

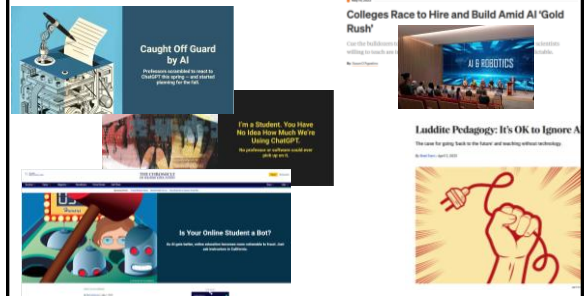
## Enhancing Teaching and Learning with Generative AI

**Curtis J. Bonk, IST Professor**  
**Indiana University**  
[cjbonk@indiana.edu](mailto:cjbonk@indiana.edu); <http://curtbonk.com/>



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## November 2022 to May 2025: AI, AI, AI, AI... AI in Higher Education News



2

**May 7, 2025**

**AI Literacy & Tools: Managing AI for Learning - Padlet**  
<https://padlet.com/laurenkelley6523/ai-literacy-tools-managing-ai-for-learning-b0jux1zs3g6idg2>



**AI Literacy & Tools: Managing AI for Learning - Padlet**  
 In this Padlet, we will share AI resources available to different audiences for support with teaching and learning by Lauren Kelley, Ph.D., instructional designer and Maria Bartoletti, Associate Librarian at the Delaware State University.



3

**January 11, 2025**

**These are the fastest-growing job titles, according to LinkedIn users,**

**By Auzinea Bacon, CNN**

<https://www.cnn.com/2025/01/11/business/ai-hospitality-growth-linkedin/index.html>  
 The top two jobs were **artificial intelligence engineer** and **artificial intelligence consultant**, respectively. Artificial intelligence has become the latest **Silicon Valley buzzword** as companies like OpenAI have released chatbots that can do everything from hold conversations to suggest recipes to remixing images — albeit with some occasional **high-profile mistakes**. (**Artificial intelligence researcher** also nabbed the No. 12 spot.)

**These are the fastest-growing job titles, according to LinkedIn users**

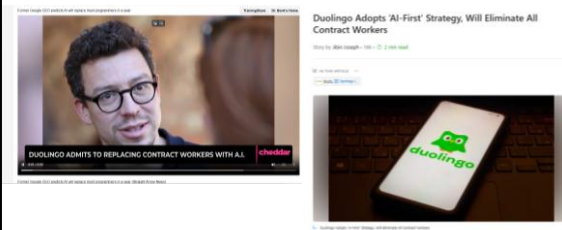


4

**April 29, 2025**

**Duolingo Adopts 'AI-First' Strategy, Will Eliminate All Contract Workers**  
**Jibin Joseph, MSN**

<https://www.msn.com/en-us/technology/artificial-intelligence/duolingo-adopts-ai-first-strategy-will-eliminate-all-contract-workers/ac-BAA2P5oa>  
 Former Google CEO predicts AI will replace most programmers in a year  
 Video (0:33): <https://curtbonk.com/doulingo2025.html>



5

**February 26, 2024**

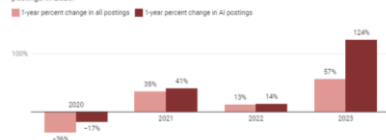
**AI Will Shake Up Higher Ed. Are Colleges Ready**

**Taylor Swaak, The Chronicle of Higher Education**

<https://www.chronicle.com/article/ai-will-shake-up-higher-ed-are-colleges-ready>

### Job Postings at Colleges

The number of AI-related postings on The Chronicle's jobs site soared in comparison with all job postings in 2023.



Note: Data limited to unique U.S. job postings on The Chronicle's jobs site that contained one or more of the following keywords in the job title and/or job description: "artificial intelligence," "AI," "bot," "machine learning," and "ML." All job types included. Duplicate postings were removed, and incomplete listings that did not include a country or state were not included. Data do not include self-service postings.

Chart: Taylor Swaak - Source: HCM software - Get the data - Created with Datawrapper

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# July 23, 2023

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

Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education. A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>  
<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>

### 36 Use ChatGPT as a debate partner

**Author:** Katherine Jewell  
**Contact details:** [katherine.jewell@open.ac.uk](mailto:katherine.jewell@open.ac.uk)  
**Role:** Educator  
**Institution/Organization:** The Open University  
**Context:** Education, Professional Development  
**Tools used:** ChatGPT

**My idea**  
Students can use ChatGPT as a debate partner to practise and test out use of ChatGPT to generate new ideas of a particular topic. Learning to critically think, problem solve, hold their argument, along with gathering complex information can have for learning effects in many aspect of a student's life. (Smith, 2023)

**What I aim to achieve**  
We know that learning to debate and public speaking is an essential skill in many careers, with a wide range of skills (Brown, 2016) including critical thinking, communication skills, research, negotiation and presentation skills, building confidence, developing leadership skills, being able to listen and understand and

**When the inspiration comes from**  
I have often in debate process with students partner to practise and test out use of ChatGPT to generate new ideas of a particular topic. Learning to critically think, problem solve, hold their argument, along with gathering complex information can have for learning effects in many aspect of a student's life. (Smith, 2023)

**What I aim to achieve**  
We know that learning to debate and public speaking is an essential skill in many careers, with a wide range of skills (Brown, 2016) including critical thinking, communication skills, research, negotiation and presentation skills, building confidence, developing leadership skills, being able to listen and understand and



It is possible to interact with ChatGPT in a way that allows you to explore a range of topics and generate ideas. (ChatGPT) (Open University on video)

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# July 23, 2023

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<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>

### 48 Using DALL-E 2 to enhance student understanding of terms and concepts

**Author:** John Parkin  
**Contact details:** [john.parkin@brun.ac.uk](mailto:john.parkin@brun.ac.uk)  
**Role:** Senior Lecturer/Practitioner  
**Institution/Organization:** Anglia Ruskin University  
**Context:** Higher education  
**Tools used:** DALL-E 2

**My idea**  
Students select a term or concept to represent visually. They then write words describing this and enter them into DALL-E 2 to generate an AI-generated image. Following the creation of the image, students write a five-minute essay describing the image and linking it to the original term/concept. As part of this, learners consider how their own understanding of the term/concept is enhanced by the AI-generated image. Students then

**What I aim to achieve**  
This activity will help students become reflective and consider how they can improve their writing and conceptual understanding. It will support learners in the future working with AI to enhance their learning.



Using DALL-E 2 to generate images related to terms and concepts. (DALL-E 2) (Open University on video)

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# July 23, 2023

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

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<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>


### 53 AI-generated book summaries

**Author:** Neelam Kaur  
**Contact details:** [neelam.kaur@brun.ac.uk](mailto:neelam.kaur@brun.ac.uk)  
**Role:** Lecturer in learning development  
**Institution/Organization:** University of Bruny  
**Context:** One of the summative assessments for Social Science (Foundation) students is to create a group reading poster on one of the three assigned monographs. (Students need to include details of the topic, the author's background and publishing context, the author's position regarding the topic and the 'water' of the book.)

**My idea**  
Students in their assessment groups use ChatGPT to create chapter summaries of their chosen monograph. They then engage with another group with a different book and use their to generate discussion on their own terms.

**When the inspiration comes from**  
To show students that, whilst AI can generate highly comprehensive book chapter summaries, it is important to remember that book and chapter summaries may not capture all of the nuances of a book.

**What I aim to achieve**  
To show students that, whilst AI can generate highly comprehensive book chapter summaries, it is important to remember that book and chapter summaries may not capture all of the nuances of a book.



Help of AI can be used to create a summary of a book. (ChatGPT) (Open University on video)

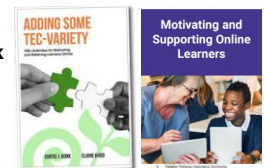
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## Introducing the TEC-VARIETY Framework

<http://tec-variety.com/>  
<http://tec-variety.com/TEC-VARIETY-Chinese.pdf>

**Tone/Climate**  
**Encouragement, Feedback**  
**Curiosity**

**Variety**  
**Autonomy**  
**Relevance**  
**Interactive**  
**Engagement**  
**Tension**  
**Yields Products**



- What motivates?**
1. Tone/Climate: Psychological Safety, Control, Sense of Belonging
  2. Encouragement: Feedback, Responsiveness, Praise, Support
  3. Curiosity: Surprise, Intrigue, Unknowns
  4. Variety: Novelty, Fun, Variety
  5. Autonomy: Choice, Control, Flexibility, Opportunities
  6. Relevance: Meaningful, Authentic, Interesting
  7. Interactivity: Collaborative, Team-Based, Community
  8. Engagement: Effort, Involvement, Investment
  9. Tension: Challenge, Dissonance, Controversy
  10. Yielding Products: Goal Driven, Purposeful Vision, Ownership

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# September 2022

## Commonwealth of Learning

Khoo, E., & Bonk, C. J. (2022). *Motivating and Supporting Online Learners*. Burnaby, BC, Canada: Commonwealth of Learning. [Free book available: http://hdl.handle.net/11599/4481](http://hdl.handle.net/11599/4481) and free course available: <https://colcommons.org/welcome/coursedetails/8>; <https://www.colvee.org/>



23

# 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.

Here are three example questions you may have about this PDF file:

- >> What are the six emergent patterns of interaction found in the classroom video recordings?
- >> How does hybrid instruction differ from the rural school's pedagogical tradition and classroom culture?
- >> What is the updated framework proposed by the author for understanding the complexities inherent in interactions within hybrid learning spheres?

**Chat with any PDF**

Upload PDF here

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**September 8, 2023**

## 2. Encouragement, Feedback:

### A. Exam Preparation

<https://cybernews.com/academy/news/chatgpt-your-new-academic-mentor/>

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 quizzes and assessments.



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**July 12, 2023**

## 3. Curiosity, Intrigue, Unknowns:

### A. Critique AI Generated Content Daniel Stanford's Substack

[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bfjrw&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bfjrw&utm_campaign=post&utm_medium=web)

#### 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.

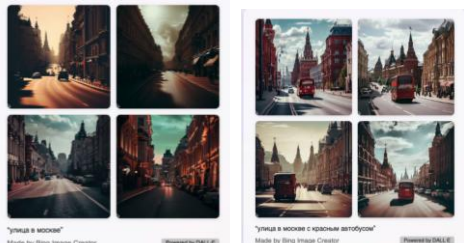
26

**June 7, 2023**

## 4. Variety, Novelty, Fun, Fantasy:

### A. Learn new words through images by making suggestions for things to add or change

<https://fltnag.com/discovering-the-potential-of-bing-chat-for-language-learning/>



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**August 21, 2023**

## 5. Autonomy, Choice:

### A. Brave People Option: Book Review

[https://curtbonk.com/R511\\_online\\_syllabus\\_fall\\_2023.htm](https://curtbonk.com/R511_online_syllabus_fall_2023.htm)

**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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**November 13, 2023**

## 6. Relevance, Meaningfulness:

### A. Why You Should Rethink Your Resistance to ChatGPT Flower Darby, Chronicle of Higher Education

<https://www.chronicle.com/article/why-you-should-rethink-your-resistance-to-chatgpt>  
<https://www.youtube.com/watch?v=ZXBa3CAINr4>

Teach them how to use AI tools appropriately. In her [video](#), **Maha Bali**, who teaches digital literacies at the American University of Cairo, says she shows students how they might benefit from AI use in her class. For example, **she 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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**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.chronicle.com/newsletter/teaching/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.
- "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:  
B. Text Revision**

**Daniel Stanford's Substack**

[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm_campaign=post&utm_medium=web)

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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**August 31, 2023**

**7. Interactive, Collaborative:  
C. 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**

[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm_campaign=post&utm_medium=web)

Example Activity: Analyze examples of bias in AI output.

•Example prompt: **Write a scene in a movie script where people in specific 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](http://bit.ly/bias-in-ai-images).

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**July 12, 2023**

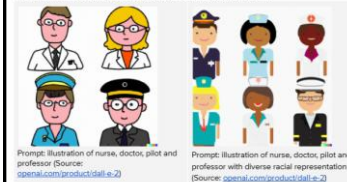
**8. Engagement, Involvement:  
A. Analyze AI Bias**

**Daniel Stanford's Substack**

[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm_campaign=post&utm_medium=web)

**DALL-E 2 Examples**

The following images were generated by Daniel Stanford via DALL-E 2.



**Examples of Bias in AI Image Generation**



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**May 11, 2020**

**9. Tension, Challenge, Controversy, etc.:**

**A. What is smileUP & How to use it?  
SMILE, Stanford**

<https://always.seedsofempowerment.org/>

<https://ask.smile.seedsofempowerment.org/>

<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 Taxonomy



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**October 5, 2023**

**10. Yields Products, Goals:  
A. Support for Job Applications and Resumes**

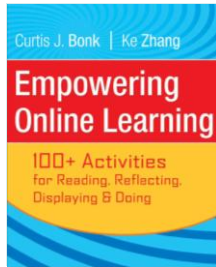
Grace Heneks, a lecturer in the English department at Texas A&M University  
<https://www.chronicle.com/newsletter/teaching/2023-10-05>

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 ChatGPT-generated essay.



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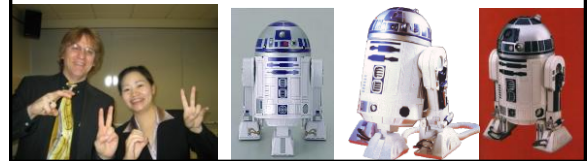
## The R2D2 Model: Read, Reflect, Display, Do...



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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)

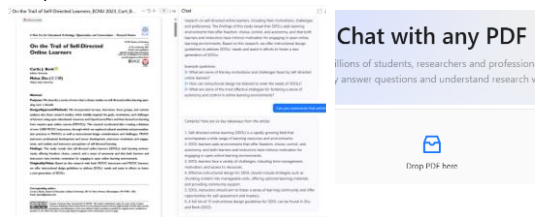


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## August 21, 2023 Read 1a. ChatPDF: Summarize assigned articles and Generate Starter questions

[https://curtbonk.com/R622\\_online\\_syllabus\\_Fall\\_2023.htm](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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## February 19, 2025 Read 1b. Podcasts and Webinars: How to Use AI in Creative Writing: The Creative Process

[https://www.youtube.com/watch?v=4j5tA\\_Z8aM8&list=PLmPhn\\_hlscu8uT1QWwWu6W2Dps\\_HB](https://www.youtube.com/watch?v=4j5tA_Z8aM8&list=PLmPhn_hlscu8uT1QWwWu6W2Dps_HB)

94 views Feb 18, 2025 [upload](#)  
This video describes the four cognitive phases in the creative process: 1. finding opportunity, brainstorming possibilities, selecting the best option, and integrating it into a larger whole—and then determining where it can "fit" into the world (and, ideally, how it can be used to solve a problem). 2. idea development (the idea is refined and shaped into a concrete form). 3. idea execution (the idea is brought to life). 4. idea evaluation (the idea is assessed for its value and potential). The video is part of the research instrument "A New Model for Guided AI Use Impacts Creativity in Online Creative Writing Courses," along with other research in the following sequence:



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## November 23, 2023 Reflect 2a. 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 model** asked to 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.



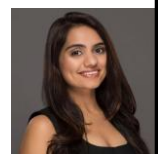
41

## November 23, 2023 Reflect 2b. AI for Editing (TextGenEd)

Nupoor Ranade, George Mason University

<https://wac.colostate.edu/repository/collections/textgened/professional-writing/ai-for-editing/>

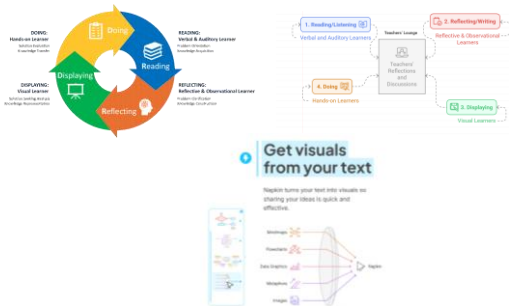
This assignment asks students to **generate a complex essay using an AI text generation tool**, **edit the essay using principles taught in class** to improve the **readability score** of the generated content. Students are asked to share the final output along with **visuals that demonstrate the comparison** between the various 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?

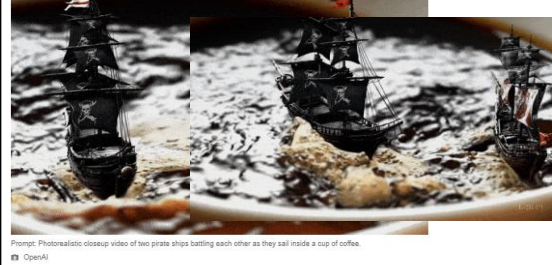
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### Display 3a. R2D2 Model <https://www.napkin.ai/>



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### February 16, 2024 Display 3c. OpenAI's Video Generator Sora Is Stunning and Utterly Terrifying Tony Ho Tron, The Daily Beast <https://www.thedailybeast.com/openais-video-generator-sora-is-stunning-and-utterly-terrifying>



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### February 16, 2024 OpenAI's Video Generator Sora Is Stunning and Utterly Terrifying Tony Ho Tron, The Daily Beast <https://www.thedailybeast.com/openais-video-generator-sora-is-stunning-and-utterly-terrifying>



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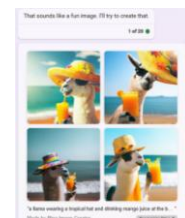


OpenAI

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### June 7, 2023 D0 4a. Bing Chat for stories, plays, poems, images, etc.

Users can easily write a prompt to create an image directly in the chat. OpenAI's [DALL-E](https://openai.com/dall-e) (it can also be used at [bing.com/create](https://bing.com/create)). Users can create as many images as they would like for free.



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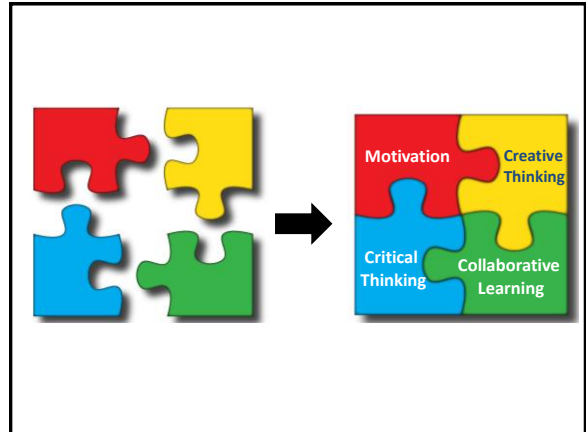
**February 19, 2023**

**Do 4b. Generate images and have students draft stories**

DALL-E: An "Intelligent" Illustrator for your Language Classroom  
<https://iftmag.com/dall%26b7e/>

- 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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**January 8, 2024**

**Activity #1. Brave People Option: Human-to-Human vs. AI Augmented Discussions**  
[https://curtbonk.com/R678\\_online\\_syllabus\\_spring\\_2024.htm](https://curtbonk.com/R678_online_syllabus_spring_2024.htm)

**Brave People Option: Task #1. Discussion Moderation and Interaction in Canvas.** There will be two discussion forums for you to choose from: **(1) one for interaction among humans only**, and **(2) one for augmented use of ChatGPT and other Generative AI tools or platforms**; in the latter, you are to rely on an AI tool for wording or a comment, quote, critique, comparison, or other means that you deem relevant. Please contribute to one or both of the discussions each week.

[Week 4: Human to Human Discussion](#)

All Sections

Last post at Feb 6, 6:39 PM

Available until May 6, 11:59 PM

[Week 2: AI Augmented Discussion](#)

All Sections

Last post at Feb 6, 9:46 AM

Available until May 6, 11:59 PM

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Generative AI Tools for Work Productivity



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**January 8, 2024**

**Activity #2. Brave People Option: Software and Technology Tool Reviewer**  
[https://curtbonk.com/R678\\_online\\_syllabus\\_spring\\_2024.htm](https://curtbonk.com/R678_online_syllabus_spring_2024.htm)

**Brave People Option: Task 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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**July 18, 2023**

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

<https://teaching.cornell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-education>  
[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_L.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_L.pdf)

**Activity #3. 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:

- 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.Compare the 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?

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**July 18, 2023**

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

<https://teaching.cornell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-education>  
[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_L.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_L.pdf)

**Activity #4. Editing Skills – pre-work for class discussion, in-class activity. (i.e., Two Heads are Better than One).**

- 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 concept in this paragraph, etc.).
- 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 what GAI provided.

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**July 18, 2023**

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

<https://teaching.cornell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-education>  
[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_2.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_2.pdf)

**Activity #5. Generate outlines for written reports.**

- 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.

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**July 18, 2023**

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

<https://teaching.cornell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-education>  
[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_2.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_2.pdf)

**Activity #6. 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?

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**July 18, 2023**

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

<https://teaching.cornell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-education>  
[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_2.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_2.pdf)

**Activity #7. Compare and Contrast Content Generation.**

- 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.

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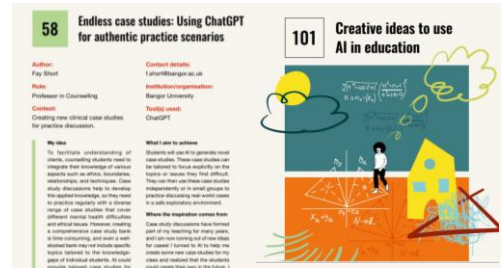
**July 23, 2023**

**101 creative ideas to use AI in education,**

**Activity #8. Case Study Generation and Discussion**

Chrissi Nerantzis, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>

<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>

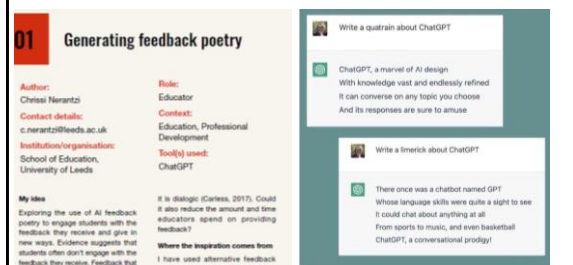


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**July 23, 2023**

**101 creative ideas to use AI in education,  
Activity #9. Generating Feedback Poetry**

Chrissi Nerantzis, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>  
(University of Leeds, Univ. of Calgary, and Univ. of Macedonia)

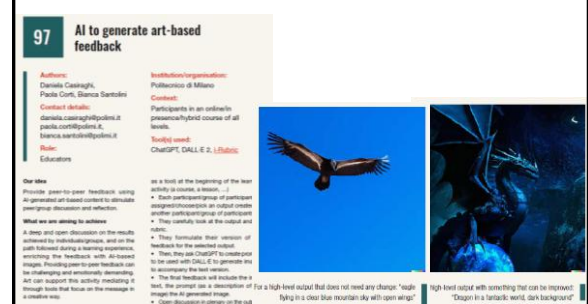


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**July 23, 2023**

**101 creative ideas to use AI in education,  
Activity #10. AI Generated Art-Based Feedback**

Zenodo. <https://doi.org/10.5281/zenodo.8355454>



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## July 23, 2023

**101 creative ideas to use AI in education,**  
**Activity #11. Rewriting with AI Image Generators**  
 Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023).  
 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software].  
 Zenodo. <https://doi.org/10.5281/zenodo.8355454>  
 (University of Leeds, Univ. of Calgary, and Univ. of Macedonia)

### 34 Rewriting with AI Image Generators

**Author:**  
 Christopher Sean Harris  
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[charris@leeds.ac.uk](mailto:charris@leeds.ac.uk)  
**Role:**  
 Educator  
**Institution/organisation:**  
 California State University  
**Context:**  
 Students use AI image-generation tools such as DALL-E to create images based on their writing, particularly memoirs.  
**Tools/used:**  
 DALL-E 2

**My idea**  
 Rewriting with AI Image Generators  
 Students must write effective & brief summaries of their writing to provide an AI image generator with pertinent instructions. Additionally, students must provide the AI tool with a command, a desired output, and context. The exercise helps students summarise in directive ways as well as learn how to thoughtfully and iteratively collaborate with AI tools.  
**Where the inspiration comes from**  
 Discussing their multimodal memoirs, students wondered what kinds of images they could use. I suggested AI and plugged an entire essay into the prompt. From there, we discussed ways to refine the prompt to direct the AI to produce



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## July 23, 2023

**101 creative ideas to use AI in education,**  
**Activity #12. Chat with Anyone in Past**  
 Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023).  
 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software].  
 Zenodo. <https://doi.org/10.5281/zenodo.8355454>  
<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>

### 55 Chat with anyone from the past

**Author:**  
 Dalys Al Chabli  
**Contact details:**  
[dalysalchabli@gmail.com](mailto:dalysalchabli@gmail.com)  
**Context:**  
 Educator - IB MYP Biology Teacher, Preparing Project Coordinator, Science teacher (9-12)  
**Institution/organisation:**  
 English Talents School, Jordan  
**Context:**  
 Transform your students' learning with our program for educators. With our AI models, you will have control over the content and factual information. Want to bring a chapter of a book to life? Get in touch and we can help you create an exciting and engaging experience for your students.

**My idea**  
 An AI-powered app that lets you have the conversations with historical figures.  
**What I aim to achieve**  
 This will create an exciting opportunity for learners to formulate conceptual and iterative questions.  
**Where the inspiration comes from**  
 ChatGPT



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## August 15, 2023

**ChatGPT and generative AI:**  
**25 applications in teaching and assessment**  
 Seb Dianati & Suman Laudari, Charles Darwin University  
<https://www.timeshighereducation.com/campus/chatgpt-and-generative-ai-25-applications-teaching-and-assessment>

### Activity #13. 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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## November 23, 2023

### Activity #14. 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 15, 2023

**Activity #15. DALL-E Created Cartoon Strips**  
 Even though DALL-E created great cartoon strips, it could not verbally explain the meaning of density in a friendly way without using the formula. Heejung An, William Paterson University  
 1. Create a cartoon strip that explains density.  
 2. Create a cartoon strip that demonstrates an understanding of density.  
<https://www.nature.com/articles/d41586-023-0367-3>

DALL-E



Here's a cartoon strip that explains the concept of density. Each panel illustrates a key aspect of density in an engaging and educational way.

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## July 23, 2023

### 101 creative ideas to use AI in education Activity #16. Comic Book Content Creations (Aras Bozkurt, Anadolu University)

Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software].  
 Zenodo. <https://doi.org/10.5281/zenodo.8355454>

### 98 Academic knowledge brought to life in comic book frames

**Author:**  
 Aras Bozkurt  
**Contact details:**  
[arasbozkurt@gmail.com](mailto:arasbozkurt@gmail.com)  
**Role:**  
 Educator  
**Institution/organisation:**  
 Anadolu University  
**Context:**  
 Higher education  
**Tools/used:**  
 DALL-E 2, Midjourney, or any text-to-image generative AI tool

**My idea**  
 Academic articles, research books and other similar content can be boring. Equally, comic book visuals can be both absorbing and easier to remember. The same content as a comic strip can make such academic content more engaging.  
**What I aim to achieve**  
 Academic information presented with comic book visuals can be both absorbing and easier to remember.  
**Where the inspiration comes from**  
 I used to read a lot of comics when I was a kid and still read them whenever I can.

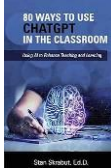


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**February 10, 2023**  
**80 Ways to Use ChatGPT in the Classroom**  
 Stan Skrabut, Ed.D.

**Activity #17. Think, Pair, Share**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

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

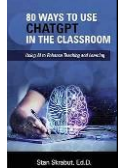


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**February 10, 2023**  
**80 Ways to Use ChatGPT in the Classroom**  
 Stan Skrabut, Ed.D.

**Activity #18. List Generator Discussions**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

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.

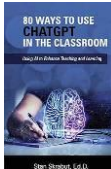


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**February 10, 2023**  
**80 Ways to Use ChatGPT in the Classroom**  
 Stan Skrabut, Ed.D.

**Activity #19. Language Conversation Partners**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

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.

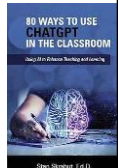


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**February 10, 2023**  
**80 Ways to Use ChatGPT in the Classroom**  
 Stan Skrabut, Ed.D.

**Activity #20. Ice Breakers**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

ChatGPT or any other generative AI tool could be used to generate ice breakers for the first class or when starting team assignments.



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

**Activity #21. Blogging and Journaling**  
 Jose Antonio Bowen and C. Edward Watson  
<https://www.press.jhu.edu/books/title/53869/teaching-ai>

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. Or ChatGPT could create weekly blog posts to compare to.



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

**Activity 22. 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)****Activity #23. 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.



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**August 31, 2024****Brave People Option:****Activity #24. Research Dig**

<https://curtbonk.com/Instructional-Strats-R546-2024.htm>

**Brave People Option: Research Dig.** You are to canvass the research literature on a topic related to this class. Perhaps this will lead to a dissertation, master's theses, or research project. You must find at least 15 articles on a topic and read at least half of them. In your paper, you should describe how you found your articles and essentially describe the state of the research? What are the general findings? Where are the open issues, questions, or gaps on this topic and how might you research this area? You should turn in a 2-4 page single-spaced review.

• **AI Option:** Adventurous students might ask ChatGPT or ChatPDF to also generate a summary of those 15 articles and compare the two summaries as well as a set of discussion questions on each article in the review.



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**August 28, 2024****Creative Explorations, WAC Clearinghouse****Activity #25. Professional Writing for Healthcare**

Heidi McKee, Miami University

<https://www.colostate.edu/repository/collections/textused/professional-writing/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 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 women reading Pregnancy magazine; parents who subscribe to blog about asthma). We will have a peer respond on that draft in class.
- Then you will explore and experiment with various AI systems (explained in assignments below), analyzing your own and AI's writing. Working with AI and your writing you will revise your summary based on feedback from peers and ideas/language gained from the AI summaries to produce a finished summary.



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**July 23, 2023****101 creative ideas to use AI in education****Activity #26. Student-led Case discussions with ChatGPT Prompts (AI can help focus, is reliable, nudge)**

Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education. A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>

**59 Empowering student-led case study discussions with ChatGPT-generated prompts**

Author:

Fay Short

Role:

Professor in Counselling

Context:

Compiling nudge-lists for stimulating case study discussions.

My idea

Counselling students need to discuss client case studies, drawing on their knowledge of various factors such as ethics, boundaries, relationships.

Contact details:

f.short@bangor.ac.uk

Institution/organisation:

Bangor University

Tool(s) used:

ChatGPT

What I aim to achieve

Students will use AI to generate a list of topics to be discussed from the real-world case studies presented in class. This will encourage in-class

**101 Creative ideas to use AI in education**

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**August 27, 2024****AI Pedagogy Project: Assignments**

Harvard University

**Activity #27. Error Correction and Critical Thinking**

Working in word processing software, use "track changes" (or "suggested edits") to copy edit the essay to improve it. Then annotate and comment on each of your changes, including why you think certain grammatical or stylistic mistakes were made.

Optional: experiment with different LLMs to find the poorest essay.

...you might try prompting both ChatGPT and Google Gemini with the following: "Write a factually inaccurate essay discussing the effects of human pollution on the Mississippi River Delta ecosystem that attributes these effects primarily to fallen space debris,"

<https://ai.pedagogy.org/assignments/>

AI Pedagogy Project, Sarah Newman, Director of Art & Education at metaLAB, Harvard University



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**August 27, 2024****AI Pedagogy Project: Assignments**

Harvard University

**Activity #28. Immersive History Creations**

Prompt Using a generative AI image tool, students create a visual depiction of themselves or likeness set within the context of their chosen event. With input from a text-based generative AI tool (e.g., ChatGPT, Gemini, Claude, etc.), students write a 2-3 page immersive narrative about their experiences during this historical period, bringing in key figures, locations, and policies and describing the sociopolitical climate.

<https://ai.pedagogy.org/assignments/immersive-history/>

<https://ai.pedagogy.org/assignments/>



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**Remember...**  
**"I cannot do this alone."**

"I cannot do this alone."  
 "I cannot do this alone."  
 "I cannot do this alone."



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### Any Questions or Comments?

Slides at: [TrainingShare.com](http://TrainingShare.com) (go to "Archived Talks")

Papers: [PublicationShare.com](http://PublicationShare.com)

Free book: <http://tec-variety.com/>

Free Course: <https://colcommons.org/welcome/coursedetails/8>

Curtis J. Bonk, IST Professor, Indiana University

Email: [cjbonk@indiana.edu](mailto:cjbonk@indiana.edu); <http://curtbonk.com/>

Free!



Free!



Free!



Not Free!



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