

The HyFlex of Blended Learning with AI:

Popular Frameworks for Powerful Learning

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Indiana University**

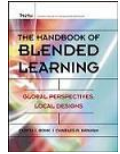
cjbonk@indiana.edu; <http://curtbonk.com/>



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Poll #1: Have you ever taken or taught a blended learning or HyFlex course?

- Yes many.
- Yes, just a couple.
- No, but I taught one or more technology enhanced ones.
- No but I am willing to try.
- No and I like it that way.



2

Poll #2 and #3. Warm-up questions...

2. Have you used ChatGPT or other Generative AI tools for any **teaching**, training, or tutoring that you have done? Yes. No.

3. Have you used ChatGPT or other Generative AI tools for any of your formal or informal **learning**? Yes. No.



3

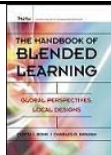
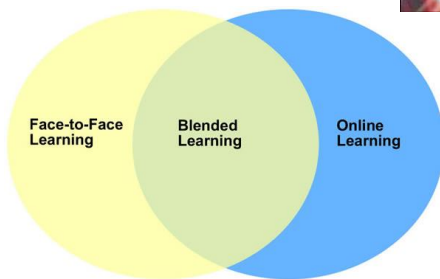
Activity #1 (Paired):

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



4

Blended Learning

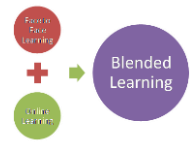


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Myth: Blended learning is easy to define.
Myth: Blended learning is hard to define.

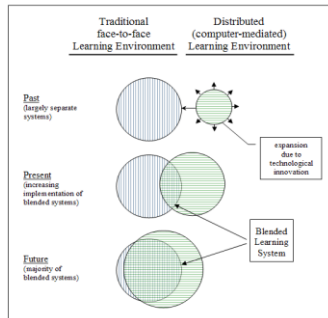
Blending Online and F2F Instruction

"Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)



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Historical Emergence of Blended (Graham, 2006)



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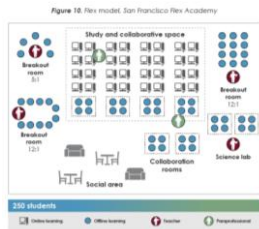
Myth: There is a best model of blended. AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Ignieri, 2006)



Source: American Management Association, AMA at Work

8

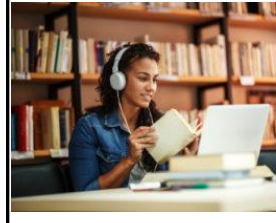
Blended Model. Flex (curriculum primarily online with instructors available FTF)



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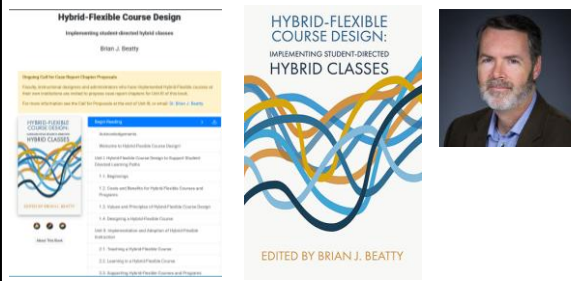
June 17, 2021 How can higher ed move blended learning forward?

Jessica Rowland Williams, eCampus News

<https://www.ecampusnews.com/2021/06/17/how-can-higher-ed-move-blended-learning-forward/>

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June 17, 2021 Free Book: Hybrid-Flexible Course Design <https://edtechbooks.org/hyflex>



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Fall 2021 Hybrid Modality: HyFlex Teaching

<https://instructionalcontinuity.georgetown.edu/pedagogies-and-strategies/hybrid-hyflex-teaching/>
In a HyFlex course, courses are delivered both in person and online at the same time by the same faculty member. For any given class meeting, some students might participate in person, while others might participate at the same time online, made possible by a combination of cameras, microphones, displays, and other technology in the classroom.



Some considerations for Concurrent or HyFlex Teaching and Learning

The physical context constraints and health guidelines will make teaching a hybrid environment in the fall challenging.

A brief summary of key considerations for hybrid teaching is provided in the document at the bottom of the page and is linked to the text.

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Fall 2021
Hybrid Modality: HyFlex Teaching
<https://instructionalcontinuity.georgetown.edu/pedagogies-and-strategies/hybrid-hyflex-teaching/>
 HyFlex (a term coined by [Brian Beatty](#)) stands for a combination of "hybrid," meaning alternating between face-to-face meetings and remote interactions, and "flexible," meaning students move between these participation options.

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Silver Lining for Learning

Episode 49 | HyFlex Course design: Conditions, Controversy & Craftsmanship
 by Curtis Bink | Feb 25, 2021 | 30:00:00

HyFlex Course Design:
 Conditions, Controversy, & Craftsmanship

silverliningforlearning.org
 Episode #49
 March 6 5:30pm Eastern

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Clearly...
Learning is Changing!

How Online Learning is Changing Classroom Design

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Education 3.0...Education 20/20

"In Education 3.0, classrooms would move away from lectures, such as this one, to having class time be spent on discussions and projects, using digital technology."
 (Per Wikipedia: https://en.wikipedia.org/wiki/Education_3.0)

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Now What is Education 4.0?
 "Innovation-producing education. Learn more in:
 Development of Individual Agency within a Collaborative,
 Creative Learning Community"
<http://www.igi-global.com/dictionary/education-40/44755>
<https://thinc.in.th/engadmission/education4.html> (Chula Engineering)

1.0: Dictation of Knowledge
 2.0: E-Learning
 Knowledge: a commodity in modern world
 Skills: 21st century skill
 Attitude: Can-Do Attitude
 or Knowledge Economy

3.0: Knowledge-Producing
 4.0: Innovation-Producing
 Innovation Society

Thailand Education 4.0

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Education 20/20

VISION 20/20
 Fulfilling the Promise of Public Education

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20 New Roles of the Instructor

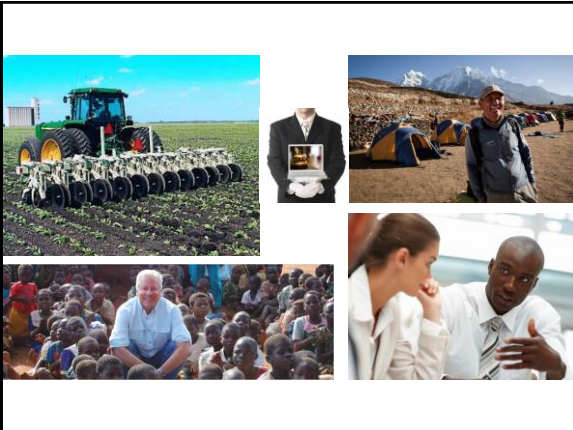
Captain **Course Ambassador** **Consumer Advocate**
Counselor **Curator** **Cook** **Change Catalyst**
Conductor **Concierge** **Comedian**
Camping Trip Guide **Coach**
Consultant **Course Expedition Leader** **Collaborator**
Community Organizer **Chemist** **Care Giver**
Cultivator **Colleague**



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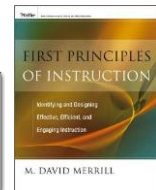
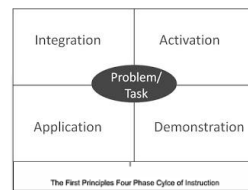
20



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Merrill's First Principles of Teaching/Instruction

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



22

Bonk's 20 "Last" Principles of Instruction (LAST = Learning Activation System Template)

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>

Flexibility **Support and Feedback** **Choice and Options**
Convenience **Spontaneity** **Nontraditional Learning**
Collegiality **Organization** **Passion and Inspiration**
Sharing **Relevance and Meaningfulness**
Cheerfulness and Optimism **Trial and Error (i.e., it is ok to fail)**
High Expectations **Purpose and Vision** **Expanded Resources**
Empowerment and Autonomy **Human Connectedness** **#20 ???**
Cognitive Apprenticeship

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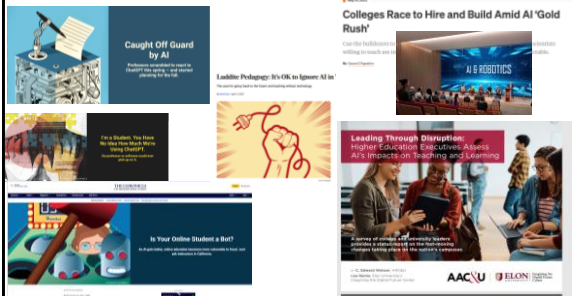
Bonk's Last Principles of Teaching/Instruction (Education 4.0?)

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>
<http://www.applicadhel.com/articles/education-4-0/>



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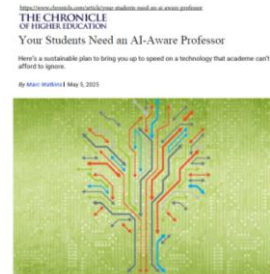
November 2022 to May 2025: AI, AI, AI, AI... AI in Higher Education News



25

May 5, 2025

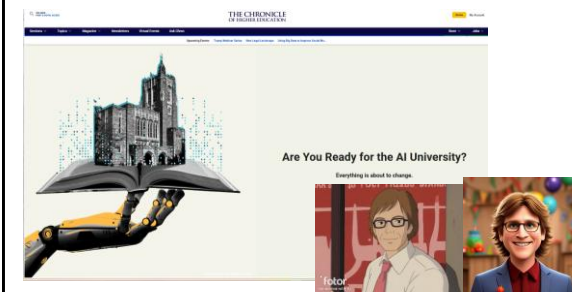
Your Students Need an AI-Aware Professor Marc Watkins, The Chronicle of Higher Education <https://www.chronicle.com/article/your-students-need-an-ai-aware-professor>



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April 8, 2025

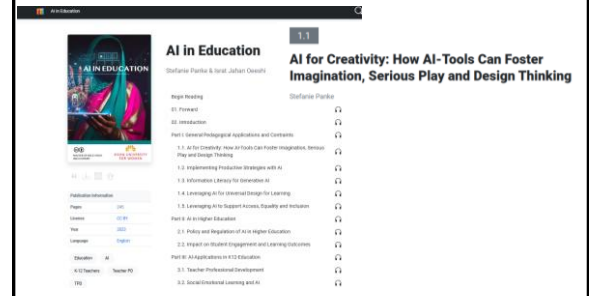
Are You Ready for the AI University Scott Latham, The Chronicle of Higher Education <https://www.chronicle.com/article/are-you-ready-for-the-ai-university>



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July 5, 2024

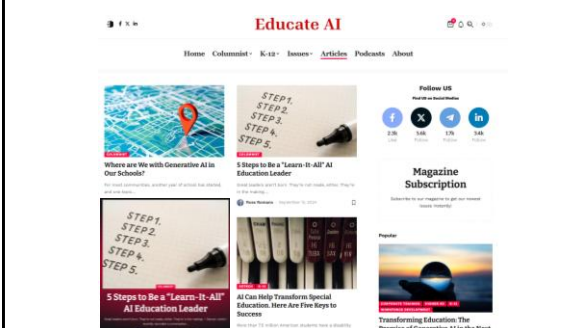
AI in Education Stefanie Panke and Israt Jahan Ooeshi https://edtechbooks.org/ai_in_education



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September 16, 2024 Educate AI

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



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Poll #4.

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.



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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 survey reveals that teachers embrace students in use of, and sentiment toward, AI in education

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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%)**

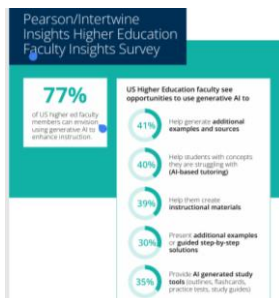


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December 2024

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>



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January 30, 2025

Digital Education Council Global AI Faculty Survey

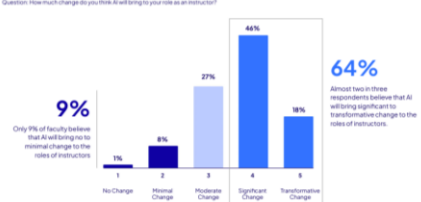
Digital Education Council

<https://www.chronicle.com/newsletter/teaching/2025-01-30>

Substantial change is coming to teaching

Digital Education Council Global AI Faculty Survey 2025 | Section 2: Faculty Sentiment on AI, Roles, and Skills for the Future

Question: How much change do you think AI will bring to your role as an instructor?



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January 30, 2025

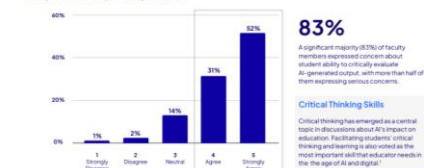
Digital Education Council Global AI Faculty Survey

Digital Education Council

<https://www.chronicle.com/newsletter/teaching/2025-01-30>

83% of faculty concerned about student ability to evaluate AI

Question: I am concerned about the following regarding AI integration into teaching:
• Ability of students to critically evaluate AI-generated output



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January 30, 2025

Digital Education Council Global AI Faculty Survey

Digital Education Council

<https://www.chronicle.com/newsletter/teaching/2025-01-30>

Top 5 skills educators need for the AI era

Digital Education Council Global AI Faculty Survey 2025 | Section 2: Faculty Sentiment on AI, Roles, and Skills for the Future

Question: In your view, what are the top skills that an educator needs in the age of AI and digital?



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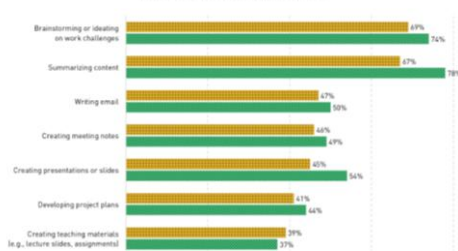
February 17, 2025

2025 EDUCAUSE AI Landscape Study: Into the Digital AI Divide

Jenay Robert and Mark McCormack

<https://www.educause.edu/content/2025/2025-educause-ai-landscape-study?highlight=the-digital-ai-divide-between-institutions#figure28>

Figure 28. Personal Uses of AI, by Institution Size



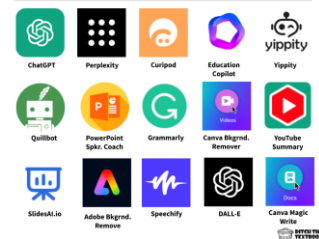
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May 15, 2025

Categorized AI Tools for Teaching and Learning

<https://docs.google.com/document/d/11Ar-wDTrmxDZ8aVufCpJdBF2cs6oUjDhwE4oq0/edit?tab=t.0>

15 AI tools to use in the classroom



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November 30, 2023

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

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

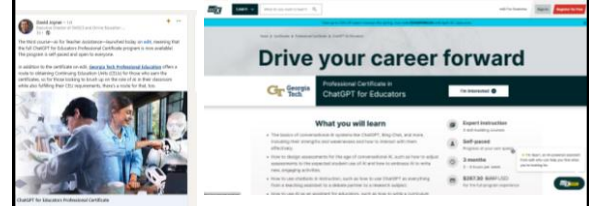


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April 19, 2024

Professional Certificate in ChatGPT for Educators Georgia Tech

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



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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.



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April 4, 2024

Teaching with AI:

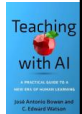
A Practical Guide to a New Era of Human Learning (2024)

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.



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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=bejrwutm_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

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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/s11528-024-09939-9>

Student codes

- 24/7 support and accessibility
 - Unlimited access
 - Variety of subjects/platforms
 - Increased opportunities
- Explain difficult concepts
 - Summarize
 - Provide rationale
- Conversation partner
 - Diverse contexts
 - Customized conversations
 - Argument practice
- Personalized feedback and materials
 - Feedback
 - Tailored activities
 - Personalized pacing
 - Personalized materials
 - Recommendations
 - Language assistance
- Writing Support
 - Writing steps
 - Ideas
 - Editing
- Self-assessment
 - Generate outlines
 - Study guides
 - Questions
 - Diagnostic reasoning
 - Detailed responses
- Engagement
 - Facilitate discussions
 - Collaboration
 - Interactive learning
- Facilitate self-determination
 - Sense of control
 - Autonomy over learning
 - Increase efficacy

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April 3, 2023

Affordances and Pedagogical Benefits ChatGPT for Language Teaching and Learning

<https://journals.sagepub.com/proxpub.wils.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

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August 15, 2023

ChatGPT and generative AI: 25 applications in teaching and assessment

Seb Dianati & Suman Laudari, Charles Darwin University

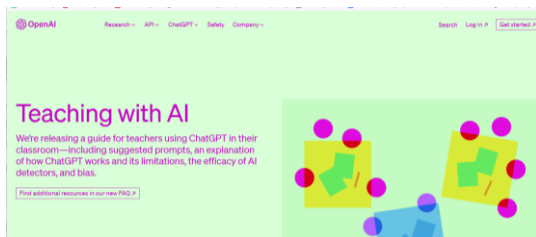
<https://www.timeshighereducation.com/campus/chatgpt-and-generative-ai-25-applications-teaching-and-assessment>

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. Include, 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: Isotopic on the one hand, 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 summarize 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. Outline class teaching for your biomedical engineering, first

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Sources Teaching with AI

<https://openai.com/blog/teaching-with-ai>
<https://cybernews.com/academy/news/teaching-with-ai-openai-new-teachers-guide/>



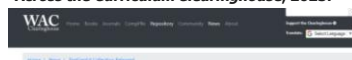
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November 23, 2023

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

By April 2024

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 new TextGenEd Collection. This collection includes the most current research and writing in the field of text generation technologies, and is designed to support students in their research and writing across the curriculum. The collection is available in both print and digital formats, and is designed to be used by students and faculty alike.



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July 23, 2023

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

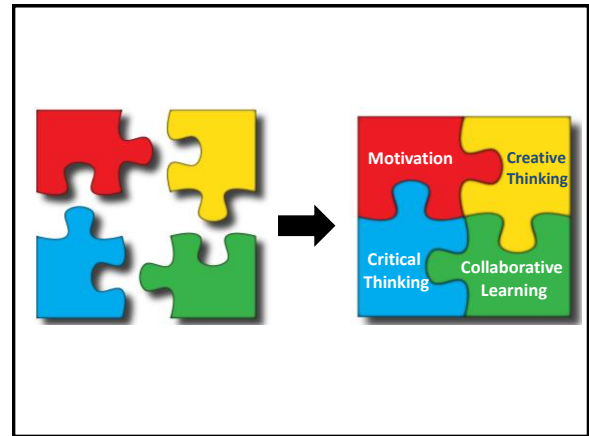
Chrisi Nerantz, Sandra Abegglen, Marianna Karatsiori, & Antonio Martínez-Arboleda (Eds.). (2023). 101 creative ideas to use AI in education, A crowdsourced collection (2023 1.2) [Computer software]. Zenodo. <https://doi.org/10.5281/zenodo.8355454>

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

Student-led Case discussions with ChatGPT Prompts
(AI can help focus, is reliable, nudge).

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Motivation Research Highlights
(Jere Brophy, Michigan State University)

1. **Supportive**, appropriate **challenge**, **meaningful**, moderation/optimal.
2. Teach **goal** setting and self-reinforcement.
3. Offer **rewards** for good/improved performance.
4. Novelty, **variety**, **choice**, adaptable to interests.
5. Game-like, **fun**, fantasy, curiosity, suspense, active.
6. Higher levels, divergence, dissonance, **peer interaction**.
7. Allow to create finished **products**.
8. Provide immediate **feedback**, advance organizers.
9. Show intensity, **enthusiasm**, interest, minimize anxiety.
10. Make content **personal**, concrete, familiar.





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Introducing the TEC-VARIETY Framework

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

Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

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September 23, 2022

Motivating and Supporting Online Learners
<https://colcommons.org/my-course>




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1. Tone/Climate: A. Course Introductions with GenAI Embellishments on One Item

(R678) <https://padlet.com/cmsmeltz/h6zbzpdfos6x19l>
(R511) <https://padlet.com/sunseol/b1yr49ljxwc6smkx>

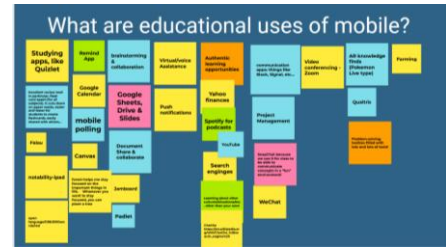


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April 11, 2022

1. Tone/Climate: B. Warm-Up Exercises: What do you know about XYZ...? (in Jamboard or Miro with GenAI assistance)

https://jamboard.google.com/d/3hatec2m2u7D5GAt6LcQmewR9RkxwR1NCSQm_Bf512/viewer?c=3

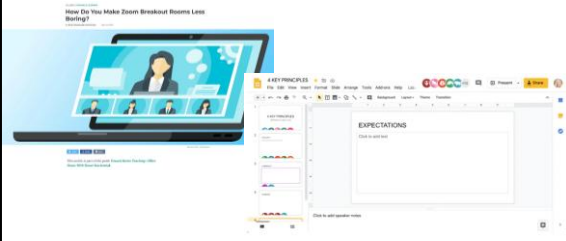


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September 24, 2020

1. Tone/Climate: C. Breakout Rooms Introductions: Share one AI Tool you use, etc.

Bonni Stachowiak (Columnist), Ed Surge
<https://www.edsurge.com/news/2020-09-24-how-do-you-make-zoom-breakout-rooms-less-boring>



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August 21, 2023

1. Tone/Climate:

D. 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 documents, research papers and generate answers, questions and understand research.



Drop PDF here

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August 15, 2023

1. Tone/Climate:

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

1. Tone/Climate: A. Develop Ice-Breaker or Team Building Exercises.

A. 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.

B. 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.



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May 25, 2023

1. Tone/Climate:

F. 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?

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March 7, 2022
1. Tone/Climate:
G. Use ChatGPT to Generate Polls and Engage in Brainstorming
<https://padlet.com/basdogan2/ywl19ct98stvolbw>

Sync Polling for Comprehension
 June 30, 2022

13. Develop synchronous polling: Can you develop five synchronous polling questions to test students' 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.

Certainly! Here are five synchronous polling questions to test students' comprehension of the subject prompt:

1. What is the purpose of synchronous polling?

- a) To test students' comprehension
- b) To facilitate real-time interaction
- c) To evaluate learning outcomes
- d) All of the above

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

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



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August 31, 2023
2. Encouragement, Feedback:
B. Translation Assistance to Improve Writing and Conversation Skills
<https://openai.com/blog/teaching-with-ai>

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



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July 23, 2023
101 creative ideas to use AI in education,
2. Encouragement, Feedback:
C. Generating Feedback Poetry

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>

01 Generating feedback poetry

Author: Chrissi Nerantzi
Contact details: c.nerantzi@leeds.ac.uk
Institution/organization: School of Education, University of Leeds

Role: Educator
Context: Education, Professional Development
Tool(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...

It is a design (Carrere, 2017). Could it also reduce the amount and time educators spend on providing feedback?

Where the inspiration comes from: I have used alternative feedback...

Write a quatrain about ChatGPT

ChatGPT, a marvel of AI design,
 With knowledge vast and endlessly refined,
 It can converse on any topic you choose,
 And its responses are sure to amuse.

Write a haiku about ChatGPT

There once was a ChatGPT named GPT,
 Whose language skills were quite a sight to see,
 It could chat about anything at all,
 From sports to music, and even baseball.
 ChatGPT, a conversational prodigy!

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July 23, 2023
101 creative ideas to use AI in education,
2. Encouragement, Feedback:
D. AI Generated Art-Based Feedback
 Zenodo. <https://doi.org/10.5281/zenodo.8355454>

97 AI to generate art-based feedback

Author: Chrissi Nerantzi, Paula Cook, Maria Karatsiori
Contact details: chrissi.nerantzi@leeds.ac.uk, paula.cook@leeds.ac.uk, maria.karatsiori@leeds.ac.uk
Role: Educators

Institution/organization: Professors at Leeds
Context: Participants in an online, presence/hybrid course of all levels
Tool(s) used: ChatGPT, DALL-E 2, iStock

My idea: Providing a new way to give feedback, using AI-generated art-based prompts to stimulate peer-group discussion and reflection.

What was the setting or audience: A deep and open discussion on the results achieved by participants, and the path forward using a learning experience, including the feedback with AI-generated images. Providing a new way to give feedback can be challenging and involves identifying, and not repeating this, which is essential through how that focus on the message is created.

An idea that at the beginning of the learning activity to create a better...
 a. Don't underestimate the importance of a design/visual element or of an online participation of participants.
 b. This creates a lot of the initial and the whole.

How I generated these images of the feedback for the selected output:
 a. Use the ChatGPT to create prompts to generate images.
 b. Use the DALL-E 2 to generate images to accompany the text content.
 c. The final feedback will include the image, the prompt (as a description of the image) and a generated image.
 d. Open discussion or debate on the outputs.

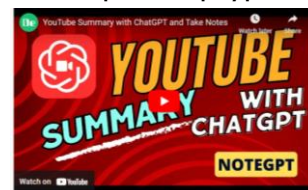
For a high-level output that does not need any change: "Aquila flying in a clear blue mountain sky with open wings"

High-level output with something that can be improved: "Dragon in a fantasy world, dark background"

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August 15, 2023
ChatGPT and generative AI: 25 applications
3. Curiosity, Intrigue, Unknowns:
A. Provide YouTube Summaries
<https://www.timeshighereducation.com/campus/chatgpt-and-generative-ai-25-applications-teaching-and-assessment>

Use this YouTube transcript of a previous instructor and summarize their video or demonstration into 10 bullet points. Now use this data to help me develop my presentation.



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July 12, 2023
3. Curiosity, Intrigue, Unknowns:
B. 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.

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July 12, 2023
3. Curiosity, Intrigue, Unknowns:
C. 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

Example ChatGPT Responses from SUNY Online Summit Workshop

Document created by Daniel Stanford. Email: daniel@danstanford.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.

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February 6, 2025
3. Curiosity, Intrigue, Unknowns:
D. 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>

KAIST team discovers molecular switch to reverse cancer cells

Professor Keung-Yoon Choi's research team has recently been highlighted for their work in developing an original technology for cancer reversal treatment that does not kill cancer cells but only change their characteristics to reverse them to a state similar to normal cells. This time, they have succeeded in revealing for the first time that a molecular switch that can induce cancer reversal at the moment when normal cells change into cancer cells is hidden in the genetic network.

KAIST President Keung-Yoon Choi announced in the list of lectures that Professor Keung-Yoon Choi's research team of the Department of Bio and Brain Engineering has succeeded in developing a fundamental technology to restore the critical transition phenomenon at the moment when normal cells change into cancer cells and analyze its discover a molecular switch that can reverse cancer cells back into normal cells.

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February 6, 2025
3. Curiosity, Intrigue, Unknowns:
D. Key Points of Article Per ChatPDF and 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 reverse 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 provided a foundation for developing reversion therapies for various cancers, moving toward

Potential for Future Therapies: This research provides a foundation for developing reversion therapies for various cancers, moving toward targeted and precise treatments.

Significance of the Findings: This is the first study to analyze the critical genetic transition in detail and identify a molecular switch capable of reversing cancer at this key moment.

These points underscore a novel, mechanism-based approach to cancer treatment centered on molecular and systems biology insights.

What role does the critical transition state play in reversing cancer cells?

The critical transition state plays a pivotal role in reversing cancer cells by representing a transient and unstable phase where normal cells and cancer cells coexist just before the irreversible change into a cancerous state. The research team discovered that during tumorigenesis, normal cells pass through this critical transition state due to accumulated genetic and epigenetic changes. By analyzing this specific moment, they could identify the molecular switch that controls the transition, targeting the subtle processes at the critical point allows for the possibility of reversing the process, restoring cancer cells to a normal state before they become irreversibly malignant. Essentially, the critical transition state acts as a window of opportunity where intervention can effectively revert cancer cells back to normal, preventing the progression of tumor development.

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March 7, 2022
3. Curiosity, Intrigue, Unknowns:
E. Brainstorming in Padlet with GenAI Assistance

<https://padlet.com/basdogan2/ywl19ct8stylvow>



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February 28, 2025
3. Curiosity, Intrigue, Unknowns:
F. Multimedia News/Tidbits with GenAI summaries.
No one knows what this ancient script says.
Now there's a \$1 million prize to crack the code

Jessie Yeung, CNN

<https://www.cnn.com/2025/02/28/asia/indus-valley-script-indie-prize-1ml-hnk-ds/index.html>

A fish under a roof. A stick figure without a head. A series of lines that look like a garden robe. These symbols are part of an entirely undiscovered script from a sophisticated ancient civilization thousands of years old. And they remain an enduring mystery that has sparked heated debates, death threats to researchers, and cash prizes for the coveted answer. The latest such prize was offered last month by the chief minister of one Indian state: \$1 million to anyone who can decode the script of the Indus Valley civilization, which stretched across what is now Pakistan and northern India.

If deciphered, the script could offer a glimpse into a Bronze Age civilization believed to rival ancient Egypt and Mesopotamia. Some believe this vast domain held millions of people, with cities that boasted advanced urban planning, standardized weights and measures, and extensive trade routes.



Excavated with a diamond saw, the clay tablet was found in the Indus Valley. It is the largest tablet ever discovered from the Indus Valley civilization.



A stone seal inscribed with the Indus Valley script and depicting an Indian deity. Found at Mohenjo-daro, Indus Valley. Credit: CNN/Indus Valley Script Foundation/Indus Valley Script Foundation.



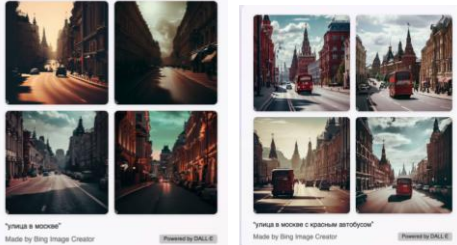
Many seals had this common motif: often described as a unicorn. Though others contend it was a bull. Credit: Indus Valley Script Foundation/Indus Valley Script Foundation.

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June 7, 2023

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

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



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July 23, 2023

101 creative ideas to use AI in education

4. Variety, Novelty, Fun, Fantasy: B. Chat with Anyone in Past

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/articles/how-will-artificial-intelligence-change-higher-ed>



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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>



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5. Autonomy, Choice:

B. Reflect on Podcasts and Webcasts



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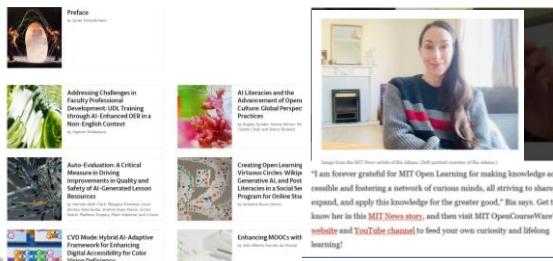
February 27, 2025

5. Autonomy, Choice:

C. Making Knowledge Accessible and Fostering a Network of Curious Minds

MIT OpenCourseWare

<https://aiopeneducation.pubpub.org/>



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January 8, 2024

5. Autonomy, Choice:

D. Discussion Choice

Human-to-Human vs. AI Augmented Discussions

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

Brave People Option: 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.



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Discussions

[Week 5, Human to Human Discussion](#)
All Sections
Last post at Feb 6, 10:25 PM Available until May 6, 11:59 PM

[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

[Week 5, AI Augmented Discussion](#)
All Sections
Last post at Feb 5, 11:07 PM

[Week 4, AI Augmented Discussion](#)
All Sections
Last post at Feb 5, 11:07 PM

Looking for 2024, what questions should instructional designers and technologists ask about using generative technologies and augmented reality in learning environments?
Please feel free to use these questions to generate new queries:
Specific Brief Questions
In 2024, with the advancements in generative technologies and augmented reality (AR), it's important for instructional designers and technologists to ask critical questions when incorporating them into learning environments. Here are some key points to consider:
Technological Considerations
• What are the data privacy and security implications of using AR/Generative technologies? Be transparent about data collection, storage, and usage, and ensure compliance with relevant regulations.
• What are the ethical considerations involved in using AR/Generative technologies in education? Address potential biases, data ownership, and transparency to ensure responsible use of the data.
• What are the technical requirements and costs associated with implementing AR/Generative technologies? Consider hardware compatibility, software subscriptions, maintenance, and potential upgrade costs, along with the required faculty and training time for sustainability.
Pedagogical Considerations
• How will we integrate AR/Generative technologies seamlessly into the existing curriculum? Avoid isolated "AR demos" and ensure the technology complements and reinforces existing learning outcomes.
• What specific learning objectives will AR/Generative technologies help achieve? AR is great for illustrating concepts, but not everything needs virtual immersion. Identify specific learning goals where these technologies offer a clear advantage over traditional methods.
• How will we assess the impact of AR/Generative technologies on learning outcomes? Measure and analyze data to see if the technology actually improves learning compared to traditional methods. Don't assume effectiveness based on novelty alone.
Accessibility Considerations
• How will AR/Generative technologies ensure students with different learning styles and needs can fully benefit from the learning experience?

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August 21, 2023
5. Autonomy, Choice:
B. Brave People Option: Scholar Essay
https://curtbank.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.

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August 21, 2023
5. Autonomy, Choice:
E. Brave People Option: Book Review
https://curtbank.com/R511_online_syllabus_fall_2023.htm

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

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October 16, 2021
6. Relevance, Meaningfulness:
A. AMA (Ask Me Anything) in Miro
and have AI and humans generate answers.
Students must decide which is the human answer.

Bloomington Group #1
"Ask Curt Anything" About Instructional Strategies

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

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October 5, 2023
6. Relevance, Meaningfulness:
C. Support for Job Applications and Resumes
Grace Heneks, a lecturer in the English department at Texas A&M University
<https://www.chronicle.com/newsletter/teaching/2023-10-05>

In the technical writing course, students used **ChatGPT to write job-application materials, such as cover letters and resumes**. Most of them, she wrote, found that the chatbot actually created work because, even with multiple prompts, the writing did not have much personality and was repetitive.

Maha Bali encourages them to use AI to generate ideas, refine their first drafts, or even start an assignment with a ChatGPT-created draft and then make it their own.

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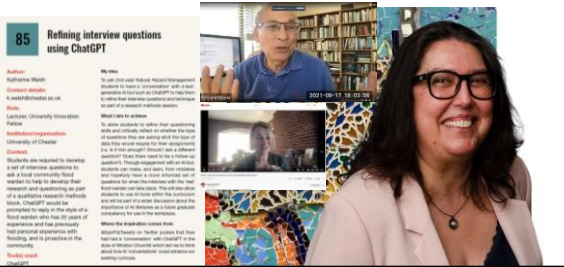
November 4, 2024

7. Interactive, Collaborative: D. Refining Interview Questions

Meet Dr. Ana-Paula Correia, an internationally recognized expert in learning design and educational technology, specializing in online learning and teaching, mobile learning, collaborative learning, and human-computer interaction.

Dr. Ana-Paula Correia is a highly accomplished Professor of Learning Technologies and the Ted and Lois Cyphert Distinguished Professor in the College of Education and Human Ecology at The Ohio State University.

<https://www.ana-paulacorreia.com/>



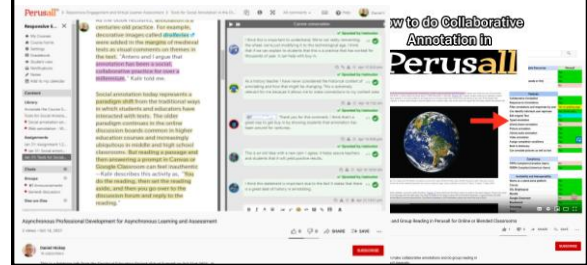
91

June 3, 2020

7. Interactive, Collaborative: E. Collab Annotation Compared to GenAI Annotations

EdTech with Adam: <https://www.youtube.com/watch?v=edB9IECompA>

<https://perusal.com/>



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August 31, 2023

7. Interactive, Collaborative: F. 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



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8. Engagement, Involvement: A. AI in Medical Simulations

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



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October 5, 2023

7. Interactive, Collaborative: B. 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.



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July 12, 2023

8. Engagement, Involvement: C. Analyze AI Bias

Daniel Stanford's Substack

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

Example Activity: Analyze examples of bias in AI output.

- Example prompt: **Write a scene in a movie script where people in specific professions interact** (e.g., a doctor/nurse, pilot and flight attendant).
- Student reflection question: **What gender did AI assign to each role?** How did this reinforce or contradict common stereotypes?
- Additional example assignment: **Analyze how AI handles racial or gender representation** depending on prompt wording. See examples at bit.ly/bias-in-ai-images.


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July 12, 2023
8. Engagement, Involvement:
C. Analyze AI Bias
Daniel Stanford's Substack
https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm_campaign=post&utm_medium=web


Examples of Bias in AI Image Generation
This document was created by Daniel Stanford. Content with links to external sites, such as Substack, is not owned by Daniel Stanford and may be subject to change without notice. The images below were generated by Midjourney. They demonstrate how image generation tools can default to certain higher-visibility roles and must be explicitly prompted to create images with diverse racial representation or to create a broader range of roles.

Midjourney Examples
The following images were generated by 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"



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July 12, 2023
8. Engagement, Involvement:
C. Analyze AI Bias
Daniel Stanford's Substack
https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bejrw&utm_campaign=post&utm_medium=web

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



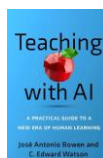
Prompt: Illustration of nurse, doctor, pilot and professor (Source: openai.com/product/dall-e-2)

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

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April 4, 2024
Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)
8. Engagement, Involvement:
D. Blogging and Journaling
Jose Antonio Bowen and C. Edward Watson
<https://www.press.jhu.edu/books/title/53869/teaching-ai>

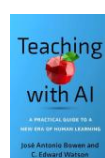
Record weekly course reflections in a blog or a journal. Then have students get feedback from both a peer and ChatGPT. Have students write one or more reflections on the difference on feedback offered. Or ChatGPT could create weekly blog posts to compare to.



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April 4, 2024
Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)
8. Engagement, Involvement:
E. Human vs. AI
Jose Antonio Bowen and C. Edward Watson
<https://www.press.jhu.edu/books/title/53869/teaching-ai>

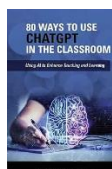
Ask students to write a paragraph, article abstract, short paper, poem, lecture summary of key points, etc. both with and without AI. Next share the artifact with a partner. Each person attempts to identify the human and AI elements. Finally, they discuss how either draft document could be improved.



100

February 10, 2023
80 Ways to Use ChatGPT in the Classroom
Stan Skrabut, Ed.D.
8. Engagement, Involvement:
F. List Generator Discussions
<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVC8MXJY>

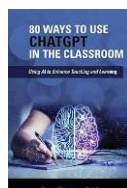
Have ChatGPT or any other generative AI tool generate a list (e.g., ice breakers, student paired interview questions, book or article recommendations, course guidelines or objectives, course objectives, etc.) and then engage students in small group and then whole class discussions.



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February 10, 2023
80 Ways to Use ChatGPT in the Classroom
Stan Skrabut, Ed.D.
8. Engagement, Involvement:
G. 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.



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July 18, 2023

9. Tension, Challenge, Controversy, etc.:
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

A. Pro and Con Debates.

- Use GAI to generate pro and con arguments for a debate that is relevant to the course.
- Review course material and readings to augment and strengthen these arguments.
- Come to class prepared to engage in a debate with classmates.
- After debate, discuss which arguments were strongest and why.
- In-class discussion or written reflection: Students critically analyze what makes a more effective argument.



103

May 11, 2020

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

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



104

May 11, 2020

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

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

Reformulate question asked for GPT 3.5

Ask a question

With the help of GPT 3.5, your question will be evaluated on a scale from Level 1 to Level 5 aligned to Bloom's taxonomy

What will it take for North and South Korea to be reunified?

Submit 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, such as:

1. Diplomatic negotiations: Engaging in sustained diplomatic dialogue 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.
4. Economic integration: Establishing mechanisms for economic integration and harmonization of policies.



105

May 25, 2023

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



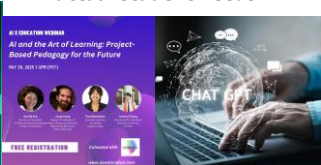
106

July 23, 2023

101 creative ideas to use AI in education...
10. Yields Products, Goals:

A. PBL

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



107

November 5, 2024

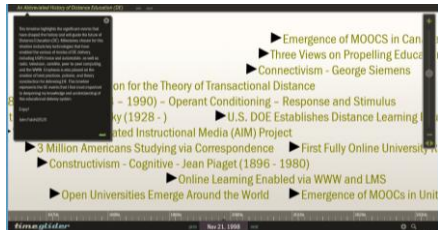
10. Yields Products, Goals:
B. Support for Job Applications and Resumes
AI Video Generation (Synthesia)

AI in Education Tutorial (Final Projects R546 Fall of 2024)
<https://share.synthesia.io/45b37421-90a3-4180-b655-8b8565763201> (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.



108

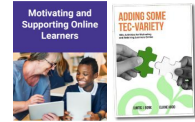
April 23, 2020
10. Yields Products, Goals:
C. AI Generated Timelines, Taxonomies, and Concept Maps



109

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



110

Poll: Any light bulbs going off in your head so far?

- Yes definitely...many of them...pop...pop...pop!
- Yes, several times.
- Yes maybe!
- Not yet (but hopefully soon...)
- Nope. Darn it my brain is not working today.
- There's no hope with this idiot presenting.



111

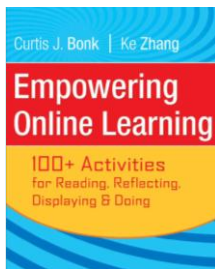
Paired Activity #2...
What have you learned so far?

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



112

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



113

Question: How can technology address diverse learner needs?



114

The R2D2 Model

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



115

1. Auditory or Verbal Learners

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



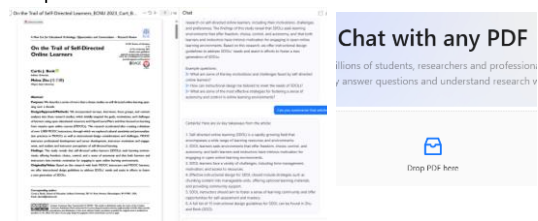
116

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.

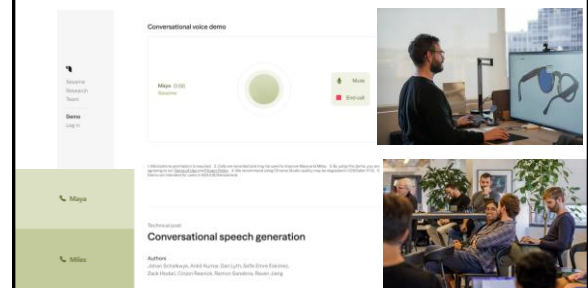


117

February 27, 2025

Read 1b. Conversational Speech Model

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



118

June 15, 2022

Read 1c. Leaders & Legends of Online Learning, Dr. Mark Nichols' Podcast

<https://onlinelearninglegends.com/podcast/062-dr-george-veletsianos/>

In this episode, Open Polytechnic of New Zealand Executive Director Dr. Mark Nichols chats with Dr. George Veletsianos, Royal Roads University in Victoria, British Columbia. George talks about his history and research in online education, and his ongoing challenges to the false dichotomy of online and in-person learning.



119

Pedagogical Uses of Podcasts

1. Replace some course readings.
2. Podcast reenactments.
3. Use of podcasts to back up different sides of debates or to start debates.
4. Remix episodes and explore themes and common issues.
5. Support asynchronous discussion.
6. Add multimedia component to student papers.
7. Interview the podcast hosts and guests.
8. Identify new discoveries and trends in the field.
9. Favorite podcast show competitions.
10. Supplement class lectures or presentations.

120

Pedagogical Benefits of Podcasts (Palenque, 2016, Journal of Instructional Research)

1. Promotes active listening.
2. Expands vocabulary.
3. Support active, social, and creative aspects of learning.
4. Provides opportunities for reflection.
5. Aligns with self-paced and independent learning.
6. Helps chunk learning and connect to what you know.
7. Fosters audience awareness and social cognition
8. Potential for audio feedback to learners.
9. Provides alternative to reading.
10. Fosters planning skills.

121

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



122

Reflect 2a.

Online Role Play or Debate with GenAI assuming one or more roles

<ul style="list-style-type: none"> • Controller/Executive Director/CEO/Leader • Connector/Relator/Linker/Synthesizer • Decider/Judge/Settler • Devil's Advocate/Critic/Censor • Reflector/Thinker/Speculator/Observer/Watcher • Warrior/Debater/Arguer/Conqueroir/Bloodletter • Idea Spuncher/Biased/Preconceiver • Slacker/Slough/Slag/Surfer Dude 	<ul style="list-style-type: none"> • Artist/Idea Person/Visionary/Muse • Planner/Predictor/Guesser/Flowcharter • Organizer/Starter/Founder/Initiator • Questioner/Ponderer/Protester • Adventurer/Discoverer/Explorer/Traveler • Mediator/Negotiator/Compromiser/Peacemaker • Watchdog/Evaluator/Measurer • Creative Energy/Inventor/Generator/Brainstormer 	<ul style="list-style-type: none"> • Optimist/Open-minded/Idealist • Robotic/Information Dumper/Spock-like • Absent Minded/Stumpler/Dense/Amless • Coach/Facilitator/Inspirator/Tutor • Guide/Mentor/Teacher/Scaffolder • Humanitarian/Do Gooder/Final Raiser • Funny/Humorous/Comic/Witty • Advisor/Responder/Helper/Tutor • Worldly/Wiseperson/Sage/Guru/Spiritual Leader
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Example 2: Scaffolding...in the form of structuring the online environment and engagement e.g., reflective roles, self-coding, timely-engagement of instructors or otherwise you have "serial monologues."

123

August 31, 2023

Reflect 2b. 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."



124

November 23, 2023

Reflect 2c. 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.



125

November 23, 2023

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

Antonio Byrd, Univ. of Missouri at KC

<https://wac.colostate.edu/repository/collections/textgened/rhetorical-engagements/using-llms-as-peer-reviewers-for-revising-essays/>

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



126

November 23, 2023 Reflect 2e. 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?

127

November 23, 2023 Reflect 2f. Decoding an AI Bot's Chatting Pattern (TextGenEd)

Bhushan Aryal & Ordner W. Taylor, Delaware State University
<https://wac.colostate.edu/repository/collections/textgened/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.



128

January 8, 2024 Reflect 2g.

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/>



129

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

Reflect 2h. Assess validity of sources for accuracy and bias.

- Use GAI to find sources for an assignment relevant to the course.
- Students review sources, evaluating the usefulness and relevance to the assignment.
- Students conduct a similar search using library resources.
- Students produce an annotated bibliography that assesses the quality, relevance, and reliability of GAI and library sources.
- In-class discussion or written reflection: Students critically analyze the usefulness of AI to find reliable and unbiased sources.

130

January 8, 2024 Reflect 2i.

Critique of Critiques

https://curtbonk.com/R678_online_syllabus_spring_2024.htm

Brave People 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.



131

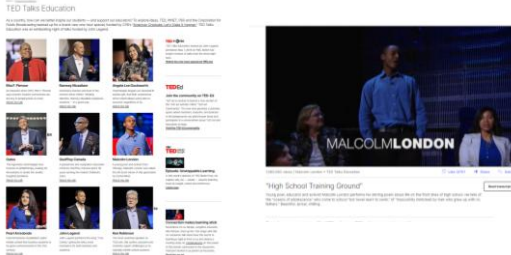
3. Visual Learners

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



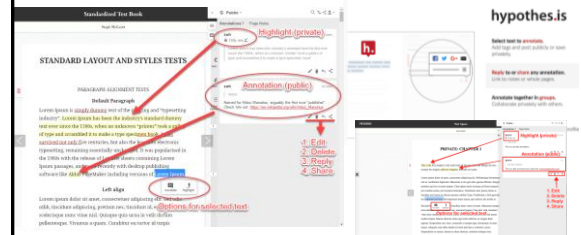
132

May 26, 2025
Display 3a. TED Talks Education with AI
suggestion on lesson plan integration
<https://www.ted.com/about/programs-initiatives/ted-talks-education>



133

Display 3e.
Display 3b. Collaborative Web and PDF Annotation Tools
(with AI advice and support—Color coded)
 Hypothes.is (Free): <https://web.hypothes.is/>
 Note Anywhere: <https://www.youtube.com/watch?v=g4AJ2eowd4Ho>
 Adds virtual sticky notes to webpages



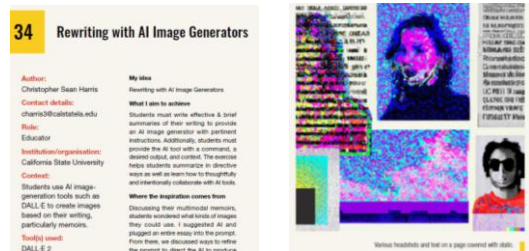
134

July 23, 2023
101 creative ideas to use AI in education
Display 3c. Reflections on Alternative Environments (Climate Change)
 Chissi 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>



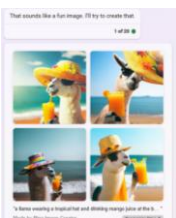
135

July 23, 2023
101 creative ideas to use AI in education,
Display 3d. Rewriting with AI Image Generators
 Chissi 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>
 (University of Leeds, Univ. of Calgary, and Univ. of Macedonia)



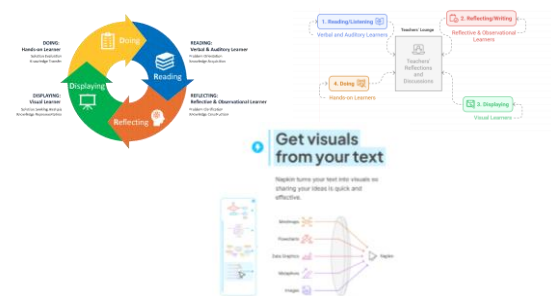
136

June 7, 2023
Display 3e. 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 bno.com/create). Users can create as many images as they would like for free. <https://tesl-ej.org/pdf/ej107/int.pdf>



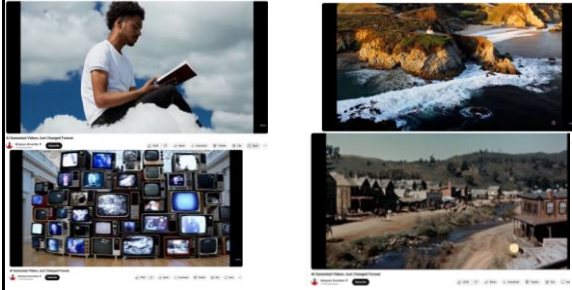
137

May 12, 2025
Display 3f. R2D2 Model
<https://www.napkin.ai/>



138

February 15, 2024 [Sora](#)
Display 3g. AI Generated Videos Just Changed Forever
 Video (12:01): <https://youtu.be/NXpdyAWLDas>



139

February 20, 2024 [Cats in Cathedral](#)
Sora: Finally, An AI Video Generator
 Video (3:34): <https://youtu.be/IBx3xW1ua-E> [Sora](#) [Sora](#)



140

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>



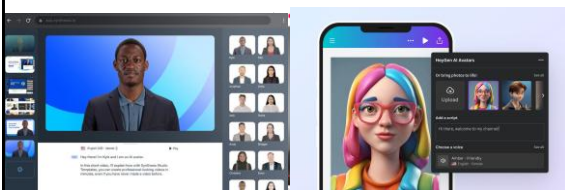
141

February 16, 2024
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>



142

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



143

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.



144

February 19, 2025

Do 4a. Podcasts and Webinars: How to Use AI in Creative Writing: The Creative Process

https://www.youtube.com/watch?v=4UySJa_xbo&list=PL0mPh-hJezckn1TQW5WuzWZkpa_NBI

94 views Feb 18, 2025 [ADDLINK](#)
This video describes the four cognitive phases in the creative process – finding opportunity, transforming possibilities, selecting the best option, and integrating it into a larger whole – and then delineates where AI can help us and where it can't, especially as it applies to creative writing and fiction. It was delivered in WR 224 at Oregon State University as part of the research mechanism in "A New Music: How Guided AI Use Impacts Creativity in Online Creative Writing Courses," along with other reasons in the following sequence:



145

November 5, 2024

Do 4b. Book Teasers and Podcasts (NotebookLM (AI Creator); Final Projects R546 Fall of 2024

<https://notebooklm.google/>
Mark Brown, 'My Leukemia Story'

Pressbook and Podcast (with NotebookLM (AI Creator)), Topic: [Teaching Across Cultures: A Pedagogical Guide for Online Faculty in Higher Education](#); Kristen Chert; Link to book: <https://pressbooks.psu.org/teachingacrosscultures/> and Link to AI generated podcast (bottom of this page): <https://pressbooks.psu.org/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.



146

December 6, 2024

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

Mark Brown, 'My Leukemia Story': <https://on.soundcloud.com/ajokd6PXUngC2xB8>

Curt Bonk, Student Learning Outcomes (SLO), COACHes Hub
Video (104:25): <https://www.youtube.com/watch?v=MQLJC7be0IY>

**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=j3lu5FSdsQs>
NotebookLM podcast (12:57): <https://youtu.be/hPr-p2Co-6I>



147

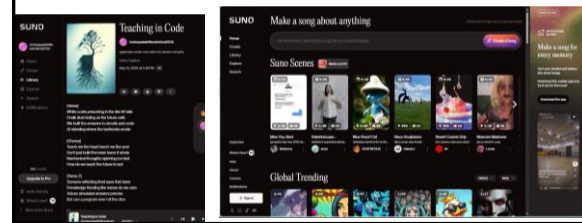
May 15, 2025

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-9a41c469f5c>

Teaching in Code: <https://suno.com/song/8704ddfc-5d25-4488-95e9-37863006e3cd>
https://suno.com/create?signup_source=splashpage&referrer=%2Fhome&redirected_from=signup&uid=default



148

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.openai.com/policies/dall-e-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.

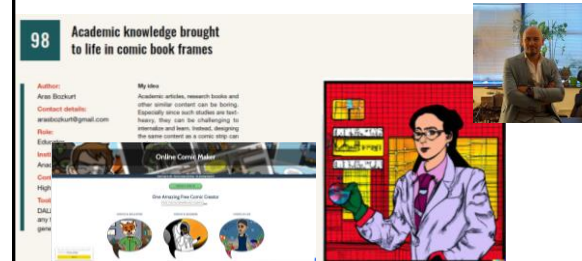
149

July 23, 2023

101 creative ideas to use AI in education

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

Chrisi Nerantzis, Sandra Aebegglen, 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>



150

February 4, 2023

Do 4g. Create Class Glossaries

ChatGPT for language learning – All the prompts you need
Theodosis 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.

151

April 23, 2020

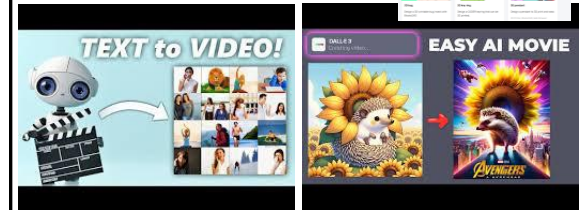
Do 4h. Demonstration Videos

Using DALL-E, Gencraft, Canva, etc.

Crane Makerspace, Tina Closser

https://www.youtube.com/channel/UC9eWf5b97p203H4B7TB5w2/view_as_subscriber

How To Make AI Generated Videos With DALL-E-3 Images
<https://www.youtube.com/watch?v=akXk2xc1ch8>

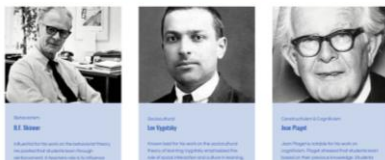


152

November 16, 2024

Do 4i. AI Peer Evaluation (website)
R511, Task 6, Fall 2024, Shelby Hoyert
Elevate-ED
<https://shelbysharp0.wixsite.com/elevate-ed>

Educational Theorists



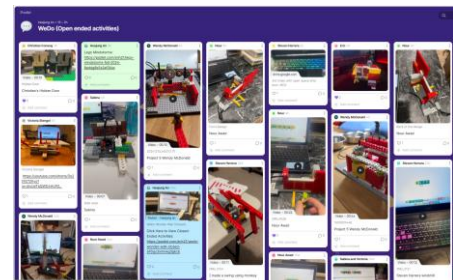
153

December 10, 2024

Do 4j. AI Explanations and Summaries

Mindstorms, Heejeung An, WPU

<https://padlet.com/anh21/wedo-open-ended-activities-r8n84ytcdyf4t17u>



154

February 19, 2023

Do 4k. Generate images and have students draft stories

DALL-E: An "Intelligent" Illustrator for your Language Classroom
<https://illmag.com/dall%2ce/>

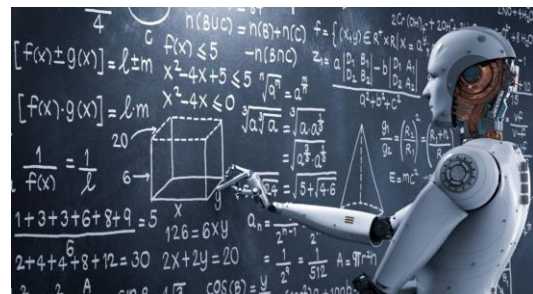
- Ask DALL-E to **generate culturally-specific images** and then have students research and explain why the image does or does not fit the reality in the context of the target culture.
- Ask DALL-E to **generate images based on idioms or proverbs** as part of a lesson on them.
- Have **students give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

155

Paired Activity...#4

Jot down one thing you learned so far...

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



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February 10, 2023
80 Ways to Use ChatGPT in the Classroom
 Stan Skrabut, Ed.D.
Blended Learning #7. Language Conversation Partners

<https://www.amazon.com/80-Ways-Use-ChatGPT-Classroom/dp/B0BVCRMXTV>

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.



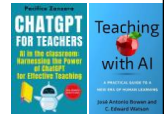
163

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

Blended Learning #8. 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-Harmless/dp/B0CPDWKWTG>

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



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April 4, 2024
Teaching with AI: A Practical Guide to a New Era of Human Learning (2024)
Blended Learning #9. Human vs. AI
 Jose Antonio Bowen and C. Edward Watson
<https://www.press.jhu.edu/books/title/53869/teaching-ai>

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



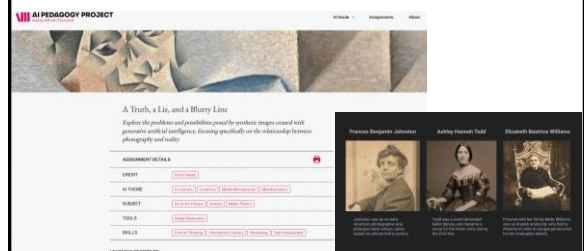
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August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University

Blended Learning #10. 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://ai.pedagogy.org/assignments/a-truth-a-lie-and-a-blurry-line/>
<https://ai.pedagogy.org/assignments/>



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August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University

Blended Learning #11. Immersive History Creations

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

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



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August 27, 2024
AI Pedagogy Project: Assignments
 Harvard University

Blended Learning #12. Error Correction and Critical Thinking

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

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

...you might try prompting both ChatGPT and Google Gemini with the following: "Write a factually inaccurate essay discussing the effects of human pollution on the Mississippi River Delta ecosystem that attributes these effects primarily to fallen space debris,"
<https://ai.pedagogy.org/assignments/correct-a-bad-essay/>
<https://ai.pedagogy.org/assignments/>



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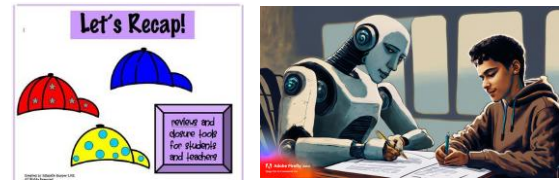
How could you use the R2D2 and TEC-VARIETY Models?



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Closing Activity:

Turn to your neighbor once again and share:
What can you use Generative AI for Blended or Hyflex Learning?



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Any questions...?



171

Chat Window Sharing: Three Words from this Session...?

e.g., "I am happy!" and...
"minions are happy!"



172

We are entering a jumping off point...



173

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

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



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Any Questions or Comments?

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

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

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

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

Curtis J. Bonk, IST Professor, Indiana University

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



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