

## How Faculty Can Harness Generative AI for Enhanced Learning: Part 4. Best of AI Pedagogy

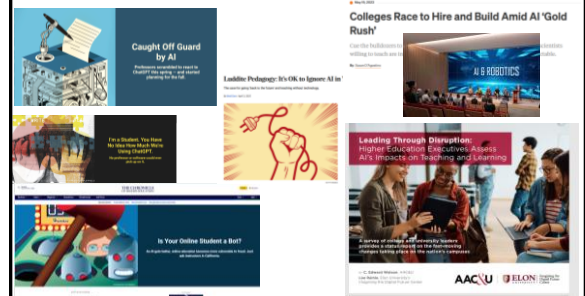
**Curtis J. Bonk, IST Professor  
Indiana University**

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



1

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



2

## Poll #1. Warm-up question...

How often do you use ChatGPT, ChatPDF, Claude, Gemini, Microsoft Co-pilot or other Generative AI tools?

- Many times each day.
- Nearly every day.
- About once a week.
- About once a month.
- Just once or twice.
- Never. Never. Never.



3

**August 1, 2024**

## Exploring AI: Students Share Their Awareness and Usage of Generative AI

Rachel Janzen, Clare Church, and Radhe Paleia

<https://forum.academica.ca/forum/exploring-ai-students-speak-about-their-awareness-and-usage-of-chatgpt>

Figure 2: What did you use ChatGPT or other generative AI tools for? Please select all that apply. (2024 n=493; 2023 n=104)



4

**August 23, 2024**

## Crunch the Numbers—New Data on AI in Higher Ed

Kevin Hogan, Penn Foster Group, eCampus News

<https://www.ecampusnews.com/innovation-insights/2024/08/23/crunch-the-numbers-new-data-on-ai-in-higher-ed-student-finance-restraints-and-election-season-jitters/>

Key findings include:

- 82% of college students say they've used AI technologies, compared to 58% of high school students, and students are now near even with teachers in adoption (67% vs. 66%)
- Two-thirds of high school and college teachers say they use AI technology for education
- Students who use AI technology for school use it to do research (46%), to summarize or synthesize information (38%), and to generate study guides or materials (31%)



5

**November 30, 2023**

## Over 1,000 Sun Devils enroll in ASU's generative AI training course

<https://tech.asu.edu/features/ASUFacultyAICourse>

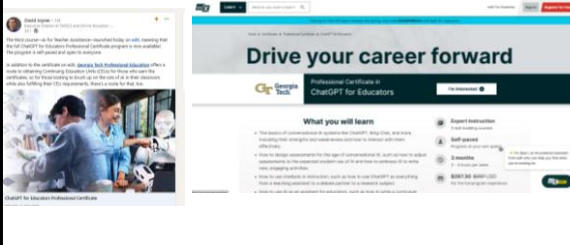


Over 1,000 Sun Devils enroll in ASU's generative AI training course

6

## April 19, 2024 Professional Certificate in ChatGPT for Educators Georgia Tech

<https://www.edx.org/certificates/professional-certificate/atx-chatgpt-for-educators>



7

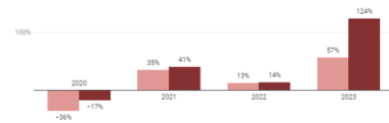
## February 26, 2024 AI Will Shake Up Higher Ed. Are Colleges Ready

Taylor Swaak, The Chronicle of Higher Education  
<https://www.chronicle.com/article/ai-will-shake-up-higher-ed-are-colleges-ready>

### Job Postings at Colleges

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

■ 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 jobs 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.

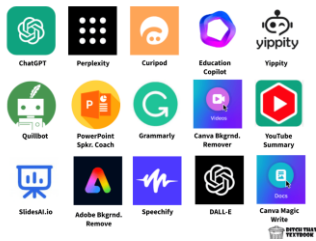
Chart: Taylor Swaak • Source: HCM software • Get the data • Created with Datawrapper

8

## May 15, 2025 Categorized AI Tools for Teaching and Learning

<https://docs.google.com/document/d/11Ar-wODtmdxZ8aVuf6CpUdBF2c6s0JIDbwE40p0/edit?tab=t.0>

### 15 AI tools to use in the classroom



9

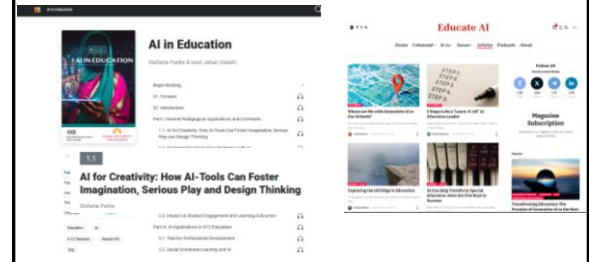
## July 5, 2024

## AI in Education Stefanie Panke and Israt Jahan Oeeshi

[https://edtechbooks.org/ai\\_in\\_education](https://edtechbooks.org/ai_in_education)

### Educate AI

<https://edu-ai.org/3d-flip-book/educate-ai-magazine-volume-1-issue-2/>



10

## AI Tutor Pro and AI Teaching Assistant Pro, Contact North

<https://www.aiteachingassistantpro.ca/>

<https://www.aitutorpro.ca/>



11

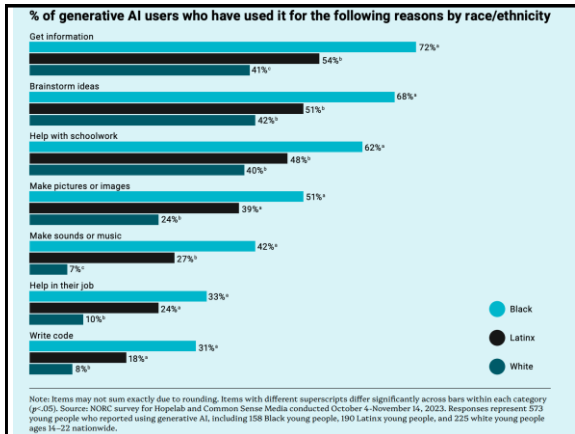
## June 18, 2024 Teens are looking to AI for information and answers, two surveys show

Jill Barschay, The Hershinger Report, Youth Today

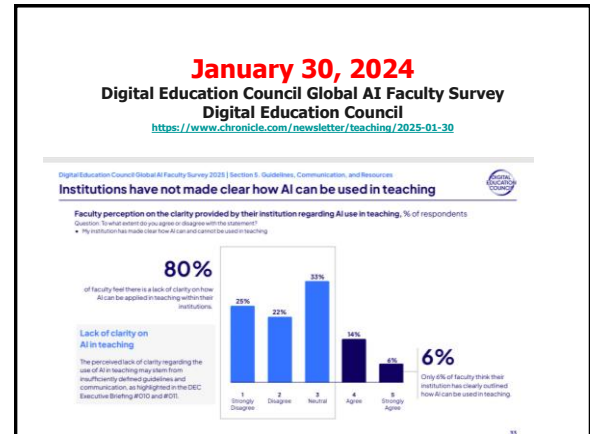
<https://youthtoday.org/2024/06/teens-are-looking-to-ai-for-information-and-answers-two-surveys-show/>

Among 12- to 18-year-olds and college students who had used AI chatbots for school, **56 percent said they had used it for help in writing essays and other writing assignments. Undergraduate students were more than twice as likely as 12- to 18-year-olds to say using AI felt like cheating, 22 percent versus 8 percent.** Earlier **2023 surveys of student cheating by scholars at Stanford** University did not detect an increase in cheating with ChatGPT and other generative AI tools. But as students use AI more, students' understanding of what constitutes cheating may also be evolving.

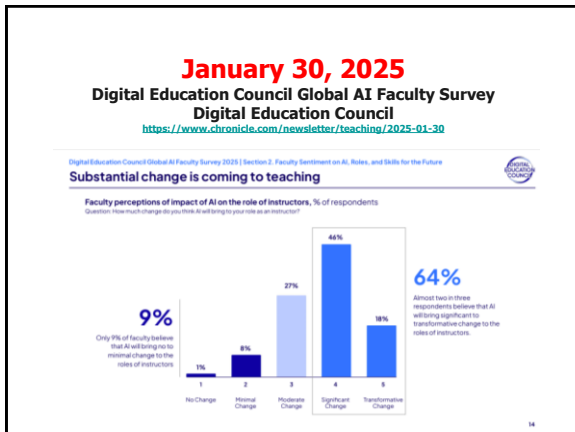
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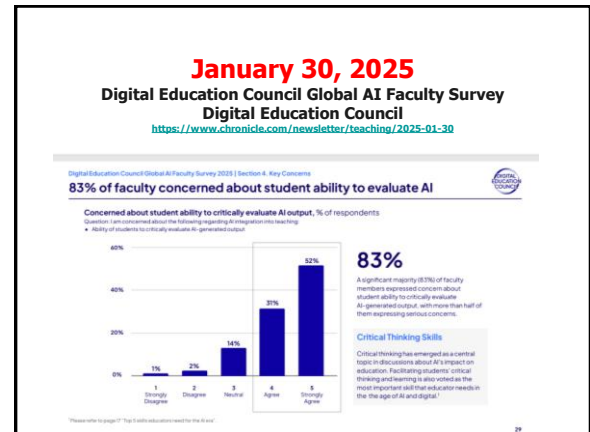
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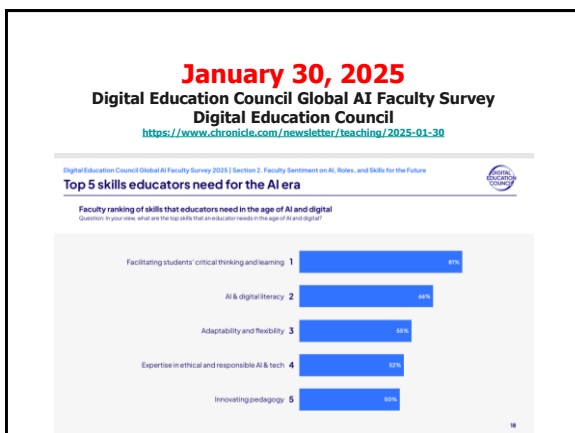
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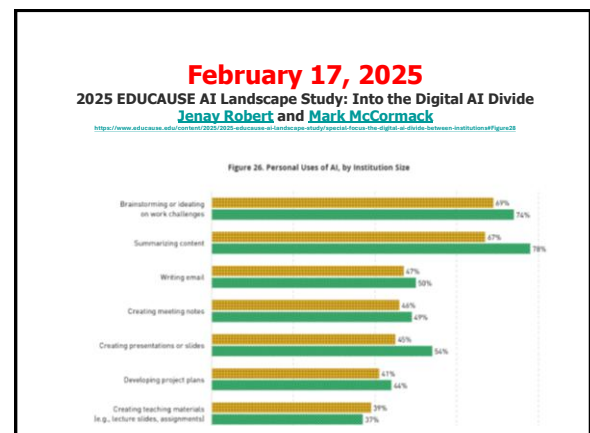
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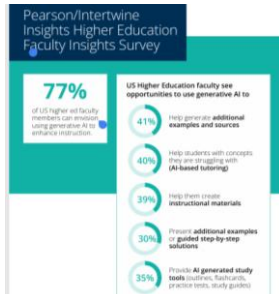
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18

## December 2024 Pearson 2024 End of Year AI Report for Higher Education

<https://pk-pearson.com/sites/pearson-corp/files/2024-12/ai-perception-and-usage-research.pdf>

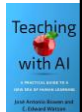


19

## 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.



20

## 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.



21

## 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?ch=prwtdm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?ch=prwtdm_campaign=post&utm_medium=web)



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

22

## March 2024 Student affordances to using ChatGPT The Educational Affordances and Challenges of ChatGPT: State of the Field Helen Crompton and Diane Burke, TechTrends <https://link.springer.com/article/10.1007/s11528-024-00939-0>

- |  |  |
|--|--|
| <p><b>Student codes</b></p> <ul style="list-style-type: none"> <li>• 24/7 support and accessibility               <ul style="list-style-type: none"> <li>◦ Unlimited access</li> <li>◦ Variety of subjects/platforms</li> </ul> </li> <li>• Increased opportunities               <ul style="list-style-type: none"> <li>◦ Summarize</li> <li>◦ Provide rationale</li> </ul> </li> <li>• Conversation partner               <ul style="list-style-type: none"> <li>◦ Diverse contexts</li> <li>◦ Customized conversations</li> <li>◦ Argument practice</li> </ul> </li> <li>• Personalized feedback and materials               <ul style="list-style-type: none"> <li>◦ Feedback</li> <li>◦ Tailored activities</li> <li>◦ Personalized pacing</li> <li>◦ Personalized materials</li> <li>◦ Recommendations</li> <li>◦ Language assistance</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Writing Support               <ul style="list-style-type: none"> <li>◦ Writing steps</li> <li>◦ Ideas</li> <li>◦ Editing</li> </ul> </li> <li>• Self-assessment               <ul style="list-style-type: none"> <li>◦ Generate outlines</li> <li>◦ Study guides</li> <li>◦ Questions</li> <li>◦ Diagnostic reasoning</li> <li>◦ Detailed responses</li> </ul> </li> <li>• Engagement               <ul style="list-style-type: none"> <li>◦ Facilitate discussions</li> <li>◦ Collaboration</li> <li>◦ Interactive learning</li> </ul> </li> <li>• Facilitate self-determination               <ul style="list-style-type: none"> <li>◦ Sense of control</li> <li>◦ Autonomy over learning</li> <li>◦ Increase efficacy</li> </ul> </li> </ul> |
|--|--|

23

## April 3, 2023 Affordances and Pedagogical Benefits ChatGPT for Language Teaching and Learning <https://journals-sagepub-com.proxylib.wits.ac.za/doi/epub/10.1177/00336882231162868>

It can:

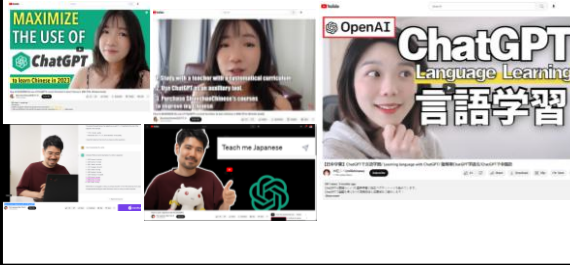
1. Identify the meaning of a word in context,
2. Correct and explain language mistakes,
3. Create texts in various genres (e.g., emails, stories, recipes),
4. Develop quizzes,
5. Annotate texts, and
6. Offer dictionary definitions, example sentences, and translations

24

## June 17, 2023, YouTubers using ChatGPT

### How to MAXIMIZE the use of ChatGPT's current functions to learn Chinese in 2023 (The Ultimate Guide)

ShuoshuoChinese 说说中文  
<https://www.youtube.com/watch?v=TzFepHKfGo>



25

## 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 institution to test use. 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 question/issue/topic 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 on how to 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 in the transcript.
- 21. Plan notes for a tutorial:** Act as a university teacher to plan online class teaching first-year biomedical engineering. En

26

## 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 2023)

The TextGenEd Collection is a collaboration between the WAC Clearinghouse and the *Journal of Writing Across the Curriculum*, published to introduce the research and practice of text generation technologies. Edited by Annette Vee, Carly Schnitzler, and the digital collection editors, this collection is a comprehensive resource for teaching and learning with text generation technologies. It includes a variety of resources, including articles, videos, and a glossary, that explore the potential of these technologies in education. The collection is available for free download from the WAC Clearinghouse website.



27

## July 23, 2023

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

Chrisi Nerantzi, Sandra Abergelin, Marianna Karatzioti, & 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>



28

## July 23, 2023

### 101 creative ideas to use AI in education...




**16 Problem-based learning (PBL) scenarios**

**Author:** Chrisi Nerantzi  
**Contact details:** c.nerantzi@leeds.ac.uk  
**Institution/organisation:** School of Education, University of Leeds  
**Role:** Educator  
**Context:** While PBL was first used in medical education in the 1980s to boost higher-order thinking (Barnes & Tansford, 1980), it can be a valuable learning and teaching strategy across disciplines and professional areas.

**My idea:** Generate PBL scenarios with the help of ChatGPT based on specific prompts for education sector students to enable inquiry-based learning on even the smallest general idea through curiosity for learning and discovery through critical and creative problem-solving.

**What I aim to achieve:** To focus on open-ended prompts of AI.

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

29

## July 23, 2023

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

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

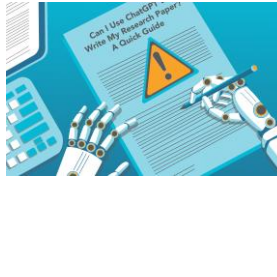
**49 Developing research/writing skills with ChatGPT**

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

**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 inspired by how ChatGPT and other apps that help students in the future.




30



**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**



**Motivating and Supporting Online Learners**


**What motivates?**

1. Tone/Climate: Psychological Safety, Comfort, Sense of Belonging
2. Encouragement: Feedback, Responsiveness, Praise, Support
3. Curiosity: Surprise, Inquisitiveness, Unfamiliarity
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

31

**September 23, 2022**  
**Motivating and Supporting Online Learners**  
<https://colcommons.org/my-course>

**Motivating and Supporting Online Learners**



**Ten Pedagogical Activities to Promote Interactivity (Continued)**

- Activity 41: Scholar, Scientist or Innovator Role Play
- Activity 42: Interactive Learner Questioning and Discussion
- Activity 43: Answer the Unlabeled Content
- Activity 44: Flipping the Class
- Activity 45: Product Brainstorming and Co-creation
- Activity 46: Collaborative Mind Mapping and Idea Visualization
- Activity 47: Collaborative Video Annotations
- Activity 48: Video Discussion and Questioning
- Activity 49: Virtual Group Interactions
- Activity 50: Backchannel Conference and Course Participation

32

**August 21, 2023**  
**1. Tone/Climate:**  
**A. ChatPDF: Generate Questions for Guest Speakers**  
[https://curtbonk.com/R622\\_online\\_syllabus\\_Fall\\_2023.htm](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**  
 Based on documents, conversations and professional practice questions and understandings


Copy PDF here

33

**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.timeshighereducation.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.**



34

**May 25, 2023**  
**1. Tone/Climate:**  
**C. 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**

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

Awww, 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?

35

**September 8, 2023**  
**2. Encouragement, Feedback:**  
**A. Exam Preparation**  
<https://cybernews.com/academy/news/chatgpt-your-new-academic-mentor/>

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



36

**July 23, 2023**

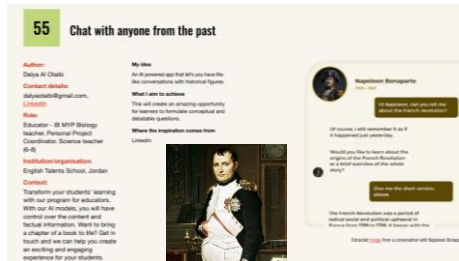
**101 creative ideas to use AI in education**

**3. Curiosity, Intrigue, Unknowns:**

**A. Chat with Anyone in Past**

Christi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education. A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.835454>

<https://www.chronicle.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:**

**C. Key Points of Article Per ChatPDF; or use Article Quotes as Discussion prompts.**

The key points of the article are:

- Discovery of a Molecular Switch:** The KAIST research team identified a specific molecular switch within the genetic network that can revert cancer cells back to normal cells without killing them.
- Critical Transition Moment:** The study focused on the critical transition phase where normal cells become cancerous, revealing that this moment contains crucial information for reversing tumorigenesis.
- Use of Systems Biology and Single-Cell RNA Sequencing:** The team employed systems biology methods and analyzed single-cell RNA sequencing data to model the genetic network and identify the molecular switch.
- Application to Colon Cancer Cells:** They confirmed through molecular experiments that applying this approach could recover cancer cells' normal characteristics, specifically in colon cancer.
- Innovative Cancer Reversal Approach:** Unlike traditional therapies that aim to kill cancer cells, this technology seeks to change their characteristics to revert them to normal cells, potentially offering a less invasive treatment option.
- Potential for Future Therapies:** This research provides a foundation for developing reversal therapies for various cancers, moving toward precision medicine.

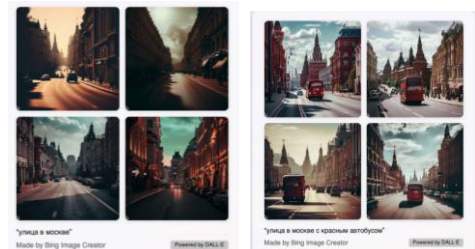
39

**June 7, 2023**

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

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

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



40

**August 21, 2023**

**5. Autonomy, Choice:**

**A. Brave People Option: Book Review**

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

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

41

**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.**



42

## 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>

**12** Branching scenarios using AI-generated case studies

**Author:** Domènec Ballester  
**Contact details:** domeneeballester@gmail.com  
**Role:** Learning Experience Designer & Technologist  
**Institution/organization:** OpenCity Project, Cognitive Labs LLC

**My idea:** Leveraging AI as a thought partner for the authoring of branching scenarios gives learners authentic, ethical first experiences.

**What I aim to achieve:** Authoring, case studies, in a 4 consuming process, and the case that that are not their own, until they, the components that would lead to engaging and meaningful learning moments. By leveraging AI, we are able to add



**BLOOD TEST**

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.

43

## July 23, 2023

### 7. Interactive, Collaborative:

#### A. Gen AI Assisted Book Summaries and Group Exchanges

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

**53** AI-generated book summaries

**Author:** Nayef Khatib  
**Contact details:** a.khatib@durham.ac.uk  
**Role:** Lecturer in learning development  
**Institution/organization:** University of Surrey  
**Context:** One of the summative assessments for Social Science Foundation students is to create a group reading poster on one of the three assigned monographs. Students need to include details of the topic, the author's background and publishing context, the author's position regarding the topic and the 'voice' of the book.  
**Tool used:** ChatGPT

**My idea:** Students in their assessment groups use ChatGPT to create chapter summaries of their chosen monograph. They then swap summaries with another group with a different book and use them to generate discussion in the next lesson.

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

**When the inspiration comes from:** University of Surrey students on digitally-enhanced education, and AI-generated book summaries for meeting comprehension assessment to help lecturers.




Image of an open book in chapter 1. This is an AI-generated image. It is not a real book.

44

## October 5, 2023

### 7. Interactive, Collaborative:

#### B. Book Summary Comparison

Kevin McCullen, an associate professor of computer science at the State University of New York at Plattsburgh  
*Machines of Loving Grace: The Quest for Common Ground Between Humans and Robots*, by John Markoff  
<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."



45

## July 12, 2023

### 7. Interactive, Collaborative:

#### C. Text Revision

Daniel Stanford's Substack

[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical7r-cbejrwAutm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical7r-cbejrwAutm_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.

46

## August 31, 2023

### 7. Interactive, Collaborative:

#### D. 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



47

## July 12, 2023

### 8. Engagement, Involvement:

#### A. Analyze AI Bias

Daniel Stanford's Substack

[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical7r-cbejrwAutm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical7r-cbejrwAutm_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](https://bit.ly/bias-in-ai-images).

48



## 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](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:



#### Examples of Bias in AI Image Generation



49

## 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/>

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

<https://www.youtube.com/watch?v=pbiU8sSALWo>

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**



50

Kim, P., Wang, W., & Bonk, C. J. (online first, 2025). Generative AI as a coach to help students enhance proficiency in question formulation. *Journal of Educational Computing Research*.

<https://doi.org/10.1177/10734265251345422>

Following the launch of the generative AI Web application, Ask SMILE, for evaluating the level of questions asked, 2,559 educators generated 25,973 question-feedback sets over a three-month period; an average of over 10 questions generated per participant.

Table 2: Question Level Statistics

	Value	Percent
Number of Observations (N)	25,973	100%
Level 1 Remembering Questions	7,073	27.2%
Level 2 Understanding Questions	4,401	16.9%
Level 3 Applying Questions	2,574	9.9%
Level 4 Analyzing Questions	3,832	14.9%
Level 5 Evaluating/Creating Questions	8,093	31.1%
Mean Level of Questions	3.056	
Standard Deviation (SD)	1.627	

Table 3: Cross-tabulation of Average Level and First Level of User Questions Generated

	1	2	3	4	5	Total
1	488	288	176	45	0	915
2	13	247	100	78	1	440
3	0	29	152	58	0	239
4	0	23	39	242	14	318
5	0	15	76	117	430	638
Total	489	329	353	340	445	2559

51

## November 5, 2024

### 10. Yields Products, Goals:

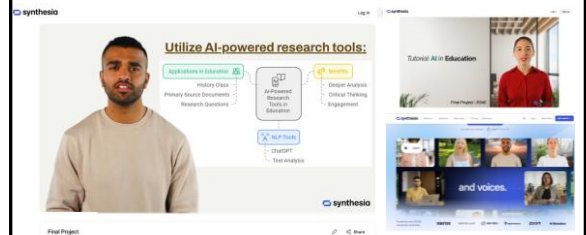
A. Support for Job Applications and Resumes  
AI Video Generation (Synthesia)

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.



52

## 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**

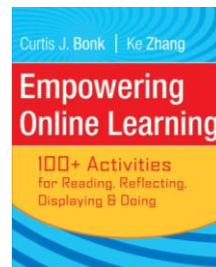


## MOTIVATION



53

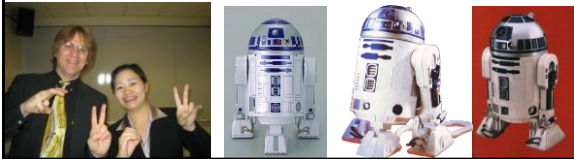
## The R2D2 Model: Read, Reflect, Display, Do...



54

## The R2D2 Model

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



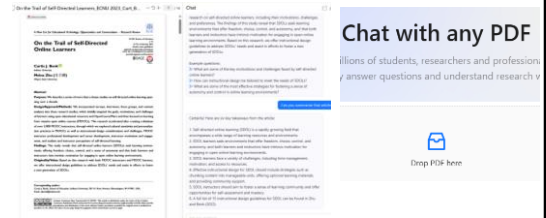
55

**August 21, 2023**

## Read 1a. ChatPDF: Summarize assigned articles and Generate Starter questions

[https://curtbank.com/R622\\_online\\_syllabus\\_Fall\\_2023.htm](https://curtbank.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.



56

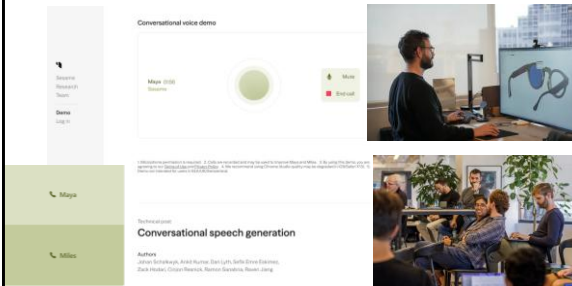
**February 27, 2025**

## Read 1b. Conversational Speech Model

Crossing the uncanny valley of conversational voice

Brendan Iribe, Ankit Kumar, and the Sesame team

[https://www.sesame.com/research/crossing\\_the\\_uncanny\\_valley\\_of\\_voice#demo](https://www.sesame.com/research/crossing_the_uncanny_valley_of_voice#demo)



57

**November 23, 2023**

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

Timothy Laquintano, Lafayette College

<https://wac.colostate.edu/repository/collections/textgened/professional-writing/translating-a-policy-document-into-plain-english/>

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



58

**November 23, 2023**

## Reflect 2b. AI for Editing (TextGenEd)

Nupoor Ranade, George Mason University

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

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

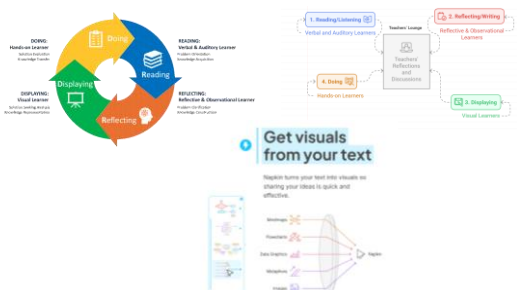


How can AI make credible contributions to the writing and editing process?

59

## May 12, 2025 Display 3a. R2D2 Model

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



60

## July 23, 2023

**101 creative ideas to use AI in education,**  
**Display 3b. Rewriting with AI Image Generators**  
 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.835454>  
 (University of Leeds, Univ. of Calgary, and Univ. of Macedonia)

### 34 Rewriting with AI Image Generators

**Author:**  
Christopher Sean Harris  
**Contact details:**  
[charris@csulb.edu](mailto:charris@csulb.edu)  
**Role:**  
 Educator  
**Institution/organization:**  
 California State University  
**Context:**  
 Students use AI image-generation tools such as DALL·E to create images based on their writing, particularly memoirs.  
**Tool(s) used:**  
 DALL·E 2

**My idea**  
 Rewriting with AI Image Generators  
 Students must write effective & brief summaries of their writing to provide an AI image generator with pertinent instructions. Additionally, students must provide the AI tool with a comment, a desired output, and context. The exercise helps students summarize in directive ways as well as learn how to thoughtfully and intentionally collaborate with AI tools.



61

## February 20, 2024

### Learning is More Visual

**Sora: Finally, An AI Video Generator**

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

Cats in Cathedral

Sora

Sora

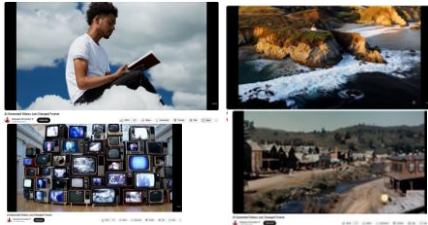


62

## February 15, 2024

### Display 3c. AI Generated Videos Just Changed Forever

Video (12:01): <https://youtu.be/NXpdyAWLDas>  
 Video (3:34): <https://youtu.be/IBx3xW1ua-E>



63

Cats in Cathedral

## February 16, 2024

**A video star is born: OpenAI's Sora stuns with AI act**

<https://economictimes.indiatimes.com/tech/technology/a-video-star-is-born-openais-sora-stuns-with-ai-act/articleshow/107733860.cms?from=rrrrrr>

"a giant cathedral is completely filled with cats. there are cats everywhere you look. a man enters the cathedral and bows before the giant cat king sitting on a throne." Video generated by Sora."

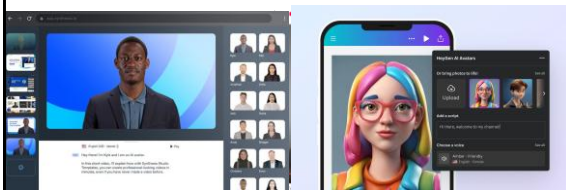


64

## How might you use AI video generators?

## How might it be useful for student self-directed learning?

Video (11:22): <https://www.youtube.com/watch?v=4Du-ofrqasK>



65

## February 19, 2025

### Do 4a. Podcasts and Webinars:

### How to Use AI in Creative Writing:

### The Creative Process

[https://www.youtube.com/watch?v=4Uy5Ua\\_xbso&list=PL0mPn-h3ezcn1TQWvWugizW2ka\\_NBI](https://www.youtube.com/watch?v=4Uy5Ua_xbso&list=PL0mPn-h3ezcn1TQWvWugizW2ka_NBI)

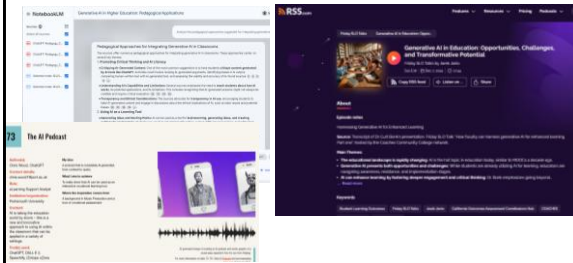
This video describes the four cognitive phases in the creative process — finding opportunities, brainstorming possibilities, selecting the best option, and integrating it into a larger whole — and then discusses where AI can help us and where it can't, especially as it applies to creative writing and fiction. It was delivered with 224 at Oregon State University as part of the research mechanism in "A New Phase: How Guided AI Use Supports Creativity in Online Creative Writing Courses," along with other lessons in the following sequence:



66

## December 7, 2024

**Do 4b. Generate Podcast from Slides (NotebookLM (AI Creator))**  
**How Faculty Can Harness Generative AI for Enhanced Learning**  
<https://notebooklm.google/>



67

## November 5, 2024

**Do 4b. Book Teasers and Podcasts**  
**(NotebookLM (AI Creator)); Final Projects R546 Fall of 2024**  
<https://notebooklm.google/>

Pressbook and Podcast (with NotebookLM (AI Creator)), Topic: *Teaching Across Cultures: A Pedagogical Guide for Online Faculty in Higher Education*; Kirsten Choct; Link to book: <https://pressbooks.psu.edu/teachingacrosscultures/> and Link to AI generated podcast (bottom of this page): <https://pressbooks.psu.edu/teachingacrosscultures/front-matter/introduction/>.  
 NotebookLM now lets you listen to a conversation about your sources  
 Our new Audio Overview feature can turn documents, slides, charts and more into engaging discussions with one click



68

## 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/ajokd6PXUoc2x8B8>

...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.



69

## 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=MQtJC7bs0IY>

\*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=i3lu5FSdsQ>

NotebookLM podcast (12:57): <https://youtu.be/hPr-n2Co-6I>

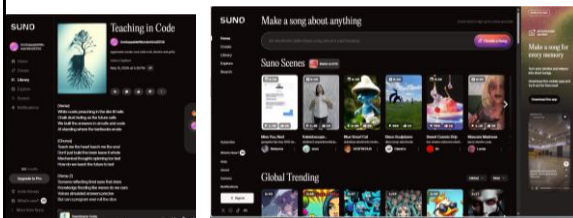


70

## May 15, 2025

**Do 1d. Suno: Makes a Song About Anything**  
**How About: The medical educators and AI song, indie rock**  
<https://suno.com/>

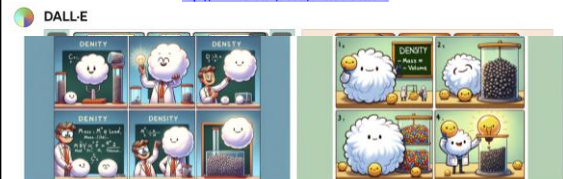
The Future We Create: <https://suno.com/song/5343dd7d-8bcd-4d01-88ab-0a41c4469f5c>  
 Teaching in Code: <https://suno.com/song/8704ddfc-5d25-4488-95e9-37863b06e3cd>  
[https://suno.com/create/signup\\_source=splashpage&referrer=%2Fhome&redirected\\_from=signup&wid=default](https://suno.com/create/signup_source=splashpage&referrer=%2Fhome&redirected_from=signup&w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



71

## 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.researchgate.net/publication/361186144-DALL-E-2>



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.

72



**July 23, 2023**  
**101 creative ideas to use AI in education**  
**Do 4f. Comic Book Content Creations**  
**(Aras Bozkurt, Anadolu University)**

Chriesi Neramzi, Sandra Alogglen, Marianna Kavatsori, & Antonia 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>


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

**Author:** Aras Bozkurt  
**Contact details:** [arabozkurt@gmail.com](mailto:arabozkurt@gmail.com)  
**Role:** Educator  
**Institution/Organization:** Anadolu University  
**Credentia:** Higher education  
**Tool(s) used:** DALL-E 2, Midjourney, or any tool for image generative AI tool

**My idea:** Academic articles, research books and other similar content can be boring. Especially since such studies are too heavy. They can be challenging to interact and learn. Instead, changing the same content as a comic strip can make such academic content more engaging.

**What I aim to achieve:** Academic information presented with comic book visuals can be both stimulating and easier to remember.

**When the inspiration came from:** I used to read a lot of comics when I was a kid and still read them whenever I can.



73

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

DALL-E: An "Intelligent" Illustrator for your Language Classroom  
<https://fltmag.com/dall%20e/>

- 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.

74

**February 4, 2023**  
**Do 4i. Create Class Glossaries**  
**ChatGPT for language learning – All the prompts you need**  
**Theodosis Karageorgakis, Educraft**  
<https://educraft.tech/chatgpt-in-the-language-learning/>

**Glossaries**

Money for the taxi. It helps avoid confusion and delays in the payment process.

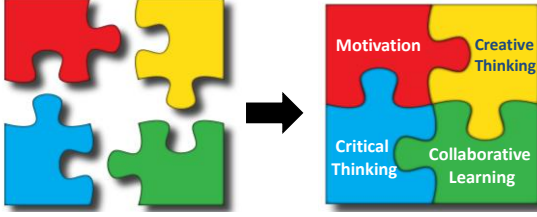
1. "How many people are in your group?"  
 This phrase is used by taxi drivers to ask how many people will be traveling together. It helps the driver choose the appropriate size of the taxi and ensure everyone fits comfortably.

2. "Please speak slowly."  
 This phrase is used by taxi drivers to ask passengers to speak slowly and clearly. It helps the driver understand the passenger's instructions and avoid misunderstandings.

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.*

75



76


**January 8, 2024**  
**Activity #1. Brave People Option:**  
**Human-to-Human vs. AI Augmented Discussions**  
[https://curtbank.com/R678\\_online\\_syllabus\\_spring\\_2024.htm](https://curtbank.com/R678_online_syllabus_spring_2024.htm)

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

**Week 4: Human-to-Human Discussion**  
 All Sections  
 Last post at Feb 6, 6:39 PM  
 Available until May 6, 11:59 PM

**Week 3: AI Augmented Discussion**  
 All Sections  
 Last post at Feb 6, 9:46 AM  
 Available until May 6, 11:59 PM

**10 Generative AI Tools for Work Productivity**




77

**January 8, 2024**  
**Activity #2. Brave People Option:**  
**Software and Technology Tool Reviewer**  
[https://curtbank.com/R678\\_online\\_syllabus\\_spring\\_2024.htm](https://curtbank.com/R678_online_syllabus_spring_2024.htm)

**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.



78



**January 8, 2024**  
**Activity #3. Brave People Option:**  
**Script Creator and Developer**

[https://curtbonk.com/R678\\_online\\_syllabus\\_spring\\_2024.htm](https://curtbonk.com/R678_online_syllabus_spring_2024.htm)

**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.



79

**July 18, 2023**  
**Center for Teaching Innovation, Cornell University**  
**CU Committee Report: Generative Artificial**  
**Intelligence for Education and Pedagogy**

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

**Activity #4. 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?

80

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**Activity #5. 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.



81

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**Activity #6. 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.

82

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**Activity #7. 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.

83

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

**Activity #8. 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.

84

**July 18, 2023**

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CU Committee Report: Generative Artificial  
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[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_2.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_2.pdf)

**Activity #9. Revise for new audience & reflect – graded assignment. Turn a two-page proposal into a one-page proposal for a new audience. Two Heads Again.**

- Have 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).
- Use GAI to help shorten the original proposal.
- Critically analyze how GAI shortened the work given the new audience.
- Using GAI edits and their critical thinking, shorten original proposal to one page.
- 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.

85

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**Activity #10. GAI as a Peer Editor.**

- 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).
- Students review the GAI
- Students respond to sev  
Which suggestions find



86

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[https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report\\_2.pdf](https://teaching.cornell.edu/sites/default/files/2023-08/Cornell-GenerativeAIForEducation-Report_2.pdf)

**Activity #11. Brainstorm Ideas for Assignment.**

- 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.).
- Students evaluate the ideas based on the established criteria for the assignment.
- Students further develop their preferred idea and complete the assignment.
- In-class discussion or written reflection: Students critically analyze the usefulness of AI in the brainstorming process.

87

**July 23, 2023**

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

**Activity #12. 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>  
<https://www.chroneicle.com/articles/how-will-artificial-intelligence-change-higher-ed>



88

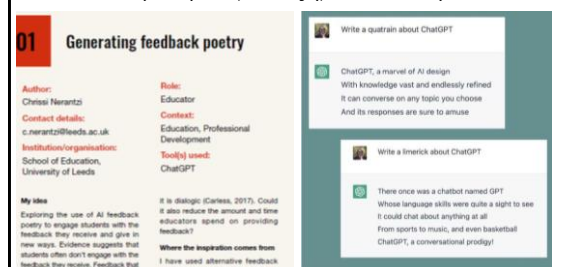
**July 23, 2023**

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

**Activity #13. 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>

(University of Leeds, Univ. of Calgary, and Univ. of Macedonia)



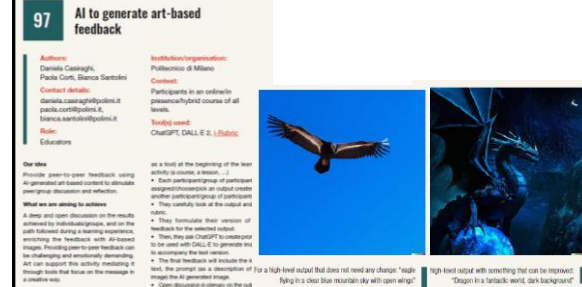
89

**July 23, 2023**

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

**Activity #14. AI Generated Art-Based Feedback**

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



90

**August 15, 2023**

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

### Activity #15. 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.



91

**August 15, 2023**

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

### Activity #16. 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.



92

**November 23, 2023**

### Activity #17. 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.



93

**October 5, 2023**

### Activity #18. 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.** Then each the group rewrote the essay, using what they wanted of the original in the final draft.



94

**November 23, 2023**

### Activity #19. 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.



95

**July 12, 2023**

### Activity #20. Generate Plans, Guides, Checklists, and Instructional Design Materials

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

**Example Activity: 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:

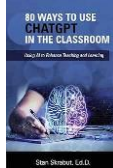
- Create a nutrition plan for a diabetic patient that incorporates the following foods. [Insert foods here.] Provide recipes for breakfast, lunch and dinner for each day of the week.
- Write 20 quiz questions that test past-tense verb conjugation for ESL learners with moderate fluency.
- Create a checklist of dos and don'ts for an entrepreneur documenting business expenses for tax purposes.

96

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

**Activity #21. Think, Pair, Share**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

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

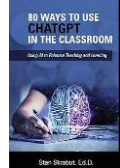


97

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

**Activity #22. List Generator Discussions**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

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

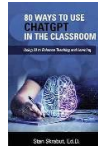


98

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

**Activity #23. Language Conversation Partners**  
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BYC8MXJY>

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



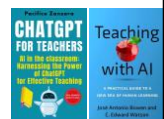
99

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

**Activity #24. Blogging and Journaling**

Jose Antonio Bowen and C. Edward Watson  
<https://www.press.jhu.edu/books/title/53869/teaching-ai>  
<https://www.amazon.com/Chat-GPT-Teachers-Classroom-Harnessing/dp/B0CPDWKXWYg>

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



100

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

**Activity #25. 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.



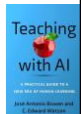
101

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

**Activity #26. 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.



102

**August 31, 2024**  
**Brave People Option:**  
**Activity #27. Research Dig**  
<https://curtbonk.com/Instructional-Strats-R546-2024.htm>

**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?

**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.



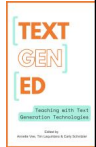
103

**August 28, 2024**  
**Creative Explorations, WAC Clearinghouse**  
**Activity #28. Professional Writing for Healthcare**  
<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.
- Then you will explore and experiment with various AI systems (explained in assignments below), analyzing your own and AI's writing. Working with AI and your writing you will revise your summary based on feedback from peers and ideas/language gained from the AI summaries to produce a finished summary.



104

**July 23, 2023**  
**101 creative ideas to use AI in education**  
**Activity #29. Mashups for Morphological Thinking**  
 Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>

**83 Design thinking as synthetic combinatory creativity**

**Author:** John Hammond  
**Contact details:** jhammond@leeds.ac.uk  
**Role:** Educator  
**Institution/organization:** University of Leeds  
**Context:** A workshop for art and design students.

**Tool used:** This is a speculative pedagogy project that aims to explore the relationship between traditional Design thinking methods for ideation and visualization 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 artificiality in AI-generated content was an exciting parallel to the creative process. The combinatory possibilities of AI systems have resonance with contemporary ideation and visualization methods used in design.

The Morphological Matrix image generated from ChatGPT using the prompt: Generate 10 ideas of ideas in new vehicles. The Morphological Matrix. For more information on this see <https://doi.org/10.5281/zenodo.8355454> Zenodo repository. Prompting creativity by thinking differently.

105

**July 23, 2023**  
**101 creative ideas to use AI in education**  
**Activity #30. Refining Interview Questions**  
 Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>

**85 Refining interview questions using ChatGPT**

**Author:** Katharine Walsh  
**Contact details:** k.walsh@leeds.ac.uk  
**Role:** Lecturer, University Innovation Centre  
**Institution/organization:** University of Chester  
**Context:** Students are required to develop a set of interview questions to explore a topic. They are given a list of questions to choose from and are asked to refine them using ChatGPT.

**My idea:** To use this tool to refine interview questions. I wanted to explore the use of AI to refine interview questions and to see how it could be used to generate a set of questions that are more relevant and specific to the topic.

**Where the inspiration comes from:** The inspiration came from a comment that the artificiality in AI-generated content was an exciting parallel to the creative process. The combinatory possibilities of AI systems have resonance with contemporary ideation and visualization methods used in design.

106

**July 23, 2023**  
**101 creative ideas to use AI in education**  
**Activity #31. Reflections on Alternative Environments (Climate Change)**  
 Chrissi Nerantzi, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>

**80 Life of a camel in icy environments**

**Author:** Madhum Nave  
**Contact details:** madhumnave@gmail.com  
**Role:** Educator  
**Institution/organization:** The College of Education  
**Context:** Education  
**Tool used:** ChatGPT, DALL-E 2

**My idea:** The idea is to use AI to generate a story about a camel in an icy environment. The idea is to use AI to generate a story about a camel in an icy environment. The idea is to use AI to generate a story about a camel in an icy environment.

**Where the inspiration comes from:** The idea came from a comment that the artificiality in AI-generated content was an exciting parallel to the creative process. The combinatory possibilities of AI systems have resonance with contemporary ideation and visualization methods used in design.

107

**November 16, 2023**  
**AI Pedagogy Project: Harvard's metaLAB Introduces AI Pedagogy Project, Sarah Newman, Director of Art & Education at metaLAB, Harvard University**  
<https://color.harvard.edu/story/2023-11/harvard-meta-lab-introduces-ai-pedagogy-project>

**Harvard's metaLAB Introduces AI Pedagogy Project**

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

**metaLAB**

**Events**  
**Community**  
**Publications**  
**Projects & Tools**  
**Programs**  
**Education**  
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**Search**

**Harvard's metaLAB Introduces AI Pedagogy Project**

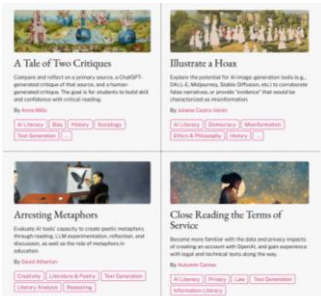
**NEW DYNAMIC RESOURCE AIMED AT GUIDING EDUCATORS NAVIGATING AI IN THEIR TEACHING.**

**metaLAB**

108



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

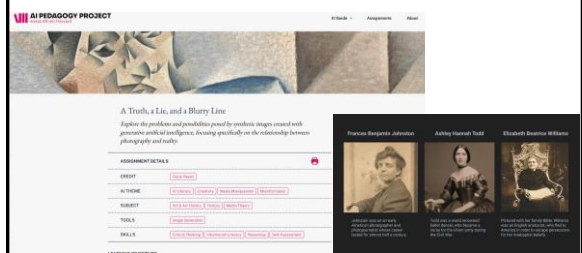


109

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

**Activity #32. Identifying Photographic Manipulations**  
**(Fake, Real, Misleading for deductive reasoning)**

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.



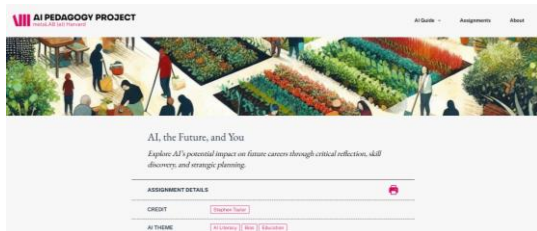
110

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

**Activity #33. 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://aipedagogy.org/assignment/a-tale-of-two-critiques/>  
<https://aipedagogy.org/assignments/>



111

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

**Activity #34. 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://aipedagogy.org/assignment/correct-a-bad-essay/>  
<https://aipedagogy.org/assignments/>



112

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

**Activity #35. 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://aipedagogy.org/assignment/immersive-history/>  
<https://aipedagogy.org/assignments/>



113

**Poll #2. Closing question...**

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

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



114

**Chat Window Sharing:  
Three Words from this Session...?**  
e.g., "I am happy!" and...  
"minions are happy!"



115

**We are entering a jumping  
off point...**



116

**Things are heating up!**



117

**The Learning Revolution  
is coming within reach!**



118

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



119

**Any Questions or Comments?**

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120