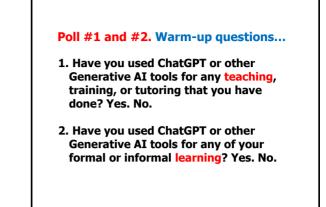
How Faculty Can Harness Generative AI for Enhanced Learning

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



1



2

Poll #3. Warm-up questions... 3. How often do you use ChatGPT or other Generative AI tools? a. Gobs of times each day. b. Nearly every day. c. About once a week. d. About once a week. d. About once a month. e. Just once or twice to test it out. f. Never. Never. Never.











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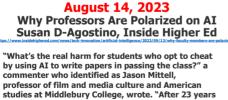
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of teaching, I've come to realize that my job is neither to police students who don't want to learn nor to rank students via grades, but to maximize learning for those who want to learn and try to inspire the others to try to join in the learning."

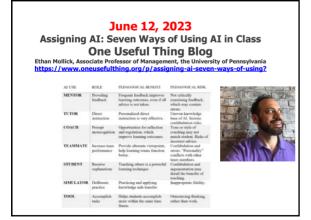




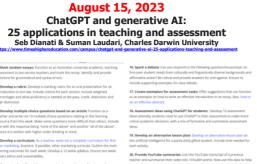










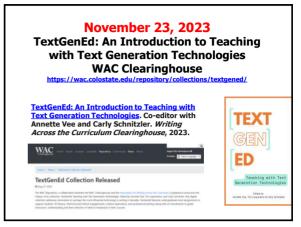


 Generate short-form (short answer) quiz questions and tasts quest Can you generate adjuzes and tast questions on digital learning design) for simple, medium and tough questions. Ensure these are not multiple-choir questions. One answer is correct. Provide tailored solutions for each answ G. Generate discussion prempts: Can you generate discussion prompts

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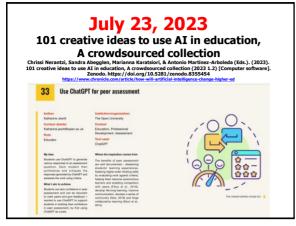


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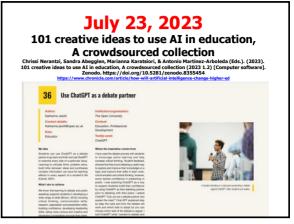


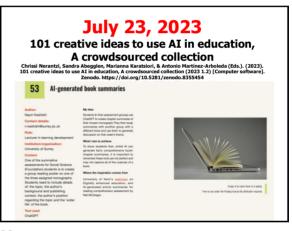


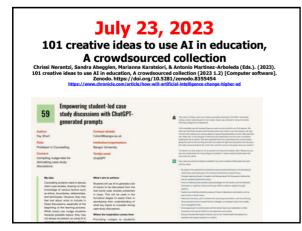






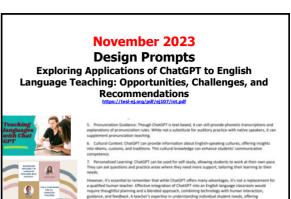




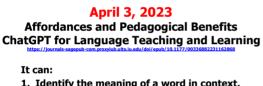






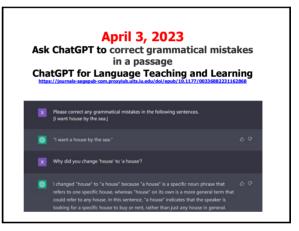


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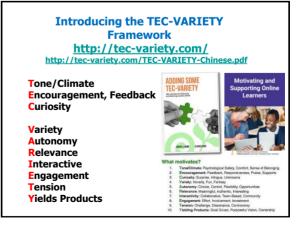


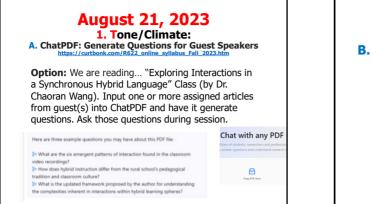
- 1. Identify the meaning of a word in context,
- 2. Correct and explain language mistakes,
- 3. Create texts in various genres (e.g., emails, stories, recipes),
- 4. Develop quizzes,
- 5. Annotate texts, and
- 6. Offer dictionary definitions, example sentences, and translations

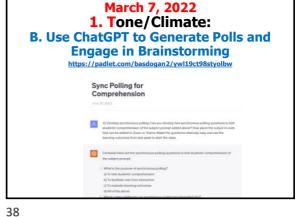
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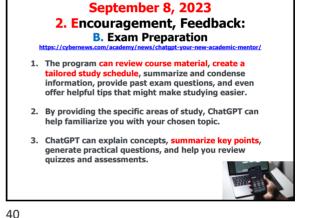


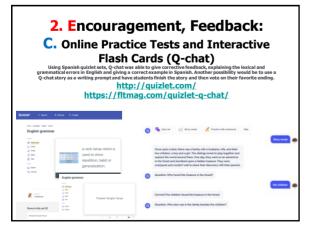






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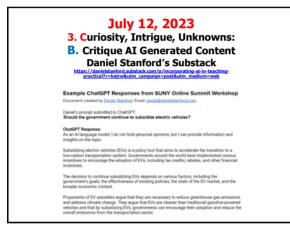


3. Curiosity, Intrigue, Unknowns: B. Critique AI Generated Content Daniel Stanford's Substack

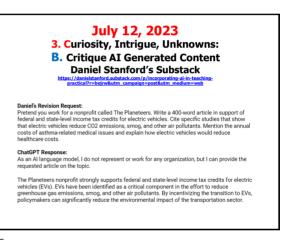
Critiques of AI-Generated Content Example Activity: Critique AI-generated arguments.

- **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.

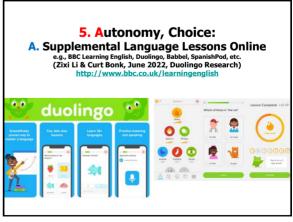
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August 21, 2023

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.

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August 21, 2023

5. Autonomy, Choice: D. Brave People Option: Learning Environment Critique and Analysis https://curtbonk.com/R622_online_syllabus_Fall_2023.htm

Brave People Option: Feel free to utilize generative AI tools like ChatGPT or ChatPDF to generate starter text and up to three quotes in your **Learning Environment Critique and Analysis** paper as long as they are marked or you have reworded them a cited them properly.



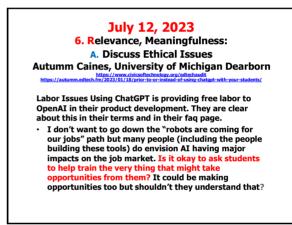
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5. Autonomy, Choice: C. Brave People Option: Book Review

August 21, 2023

Brave People Option: Put a PDF of the chosen book or books into ChatPDF, ChatGPT, or other generative AI tool or platform and have it do a **critique or a book review** on it. Next, write a reflection paper, review, or critique of what generative AI produced. A mini-glossary of personal definitions for 20-25 key terms and concepts found in this book might be included in an appendix at the end of the review.

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October 5, 2023 7. Interactive, Collaborative: A. 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 https://www.thonik.com/mwsitetr/taching/2023-10-05

- 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.
- big the second secon



July 12, 2023 7. Interactive, Collaborative: B. 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.

July 12, 2023

7. Interactive, Collaborative: C. 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.]

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7. Interactive, Collaborative: D. ChatGPT as Tool or Thought Partner: ChatGP has entered the classroom: how LLMs could transform education

Andy Extance, Nature

November 15, 2023

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 collection of creativity-focused chatbots based on ChatGPT...at Arizona State University (ASU). Beghetto prompts the bots to take on various personas to encourage creativity – for example, by deliberately challenging someone's assumptions. One student discussed various dissertation topics with the chatbots.



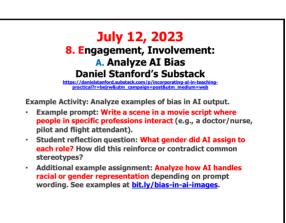
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August 31, 2023 7. Interactive, Collaborative:

E. Role Playing Challenging Conversations https://openai.com/blog/teaching-with-ai

Dr. Helen Crompton, Professor of Instructional Technology 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 point out weaknesses in their arguments, a recruiter who's interviewing them for a job, or a new boss who might deliver feedback in a specific way.

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July 12, 2023

8. Engagement, Involvement:

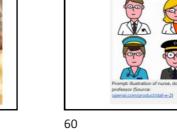
A. Analyze AI Bias

Daniel Stanford's Substack

anford via DALL-E 2

58





DALL-E 2 Examples



May 11, 2020

9. Tension, Challenge, Controversy, etc.:

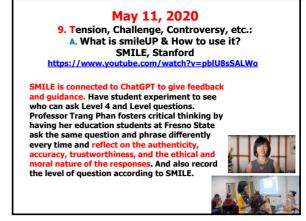
A. What is smileUP & How to use it?

SMILE, Stanford https://ask.smile.stanford.edu/

Specifically, SMILE will be used to assess

student's critical thinking and GPT 3.5 to provide constructive feedback to the questions. Accordingly, students will be given access to SMILE (https://ask.smile.stanford.edu/) to ask questions of their own. SMILE will rank the student's question from level 1 (i.e., the most basic) to level 5 (i.e., the most critical) based on its breadth and depth and its analytical nature using the Bloom Taxonomy criteria. 50 or more questions and write a reflection report on the breadth and depth of the response of ChatGPT

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May 25, 2023

9. Tension, Challenge, Controversy, etc.: B. ChatGPT as Co-Pilot, Normalize Citing AI https://www.pearson.com/en-us/higher-education/insightsand-events/teaching-and-learning-blog/2023/05/whateducation-experts-are-saying-about-chatgpt.html#:

When used properly, ChatGPT can be a student's copilot. It can help them brainstorm, improve phrasing, and learn new concepts...Panelist Anna Mills of City College of San Francisco said she teaches critical AI literacy and believes in "setting a norm of transparency and labeling of AI text." She recommends students clearly label any portion of an assignment that was generated with ChatGPT or another AI tool-just like they would cite other sources.



October 5, 2023 10. Yields Products, Goals:

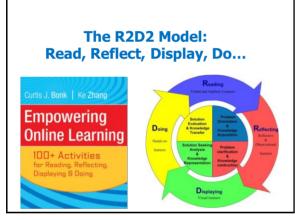
A. Support for Job Applications and Resumes Grace Heneks, a lecturer in the English department at Texas A&M University https://www.chronicle.com/newsletter/teaching/2023-10-05

Students were asked to work with ChatGPT in a technical professional-writing course and a writing about literature course. In both courses, she says, students were underwhelmed by the product. 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. The same held true in her writing course when she used ChatGPT in class and also when students reviewed a ChatGPTgenerated essay.



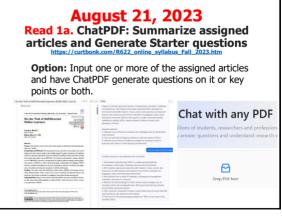












2. Reflective and **Observational Learners**

• Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives





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Chennai, India, likens teaching students about AI tools to teaching students how to use the internet responsibly. In her classroom, she advis 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 ans er. 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.



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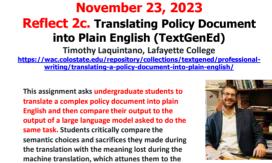
November 23, 2023

Reflect 2d. 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)





risks and benefits of LLM output. It can be adapted

to most disciplines and course levels.



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November 23, 2023 Reflect 2e. 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 co essay using an AI text generation tool, edit the essay using principles taught in class to improve the readability score of the generated content. Students are asked to share the final output along with visu istrate the comparison between the the generated content. This assign that demonstrations of the the vario 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?

November 23, 2023

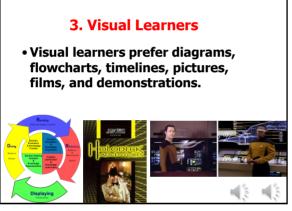
Reflect 2f. Decoding an AI Bot's Chatting Pattern (TextGenEd)

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

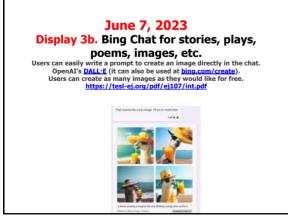
This 4-week assignment asks advanced undergraduate students to hold a sustained 'conversation' on a topic with an AI Chatbot to decode the pattern, limitations and possibilities of the AI-based writing technology. Students analyze their conversation, write a report, and make an oral presentation. The 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 experience.



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November 23, 2023

Reflect 2g. The Term Paper Turing

Test (TextGenEd)

Paul Fyfe, North Carolina State University

This assignment asks students to use an accessible language model to write their term papers—with the goal of fooling the instructor. While initially framed as something sneaky or as a shortcut for writing, the

assignment makes students confront and then reflect

n the unexpected difficulties, ethical dimension collaborative possibilities of computationally

and control of the possibility of the possibility assisted writing. It can use any web-based textgenerating platform, be adapted to various courses, and does not require significant technical knowledge.

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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
- Ask DALL-E to generate images based on idloms 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.

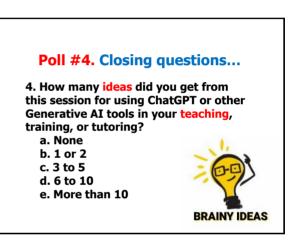
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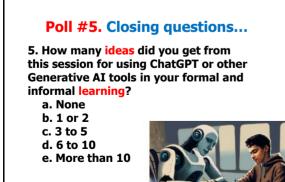


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in't do this alone.



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