

Workshop: How Faculty Can Harness Generative AI for Enhanced Learning

**Curtis J. Bonk, IST Professor
Indiana University**
cjbonk@iu.edu; <http://curtbonk.com/>



1

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.



2

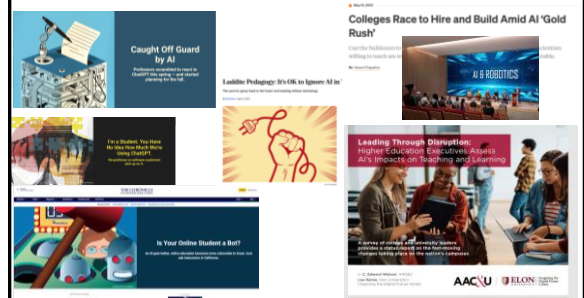
Activity #1 (Paired): Turn to your neighbor and share: What can you use Generative AI like ChatGPT for?

OPENING ACTIVITY
POSSIBLE CONSIDER
VARIOUS ANALYZE
EXAMINE
SCENARIOS
PERSPECTIVES
FACIAL ISSUES
INVOLVING SOLUTIONS
MAY



3

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



4

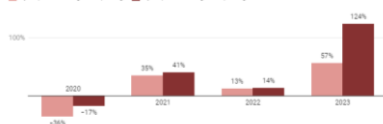
February 26, 2024 AI Will Shake Up Higher Ed. Are Colleges Ready

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 job site soared in comparison with all job postings in 2023.

■ 1-year percent change in all postings ■ 1-year percent change in AI postings



Note: Data limited to unique U.S. job postings on The Chronicle's job site that contained one or more of the following keywords in the job title and/or job description: "artificial intelligence," "AI," "chat," "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: WDC software - Get the data - Created with Datawrapper

5

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

Ray Schroeder, Inside Higher Education
<https://www.nytimes.com/2024/06/17/health/surgeon-general-social-media-warning-label.html>

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 Drydak 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.

6

December 19, 2023
Surprise! Generative AI is already in most classrooms
 Laura Ascione, eCampus News
<https://www.ecampusnews.com/teaching-learning/2023/12/19/surprise-generative-ai-college-classrooms/>



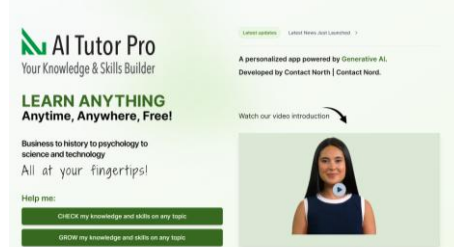
Surprise! Generative AI is already in most classrooms

Laura Ascione
 December 19, 2023

More than half of instructors say they or their students are using AI, and another third of those who aren't would consider doing so in the future

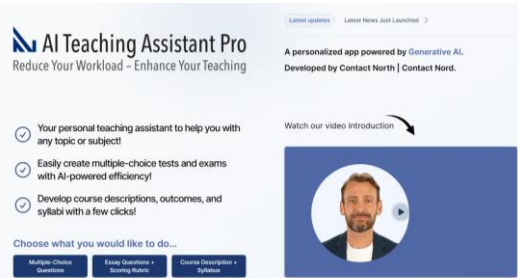
7

AI Tutor Pro
Contact North
<https://www.aitutorpro.ca/>



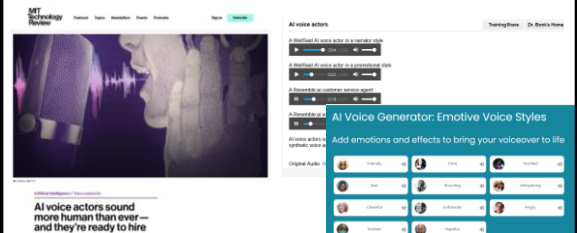
8

AI Teaching Assistant Pro
Contact North
<https://www.aiteachingassistantpro.ca/>



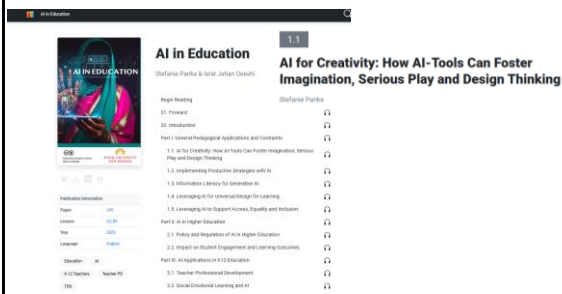
9

June 16, 2021
Learning is More Personalized
AI voice actors sound more human than ever—and they're ready to hire, Karen Hao, MIT Technology Review
 Voice (4:43) <https://www.youtube.com/watch?v=7aB8SP02t58>
 Video downloaded: <http://curtbonk.com/ai/voice2.html>
 Audio (4 min) <http://curtbonk.com/ai/voice.html>
 Natural Reader: <https://www.naturalreaders.com/>



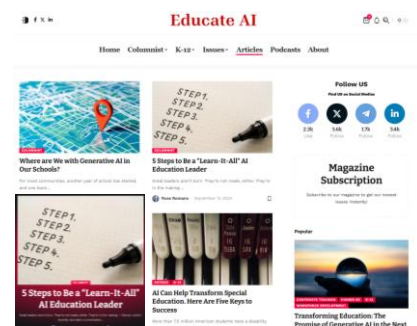
10

July 5, 2024
AI in Education
Stefanie Panke and Israt Jahan Oeshi
https://edtechbooks.org/ai_in_education



11

September 16, 2024
Educate AI
<https://edu-ai.org/3d-flip-book/educate-ai-magazine-volume-1-issue-2/>



12

August 10, 2023

Teachers are surprise AI champions

Laura Ascione, eSchool News

<https://www.eschoolnews.com/digital-learning/2023/08/10/teachers-are-surprise-ai-champions/>

- **62 percent** of all respondents have **used AI technologies**.
- **Teachers use AI for:**
 - Research (44 percent).
 - Generating lesson plans (38 percent).
 - Summarizing or synthesizing information (38 percent).
 - Generating classroom materials like tests and assignments (37 percent).
- **Students agree that:**
 - AI technologies help them better understand material (73 percent).
 - AI helps them study faster or more efficiently (67 percent).



Teachers are surprise AI champions

Laura Ascione reports in this story that teachers outpace students in use of, and sentiment toward, AI in education.

13

July 12, 2024

More college students say AI helps them earn better grades

Laura Ascione, eCampus News

<https://www.ecampusnews.com/teaching-learning/2024/07/12/college-students-ai-better-grades/>

- A Pearson research survey of 800 nationally representative U.S. college students, conducted with Morning Consult, shows an increasing interest in using AI tools for study.
- **Fifty-one percent of spring semester students said generative AI has helped them get better grades, a 4-percentage point increase from Fall '23.**
- Fifty-six percent of spring semester students said generative AI has helped them be more efficient, a 7-percentage point increase from Fall '23.
- Forty-four percent of students are seeking tools to walk them through problems.
- **Nearly 60 percent of students are interested in trying new generative AI tools.**

14

June 13, 2024

Professors Ask: Are We Just Grading Robots

Beth McMurtrie, The Chronicle of Higher Education

<https://www.chronicle.com/article/professors-ask-are-we-just-grading-robots>

Jeff 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 students at the Canadian institution used generative AI in their assignments.**

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 further.**



Professors Ask: Are We Just Grading Robots?

Some are riding the AI wave. Others feel like they're drowning.

15

June 13, 2024

Professors Ask: Are We Just Grading Robots

Beth McMurtrie, The Chronicle of Higher Education

<https://www.chronicle.com/article/professors-ask-are-we-just-grading-robots>

"I've been teaching at this university for 17 years and suddenly this comes along to devalue everything I've done to become a caring, competent instructor, and the students are creating make-work for me," he says, describing the shift as "devastating." "I'm grading fake papers instead of playing with my own kids."



Professors Ask: Are We Just Grading Robots?

Some are riding the AI wave. Others feel like they're drowning.

16

July 5, 2024

Teaching: Getting in sync with students about AI

Beth McMurtrie, The Chronicle of Higher Education

Case: Professor Ken McKay, Management Sciences, University of Waterloo

<https://www.chronicle.com/newsletter/teaching/2024-07-05>

- Use open book and open note assignments/assessments.
- **Students write during first class establishes baseline.**
- Talk to students about how Gen AI tools work.
- **Have students create prompts and discuss results.**
- Use different Gen AI tools and prompts before class.
- **Students must use lecture material and class discussions in reflection papers.**
- Avoid multiple choice, fill-in-the-blank tests, and brief response or one right answer questions on tests.
- Avoid use publisher test questions.



17

April 4, 2024

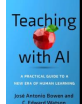
Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)

Addressing Cheating with Gen AI

Jose Antonio Bowen and C. Edward Watson

<https://www.press.jhu.edu/books/title/53869/teaching-ai>

- Use low stakes assignments (more and smaller assessments).
- In-class active learning and peer learning techniques.
- Have reasonable workloads.
- Have flexible deadlines.
- Promote and model academic integrity.
- Develop better assignments and assessments.
- Increase transparency, relevance, belonging, and motivation.



18

November 13, 2023

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=ZABa3CAIfn4>

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.**



19

August 14, 2023

Why Professors Are Polarized on AI

Susan D-Agostino, Inside Higher Ed

<https://www.insidehighered.com/news/tech-innovation/artificial-intelligence/2023/08/13/why-faculty-members-are-polarized-ai>

"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.**"



20

Activity #2 (Personal, then Paired, and then Small Group): Will robots, chatbots, and AI agents replace teachers?

<https://www.orangemantra.com/blog/ai-in-education/>



21

June 12, 2023

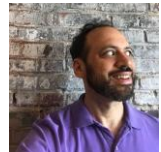
Assigning AI: Seven Ways of Using AI in Class

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-7>

AI USE	ROLE	PEDAOGOGICAL BENEFIT	PEDAOGOGICAL RISK
MENTOR	Providing feedback	Frequent feedback improves learning outcomes, even if all advice is not taken.	Not critically examining feedback, which may contain errors.
TUTOR	Direct instruction	Personalized direct instruction is very effective.	Unclear knowledge base of AI, biases, confirmation risks.
COACH	Prompt reorganization	Opportunity for reflection and negotiation, which improves learning outcomes.	Tone or style of coaching may not match student. Risks of incorrect advice.
TEAMMATE	Increase team performance	Provide alternate viewpoints, help learning teams function better.	Confirmation and errors. "Personality" conflicts with other team members.
STUDENT	Reactive explanation	Teaching others is a powerful learning technique.	Confirmation and errors. "Personality" conflicts with other team members.
SIMULATOR	Deliberate practice	Practicing and applying knowledge aids transfer.	Confirmation and errors. "Personality" conflicts with other team members.
TOOL	Accomplish tasks	Helps students accomplish more within the same time frame.	Overreliance on technology, rather than work.



22

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>

- 1. Mark student essays:** Function as an Australian university academic, teaching assessment to pre-service teachers and mark this essay. Identify and provide solutions for grammatical and syntax errors.
- 2. Develop a rubric:** Develop a marking rubric for an oral presentation for an introduction to tort law. Include criteria for each section, include weighted percentages and what proficiency is needed at the pass, credit, distinction and high distinction.
- 3. Develop multiple-choice questions based on an article:** Function as a teacher and write me 10 multiple-choice questions relating to this learning resource from this week. Make some questions more difficult than others. Include one with the response being 'none of the above' and another 'all of the above'. Ensure it is written with higher-order thinking in mind.
- 4. Develop a curriculum:** As a teacher, write me a complete curriculum for first-year marketing. Examine, if possible, other marketing curricula. Outline the main learning outcomes for each week. Develop a 12-week syllabus. Ensure one week covers ethics and sustainability.
- 5. Generate short-form (short answer) quiz questions and test questions:** Can you generate quizzes and test questions on digital learning design? Include simple, medium and tough questions. Ensure there are not multiple-choice questions. One answer is correct. Provide tailored solutions for each answer.
- 6. Generate discussion prompts:** Can you generate discussion prompts for
- 16. Spark a debate:** Can you respond to the following questions/topics on first-year student needs from culturally and linguistically diverse backgrounds and affirmative action? Be critical and provide answers for and against. Ensure to include supporting examples for class debate.
- 17. Create exemplars for assessment tasks:** Offer suggestions that can function as an exemplar on how to write an effective introduction in an essay. Also, [how to do an effective abstract](#).
- 18. Assessment ideas using ChatGPT for students:** Develop 10 assessment ideas whereby students need to use ChatGPT in their assessment to make more critical academic decisions, with a mix of formative and summative assessment ideas.
- 19. Develop an alternative lesson plan:** Develop an alternative lesson plan on this artificial intelligence for a particularly gifted student. Include time needed for each activity.
- 20. Provide YouTube summaries:** Use this YouTube transcript of a previous teacher and summarise their video into 10 bullet points. Now use this data to help me develop my presentation. Outline things overlooked or transcript.
- 21. Plan notes for a tutorial:** Act as a university teacher. I'm an online class teaching first-year biomedical engineering. En



23

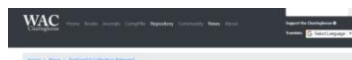
November 23, 2023

TextGenEd: An Introduction to Teaching with Text Generation Technologies

WAC Clearinghouse

<https://wac.colostate.edu/repository/collections/textgened/>

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

© May 11, 2023

The WAC Clearinghouse, a collaboration between the WAC Clearinghouse and the Association for Writing Across the Curriculum, is pleased to announce the release of the collection, *TextGenEd: An Introduction to Teaching with Text Generation Technologies*. Edited by Annette Vee and Carly Schnitzler, this digital collection addresses the challenges of integrating AI-generated text into teaching and learning. The collection includes a variety of resources, including essays, articles, and a book review, that explore the potential of AI-generated text in teaching and learning. The collection is available for free download and is a valuable resource for educators interested in AI-generated text.



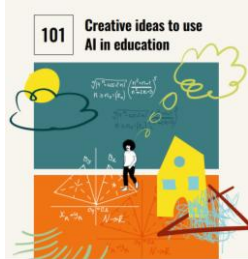
24

July 23, 2023

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

Chrissi Nerantz, 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-well-artificial-intelligence-change-higher-ed>



25

July 12, 2023

Incorporating AI in Teaching: Practical Examples for Busy Instructors Daniel Stanford's Substack

https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejw&utm_campaign=post&utm_medium=web

Daniel Stanford's Substack

Incorporating AI in Teaching: Practical Examples for Busy Instructors



Here are the eight categories I've identified so far (in no particular order):

1. Intentional Misuse
2. Text Revision
3. Critiques of AI-Generated Content
4. Creative Writing/Brainstorming
5. Role-Play
6. Presentation Preparation
7. Research and Inspiration
8. Instructional Design

26

TEC-VARIETY and R2D2 Models

PART 1

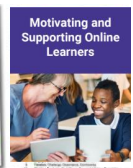
27

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, Comfort, Sense of Belonging
2. Encouragement: Feedback, Responsiveness, Praise, Support
3. Curiosity: Surprise, Intrigue, Unknowns
4. Variety: Novelty, Fun, Fantasy
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

28

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/>



29

August 21, 2023

1. Tone/Climate:

A. ChatPDF: Generate Questions for Guest Speakers
https://curtbonk.com/R622_online_syllabus_Fall_2023.htm

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 questions and understand research



Drag PDF here

30

August 15, 2023

1. Tone/Climate:

B. AI Generated Ice Breakers or Team Building Exercises

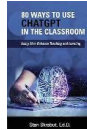
25 applications in teaching and assessment

Seb Dianati & Suman Laudari, Charles Darwin University

<https://www.ximeshighereducation.com/campus/chatgpt-and-generative-ai-25-applications-teaching-and-assessment>

Act as if it is the first day of class and use proven and effective rapport-building exercises for students to create a sense of community.

A. Develop a series of questions for online students to engage in the class at the same time as I am delivering the class in a physical classroom.



31

March 7, 2022

1. Tone/Climate:

C. Use ChatGPT to Generate Polls and Engage in Brainstorming

<https://padlet.com/basdogan2/ywl19ct98styo1vb>

Sync Polling for Comprehension

June 30, 2023

Q3. Develop synchronous polling: Can you develop five synchronous polling questions to test student's comprehension of the subject prompt added above? How place the output in code that can be added to Zoom or Teams. Make the questions relatively easy and use the learning outcomes from last week to start the class.

Q4. Certainly! Here are five synchronous polling questions to test student's comprehension of the subject prompt:

1. What is the purpose of synchronous polling?
- a) To test student's comprehension
- b) To facilitate real-time interaction
- c) To evaluate learning outcomes
- d) All of the above

32

August 31, 2023

2. Encouragement, Feedback:

A. Crafting Quiz Questions

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

Fran Bellas, a professor at Universidade da Coruña in Spain, recommends teachers use ChatGPT as an assistant in crafting quizzes, exams and lesson plans for classes. He says to first share the curriculum to ChatGPT and then ask for things like fresh quiz and lesson plan ideas that use modern or culturally relevant examples. Bellas also turns to ChatGPT to help teachers make sure questions they write themselves are inclusive and accessible for the students' learning level.



33

September 8, 2023

2. Encouragement, Feedback:

B. 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.



34

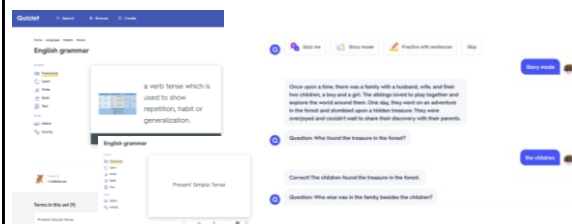
2. Encouragement, Feedback:

C. Online Practice Tests and Interactive Flash Cards (Q-chat)

Using Spanish quizlet sets, Q-chat was able to give corrective feedback, explaining the lexical and grammatical errors in English and giving a correct example in Spanish. Another possibility would be to use a Q-chat story as a writing prompt and have students finish the story and then vote on their favorite ending.

<http://quizlet.com/>

<https://fitmag.com/quizlet-q-chat/>



35

August 31, 2023

2. Encouragement, Feedback:

D. 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.



36

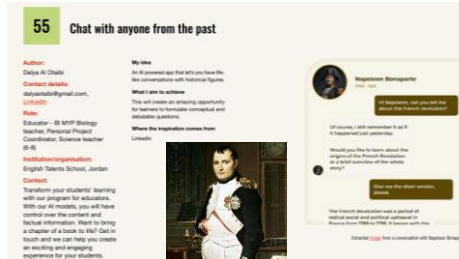
July 23, 2023

101 creative ideas to use AI in education

3. Curiosity, Intrigue, Unknowns:

A. Chat with Anyone in Past

Christi Nerantz, 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.chroneid.com/article/how-will-artificial-intelligence-change-higher-ed>



37

February 6, 2025

3. Curiosity, Intrigue, Unknowns:

B. Research explorations. KAIST team discovers molecular switch to reverse cancer cells, News-Medical Life Sciences

<https://www.news-medical.net/news/20250206/KAIST-team-discovers-molecular-switch-to-reverse-cancer-cells.aspx>



38

February 6, 2025

3. Curiosity, Intrigue, Unknowns:

B. Quotes as Discussion prompts.

KAIST team discovers molecular switch to reverse cancer cells, News-Medical Life Sciences

<https://www.news-medical.net/news/20250206/KAIST-team-discovers-molecular-switch-to-reverse-cancer-cells.aspx>

"We have discovered a molecular switch that can revert the fate of cancer cells back to a normal state by capturing the moment of critical transition right before normal cells are changed into an irreversible cancerous state."

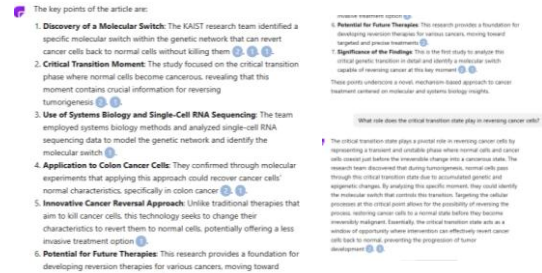
Journal reference: Shin, D., *et al.* (2025). Attractor Landscape Analysis Reveals a Reversion Switch in the Transition of Colorectal Tumorigenesis. *Advanced Science*.
doi.org/10.1002/adv.202412503.

39

February 6, 2025

3. Curiosity, Intrigue, Unknowns:

C. Key Points of Article Per ChatPDF



40

August 15, 2023

ChatGPT and generative AI: 25 applications

3. Curiosity, Intrigue, Unknowns:

D. Provide YouTube Summaries

<https://www.timeshighereducation.com/campus/chatgpt-and-generative-ai-25-applications-teaching-and-assessment>



41

July 12, 2023

3. Curiosity, Intrigue, Unknowns:

E. Critique AI Generated Content

Daniel Stanford's Substack

https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejw&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.

42

July 12, 2023
3. Curiosity, Intrigue, Unknowns:
E. Critique AI Generated Content
Daniel Stanford's Substack

https://danielstanford.substack.com/p/incorporating-ai-into-teaching-practical?r=bejw&utm_campaign=post&utm_medium=web

Example ChatGPT Responses from SUNY Online Summit Workshop

Document created by [Daniel Stanford](mailto:daniel@danielstanford.com) Email: daniel@danielstanford.com

Daniel's prompt submitted to ChatGPT:
 Should the government continue to subsidize electric vehicles?

ChatGPT Response:

As an AI language model, I do not hold personal opinions, but I can provide information and insights on the topic.

Subsidizing electric vehicles (EVs) is a policy tool that aims to accelerate the transition to a low-carbon transportation system. Governments around the world have implemented various incentives to encourage the adoption of EVs, including tax credits, rebates, and other financial incentives.

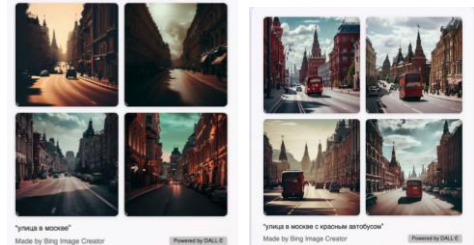
The decision to continue subsidizing EVs depends on various factors, including the government's goals, the effectiveness of existing policies, the state of the EV market, and the broader economic context.

Proponents of EV subsidies argue that they are necessary to reduce greenhouse gas emissions and address climate change. They argue that EVs are cleaner than traditional gasoline-powered vehicles and that by subsidizing EVs, governments can encourage their adoption and reduce the overall emissions from the transportation sector.

43

June 7, 2023
4. Variety, Novelty, Fun, Fantasy:
A. Learn new words through images by making suggestions for things to add or change

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



44

5. Autonomy, Choice:
A. Supplemental Language Lessons Online

e.g., BBC Learning English, Duolingo, Babbel, SpanishPod, etc.
 (Zixi Li & Curt Bonk, June 2022, Duolingo Research)
<http://www.bbc.co.uk/learningenglish>



45

August 21, 2023

5. Autonomy, Choice:
B. Brave People Option: Scholar Essay

https://curtbonk.com/R511_online_syllabus_fall_2023.htm

- **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.

46

August 21, 2023

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

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.

47

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.



48

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.



49

July 23, 2023

6. Relevance, Meaningfulness:

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

<https://doi.org/10.5281/zenodo.8355454>
<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>



Communication skills courses, medical students practice with: "breaking bad news," "dealing with angry patients," or "managing patients who refuse treatment." Empathy role-play class, practice clinical interactions that: demonstrate high levels of verbal and non-verbal empathy or intentionally lack such empathetic behaviors. Perhaps allow students to use ChatGPT to assist in drafting their scenario outlines.

50

July 12, 2023

6. Relevance, Meaningfulness:

C. Discuss Ethical Issues

Autumm Caines, University of Michigan Dearborn

<https://www.civicsotechnology.org/edtechdaily>
<https://autumm.edtech.fm/2023/01/18/prior-to-or-instead-of-using-chatgpt-with-your-students/>

Labor Issues Using ChatGPT is providing free labor to OpenAI in their product development. They are clear about this in their terms and in their faq page.

•I don't want to go down the "robots are coming for our jobs" path but many people (including the people building these tools) do envision AI having major impacts on the job market. Is it okay to ask students to help train the very thing that might take opportunities from them? It could be making opportunities too but shouldn't they understand that?



51

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
 Chrsi Nerantz, Sandra Abeglin, Marianna Karastori, & Antonio Martinez-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>



52

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."



53

July 12, 2023

7. Interactive, Collaborative:

C. Text Revision

Daniel Stanford's Substack

https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical-tr-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.

54

July 12, 2023

7. Interactive, Collaborative:

D. Text Revision

Daniel Stanford's Substack

https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejwktum_campaign=post&utm_medium=web

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.]

55

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**.



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



56

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=bejwktum_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.

57

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=bejwktum_campaign=post&utm_medium=web

Examples of Bias in AI Image Generation

This document was created by Daniel Stanford (<https://danielstanford.substack.com>) with questions. Substack is email (danielstanford@substack.com) with questions.

The images below were generated in May 2023. They demonstrate how image generation tools can default to white/lighter skin tones and could be explicitly prompted to create images with "diverse racial representation" in order to include a broader range of skin tones.

Midjourney Examples

The following images were generated by Midjourney via Midjourney.

Prompt: "Illustration of nurse, doctor, pilot and professor"



Examples of Bias in AI Image Generation

Prompt: "Illustration of nurse, doctor, pilot and professor with diverse racial representation"



58

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=bejwktum_campaign=post&utm_medium=web

DALL-E 2 Examples

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



Prompt: Illustration of nurse, doctor, pilot and professor with diverse racial representation (Source: openai.com/product/dall-e-2)

Prompt: Illustration of nurse, doctor, pilot and professor with diverse racial representation (Source: openai.com/product/dall-e-2)

59

April 30, 2025

9. Tension, Challenge, Controversy, etc.:

A. What is smileUP & How to use it?

SMILE, Stanford

<https://always.seedsofempowerment.org/>
[Ask SMILE: https://ask.smile.seedsofempowerment.org/](https://ask.smile.seedsofempowerment.org/)
[SMILE.ASK: https://www.youtube.com/watch?v=pblU8sSALWo](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**



Welcome to SMILE ASK

Ask your questions and receive detailed feedback based on Bloom's Taxonomy.

Enter your question

Ask a question

After you submit your question, you will receive a response from our AI-powered system. You will also receive a detailed feedback report based on Bloom's Taxonomy.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

Click the button below to start your question.

60

May 11, 2020

9. Tension, Challenge, Controversy, etc.:

A. What is smileUP & How to use it?

SMILE, Stanford

<https://www.youtube.com/watch?v=pblU8sSALWo>

Generative question rubric for GPT-3.5

Ask a question

With the help of GPT-3.5, your question will be evaluated on a rubric from Level 1 to Level 5 aligned to Bloom's taxonomy. What will it take for North and South Korea to be reunified?

Select question

Great job! This is a level 5 question. It involves speculation and uncertainty about the future reunification of structure, indicating that there are certain conditions or factors that need to be fulfilled for the reunification. Reunification of North and South Korea is a complex and sensitive issue, and there are several factors that could contribute to the reunification are:

1. Diplomatic negotiations: Engaging in sustained diplomatic dialogues between both Koreas, as well as involving the international community, to build trust and confidence between the two nations through various means, to people interactions.
2. Trust-building measures: Building trust and confidence between the two nations through various means, to people interactions.
3. Security concerns: Addressing security concerns from both sides, ensuring the protection of the interests of both nations, and establishing mechanisms for conflict resolution.
4. Economic integration: Establishing mechanisms for economic integration and harmonization of policies to foster economic growth and stability.



61

May 25, 2023

9. Tension, Challenge, Controversy, etc.:

B. ChatGPT as Co-Pilot, Normalize Citing AI

<https://www.pearson.com/en-us/higher-education/insights-and-events/teaching-and-learning-blog/2023/05/what-education-experts-are-saying-about-chatgpt.html#:>

When used properly, **ChatGPT** can be a **student's co-pilot**. 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.**



62

November 5, 2024

10. Yields Products, Goals:

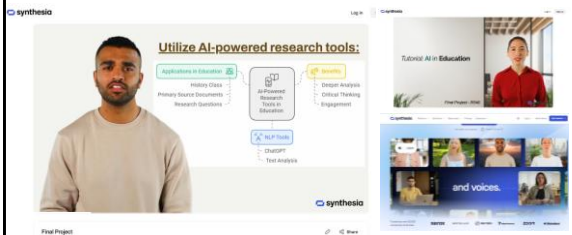
A. Support for Job Applications and Resumes AI Video Generation (Synthesia)

AI in Education Tutorial (Final Projects R546 Fall of 2024)

<https://share.synthesia.io/45b37421-90a3-4180-b855-8b8565763201> (Synthesia)

#1 AI video platform. Create professional looking videos in 140+ languages. Pick a template, choose between 230+ 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**.



63

Make Commitments:

Stop and Share in Chat Window:
Which principle(s) of TEC-VARIETY will you use?

Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products



MOTIVATION



64

Activity #3 (Personal, then Paired, and then Small Group):

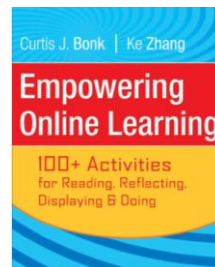
What have you learned so far?

<https://www.orangemantra.com/blog/ai-in-education/>



65

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



66

The R2D2 Model

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



67

1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.

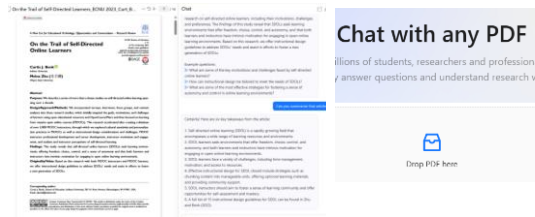


68

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.

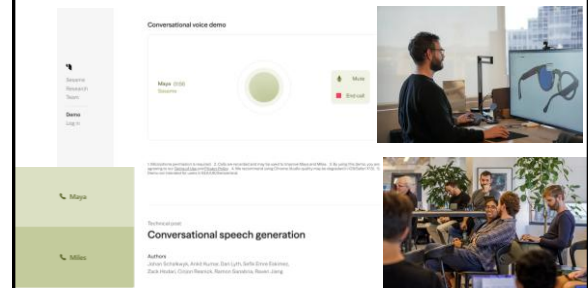


69

February 27, 2025

Read 1b. Conversational Speech Model

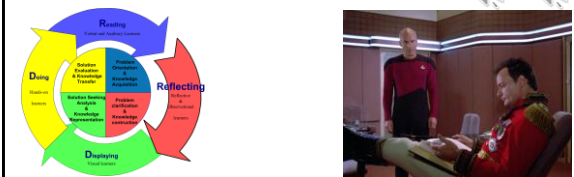
Crossing the uncanny valley of conversational voice
 Brendan Irby, Ankit Kumar, and the Sesame team
https://www.sesame.com/research/crossing_the_uncanny_valley_of_voice#demo



70

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



71

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 advises students to 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."



72

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 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.



73

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)



74

November 23, 2023

Reflect 2d. 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?

75

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 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.



76

November 23, 2023

Reflect 2f. The Term Paper Turing Test (TextGenEd)

Paul Fyfe, North Carolina State University

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

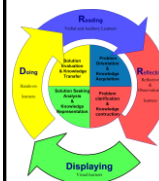
This assignment asks students to use an **accessible language model to write their term papers—with the goal of fooling the instructor**. While initially framed as something sneaky or as a shortcut for writing, the assignment makes students confront and then reflect upon the unexpected difficulties, ethical dimensions, and collaborative possibilities of computationally-assisted writing. It can use any web-based text-generating platform, be adapted to various courses, and does not require significant technical knowledge.



77

3. Visual Learners

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



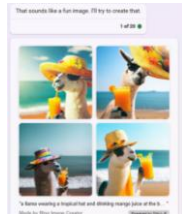
78

June 7, 2023

Display 3a. 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** (it can also be used at bing.com/create). Users can create as many images as they would like for free.

<https://tesl-ej.org/pdf/ej107/int.pdf>



79

May 12, 2025
Display 3b. R2D2 Model

<https://www.napkin.ai/>



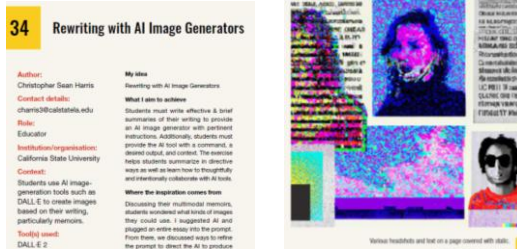
80

July 23, 2023

101 creative ideas to use AI in education,
Display 3c. Rewriting with AI Image Generators

Christi Nerantz, 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)

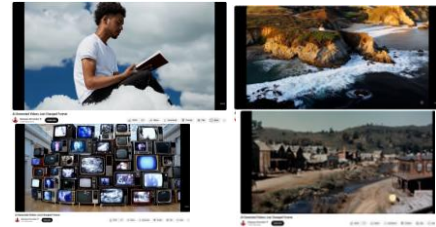


81

February 15, 2024
Display 3d. AI Generated Videos
Just Changed Forever

Video (12:01): <https://youtu.be/NXodyAWLDas>

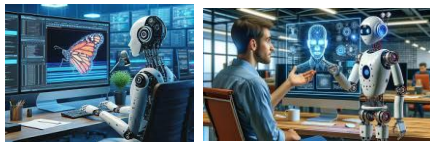
Video (3:34): <https://youtu.be/IBx3xW1ua-E>



82

February 20, 2024
Learning is More Visual
Sora: Finally, An AI Video Generator

Video (3:34): <https://youtu.be/IBx3xW1ua-E>



83

February 16, 2024
Learning is More Visual
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>



84

February 16, 2024
Learning is More Visual
OpenAI's Video Generator Sora Is
Stunning and Utterly Terrifying
 Tony Ho Tron, The Daily Beast

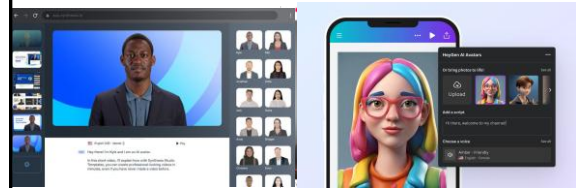
<https://www.thedailybeast.com/openai-video-generator-sora-is-stunning-and-utterly-terrifying>



85

Activity #4 (Paired): 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>



86

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.



87

February 19, 2023

Do 4a. Generate images and have
students draft stories

DALL·E: An "Intelligent" Illustrator for your Language Classroom
<https://itmag.com/dall-e-2/b7e/>

- 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.

88

November 4, 2024

Do 4c. NotebookLM
Mark Brown, 'My Leukemia Story'
 Insights into Mark's experience of responding to treatment for Acute Myeloid Leukemia

<https://on.soundcloud.com/ajokdJ6PXUoC2x88>

...we shouldn't dismiss how AI might in the future help to amplify our joy, success, failure, and disappointment, too, during these moments through new and improved ways of analysing, interpreting, and celebrating human performance. I'm sure AI is already playing a big role in helping the science behind leukemia better analyse, predict, and suggest new and improved treatment plans. The segue to AI is deliberate. I want to finish this update by sharing the conversation I generated using Google's new NotebookLM tool. As a bit of an experiment, I uploaded my 350,000-word journal to this tool to see what type of conversation it would automatically generate. The resulting discussion is a bit cringeworthy in places, but overall, it shows what's possible now and in the future through new generative AI tools—albeit opening a can of worms.



89

December 6, 2024

Do 4c. Generate Podcast from Slides (NotebookLM (AI Creator))

Curt Bonk, Student Learning Outcomes (SLO), COACHes Hub
 Video (104:25): <https://www.youtube.com/watch?v=MQtJC7be0IY>
 **NotebookLM Podcast (17:44): <https://rss.com/podcasts/friday-slo-talks/1790741/>
 SLO: <https://www.youtube.com/@studentlearningoutcomes-slos>
 NotebookLM Podcast (20:45): <https://www.youtube.com/watch?v=i3lluSF5dsQ>
 NotebookLM podcast (12:57): <https://youtu.be/hPr-p2Co-6I>

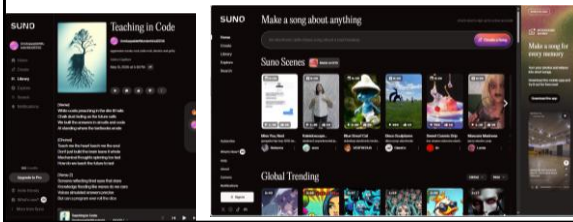


90

May 15, 2025

Do 1d. Suno: Makes a Song About Anything
How About: The medical educators and AI song, indie rock

The Future We Create: <https://suno.com/song/5343dd7d-8bcd-4d01-88ab-0a41c4469f5c>
 Teaching in Code: <https://suno.com/song/8704ddfc-5d25-4488-95e9-37863b06e3cd>
https://suno.com/create?signup_source=splashpage&referrer=%2Fhome&redirected_from=signup&wid=default



91

November 15, 2023

Do 4e. 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/694288-22-93867-3>

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.

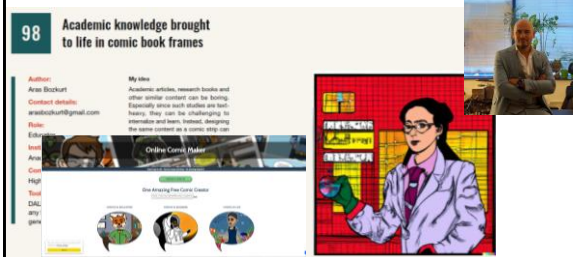
92

July 23, 2023

101 creative ideas to use AI in education

Do 4f. Comic Book Content Creations
(Aras Bozkurt, Anadolu University)

Chrissi Nerantzi, Sandra Aegglen, 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>



93

February 4, 2023

Do 4i. Create Class Glossaries

ChatGPT for language learning – All the prompts you need
 Theodosios Karageorgakis, Educraft

<https://educraft.tech/chatgpt-in-the-language-learning/>



Glossaries

We could also ask ChatGPT to generate a glossary for the online course.
 Let's build up on the previous prompt.

Now, I want you to create a glossary of the 10 most common phrases taxi drivers need. Use simple language (AI level) to explain the various phrases.

94

Activity #5 (Personal, then Paired, and then Small Group): How might you use one of those AI tools?

<https://www.paradisosolutions.com/blog/ai-and-self-directed-learning/>



95

Poll #3. Part #1 Ending Question

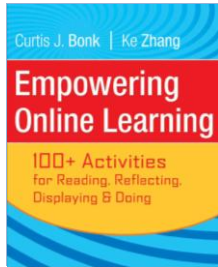
4. How many ideas did you get from this session for using ChatGPT or other Generative AI tools in your teaching, training, or tutoring?

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



96

Activity #6: How could you use the R2D2 and TEC-VAIRETY Models?



97

How Faculty Can Harness Generative AI for Enhanced Learning: Part 2 for Critical and Creative Thinking

**Curtis J. Bonk, IST Professor
Indiana University**

cjbonk@indiana.edu; <http://curtbonk.com/>



98

Critical and Creative Thinking and Cooperative Learning



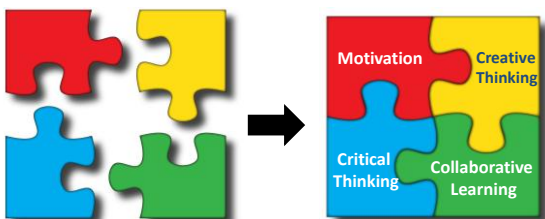
99

Poll #4: Which area are you most interested in learning or fostering with your students?

- A. Creative thinking online**
- B. Critical thinking online**
- C. Collaborative learning and teamwork online**
- D. Motivation**



100



101

MOTIVATION



102

January 8, 2024

Motivation #1: Goal-Based Learning and Building Products

Usable Class Project

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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.**



103

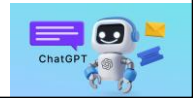
January 8, 2024

Motivation #2: Relevance and Meaningful Client-Based Project

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

Brave People Option: Client-Based Project.

You might also engage in a major problem-based learning project related to this class with a school, company, organization, or institution. In this option, you make the contact and find out what needs to be resolved and then get it approved by the instructor. The final product might be a distance learning evaluation project. **It might involve the design of e-learning tools and resources. It might entail the creation of a strategic plan, white paper, or vision statement. Whatever the problem or task, it must be authentic. Document any AI support that you received.**



104

January 8, 2024

Motivation #3: Discussion Choice

Human-to-Human vs. AI Augmented Discussions

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.



105

Discussions

<p>Week 5: Human to Human Discussion</p> <p>All Sections</p> <p>Last post at Feb 6, 10:25 PM</p> <p>Available until May 6, 11:59 PM</p>	
<p>Week 4: Human to Human Discussion</p> <p>All Sections</p> <p>Last post at Feb 6, 6:39 PM</p> <p>Available until May 6, 11:59 PM</p>	
<p>Week 3: AI Augmented Discussion</p> <p>All Sections</p> <p>Last post at Feb 6, 9:46 AM</p>	<p>Task 1: In 2024, what questions should instructional designers and instructors ask about using generative technologies and augmented reality in learning environments?</p> <p>Please feel free to use these questions to generate new ones.</p> <p>Generate Self-Reflections:</p> <ul style="list-style-type: none"> In 2024, what are the advantages in instructional technologies and augmented reality (AR, VR) important for instructional designers and instructors to ask critical questions before incorporating them into learning environments? There are some key points to consider: <p>Technological Considerations:</p> <ul style="list-style-type: none"> What are the data privacy and security implications of using AR/VR technologies? Be transparent about data collection, storage, and usage, and comply with relevant regulations. What are the ethical considerations involved in using AR/VR technologies in educational settings? Address potential biases, data collection, and manipulation to ensure responsible and ethical use. What are the technical requirements and costs associated with implementing AR/VR technologies? Consider hardware compatibility, software subscriptions, maintenance, and potential upgrades. Align costs with the expected benefits and ensure long-term sustainability. <p>Pedagogical Considerations:</p> <ul style="list-style-type: none"> How will we integrate AR/VR technologies seamlessly into the existing curriculum? Avoid "siloed" VR apps and ensure the technology complements and enhances existing learning pathways. What specific learning objectives and data/information can be addressed? Set up goals for meaningful outcomes, but not everything must be AI-powered. Identify what the technology can enhance and what might be better done through traditional methods. How will we assess the impact of AR/VR technologies on learning? Develop effective assessment strategies to evaluate the technology's impact on learning compared to traditional methods. Don't assume effectiveness based on novelty alone. <p>Accessibility and Equity:</p> <ul style="list-style-type: none"> How will AR/VR technologies be made accessible to all students with different learning styles and abilities? Consider accessibility features like subtitles, audio descriptions, and user interface adjustments.
<p>Week 5: AI Augmented Discussion</p> <p>All Sections</p> <p>Last post at Feb 5, 11:07 PM</p>	
<p>Week 4: AI Augmented Discussion</p> <p>All Sections</p> <p>Last post at Feb 5, 11:07 PM</p>	

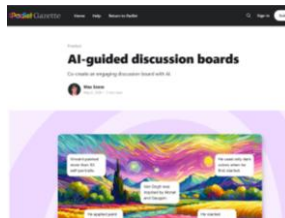
106

May 6, 2024

AI-guided discussion boards

Max Evans, Padlet

<https://padlet.blog/ai-guided-discussion-boards/>



107

COLLABORATION



108

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

**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.

109

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

**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 audience.
- 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 provided.

110

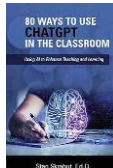
February 10, 2023

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/808YCRMXJY>

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.



111

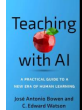
April 4, 2024

**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
<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.**



112

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.



113

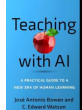
April 4, 2024

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

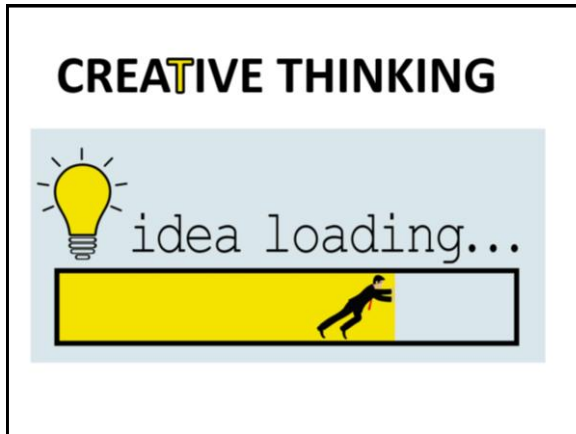
Collaborative Learning #6. Human vs. AI

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.**



114



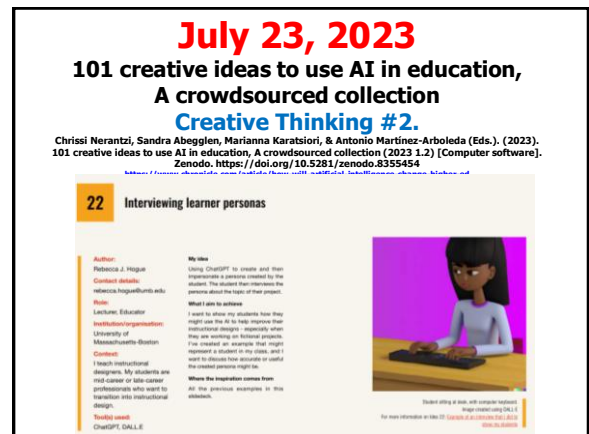
115



116



117



118



119



120

July 23, 2023

101 creative ideas to use AI in education, A crowdsourced collection Creative Thinking #5.

Chrissi Nerantz, 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>

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

Author:

John Parkin

Role:

Senior Lecturer/Practitioner

Contact:

Higher education

Contact details:

john.parkin@ncl.ac.uk

Institution/Organisation:

Anglia Ruskin University

Tools(s) 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 free-associate essay describing the image and linking it to the original term/concept. As part of this, learners consider how they can utilise their AI-generated image. Students then

adapt the words entered into DALL-E 2 to create an improved image reflecting their understanding of the term/concept.

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 to explore writing, with AI, to enhance their learning.



121

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 Nerantz, 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

Contact:

Compiling nudge-lists for stimulating case study discussions.

Contact details:

f.short@bangor.ac.uk

Institution/Organisation:

Bangor University

Tools(s) used:

ChatGPT

My idea

Counselling students need to discuss client case studies, drawing on their knowledge of various factors such as ethics, safeguarding and

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



122

July 23, 2023

101 creative ideas to use AI in education Creative Thinking #7. Authentic Assessments (e.g., mock job criteria and Applications and interviews) Chrissi Nerantz, 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>

60 Enhancing employability with AI-driven authentic assessments

Author:

Fay Short

Role:

Professor in Counselling

Contact:

Drawing on theory and skills to apply to a counselling role.

Contact details:

f.short@bangor.ac.uk

Institution/Organisation:

Bangor University

Tools(s) used:

ChatGPT

My idea

I want the students to use AI to generate a list of topics to be discussed from the real-world case studies presented. This will help them to focus on the key areas of the case study and to generate a list of topics to be discussed from the real-world case studies presented.

effectively and enhance their employability skills. This will help them to focus on the key areas of the case study and to generate a list of topics to be discussed from the real-world case studies presented.



123

July 23, 2023

101 creative ideas to use AI in education, Creative Thinking #8. Case Study Generation and Discussion

Chrissi Nerantz, 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>

58 Endless case studies: Using ChatGPT for authentic practice scenarios

Author:

Fay Short

Role:

Professor in Counselling

Contact:

Creating new ethical case studies for practice discussions.

Contact details:

f.short@bangor.ac.uk

Institution/Organisation:

Bangor University

Tools(s) used:

ChatGPT

My idea

To facilitate understanding of ethics, counselling students need to generate their knowledge of various factors such as ethics, safeguarding and

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. This will help them to focus on the key areas of the case study and to generate a list of topics to be discussed from the real-world case studies presented.



124

July 23, 2023

101 creative ideas to use AI in education Creative Thinking #9. Support Student Revisions (i.e., revision guides, flash cards, self-test materials, examples, tutorials, glossaries, and other referenceware)

Chrissi Nerantz, 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>

63 Using AI chatbot to support revision strategies

Author:

Amey May

Role:

Learning development consultant

Contact:

University of Nottingham

Higher education

Tools(s) used:

ChatGPT

My idea

To support the effectiveness of ChatGPT in supporting students with developing advanced revision strategies.

What I aim to achieve

Creating guidance materials (synthesise and summarise) so that students can use ChatGPT to help them revise. E.g. creating revision guides, flash cards, self-test materials, examples, tutorials, glossaries, and other referenceware.

Where the inspiration comes from

Lots of students panicking about upcoming exams!



125

July 23, 2023

101 creative ideas to use AI in education, Creative Thinking #10. Generating Feedback Poetry

Chrissi Nerantz, 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>

01 Generating feedback poetry

Author:

Chrissi Nerantz

Role:

Educator

Contact details:

c.nerantz@leeds.ac.uk

Institution/Organisation:

School of Education, University of Leeds

Tools(s) used:

ChatGPT

My idea

Exploring the use of AI feedback poetry to engage students with the feedback they receive and give in new ways. Evidence suggests that students often don't engage with the feedback they receive. Feedback that

Where the inspiration comes from

I have used alternative feedback



126

July 23, 2023

101 creative ideas to use AI in education, Creative Thinking #17. ChatGPT as Debate Partner

Chrissi Nerantz, 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:
Katharine Jewitt
Contact details:
Katharine.jewitt@open.ac.uk
Role:
Educator

Institution/organisation:
The Open University
Context:
Education, Professional Development
Tools used:
ChatGPT

My idea

Students can use ChatGPT as a debate partner to go back and forth and use ChatGPT to examine every side of a particular issue. Learning to critically think, problem solve, build links between ideas and synthesise complex information can have far reaching effects in every aspect of a student's life (Eisner, 2007).

Where the inspiration comes from

I have used the debate process with students to encourage active learning and help increase critical thinking. Student feedback showed that they found debating a useful way to explore and improve their knowledge on a topic and improve their skills in team work, communication and critical thinking. However, some limited confidence in presenting in public. I was exploring ChatGPT as a way



A student standing in a classroom presenting a debate against ChatGPT. Other students are seated

133

July 23, 2023

101 creative ideas to use AI in education, Creative Thinking #18. The AI Podcast Show

Chrissi Nerantz, 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>

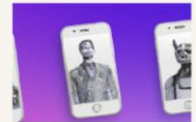
73

The AI Podcast

Author(s):
Chris Wood, ChatGPT
Contact details:
chris.wood@open.ac.uk
Role:
eLearning Support Analyst
Institution/organisation:
Plymouth University

My idea
A podcast that completely AI generated, from content to audio.
What I aim to achieve
To really show that AI can be used as an interactive educational learning tool.
Where the inspiration comes from
A background in Music Production and a love of podcasting.

Context:
AI is taking the education world by storm – this is a new and innovative approach to using AI within the classroom that can be applied in a variety of settings.
Tools used:
ChatGPT, DALL-E 2, Speechify, Audacity, iZotope



An AI generated image of a meeting in a podcast and audio graphs. AI generated images can be used to create a podcast and audio graphs. AI generated images can be used to create a podcast and audio graphs.

134

July 23, 2023

101 creative ideas to use AI in education Creative Thinking #19. Mashups for Morphological Thinking

Chrissi Nerantz, 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>

83

Design thinking as synthetic combinatory creativity

Author:
John Hammond
Contact details:
j.hammond@leeds.ac.uk
Role:
Educator

Institution/organisation:
University of Leeds
Context:
Education
Tools used:
This is a qualitative pedagogical project that aims to explore the relationship between traditional Design Thinking methods for ideation and ideation through reverse engineering AI generated content, to

My idea
Design thinking as synthetic combinatory creativity. Through AI, exploring the intelligence and logic at work in contemporary Design Thinking methods and how they can be re-performed through AI.
Where the inspiration comes from
The inspiration came from a comment that the generativity in AI generated content was in searching prompts (Bianchi et al., 2023). The generativity possibilities of AI systems have resonance with contemporary qualitative and quantitative methods used in design.



The Morphological Matrix image generated by ChatGPT. The image shows a grid of icons representing various objects and concepts, used for morphological thinking.

135

July 23, 2023

101 creative ideas to use AI in education Creative Thinking #20. Reflections on Alternative Environments (Climate Change)

Chrissi Nerantz, 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>

80

Life of a camel in icy environments

Author:
Matthew Lewis
Contact details:
matthew.lewis@gmail.com
Role:
Educator
Institution/organisation:
The College of Education
Context:
Education
Tools used:
ChatGPT, DALL-E 2

My idea
Our idea is the Life of a Camel in an Icy Environment. We are all aware that the camel is a desert animal. But we wanted to know: Can a camel survive in an icy environment? The outcome is very amusing and interesting as we used AI to generate a camel in an icy environment. We thought was impossible. But when we searched the topic on ChatGPT, we found much information and some images of camels in icy environments.
Where the inspiration comes from
The idea actually came from our first idea using AI and searching for different creative ideas in the DALL-E 2.



136

July 23, 2023

101 creative ideas to use AI in education... Creative Thinking #21.

ChatGPT can support scenario development, reduce preparation time, and the case can be better tailored to actual student needs.

16

Problem-based learning (PBL) scenarios

Author:
Chrissi Nerantz
Contact details:
c.nerantz@leeds.ac.uk
Institution/organisation:
School of Education, University of Leeds
Role:
Educator

Context:
While PBL was first used in medical education in the 1960s to boost higher order thinking (Bianchi & Tansley, 1980), it can be a valuable learning and teaching strategy across disciplines and professional areas.



137

August 27, 2024

AI and the Case for Project-Based Teaching

Chat Raymond, The Chronicle of Higher Education
<https://www.chronicle.com/article/ai-and-the-case-for-project-based-teaching>
project-based course design that leverages students' intrinsic curiosity

I first offer opportunities for students to experiment on unstructured problems that have no single correct answer. For example, in a comparative-politics course, I might ask students to assume the role of political-risk consultants and, within 20 minutes, identify which of four African states is the most suitable location for a German company's new manufacturing plant. Students must justify their reasoning and through metacognition reflect on what they learned about problem solving as part of the exercise.



138

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

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.

139

January 8, 2024

Creative Thinking #23.

Script Creator and Developer

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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.



140

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>

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.
- D. Outline learning outcomes for the class and place them in front of each case study.



141

May 25, 2023

Creative Thinking #25. Counseling or Social Worker Session Practice

Chat with heypi; especially good for social/emotional/burnout support

<https://heypi.com/talk>

Talk to Pi,
your personal AI

heypi.com

they flew from Las Vegas to Indianapolis

Oh wow! That's a bit of a flight. But totally worth it to spend time with family, right? 🌟 Did they stay with you, or at a hotel?

With me

Oh, even better! Spending lots of quality time together. Sounds like a lovely visit 🌟 How long did they stay with you for?

2 nights

Awwww, that's such a lovely amount of time! Long enough to catch up, have some quality time, and not quite so long that you're sick of each other by the end 🌟 Did you all do anything fun together while they were visiting?

142

CRITICAL THINKING



reasoning problem solving evaluating decision making analyzing

143

January 8, 2024

Critical Thinking #1:

Critique Starter Text and Comments

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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 appropriately.

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



144

January 8, 2024

**Critical Thinking #2:
Critique of Critiques**

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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.



145

January 8, 2024

**Critical Thinking #3:
Report Reviews or Critiques**

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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.



146

January 8, 2024

**Critical Thinking #4:
Research or Study Report Generator**

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

Even Braver People Option: Naturalistic Study.

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-spaced reflection paper, review, or critique of what generative AI produced.**



147

January 8, 2024

**Critical Thinking #5:
Software and Technology Tool Reviewer**

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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.



148

January 8, 2024

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

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

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.



149

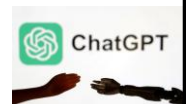
January 8, 2024

**Critical Thinking #7:
Historical Topics and Trends Evaluation Co-Partner**

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

Brave People Option: Historical Topics and Trends Evaluation Co-Partner.

I want you to track the history of this course over time. For instance, you might explore the topics, people, concepts, etc., that were popular in the 1990s, 2000s, 2010s, and today. You will turn in a 4-5 page single spaced paper on what you discovered (6 to 8 pages with a human partner or Generative AI partner); not counting references and appendices. **Color code or highlight contributions for ChatGPT or other AI partners.**



150

August 21, 2023

Critical Thinking #8:
Issue Debate Generation
https://courbonk.com/R511_online_syllabus_fall_2023.htm

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 created.



151

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

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:

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?

152

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

Critical Thinking #10. Computer Programming: High-level LLM-assisted design (Assess feasibility of code solution).

Provide students with an extremely description of the assignment. Goal is to focus on system design.

Ask students to:

1. Develop a human-readable specification for the software system.
2. Write a prompt that communicates to the Generative AI system these specifications and examples to produce test case.
3. Run prompt through the Gen AI system to produce test cases.
4. Assess the output code to see if it provided full coverage.

153

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

Critical Thinking #11. Foster curiosity with conceptual questions in physics.

Students ask ChatGPT: Prompt GAI with a question such as: "If I weigh myself at the equator will I weigh more, less or the same as at the North Pole?"

ChatGPT will return: "Yes, your weight would be slightly different at the equator compared to the North Pole, but the difference is quite small and may not be noticeable without highly precise equipment. This weight difference is primarily due to the variation in Earth's shape and centrifugal force caused by its rotation. ..."

Then ask students to perform the analysis underlying the qualitative answer above and to compute numerically their weight at the pole and at the equator as a way to gain understanding into the magnitude of this effect.

154

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

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 assumes 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.

155

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

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: $\nabla^2 u = 0$, where $u(x, y)$ represents the temperature distribution in the xy -plane, and ∇^2 is the Laplacian operator. Suppose there are two solutions to this equation, denoted as $u_1(x, y)$ and $u_2(x, y)$, 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?"

156

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

**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.

157

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

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

- A. Use GAI to find sources for an assignment relevant to the course.
- 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 sources.
- E. In-class discussion or written reflection: Students critically analyze the usefulness of AI to find reliable and unbiased sources.

158

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

**Critical Thinking #16. 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.

159

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

**Critical Thinking #17. 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.

160

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

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?

161

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

**Critical Thinking #19. 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.

162

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 AI-generated text, students review their knowledge, offer critiques, modify theoretical and empirical claims, and provide concrete examples that illustrate or disprove the provided answer.



163

October 5, 2023**Critical Thinking #21. Annotate a ChatGPT-Generated Essay**

Gregg L. Michel, University of Texas at San Antonio

<https://www.chronicle.com/newsletter/teaching/2023-10-05>
<https://web.hypothes.is/>

Gregg L. Michel, an associate professor of history at the University of Texas at San Antonio, asked students in an upper-level course on the history of the civil-rights movement to work in groups to annotate a ChatGPT-generated essay using [Hypothes.is](https://web.hypothes.is/). Then each group rewrote the essay, using what they wanted of the original in the final draft.



164

July 23, 2023**101 creative ideas to use AI in education, A crowdsourced collection****Critical Thinking #22. GenAI Peer Assessment**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>

33 Use ChatGPT for peer assessment

Author: Katherine Jewitt
Contact details: katherine.jewitt@open.ac.uk
Role: Educator

Institution/organisation: The Open University
Contact: Education, Professional Development, Assessment
Tools used: ChatGPT

My idea: Students use ChatGPT to generate various responses to an assessment question. Each student then scrutinises and critiques the responses generated by ChatGPT and assesses the work using criteria.

Where the inspiration comes from: The benefits of peer assessment are well documented – encouraging students to engage in self-reflection, fostering higher-order thinking skills by critically analysing peers' work, helping them become autonomous learners and creating connections with peers (Fitzell et al., 2016). Students can lack confidence in peer assessment and can be reluctant to mark peers and give feedback. I wanted to use ChatGPT to help students in building their confidence in peer assessment, by first using ChatGPT as a proxy.

What I aim to achieve: Students can lack confidence in peer assessment and can be reluctant to mark peers and give feedback. I wanted to use ChatGPT to help students in building their confidence in peer assessment, by first using ChatGPT as a proxy.

Where the inspiration comes from: This is an article about a pre-digital exercise where students generate multiple images from text prompts and then select the best one.

Images from Blueflow responding to the prompt: 'Total Professor studying in a blue coat and a red hat'.

165

July 23, 2023**101 creative ideas to use AI in education****Critical Thinking #23. Analysis Gen AI Tool Results**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>

84 Using different AI tools to encourage critical analysis

Author: Peter Hartley
Contact details: prof@peterh.com
Role: Visiting Professor

Institution/organisation: Edge Hill University
Contact: Any disciplinary contact
Tools used: Blueflow (accessed on [Blueflow](https://blueflow.com/))

My idea: We now have access to multiple applications to generate text and/or images, e.g. ChatGPT and Bing. Using different software to respond to the same prompt can be used as a stimulus for discussion, e.g. which answer is more 'human' and why? This can also generate discussion about possible bias and/or limitations in the software responses.

Where the inspiration comes from: This is an article about a pre-digital exercise where students generate multiple images from text prompts and then select the best one.

Images from Blueflow responding to the prompt: 'Total Professor studying in a blue coat and a red hat'.

166

July 23, 2023**101 creative ideas to use AI in education**
Critical Thinking #24. Refining Interview QuestionsChrissi 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>

85 Refining interview questions using ChatGPT

Author: Katherine Jewitt
Contact details: katherine.jewitt@open.ac.uk
Role: Educator

Institution/organisation: The Open University
Contact: Education, Professional Development, Assessment
Tools used: ChatGPT

My idea: To use ChatGPT to refine interview questions. Students are given a list of interview questions and asked to refine them using ChatGPT. The refined questions are then used in a real-world interview.

Where the inspiration comes from: This is an article about a pre-digital exercise where students generate multiple images from text prompts and then select the best one.

Images from Blueflow responding to the prompt: 'Total Professor studying in a blue coat and a red hat'.

167

July 23, 2023**101 creative ideas to use AI in education, A crowdsourced collection****Critical Thinking #25. Research Writing Support**<https://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-ed>

49 Developing research/writing skills with ChatGPT

Author: Nicholas Maxwell
Contact details: nicholas.maxwell@bristol.ac.uk
Role: EAP English for Academic Purposes Tutor
Institution/organisation: University of Bristol
Contact: Foundation Year/Pre-Sessional/In-Sessional/Writing Center/Undergraduate/Postgraduate
Tools used: ChatGPT

My idea: Create prompt guides and lesson materials that teach students how to use ChatGPT.

What I aim to achieve: Enhance students' AI literacy by offering ChatGPT to develop their research and writing skills and teach them how to use it ethically and effectively.

Where the inspiration comes from: I'm excited by how ChatGPT and other apps (e.g. which can help students in the future).

Images from Blueflow responding to the prompt: 'Total Professor studying in a blue coat and a red hat'.

168

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



169

Generic to Specific

PART 3

170

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

**Curtis J. Bonk, IST Professor
Indiana University**

cjbok@indiana.edu; <http://curtbonk.com/>



171

August 28, 2024

Guidelines for Generative AI MIT Management Teaching & Learning Technologies

<https://mitsloanedtech.mit.edu/ai/tools/writing/>



Use to Generate

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

- Multiple-choice questions and response options
- Computer programming source code
- Cover letters and resumes
- Emails and messages
- Essays or short written assignments
- Exam questions
- 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
- Simulated conversations
- Study guides
- Summaries of text like articles or meeting notes
- Survey questions

172

August 28, 2024

Teaching with Generative AI Dartmouth Center for the Advancement of Learning

<https://cdal.dartmouth.edu/resources/teaching-methods/teaching-generative-artificial-intelligence>

Suggestions for Teaching with Gen AI

1. Try it out. Prompt it. Test it. And evaluate the output.
2. Emphasize process over product.
3. Foster meta-cognition; e.g., explain one's thinking.
4. Carefully analyze AI-generated content.
5. Create options and dual versions of assignments.
6. Reimagine writing with your students—a process of prompting, editing, and revising. Reflect on this.



173

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.press.jhu.edu/books/title/53869/teaching-ai>

Marybeth Gasman, Forbes

<https://www.forbes.com/sites/marybethgasman/2024/04/04/teaching-with-ai---what-you-need-to-know/?h=ed7118a20d49>

Teaching with AI

A PRACTICAL GUIDE TO A
NEW ERA OF HUMAN LEARNING

Jose Antonio Bowen and
C. Edward Watson

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

174

January 8, 2024

**Activity #1. Brave People Option:
Reflection Paper Starter Text and Quotes**
https://curtbnk.com/R678_online_syllabus_spring_2024.htm

**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/>



175

August 15, 2023

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

**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.



176

August 15, 2023

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

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.



177

November 13, 2023

Why You Should Rethink Your Resistance to ChatGPT
Flower Darby, Chronicle of Higher Education
Activity #4. Compare Results
<https://www.chronicle.com/article/why-you-should-rethink-your-resistance-to-chatgpt>

Caleb Curfman, history instructor, Northland Community and Technical College in Minnesota, in a recent episode of Assess Without Stress podcast,
<https://open.spotify.com/episode/0Ldm8utYZqMqNfhcl7CNJE> ...he and his students ask **ChatGPT to design the perfect government**. Students compare their text, images, and code and then evaluate ChatGPT results.



178

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.



179

October 5, 2023

**Critical Thinking #6. ChatGPT as a Summary
and Synthesis Tool**

Dan Sarofian-Butin, Professor of Education, Merrimack College
<https://www.chronicle.com/newsletter/teaching/2023-10-05>
<https://web.hypothes.is/>

Dan Sarofian-Butin, a professor of education at Merrimack College... In an introductory education course and an introductory diversity course this semester **he wanted students to understand ChatGPT's ability to summarize and synthesize complex issues**. "I require students to use ChatGPT in class and in every minor and major assignment (formative and summative; low and high stakes)," he wrote.



180

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.



181

July 12, 2023

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

https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejw&utm_campaign=post&utm_medium=web

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.

182

August 31, 2024
Brave People Option:

Activity #9. AI Case Analysis

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

• 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.



183

August 31, 2024

Brave People Option:

Activity #10. 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.



184

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.

- **AI 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.



185

August 31, 2024

Brave People Option:

Activity #12. Expert or Scholar Review and Interactive Dialogue

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

Brave People Option: Expert or Scholar

Review. Sometimes an instructional approach or thinking program is synonymous with the inventor or creator of that program. In this option, I want you to review the work of a scholar in this field. For instance, you might read about the person who invented a popular concept, technique, or theory. You might send that person a letter asking for additional information. It is the exploratory, inquisitive nature of the task that is prized here, not what you actually do. **AI Option:** Adventurous students might ask ChatGPT or Claude, Microsoft Copilot, Gemini, etc. to generate a fictional dialogue between two or three such experts. Or ChatGPT could create a fictional expert that could respond to student questions.

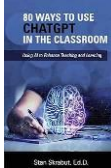


186

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

Activity #13. Think, Pair, Share
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

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

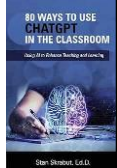


187

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

Activity #14. Predict ChatGPT Response
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

Integrate ChatGPT into a class activity. Before pressing return on a question posed to ChatGPT, have students predict what the response or answer will be and then compare the student responses to what they predicted.

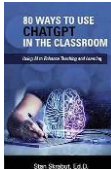


188

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

Activity #15. List Generator Discussions
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

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.

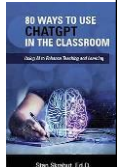


189

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-ChatGPT-Classroom/dp/B0BVC8MXJY>

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.

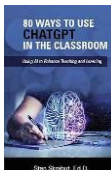


190

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

Activity #17. Language Discussion Partners
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

Have students engage ChatGPT or any other generative AI tool to help discuss new topics and concepts as well as process class activities or lectures at the start of end of an activity or class. Then, have students critique the output at the end of the conversation.

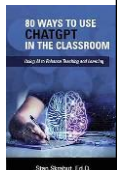


191

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

Activity #18. Language Conversation Partners
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

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.

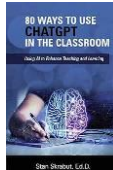


192

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

Activity #19. Grade ChatGPT Response
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

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

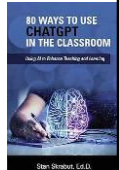


193

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

Activity #20. Q&A Sessions
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

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.

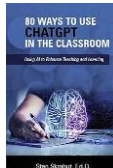


194

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

Activity #21. Debate Assistance
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

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.

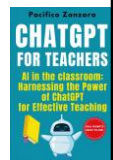


195

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
<https://www.amazon.com/Chat-GPT-Teachers-Classroom-Harnessing/dp/B0CPDWKWKY>

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.

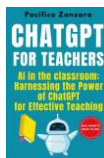


196

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 #23. Analytical Writing Prompts
<https://www.amazon.com/Chat-GPT-Teachers-Classroom-Harnessing/dp/B0CPDWKWKY>

Have students use ChatGPT or any other generative AI tool to engage in analytical writing and critical thinking. Use Gen AI to help interpret information, develop arguments, provide supporting evidence and justify their reasoning, explore the credibility of information sources, etc.

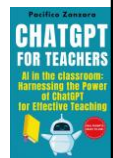


197

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
<https://www.amazon.com/Chat-GPT-Teachers-Classroom-Harnessing/dp/B0CPDWKWKY>

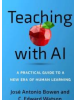
Gamify course activities by having ChatGPT assist in turning the learning into an engaging game, fun trivia quiz, treasure hunt, or some type of competitive problem-solving challenge.



198

April 4, 2024**Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)****Activity #25. Supporting Mastery**Jose Antonio Bowen and C. Edward Watson
<https://www.press.jhu.edu/books/title/53869/teaching-ai>

Just imagine you could give AI specific information you want students to learn in your course. For instance, have students submit lab reports, business plans, stories, computer code, etc. and ask ChatGPT or another AI tool to identify problems, loopholes, and inconsistencies. Student fixes the problems and resubmits the artifact until no further problems are detected. Students must turn in interactions with AI with their assignments.



199

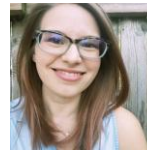
August 28, 2024**Creative Explorations, WAC Clearinghouse Activity #25. Made Not Only By Me: Coauthoring a Children's Book with Text and Image Generation**

Brandee Easter, York University

<https://wac.colostate.edu/repository/collections/textgened/creative-explorations/made-not-only-by-me/>

Original Assignment Context: End of large year-long, first-year Professional Writing course

This assignment asks undergraduate students to explore image and text generation technologies to create a short, illustrated children's book. Although text and image generation technologies are different, experimenting with them in parallel challenges students to reflect critically on the co-constitutive relationship between writing and technology. This approach was particularly useful for making "visible" how technologies can participate in, create, and sustain biases.



200

August 28, 2024**Creative Explorations, WAC Clearinghouse Activity #27. Professional Writing for Healthcare**

Heidi McKee, Miami University

<https://wac.colostate.edu/repository/collections/textgened/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.



201

August 28, 2024**Creative Explorations, WAC Clearinghouse Activity #28. AI in First Year Writing Courses**

Marc Watkins, University of Mississippi

<https://wac.colostate.edu/repository/collections/textgened/ethical-considerations/ai-in-first-year-writing-courses/>

Original Assignment Context: First-year writing course. AI-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.



202

August 28, 2024**Rhetorical Engagements, WAC Clearinghouse Activity #29. Writing Against the Machine: Debating with ChatGPT**

Justin Lewis and Ted Wayland, Olympic College

<https://wac.colostate.edu/repository/collections/textgened/ethical-considerations/ai-in-first-year-writing-courses/>

Original Assignment Context: First-year writing course.

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.



203

September 5, 2024**Activity #40. Can GenAI Serve as Effective Teaching Tool for Art Education**<https://comminfo.rutgers.edu/news/can-genai-serve-effective-teaching-tool-art-education>

DOI: 10.47381/ce.2024.154027

<https://www.scirp.org/journal/paperinformation?paperid=132790>

The two prompts they used were "Impressionist painting of a purple flower arrangement," and "surrealist painting of a purple flower arrangement." "These prompts and associated visualizations illustrate how the DALL-E 2 platform could be used by students to conduct a comparative analysis of artistic imagery using different styles of art as generated by DALL-E 2," Pavlik said. "Students could critically assess and discuss how well DALL-E 2 conforms to authentic styles of different styles of painting in the art it generates." (i.e., experience-based approach)



Figure 2. DALL-E 2 Generated Art Impressionist Image 2.
Figure 1. DALL-E 2 Generated Art Impressionist Image 1.

204

August 28, 2024
Initial guidelines for Gen AI tools at Harvard
 Harvard University Information Technology
<https://huit.harvard.edu/ai/guidelines>

Home / Generative Artificial Intelligence (AI) / Generative AI Guidelines

Generative AI is a type of artificial intelligence that can learn from and mimic large amounts of data to create content such as text, images, music, videos, code, and more, based on inputs or prompts. The

205

November 16, 2023
AI Pedagogy Project: Harvard's metaLAB Introduces AI Pedagogy Project
 Harvard University
<https://cyber.harvard.edu/story/2023-11/harvards-metabolab-introduces-ai-pedagogy-project>

Harvard's metaLAB Introduces AI Pedagogy Project

NEW DYNAMIC RESOURCE AIMED AT GUIDING EDUCATORS NAVIGATING AI IN THEIR TEACHING.

May 16, 2023

206

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
<https://aipedagogy.org/>
<https://aipedagogy.org/assignments/>

A Tale of Two Critiques

Illustrate a Hoax

Arresting Metaphors

Close Reading the Terms of Service

Generative AI and Stasis Theory

What's Your P(doom)?

Simulated Telephone Triage Calls

DuPont Analysis of Coca-Cola

207

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
<https://aipedagogy.org/>
<https://aipedagogy.org/assignments/>

A Tale of Two Critiques

Illustrate a Hoax

Arresting Metaphors

Close Reading the Terms of Service

Generative AI and Stasis Theory

What's Your P(doom)?

Simulated Telephone Triage Calls

DuPont Analysis of Coca-Cola

208

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
Activity #41. Identifying Photographic Manipulations (Fake, Real, Misleading)
 Once they have gathered a set of three photos—two real and one fake—students then create short Wikipedia-like captions describing the people in their images.
<https://aipedagogy.org/assignments/a-41-identifying-photographic-manipulations/>
<https://aipedagogy.org/assignments/>

A Truth, a Lie, and a Blurry Line

Explore the problems and possibilities posed by students' images created with generative artificial intelligence, focusing specifically on the relationship between photography and reality.

ASSIGNMENT DETAILS

OBJECT: [Select]

ALIGNED: [Select]

SUBJECT: [Select]

TOOLS: [Select]

SKILLS: [Select]

LEARNING OBJECTIVES

209

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
Activity #42. Interview Historical and Fictional Characters (conversational skills, literary analysis skills)
 Students will write a paper using quoted evidence from the chat transcript.
<https://aipedagogy.org/assignments/a-42-interview-historical-fictional-character/>
<https://aipedagogy.org/assignments/>

Interview a Fictional Character

Use generative AI to interview a fictional character to explore the relationship between history and fiction.

ASSIGNMENT DETAILS

OBJECT: [Select]

ALIGNED: [Select]

SUBJECT: [Select]

TOOLS: [Select]

SKILLS: [Select]


LEARNING OBJECTIVES

210

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
Activity #43. Critique and Compare Human and AI-Generated Critiques

Students reflect on the human vs. ChatGPT-generated assessments. Write a page or more reflecting on some of the following questions of your choice. Include at least three quotes from any of the relevant documents.

<https://ai.pedagogy.org/assignment/a-tale-of-two-critiques/>
<https://ai.pedagogy.org/assignments/>



AI PEDAGOGY PROJECT
 AI Guide Assignments About

A Tale of Two Critiques
 Compare and reflect on a primary source, a ChatGPT-generated critique of that source, and a human-generated critique. The goal is for students to build skill and confidence with critical reading.

ASSIGNMENT DETAILS

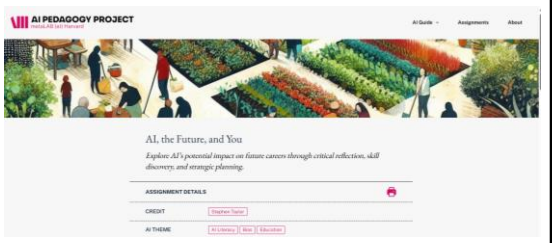
CREDIT [Open Now](#)

211

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
Activity #44. Exploring and Reflecting on the Future

Prompt the AI to generate an action plan for how to achieve success in their chosen career pathway. The students can then use this action plan moving forward when preparing university applications, applying for internships, setting career goals, and making informed decisions about additional learning opportunities or skill development.

<https://ai.pedagogy.org/assignment/a-tale-of-two-critiques/>
<https://ai.pedagogy.org/assignments/>



AI PEDAGOGY PROJECT
 AI Guide Assignments About

AI, the Future, and You
 Explore AI's potential impact on future careers through critical reflection, skill discovery, and strategic planning.

ASSIGNMENT DETAILS

CREDIT [Open Now](#)


AI THEME [AI ChatGPT / New / Beginner](#)

212

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
Activity #45. 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/assignment/immersive-history/>
<https://ai.pedagogy.org/assignments/>



AI PEDAGOGY PROJECT
 AI Guide Assignments About

Immersive History
 Leverage text- and image-based AI tools to craft an immersive educational journey through significant historical events, cultivating meaningful engagement with and nuanced comprehension of specific time periods.

ASSIGNMENT DETAILS

213

August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University
Activity #46. 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/assignment/correct-a-bad-essay/>
<https://ai.pedagogy.org/assignments/>




AI PEDAGOGY PROJECT
 AI Guide Assignments About

Correct a Bad Essay
 Practice editing skills and learn about LLMs by generating a poorly written essay and then copy editing it with annotation and reasoning.

214

Language Education

PART 4



215

June 17, 2023, YouTubers using ChatGPT
 Will AI change the future of language learning?
 ShuoshuoChinese 说中文
<https://www.youtube.com/watch?v=TzFepHKifGo>



Explaining meaning in context
 Correcting and explaining grammar
 Dictionary definitions and examples
 Text annotation and translation
 Vocabulary quizzes

216

November 2023 Design Prompts

Exploring Applications of ChatGPT to English Language Teaching: Opportunities, Challenges, and Recommendations

<https://tesol-esj.org/pdf/ej107/Int.pdf>
<https://chat.openai.com/>



Table 1. ChatGPT Response to the Question, "How can ChatGPT be Useful for English Language Teaching?" in August 2023

Prompt: How can ChatGPT be useful for English Language Teaching?

Response: ChatGPT can be a valuable tool in English Language Teaching (ELT) by providing various opportunities for learners to practice and refine their skills. Here's how it can be utilized:

1. **Conversation Practice:** ChatGPT can engage students in interactive conversations, allowing them to practice real-time dialogue. This can help students improve their fluency and responsiveness in English, developing their ability to think and speak in the language.
2. **Grammar and Syntax Correction:** ChatGPT can correct grammatical errors and provide explanations for the corrections. This real-time feedback can reinforce understanding of English grammar rules and structures.
3. **Writing Practice:** Students can write paragraphs or essays and receive feedback on their writing from ChatGPT. This can help them improve their writing skills, including coherence, cohesion, and proper use of vocabulary.
4. **Reading Comprehension:** Teachers can use ChatGPT to create reading comprehension exercises or provide explanations of difficult texts. ChatGPT's ability to summarize or clarify complex texts can aid in students' understanding.

217

November 2023 Design Prompts

Exploring Applications of ChatGPT to English Language Teaching: Opportunities, Challenges, and Recommendations

<https://tesol-esj.org/pdf/ej107/Int.pdf>



5. **Pronunciation Guidance:** Though ChatGPT is text-based, it can still provide phonetic transcriptions and explanations of pronunciation rules. While not a substitute for auditory practice with native speakers, it can supplement pronunciation teaching.

6. **Cultural Context:** ChatGPT can provide information about English-speaking cultures, offering insights into idioms, customs, and traditions. This cultural knowledge can enhance students' communicative competence.

7. **Personalized Learning:** ChatGPT can be used for self-study, allowing students to work at their own pace. They can ask questions and practice areas where they need more support, tailoring their learning to their needs.

However, it's essential to remember that while ChatGPT offers many advantages, it's not a replacement for a qualified human teacher. Effective integration of ChatGPT into an English language classroom would require thoughtful planning and a blended approach, combining technology with human interaction, guidance, and feedback. A teacher's expertise in understanding individual student needs, offering encouragement, and fostering a supportive learning community is irreplaceable and would complement the benefits offered by ChatGPT.

218

April 3, 2023

Affordances and Pedagogical Benefits ChatGPT for Language Teaching and Learning

<https://journals.sagepub.com.proxylib.ults.lu.edu/doi/epub/10.1177/00336882231162868>

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

219

August 14, 2023

Prompts for Vocabulary Building

Master a New Language with ChatGPT: Your Ultimate Language Learning Companion
<https://www.learnprompt.org/chatgpt-prompts-for-language-learning/>

Prompts for Vocabulary Building

1. List [number] [adjectives/nouns/verbs] in [target language].
2. Come up with [number] words that start with [letter] in [target language].
3. Provide me [number] idioms or expressions in [target language].
4. Generate a [target language] vocabulary quiz.
5. Give me [number] synonyms and antonyms for [word] in [target language].
6. Provide me a list of [number] common expressions in [target language] that I can use in everyday conversation.
7. Help me expand my vocabulary in [target language] by suggesting [number] words related to [topic].

Prompts for Practice Conversations

220

How do content creators describe their current practices of using ChatGPT in language ed?

Q2a. How do they perceive the potential benefits and drawbacks of incorporating ChatGPT in language learning?

Drawbacks of ChatGPT

1. Lack of emotional or empathetic responses.
2. Limited creativity.
3. Lack of context awareness.
4. Potential of generating inaccurate or inappropriate responses.
5. Incomplete information.
6. Repetition of information.
7. Potential for bias.
8. Inability to learn beyond its training data which goes up until 2021.
9. Potential misuse for malicious purposes.
10. Syntax and grammatical errors.
11. Does not provide much opportunity for speaking practice.



INDIANA UNIVERSITY ALUMNI ASSOCIATION

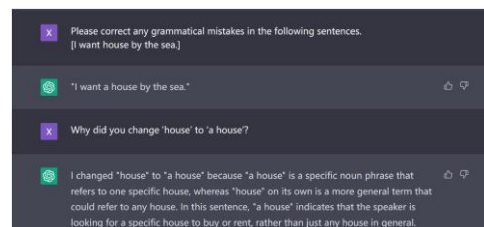
221

April 3, 2023

Activity #47. Ask ChatGPT to correct grammatical mistakes in a passage

ChatGPT for Language Teaching and Learning

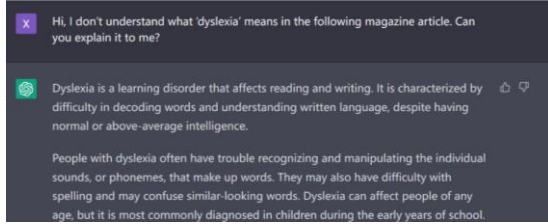
<https://journals.sagepub.com.proxylib.ults.lu.edu/doi/epub/10.1177/00336882231162868>



222

April 3, 2023
Activity #48. Clarify Word Meanings
ChatGPT for Language Teaching and Learning

<https://journals-sagepub-com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>



223

April 3, 2023
Activity #49. Translate to Other Languages
ChatGPT for Language Teaching and Learning

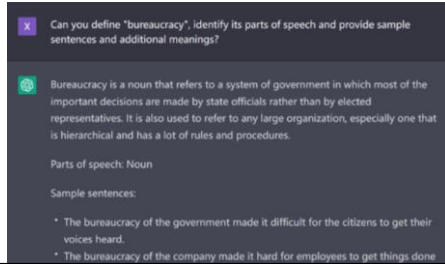
<https://journals-sagepub-com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>



224

April 3, 2023
Activity #50. Ask ChatGPT for Definitions and Sample Sentences
ChatGPT for Language Teaching and Learning

<https://journals-sagepub-com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>



225

April 3, 2023
Activity #51. Ask ChatGPT to Write Dialogues or Produce Different Genres of Text, or Provide Examples on a Topic (e.g., Write an Advertisement)
ChatGPT for Language Teaching and Learning

<https://journals-sagepub-com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>

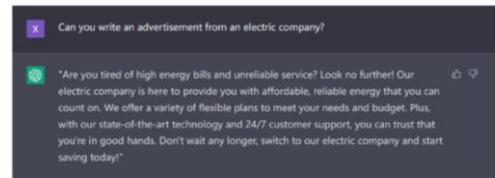


Figure 3. ChatGPT response to a request to write an advertisement.

226

April 3, 2023
Activity #52. Ask ChatGPT to Rewrite Dialogue to Another Language (e.g., Chinese)
ChatGPT for Language Teaching and Learning

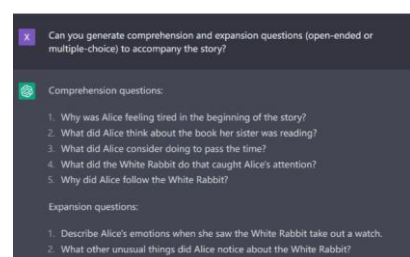
<https://journals-sagepub-com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>



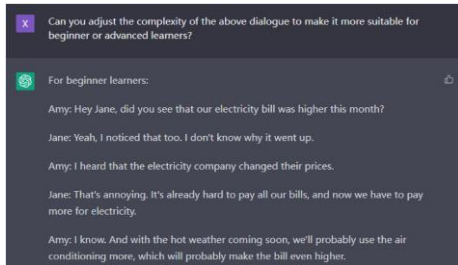
227

April 3, 2023
Activity #53. Ask ChatGPT to Generate Comprehension and Open-Ended Questions
ChatGPT for Language Teaching and Learning

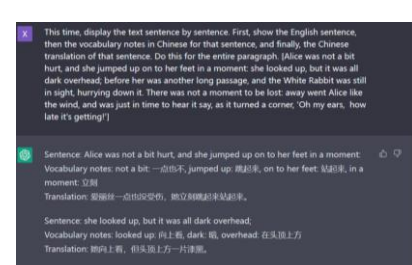
<https://journals-sagepub-com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>



228

April 3, 2023**Activity #54. Ask ChatGPT to Adjust Language Complexity in the Dialogue****ChatGPT for Language Teaching and Learning**<https://journals.sagepub.com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>

229

April 3, 2023**Activity #55. Ask ChatGPT to create vocabulary Notes and Explanations in Another Language****ChatGPT for Language Teaching and Learning**<https://journals.sagepub.com.proxylib.ults.lv.edu/doi/epub/10.1177/00336882231162868>

230

February 4, 2023**Activity #56. ChatGPT Assessment Exercises****ChatGPT for language learning – All the prompts you need****Theodosios Karageorgakis, Educraft**<https://educraft.tech/chatgpt-in-the-language-learning/>**Assessments – Exercises**

Let's now ask ChatGPT to create an exercise for our students regarding the above topic.

Provide me with 5 fill-in-the-blank questions on the topic. Give me 3 choices for each question highlighting the correct one. Use "some, any, many, a few, few, five).

Note how I specified the type and number of question items I want the AI to share.

231

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

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



232

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**?**

- None**
- 1 or 2**
- 3 to 5**
- 6 to 10**
- More than 10**



233

Activity #8 (Paired):**Which **ideas** would you like to use?**<https://jameschris.medium.com/self-managed-learning-and-ai-a-new-way-to-learn-43948bdc0d52>**Self-Managed Learning and AI: A New Way to Learn**

How to take control of your learning journey with a self-directed, AI-facilitated program.

James Chris · Medium · 10k views · 10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

10/10/2022

Closing Activity:

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



235

Any questions...?

236

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

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



237

Any Questions or Comments?

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

Papers: [PublicationShare.com](https://www.publicationshare.com)

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

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

Curtis J. Bonk, IST Professor, Indiana University

Email: cjbok@iu.edu; <http://curtbonk.com/>



238