generate Case Studies

A.Design four real-world case studies on supply and demand for my first-year microeconomics class.

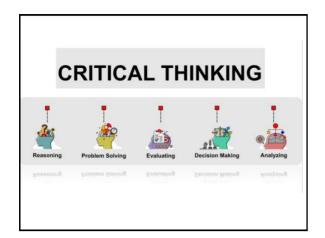
B.Include answers to the supply-and-demand problem.

C.Include a lesson plan associated with the case studies for an online class. Include case studies that students can connect to in their real life.

 $\ensuremath{\mathsf{D.Outline}}$ learning outcomes for the class and place them in front of each case study.



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January 8, 2024

Critical Thinking #1: **Critique Starter Text and Comments**

Brave People Option: Journal Review and

Critique and Interview. Feel free to utilize generative AI tools like ChatGPT or ChatPDF to generate starter text and up to three quotes in your paper as long as they are marked or you have reworded them and cited them properly. If you utilized ChatGPT or some other generative AI platform, please cite it

OpenAI (2023). ChatGPT (March 14 version) [Large language modell, https://chat.openai.com/



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January 8, 2024 Critical Thinking #2:

Critique of Critiques

Brave People Option: (Even Braver Option). **ChatGPT Journal Review and Critique and**

Interview. Or perhaps put the articles or the entire special issue into ChatPDF, ChatGPT, or other generative AI tool or platform and have it do a critique or a book review. If you choose this route, you are to write a 2-3 page single-spaced reflection paper, review, or critique of what generative AI produced.



January 8, 2024 Critical Thinking #3:

Report Reviews or Critiques

Brave People Option: Report or Strategic Plan Analysis and Evaluation.

The entire strategic plan report into ChatPDF, ChatGPT, or other generative AI tool or platform and have it do a critique or a review. If you choose this route, you are to write a 2-3 page single-spaced reflection paper, review, or critique of what generative AI produced.



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January 8, 2024

Critical Thinking #4:

Research or Study Report Generater

Even Braver People Option: Naturalistic Studv.

Note: You can use ChatGPT to generate starter text or 2-3 comments or quotes but be sure to cite such work properly. Or perhaps have ChatGPT write your study report. If you choose this route, you are to write a 2-3 page single-space reflection paper, review, or critique of what generative AI produced.



January 8, 2024 Critical Thinking #5:

Software and Technology Tool Reviewer

Brave People Option: Software or Technology Tool or Platform Review.

If you utilized ChatGPT or some other generative AI platform for any aspect of this assignment, please cite it appropriately. Perhaps you might put the articles or reviews on a technology tool into ChatPDF, ChatGPT, or other generative AI tool or platform and have it do a critique or a book review. If you choose this route, you are to write a 2-3 page single-spaced reflection paper, review, or critique of what generative AI produced.



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January 8, 2024

Critical Thinking #6: List Generator: Issues and Challenges Paper

Brave People Option: Analysis of Issues/Challenges in the Field of Learning Technology.

You are encouraged to use ChatGPT or some other generative AI tool or platform in the development your issues and challenges paper. You utilize ChatGPT or similar to generate a list of key issues and challenges. That will go in a table in your paper. Then you are to write a paper using this starter list by conducting research on each of those items. If you utilized an AI tool or platform to support your efforts, please use appropriate citations.



August 21, 2023
Critical Thinking #8:

Issue Debate Generation

Brave People Option: Issue Debate Generator. Have ChatPDF, ChatGPT, or other generative AI tool or platform write a paper about a topic is debated in the field of learning, design, and technology. Next, write a 3-4 page reflection paper or critique of what generative AI produced (single-spaced preferred). I want you to include both your paper and the paper generative AI

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July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Critical Thinking #9 Computer Programming: Debugging skills - preliminary to coding assignments in intro classes (Compare Human and **AI Solutions)**

Provide students with snippets of code that have clear errors or issues with them or strange error messages. Teach how to use GAI as a debugging tool to help out in these situations.

Ask students to:

Ask students to:

1.Run the snippets of code through an interpreter or compiler.

2.Students diagnose the issue themselves based on the output and write a short description of the problem.

3.Run the code snippet through GAI and construct a prompt to ask for its description of the problem.

4.Compared the problem.

4.Compared the compared to the written description: was it sufficient, and does it he output of the model with the written description: was it sufficient, and does it lead to a different code change than the original student suggestion?

July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial** Intelligence for Education and Pedagogy

Critical Thinking #12. Understanding assumptions common in engineering analyses. Students ask ChatGPT: Prompt GAI with a question such as: "What are the underlying assumptions in beam theory?"

1.ChatGPT will return: "Linear Elasticity: Beam theory assume. that the material of the beam behaves elastically and follows Hooke's law. It assumes that the beam material is isotropic and that it deforms linearly under applied loads.

Then ask students to reflect on and assess the accuracy of the ChatGPT response.

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July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Critical Thinking #13. Mathematical Proofs: With Gen AI as an assistant.

Students ask Prompt GAI to "Prove that the solution to the 2D steady-state heat equation is unique.

ChatGPT will return: To prove the uniqueness of the solution to the 2D steady-state heat equation, we can use the method of contradiction. Consider the 2D steady-state heat equation with homogeneous Dirichlet boundary conditions: $P^{\prime}u=0, \text{ where } u(x,y) \text{ represents the temperature distribution in the xy-plane, and } P^{\prime} \text{ is the Laplacian operator. Suppose there are two solutions to this equation, denoted as } u1(x,y) \text{ and } u2(x,y), \text{ that satisfy the same boundary conditions}$

Then ask students to assess the accuracy of the solution. Follow up by having students test out different prompts; for example: "Is the solution to the 2D steady-state heat equation unique?

July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Critical Thinking #14. Summarize arguments and produce themes.

A.Use GAI to summarize a meeting transcript into key themes (e.g., congressional meetings, central banker transcripts, corporate earnings reports, etc.).

B.Students produce a memo that prioritizes the themes and adds contextual information on power dynamics or other relevant background information. C.In-class discussion or written reflection: Students critically analyze the usefulness of AI in the writing process.

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July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Critical Thinking #15. Assess validity of sources for accuracy and bias.

A.Use GAI to find sources for an assignment relevant to the

B.Students review sources, evaluating the usefulness and relevance to the assignment.

C.Students conduct a similar search using library resources. D.Students produce an annotated bibliography that assesses the quality, relevance, and reliability of GAI and library

E.In-class discussion or written reflection: Students critically analyze the usefulness of AI to find reliable and unbiased

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July 18, 2023

Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial** Intelligence for Education and Pedagogy

Critical Thinking #17. Generate outlines for written

A.Have GAI to assist them in generating an outline for report. B.Emphasize that GAI should be used as a tool for inspiration and guidance, rather than relying solely on its suggestions. C.Students modify and improve their outline, then evaluate it based on their logical structure, coherence, and adherence to the assignment requirements.

D.In-class discussion or written reflection: Students critically analyze the usefulness of AI in the writing process

July 18, 2023

July 18, 2023

Center for Teaching Innovation, Cornell University

CU Committee Report: Generative Artificial

Intelligence for Education and Pedagogy

Critical Thinking #16. Editing Skills - pre-work for class discussion, in-class activity. (i.e., Two Heads

A.Have students edit a paragraph or short paper on their own, using a prompt that makes sense for your course (e.g., make this paragraph more concise, strengthen the argument in this paragraph, explain the

B.Students run the original paragraph through GAI and ask it to do the same thing that students did in the first step.

C.Have students review their editing choices as compared to the editing choices made by GAI and submit a final revised paragraph.

D.Students complete a written or in-class reflection on why they included their final edits and how they were able to improve on v GAI provided.

are Better than One).

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Center for Teaching Innovation, Cornell University **CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy**

Critical Thinking #18. GAI as a Peer Editor.

A.Ask GAI to offer constructive feedback on their writing, with specific suggestions for where and how to make improvements in grammar, logic, and flow (tailor this prompt to your desired outcomes).

B.Students review the GAI feedback and make edits.

C.Students respond to several reflection prompts including: A. Which suggestions find effective? Not effective? Why?

B. As you review the feedback, did GAI help you notice patterns in the kinds of suggestions that you received? If so, identify and reflect on these patterns? Did it miss some?

C. How do you intend to apply the feedback you found effective in future writing?

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CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy

Critical Thinking #19. Compare and Contrast Content

A.Use GAI to generate content on a particular topic that is relevant to the course (e.g., academic writing vs. business writing, Greek civilization vs. Roman civilization, differential calculus vs. integral calculus).

B.Assign a reading or book chapter on the same content. C.In-class discussion or written reflection: Students critically analyze what GAI got correct, incorrect, or missed completely.

November 23, 2023

Critical Thinking #20. Using AI Text as Prompts for Critical Analysis (TextGenEd)

Juan Pablo Pardo-Guerra, UC San Diego https://wac.colostate.edu/repository/collections/textgened/rhetorical-engagements/using-ai-text-as-prompts-for-critical-analysis/

In this assignment, students are provided with an AI-generated text relevant to a course's topics and focus and then asked to comment, review, and expand on it using a feature such as "track changes." In engaging with the AIgenerated text, students review their knowledge, offer critiques, modify theoretical and empirical claims, and provide concrete examples that illustrate or disprove the



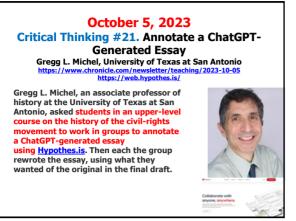
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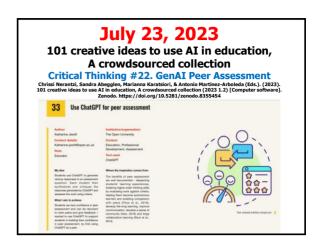
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July 18, 2023

Center for Teaching Innovation, Cornell University











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Poll 5. Part #2 question...

How many new teaching, tutoring, or training ideas did you get from this session? tutoring?

a. None
b. 1 or 2
c. 3 to 5
d. 6 to 10
e. More than 10

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Generic to Specific



How Faculty Can Harness Generative AI for Enhanced Learning: **Part 3 From Generic to Specific**

Curtis J. Bonk, IST Professor Indiana University cjbonk@indiana.edu; http://curtbonk.com/



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August 28, 2024

Guidelines for Generative AI

MIT Management Teaching & Learning Technologies

MIT

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Use to Generate

You can use these tools to generate a wide range of co

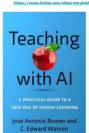
- · Computer programming source code
- Cover letters and resumes
- Essays or short written assignments
- Instructions for a learning activity
- . Instructions for a learning activity · Learning objectives
- Metaphors and analogies to explain complex concepts
- Outlines of papers or presentations Rubrics
- · Scripts for a podcast or video
- . Summaries of text like articles or meeting notes
- Survey questions

April 4, 2024

Teaching with AI:

A Practical Guide to a New Era of Human Learning (2024) Jose Antonio Bowen and C. Edward Watson

https://www.pr Marybeth Gasman, Forbes



Just as the internet changed "our relationship with knowledge, AI is going to change our relationship with thinking."

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January 8, 2024

Activity #1. Brave People Option: Reflection Paper Starter Text and Quotes

Brave People Option: Tidbit and Video Reflection Paper

You can use **ChatGPT** to **generate starter text or 2-3 comments or quotes**, but be sure to cite such work properly. For example, citations in text: (ChatGPT, personal communication) or (OpenAI, 2024).

OpenAI (2023). ChatGPT (March 14 version) [Large language model]. https://chat.openai.com/

August 15, 2023

ChatGPT and generative AI:

25 applications in teaching and assessment Seb Dianati & Suman Laudari, Charles Darwin University

Activity #2. Provide Explanations and Reflection Questions.

A.Provide the 10 most common misconceptions and explanations of Carl Jung's work in psychology and how it differs from Sigmund Freud's.

B.Include a Q&A list of prompts for my first-year unit in educational psychology to evaluate their knowledge after class on the topic above.



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August 15, 2023

ChatGPT and generative AI: 25 applications in teaching and assessment Seb Dianati & Suman Laudari, Charles Darwin University

Activity #3. Generate Code Snippets.

Ask ChatGPT: How do I make an HTTP request in JavaScript? Answer as if you were teaching first-year programming and offer examples, solutions, issues and common mistakes.



November 23, 2023

Activity #5. Critical Assessment and Analysis
Exercise (TextGenEd)

Nathan Murray, University of Mississippi

Elisa Tersigni, University of Toronto Mississauga
https://wac.colostate.edu/repository/collections/textgened/ai-literacy

This assignment asks first-year critical writing students to evaluate the reliability, factuality, and internal reasoning of three anonymized texts, one written by AI, that present conflicting opinions or information. By considering the strengths and weaknesses of these texts independent of contextual information, students are encouraged to develop critical reading skills as well as an awareness of the prevalence of misinformation from both human-generated and AI-generated sources online today.





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November 23, 2023

Activity #7. Promoting Ethical AI Literacy in an Undergraduate Course (TextGenEd) Mike Frazier, Michigan State University, Lauren Hensley, Ohio Wesleyan University

https://wac.colostate.edu/repository/collections/textgened/ethical-considerations

This assignment proposes the integration of generative AI tools, such as ChatGPT, into a college learning and motivation strategies course, with the dual focus of enhancing metacognition and promoting ethical AI use. Students engage with AI-generated artifacts, compare outputs with their own work, and reflect on the implications of AI in their academic and professional lives. The approach can be adapted for various courses, encouraging a critical examination of AI's role in learning and its potential impact on future careers





July 12, 2023

Activity #8. Generate Plans, Guides, Checklists, and Instructional Design Materials Daniel Stanford's Substack

ttps://danielstanford.substack.com/p/incorporating-ai-in-teaching-

Example Activity: Generate guides, checklists, plans, or instructional materials.

They could be used by students as part of an assignment where they develop similar materials to demonstrate their mastery of the subject matter.

Example prompts:

•Create a nutrition plan for a diabetic patient that incorporates the following foods. [Insert foods here.] Provide recipes for breakfast, lunch and dinner for each day of the week.

•Write 20 quiz questions that test past-tense verb conjugation for ESL learners with moderate fluency.

•Create a checklist of dos and don'ts for an entrepreneur documenting business expenses for tax purposes.

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August 31, 2024

Brave People Option: Activity #9. AI Case Analysis

• Brave People Option: Case Situations or Problems

Write 3 case situations or vignettes related to your current or most recent job setting (each will be about one page long single-spaced). In these cases, you will point out the situation or problem in 1-2 paragraphs as well as the key questions or issues.

 AI Option: Adventurous students might ask ChatGPT to solve 3 cases situations that they write up or read about. If you do this, please reflect on the solution(s) that ChatGPT or some other platform provided as well as the course related concepts in the case or the solution. And you could ask two or three different platforms (e.g., ChatGPT, Claude, Microsoft Copilot, Gemini, etc.) and compare them.



August 31, 2024 Brave People Option:

Activity #11. Super Summary https://curtbonk.com/Instructional-Strats-R546-2024.htm

Brave People Option: Super Summary

Search. In the Super Summary Search, you might conduct a library search on a topic that you find important (this must include at least 10 articles (at least half of these must be research-based articles). In addition, I would like for you to write a one paragraph summary for about 3-5 of these articles, wherein you summarize the article and discuss its importance to the field and to yourself and your colleagues.



 AÍ Option: Adventurous students might ask ChatGPT or ChatPDF to also generate a super summary and compare and contrast the two papers. The article summaries might be made available as a study guide.

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February 10, 2023 80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #13. Think, Pair, Share

Students reflect of a topic and share with a partner. Then they could query ChatGPT and discuss their findings before sharing with the class.



February 10, 2023 80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #15. List Generator Discussions

Have ChatGPT or any other generative AI tool generate a list (e.g., ice breakers, student paired interview questions, book or article recommendations, course guidelines or objectives, course objectives, etc.) and then engage students in small group and then whole class discussions.



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February 10, 2023

80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #16. Writing Feedback and **Assistance** https://www.amazon.com/80-Ways-Use-0

ChatGPT or any other generative AI tool might assist with student papers and essays to identify areas of potential improvement. Feedback might be offered on the grammar, wording, content, overall organization, or ideas. Teams might discuss and revise their papers before submission. End with entire group conversation.



February 10, 2023

80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #18. Language Conversation Partners

Generative AI might also translate articles and blocks of text into the target language. Next have students work in teams to improve the drafts through rewriting and discussion.



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February 10, 2023 80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #19. Grade ChatGPT Response

Use ChatGPT to create a document like an essay, report, plan, etc., and have students grade the results using a rubric or a checklist.



February 10, 2023 80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #20. Q&A Sessions

Hold a Question and Answer session where the instructor answers student questions and then ChatGPT answers them. Next, either the instructor would have a chance to amend his/her answer or the students would discuss discrepancies in the answers provided and ask a follow-up question.



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February 10, 2023 80 Ways to Use ChatGPT in the Classroom Stan Skrabut, Ed.D.

Activity #21. Debate Assistance

Students could ChatGPT to generate arguments and counterarguments before or during a debate situation on a given topic. In addition, an opposing

group could ask ChatGPT for a rebuttal.



December 3, 2023

ChatGPT for Teachers: AI in the Classroom: Harnessing the Power of ChatGPT for Effective Teachings Pacifico Zanzara (K-12 or higher ed)

Activity #22. Interactive Lessons

ChatGPT or any other generative AI tool could be used to generate interactive and engaging content including science experiments, simulations, historical scenarios, controversial cases situations, creative writing prompts, etc.



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December 3, 2023

ChatGPT for Teachers: AI in the Classroom: Harnessing the Power of ChatGPT for Effective Teachings Pacifico Zanzara (K-12 or higher ed) **Activity #24. Gamified Learning**

Gamify course activities by having ChatGPT assist in turning the learning into an engaging game, fun trivia quiz, treasure hunt, or some type of

competitive problem-solving challenge.



August 28, 2024

Creative Explorations, WAC Clearinghouse

Activity #27. Professional Writing for Healthcare

Original Assignment Context: mid-level undergraduate professional writing for healthcare course

In this project, via a series of scaffolded assignments, students selected and read medical journal articles and then drafted and revised research summaries for lay audiences, exploring, analyzing, and integrating the use of AI writing



exploring, analyzing, and integrating the use of AI writing systems (e.g., ChatGPT, QuillBot Summarizer, etc.) throughout the process. This assignment is adaptable to a variety of undergraduate and graduate courses. You will first read and write (on your own, no AI) a summary (350-550 words) of the article in a press release or blog/newsletter format for a lay audience that you identify (e.g., pregnant vomen reading Pregnancy magazine; parents who subscribe to blog about asthma). We will have a peer respond on that draft in classification.

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August 28, 2024

Creative Explorations, WAC Clearinghouse

Activity #28. AI in First Year Writing Courses

Marc Watkins, University of Mississippi

Original Assignment Context: First-year writing course Al-assisted writing is only permitted in this course provided a student uses an AI writing assistant as a collaborative tool to help the student with the development and advancement of their own writing process. Collaborating with an AI writing assistant can include brainstorming, outlining, and drafting, so long as there is substantial writing, research, and composing by the student which is not generated solely by the AI. 'AI-generated writing' means there has been little or no involvement from the student as an author, with the majority of the writing being generated by an AI.





August 28, 2024

Rhetorical Engagements, WAC Clearinghouse Activity #29. Writing Against the Machine:

Debating with ChatGPT

Justin Lewis and Ted Wayland, Olympic College

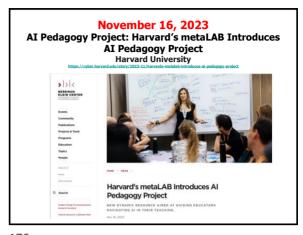
Original Assignment Context: First-year writing course.

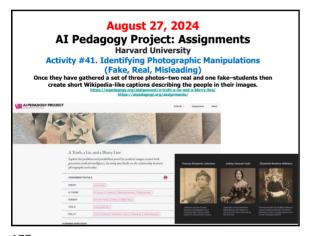
This assignment challenges students to use LLMs to map the This assignment challenges students to use LLMs to map the counterarguments to their main claims through a process of counterclaiming. By writing prompts that position the AI as argumentative adversary, students can refine, extend and evolve their thesis over the course of the research, drafting and revision processes. This lesson is focused on 100-level composition courses but could be adopted to any undergraduate or graduate course focused on argument and claim making.

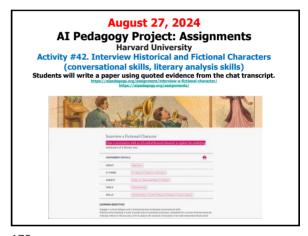


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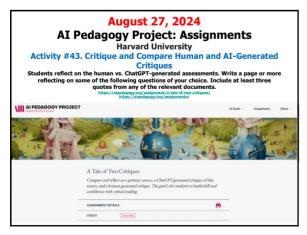






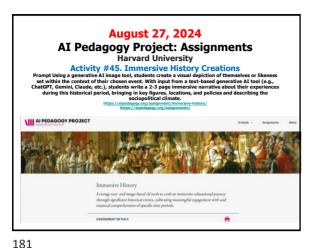


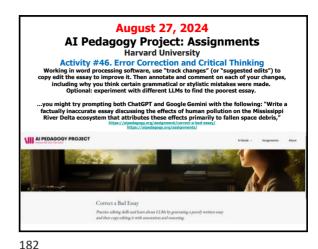
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179 180





Activity #7: Will instructors be replaced by Generative AI?

- a. Definitely not!
- b. I will wait and see...
- c. Perhaps some instructors might.
- d. Most entry level instructors will likely be replaced.
- e. All instructors should fear losing their jobs.



Poll #6. Closing questions...

- 4. How many ideas did you get from this session for using ChatGPT or other Generative AI tools in your teaching, training, or tutoring?
 - a. None
 - b. 1 or 2
 - c. 3 to 5
 - d. 6 to 10
 - e. More than 10



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Activity #8 (Paired): Which ideas would you like to use? Self-Managed Learning and Al: A New Way to Learn



185 186





