


## How Faculty Can Harness Generative AI for Enhanced Learning: Part 1 With a Little TEC-VARIETY and R2D2

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



1

### Poll #1 and #2. Warm-up questions...

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

2

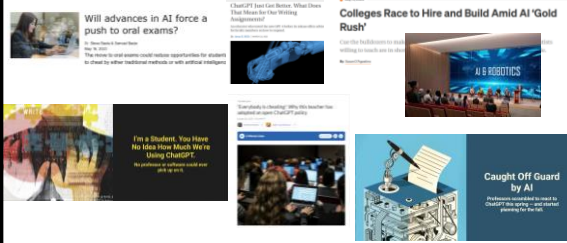
### Poll #3. Warm-up questions...

3. How often do you **use ChatGPT** or other Generative AI tools?

- a. Gobs of times each day.
- b. Nearly every day.
- c. About once a week.
- d. About once a month.
- e. Just once or twice to test it out.
- f. Never. Never. Never.

3

## 2023 & 2024: AI, AI, AI, AI... AI in Higher Ed News




4

## November 13, 2023 Why You Should Rethink Your Resistance to ChatGPT

Flower Darby, Chronicle of Higher Education  
<https://www.chronicle.com/article/why-you-should-rethink-your-resistance-to-chatgpt>

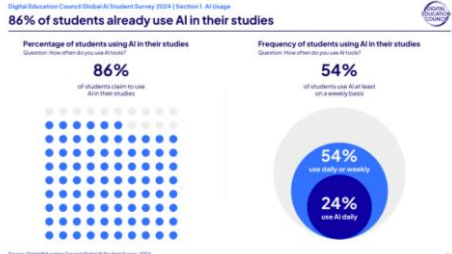
A **more recent study** found that **nearly half (49 percent) of college students are using generative AI tools, but only 22 percent of faculty members.** That disconnect highlights faculty hesitation to use AI as much as it reveals potential resistance.



5

## August 2, 2024 Digital Education Council Global AI Student Survey 2024 The Digital Education Council

<https://www.digitaleducationcouncil.com/post/digital-education-council-global-ai-student-survey-2024>



Metric	Percentage
Percentage of students using AI in their studies (claim to use)	86%
Frequency of students using AI in their studies (at least once a week)	54%
Frequency of students using AI in their studies (daily)	24%

6

### August 2, 2024

## Digital Education Council Global AI Student Survey 2024 The Digital Education Council

<https://www.digitaleducationcouncil.com/post/digital-education-council-global-ai-student-survey-2024>

Is Gen AI the new Google?

Information searching tops the list for AI use cases among students, followed by grammar checking

Use Case	Percentage
Search for information	69%
Check grammar	42%
Summarize documents	33%
Paraphrase a document	28%
Create a text draft	24%

7

### August 1, 2024

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

Rachel Janzen, Clare Church, and Radhe Paleia  
<https://forum.academica.ca/forum/exploring-ai-students-speak-about-their-awareness-and-usage-of-chatgpt>

### Awareness: What Generative AI Tools Are Students Familiar With?

We asked students about their familiarity with generative AI tools first, beginning with the most famous tool: ChatGPT. Unsurprisingly, a significantly higher proportion of students had heard of ChatGPT in 2024 than in 2023. Almost all (97%) of surveyed students said that they had heard of ChatGPT this year, whereas in 2023, less than two thirds (66%) of students said the same (figure 9).

Figure 9: Have you heard of ChatGPT? (2024 n=88, 2023 n=103)

Year	Yes (%)	No (%)
2024	97%	3%
2023	66%	34%

8

### August 1, 2024

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

Rachel Janzen, Clare Church, and Radhe Paleia  
<https://forum.academica.ca/forum/exploring-ai-students-speak-about-their-awareness-and-usage-of-chatgpt>

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

Task	2024 (%)	2023 (%)
As a learning aid (e.g., to research a question, clarifying concepts)	88%	75%
Exploratory (just to see what it could do)	79%	79%
To write part of an assignment	30%	16%
To write a full assignment	5%	4%
Other	16%	12%

9

### 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-repairs-aid-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%)

10

### July 12, 2024

## More college students say AI helps them earn better grades

Laura Ascione, eCampus News  
<https://www.ecampusnews.com/teaching-learning/2024/07/12/more-college-students-ai-better-grades/>

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

11

### July 12, 2024

## More college students say AI helps them earn better grades

Laura Ascione, eCampus News  
<https://www.ecampusnews.com/teaching-learning/2024/07/12/more-college-students-ai-better-grades/>

**Anthony Gonzalez, a student at Cerritos Community College who used Pearson's AI study tools in his General Chemistry class said, "I felt much more prepared for class, quizzes, and exams all around. Not to mention you could ask the AI study tool any question at any given time."**

More college students say AI helps them earn better grades

Laura Ascione  
July 12, 2024  
Students say their academic achievement and efficiency have improved after using generative AI tools

12

**July 5, 2024 (Books)**

**AI in Education**  
**Stefanie Panke and Israt Jahan Oeeshi**  
[https://edtechbooks.org/ai\\_in\\_education](https://edtechbooks.org/ai_in_education)

The image shows the cover of the book 'AI in Education' by Stefanie Panke and Israt Jahan Oeeshi. The cover features a colorful illustration of a person's head with gears and a brain, symbolizing AI and education. Below the cover is a table of contents for the book.

Part I	Part II
1.1. AI in Creativity: How AI-Tools Can Foster Imagination, Serious Play and Design Thinking	2.1. Policy and Regulation of AI in Higher Education
1.2. Implementing Pedagogical Strategies with AI	2.2. Impact on Student Engagement and Learning Outcomes
1.3. Information Literacy for Generative AI	2.3. Impact on Student Engagement and Learning Outcomes
1.4. Learning in the Open-World for Learning	Part II: Applications in K-12 Education
1.5. Learning in the Open-World, Equity and Inclusion	3.1. Teacher Professional Development
Part II: Applications in Higher Education	3.2. Student Learning and AI
2.1. Policy and Regulation of AI in Higher Education	3.3. Social-Emotional Learning and AI
2.2. Impact on Student Engagement and Learning Outcomes	
2.3. Impact on Student Engagement and Learning Outcomes	

13

**Sources**

**International Association for Language Learning Technology (IALLT): <https://iallt.org/#>**  
**Free Language Technology Magazine (FLTMAG) <https://fltmag.com/>**

The image shows two website screenshots. The top one is for the International Association for Language Learning Technology (IALLT), featuring a globe and the text 'International Association for Language Learning Technology'. The bottom one is for Free Language Technology Magazine (FLTMAG), showing a similar globe graphic and the text 'FLTMAG'.

14

**April 22, 2023**

**In UNESCO "Quick Start Guide to ChatGPT and AI in Higher Education"**  
[https://www.unesco.org/en/robotics/updates/2023/04/ChatGPT-and-AI-in-Higher-Education-In-UNESCO-Quick-Start-Guide\\_HK\\_ZJW6.pdf](https://www.unesco.org/en/robotics/updates/2023/04/ChatGPT-and-AI-in-Higher-Education-In-UNESCO-Quick-Start-Guide_HK_ZJW6.pdf)

Role*	Description	Example of implementation
<b>Possibility engine</b>	AI generates alternative ways of expressing an idea	Students write queries in ChatGPT and use the Regenerate response function to examine alternative responses.
<b>Socratic opponent</b>	AI acts as an opponent to develop and argument	Students enter prompts into ChatGPT following the structure of a conversation or debate. Teachers can ask students to use ChatGPT to prepare for discussions.
<b>Collaboration coach</b>	AI helps groups to research and solve problems together	Working in groups, students use ChatGPT to find out information to complete tasks and assignments.
<b>Guide on the side</b>	AI acts as a guide to navigate physical and conceptual spaces	Teachers use ChatGPT to generate content for classes/courses (e.g. discussion questions) and advice on how to support students in learning specific concepts.
<b>Personal tutor</b>	AI tutors each student and gives immediate feedback on progress	ChatGPT provides personalized feedback to students based on information provided by students or teachers (e.g. test scores).

15

**June 13, 2023**

**U.S. Department of Educational Technology**  
**Artificial Intelligence**  
<https://tech.ed.gov/news/advance-of-teaching-and-learning/>  
[https://zoom.us/join/zoom/register/WN\\_AYp5kADaCQ58pckU2Vqvwf/registration](https://zoom.us/join/zoom/register/WN_AYp5kADaCQ58pckU2Vqvwf/registration)

The image shows the cover of a report titled 'Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations' from the U.S. Department of Educational Technology. The cover features a colorful graphic of a globe with various icons representing AI and education.

16

**March 2024 (Affordance Listings)**

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

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

17

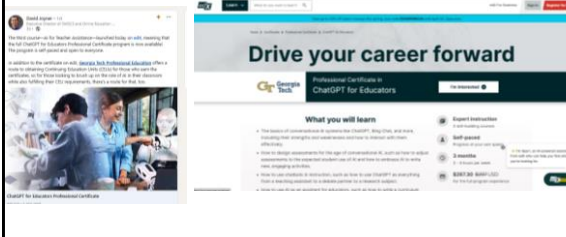
**November 30, 2023 (Courses)**

**Over 1,000 Sun Devils enroll in ASU's generative AI training course**  
<https://tech.asu.edu/features/ASUFacultyAICourse>

The image shows two screenshots. The top one is from the ASU Enterprise Technology website, featuring a photo of students in a classroom and the text 'Over 1,000 Sun Devils enroll in ASU's generative AI training course'. The bottom one is a slide titled 'Overview' for the 'Teaching and Learning with Generative AI: Higher Education' course, showing a list of topics and a 'Learn More' button.

18

**April 19, 2024 (Certificates)**  
**Professional Certificate in ChatGPT for Educators**  
 Georgia Tech  
<https://www.edx.org/certificates/professional-certificate/chatgpt-for-educators>



19

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



20

**August 28, 2024 (Guidelines)**  
**Guidelines for Generative AI**  
 MIT Management Teaching & Learning Technologies  
<https://mitsloanedtech.mit.edu/ai/tools/writing/>



**Use to Generate**

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

- Multiple-choice questions and response options
- Computer programming source code
- Cover letters and resumes
- Emails and messages
- Essays or short written assignments
- Exam questions
- Instructions for a learning activity

- Instructions for a learning activity
- Learning objectives
- Metaphors and analogies to explain complex concepts
- Outlines of papers or presentations
- Rubrics
- Scripts for a podcast or video
- Simulated conversations
- Study guides
- Summaries of text like articles or meeting notes
- Survey questions

(Center for Innovative Teaching and Learning, n.d.; Mollick,

21

**November 13, 2023**  
**Why You Should Rethink Your Resistance to ChatGPT**  
 Flower Darby, Chronicle of Higher Education  
<https://www.chronicle.com/article/why-you-should-rethink-your-resistance-to-chatgpt>  
<https://www.youtube.com/watch?v=ZXBa3CAINrg>


Teach them how to use AI tools appropriately. In her video, **Maha Bali**, who teaches digital literacies at the American University of Cairo, says she shows students how they might benefit from AI use in her class. For example, **she encourages them to use AI to generate ideas, refine their first drafts, or even start an assignment with a ChatGPT-created draft and then make it their own.**



22

**August 14, 2023**  
**Why Professors Are Polarized on AI**  
 Susan D-Agostino, Inside Higher Ed  
<https://www.insidehighered.com/news/tech-innovation/artificial-intelligence/2023/08/13/why-faculty-members-are-polarized-ai>

"What's the real harm for students who opt to cheat by using AI to write papers in passing the class?" a commenter who identified as Jason Mittell, professor of film and media culture and American studies at Middlebury College, wrote. "After 23 years of teaching, **I've come to realize that my job is neither to police students who don't want to learn nor to rank students via grades, but to maximize learning for those who want to learn and try to inspire the others to try to join in the learning.**"



23

**June 20, 2024 (Jobs)**  
**Higher Education Has Not Been Forgotten by Generative AI**  
 Ray Schroeder, Inside Higher Education  
<https://www.nytimes.com/2024/06/17/health/surgeon-general-social-media-warning-label.html>

Just in case we need to remind ourselves of why those of us in higher education must begin to integrate GenAI into our teaching and learning, **data is now emerging that indicates that students may be more likely to be considered for higher paying positions if they include experience with AI in their employment applications.** A study by **Nick Drydakis in the Oxford Economic Papers, recently reported:** It was found that university graduates with AI capital, obtained through an AI business module, experienced more invitations for job interviews than graduates without AI capital...for jobs that offered higher wages than those without AI capital.

24

## February 26, 2024 (Jobs)

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

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

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

Year	1-year percent change in all postings	1-year percent change in AI postings
2020	-36%	-17%
2021	35%	41%
2022	13%	14%
2023	57%	124%

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

25

## November 16, 2023

### Exclusive: OpenAI explores how to get ChatGPT into classrooms

**Anna Tong, Reuters**  
<https://www.reuters.com/technology/openai-explores-how-get-chatgpt-into-classrooms-2023-11-16/>  
<https://openai.com/blog/teaching-with-ai>  
<https://cybernews.com/academy/news/teaching-with-ai-openai-new-teachers-guide/>

**Teaching with AI**  
 We're releasing a guide for teachers using ChatGPT in their classroom—including suggested prompts, an explanation of how ChatGPT works and its limitations, the efficacy of AI detectors, and bias.

26

## June 12, 2023

### Assigning AI: Seven Ways of Using AI in Class

#### One Useful Thing Blog

**Ethan Mollick, Associate Professor of Management, the University of Pennsylvania**  
<https://www.oneusefulthing.org/p/assigning-ai-seven-ways-of-using-ai>

AI USE	ROLE	PEDAGOGICAL BENEFIT	PEDAGOGICAL RISK
MENTOR	Providing feedback	Frequent feedback improves learning outcomes, even if all advice is not taken.	Not critically engaging feedback, which may contain errors.
TUTOR	Direct instruction	Personalized direct instruction is very effective.	Overexposed knowledge base of AI. Serious collaboration risks.
COACH	Prompt metacognition	Opportunities for reflection and regulation, which improve learning outcomes.	Tone or style of coaching may not match student. Risks of incorrect advice.
TEAMMATE	Increase team performance	Provide alternate viewpoints, help learning team function better.	Confabulation and errors. "Personality" conflicts with other team members.
STUDENT	Reactive explanations	Teaching efforts in a powerful learning technique.	Confabulation and argumentation may shield the benefits of teaching.
SIMULATOR	Deliberate practice	Practicing and applying knowledge safe transfer.	Inappropriate fidelity.
TOOL	Accomplish tasks	Helps students accomplish more within the same time frame.	Outsourcing thinking, rather than work.

27

## 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-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

28

## 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 assignment 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 to mind.
4. **Develop a curriculum:** As a teacher, write me a complete curriculum for first-year marketing. Examine, if possible, other marketing curricula. Outline the main learning outcomes for each week. Develop a 12-week syllabus. Ensure one week covers ethics and sustainability.
5. **Generate short-form (short answer) quiz questions and test questions:** Can you generate quizzes and test questions on digital learning design? Include simple, medium and tough questions. Ensure these 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/topic on first-year student needs from culturally and linguistically diverse backgrounds and affirmative action? Be critical and provide reasons 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 class 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 the artificial intelligence for a particularly gifted student. Include time needed for each activity.
20. **Provide YouTube summaries:** Use this YouTube transcript of a previous teacher and summarise their video into 10 bullet points. How use this data to help me develop my presentation. Outline things I overlooked or transcript.
21. **Plan notes for a tutorial:** Act as a university teacher. I'm online class teaching first-year biomedical engineering. En

29

## 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**  
 © Aug 11, 2023

The WAC Clearinghouse, a collaboration between the WAC Clearinghouse and the Association for Writing Across the Curriculum, is pleased to announce the release of the collection, *Teaching Writing with Text Generation Technologies: Identifying Needs, the Experience, and Key Strategies*. The digital collection addresses generative AI, among the most advanced technology writing in decades. Released before professional team assignments to support students' AI literacy, research and digital engagement, creative applications, and professional writing, along with understanding generative AI's impact on writing and the future of AI in the workplace in their courses.

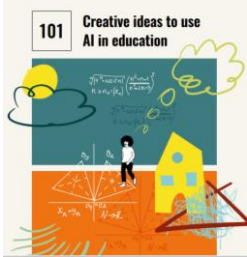
30



July 23, 2023

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

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



31

July 23, 2023

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

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

11 Using AI tools in an entrepreneurial startup project. Author: Nick Jackson. My idea: To create a tool for helping students to create and improve their business plans...

32

July 23, 2023

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

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

12 Branching scenarios using AI-generated case studies. Author: Dominic Stanton. My idea: Leveraging AI as a thought partner in the authors of branching scenarios to generate authentic critical thinking scenarios...

33

July 23, 2023

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

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

22 Interviewing learner personas. Author: Rebecca J. Higgin. My idea: Using ChatGPT to create and then interview a persona created by the student. This student then interviews the persona about the topic of their project...

34

July 23, 2023

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

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

33 Use ChatGPT for peer assessment. Author: Katherine Jewitt. My idea: Students use ChatGPT to generate random responses to an assessment question. Each student then compares and critiques the responses generated by ChatGPT and answers the work using their own ideas...

35

July 23, 2023

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

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

36 Use ChatGPT as a debate partner. Author: Katherine Jewitt. My idea: I have used this idea to create an AI persona to encourage active learning and help increase critical thinking. Student feedback shows that this tool is being used widely...

36

## July 23, 2023

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

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


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

**Author:** John Parkin  
**Role:** Senior Lecturer/Practitioner  
**Contact:** Higher education

**Contact details:** john.parkin@brun.ac.uk  
**Institution/Organization:** Anglia Ruskin University  
**Topic(s) used:** DALL-E 2

**My idea**  
 Students select a term or concept to represent visually. They then write words describing this and enter them into DALL-E 2 to generate an AI-generated image. Following the creation of the image, students write a five-minute video describing the image and linking it to the original term/concept. As part of this, learners consider how they can utilize their AI-generated image. Students then adapt the words entered into DALL-E 2 to create an improved image reflecting their understanding of the term/concept.

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



**Image credit:** © iStockphoto.com/Andrey Kozlov

37

## July 23, 2023

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

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

**53** AI-generated book summaries

**Author:** Nayin Kanchaisri  
**Contact details:** n.kanchaisri@burney.ac.uk  
**Role:** Lecturer in learning development  
**Institution/Organization:** University of Burnley  
**Contact:** One of the summative assessments for Social Science (Foundation) students to create a group reading poster on one of the three assigned monographs. Students need to include details of the topic, the author's background and publishing information, the author's position regarding the topic and the 'seller' bit of the book.  
**Topic used:** ChatGPT

**My idea**  
 Students in their assessment group use ChatGPT to create digital summaries of their chosen monograph. They then use summaries with another group with a different book and use them to generate discussion on the week's theme.

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

**Where the inspiration comes from**  
 University of Burnley's emphasis on digitally enhanced education, and generative AI summaries for reading comprehension assessment for non-techniques.



**Image credit:** © iStockphoto.com/Andrey Kozlov

38

## July 23, 2023

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

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

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


**Author:** Fay Short  
**Role:** Professor in Counselling  
**Contact:** Compiling notes/links for stimulating case study discussions.

**Contact details:** f.short@brun.ac.uk  
**Institution/Organization:** Brunel University  
**Topic(s) used:** ChatGPT

**My idea**  
 Identifying students need to discuss case study prompts during their knowledge of ethics lessons such as which, boundaries, boundaries, and which cases students find the best but about what to include in these discussions, especially at the beginning of the learning process. When future case study scenarios become possible topics, they may not always be prepared, so using AI to generate prompts for discussion.

**What I aim to address**  
 Students will use AI to generate a list of cases to be discussed from the next week's case studies presented in class. This will be used in the formative stages to assist them in identifying their understanding of what they need to consider during case study discussions.

**Where the inspiration comes from**  
 Promoting dialogue in education.



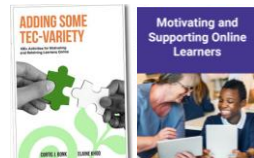
39

## Introducing the TEC-VARIETY Framework

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

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

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



**What motivates?**

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

40

## August 21, 2023

### 1. Tone/Climate:

#### A. ChatPDF: Generate Questions for Guest Speakers

[https://courtoink.com/R622\\_online\\_syllabus\\_fall\\_2023.htm](https://courtoink.com/R622_online_syllabus_fall_2023.htm)

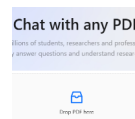
**Option:** We are reading... "Exploring Interactions in a Synchronous Hybrid Language" Class (by Dr. Chaoran Wang). Input one or more assigned articles from guest(s) into ChatPDF and have it generate questions. Ask those questions during session.

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

Home of students, researchers and professors to answer questions and understand research.



41

## March 7, 2022

### 1. Tone/Climate:

#### B. Use ChatGPT to Generate Polls and Engage in Brainstorming

<https://padlet.com/basdogan2/yw19ct98stvolbw>

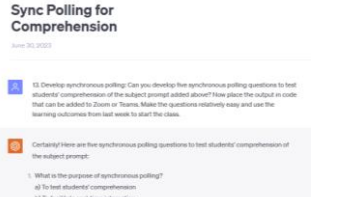
**Sync Polling for Comprehension**

June 20, 2022

13. Develop synchronous polling: Can you develop five synchronous polling questions to test students' comprehension of the subject prompt asked 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.

Contacted/ Here are five synchronous polling questions for best students' comprehension of the subject prompt:

1. What is the purpose of synchronous polling?
2. To test students' comprehension
3. To facilitate real-time interaction
4. To facilitate learning outcomes
5. All of the above
6. None of the above



42


**August 31, 2023**

**2. Encouragement, Feedback:**

**A. Crafting Quiz Questions**

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

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



43


**September 8, 2023**

**2. Encouragement, Feedback:**

**B. Exam Preparation**

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

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



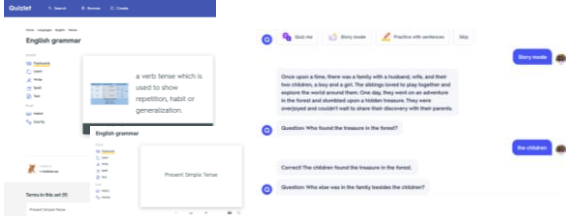
44

**2. Encouragement, Feedback:**

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

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

<http://quizlet.com/>  
<https://fltmag.com/quizlet-q-chat/>



45


**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>



46

**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=bsjrw&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=bsjrw&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.

47

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

**Example ChatGPT Responses from SUNY Online Summit Workshop**

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

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

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

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

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

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

48



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

**Daniel's Revision Request:**

Pretend you work for a nonprofit called The Planetears. Write a 400-word article in support of federal and state-level income tax credits for electric vehicles. Cite specific studies that show that electric vehicles reduce CO2 emissions, smog, and other air pollutants. Mention the annual costs of asthma-related medical issues and explain how electric vehicles would reduce healthcare costs.

**ChatGPT Response:**

As an AI language model, I do not represent or work for any organization, but I can provide the requested article on the topic.

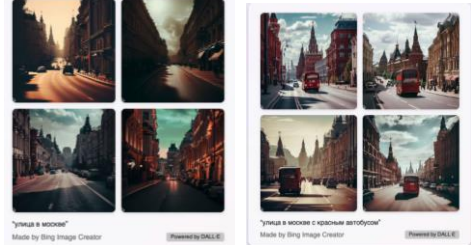
The Planetears nonprofit strongly supports federal and state-level income tax credits for electric vehicles (EVs). EVs have been identified as a critical component in the effort to reduce greenhouse gas emissions, smog, and other air pollutants. By incentivizing the transition to EVs, policymakers can significantly reduce the environmental impact of the transportation sector.

49

**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/>



50

**August 21, 2023**

**5. Autonomy, Choice:  
A. Brave People Option:  
Scholar Essay**

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

- **Brave People Option:** Have ChatPDF, ChatGPT, or another generative AI tool or platform generate a 2,000-3,000 word **summary or essay of a scholar**. Next, write a 2-3 page single-spaced reflection paper, review, or critique of that scholar and incorporate a couple of quotes and aspects of what generative AI produced.

51

**August 21, 2023**

**5. Autonomy, Choice:  
B. Brave People Option:  
Book Review**

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

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

52

**August 21, 2023**

**5. Autonomy, Choice:  
C. Brave People Option:  
Learning Environment Critique and Analysis**

[https://curtbonk.com/R622\\_online\\_syllabus\\_Fall\\_2023.htm](https://curtbonk.com/R622_online_syllabus_Fall_2023.htm)

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



53

**July 12, 2023**

**6. Relevance, Meaningfulness:  
A. Discuss Ethical Issues  
Autumm Caines, University of Michigan Dearborn**

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

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

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

54

**October 5, 2023**

**7. Interactive, Collaborative:**

**A. Book Summary Comparison**

Kevin McCullen, an associate professor of computer science at the State University of New York at Plattsburgh  
*Machines of Loving Grace: The Quest for Common Ground Between Humans and Robots*, by John Markoff  
<https://www.chronicle.com/newsletter/teaching/2023-10-05>

- A freshman seminar about AI and robotics. **Students work in groups to outline and summarize the first three chapters.** Then he **showed them what ChatGPT** had produced in an outline.
- "Their version and ChatGPT's version seemed to be from two different books," McCullen wrote. "ChatGPT's version was essentially a 'laundry list' of events. Their version was narratives of what they found interesting. The students had focused on what the story was telling them, while ChatGPT focused on who did what in what year." The chatbot also introduced false information, such as wrong chapter names.
- Found it "soulless."



55

**July 12, 2023**

**7. Interactive, Collaborative:**

**B. Text Revision**

**Daniel Stanford's Substack**

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

**Text Revision:** For activities where students revise or critique AI-generated text, consider how students will annotate their work. For example, your instructions might include one or more of the following guidelines:

- **Highlight text in yellow** if at least 50% of the sentence was AI-generated without major revisions on your part.
- **Use track changes when revising AI-generated text** so that the AI text is crossed out and your revised version is shown in a different color.
- **Identify at least one place where the AI-generated text is problematic.** Highlight this text and use the comment feature to briefly explain why it's problematic and how you would change the text to fix the issue.

56

**July 12, 2023**

**7. Interactive, Collaborative:**

**C. Text Revision**

**Daniel Stanford's Substack**

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

**Example Activity: Summarize a text.**

- Example AI prompt: **Summarize the most important points of the following article** in five to 10 bullet points. Limit the summary to a maximum of 200 words total. [Paste article to be summarized here.]

**Example Activity: Expand on an outline.**

- Example AI prompt: **Take the following outline and expand on each point with one to two paragraphs of text.** [Paste outline here.]

57

**November 15, 2023**

**7. Interactive, Collaborative:**

**D. ChatGPT as Tool or Thought Partner:**

ChatGPT has entered the classroom: how LLMs could transform education  
**Andy Extance, Nature**  
<https://www.nature.com/articles/d41586-023-03587-3>

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.



58

**August 31, 2023**

**7. Interactive, Collaborative:**

**E. Role Playing Challenging Conversations**

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

Dr. Helen Crompton, Professor of Instructional Technology at Old Dominion University, encourages her education graduate students to use ChatGPT as a stand-in for a particular persona—like a **debate partner who will point out weaknesses in their arguments, a recruiter who's interviewing them for a job, or a new boss who might deliver feedback in a specific way.**



59

**July 12, 2023**

**8. Engagement, Involvement:**

**A. Analyze AI Bias**

**Daniel Stanford's Substack**

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

**Example Activity:** Analyze examples of bias in AI output.

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

60

**July 12, 2023**  
**8. Engagement, Involvement:**  
**A. Analyze AI Bias**  
**Daniel Stanford's Substack**  
[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=beta&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=beta&utm_campaign=post&utm_medium=web)

**Examples of Bias in AI Image Generation**  
This document was created by Daniel Stanford. Contact with Daniel on LinkedIn, via Email, Substack, or email (daniel@stanford.edu) with questions.  
The images below were generated in May 2023. They demonstrate how image generation tools can default to white/lighter skin tones and must be explicitly prompted to create images with "diverse racial representation" or similar to include a broader range of skin tones.

**Midjourney Examples**  
The following images were generated by Midjourney via Midjourney.  
Prompt: "Illustration of nurse, doctor, pilot and professor?"

**Examples of Bias in AI Image Generation**  
Prompt: "Illustration of nurse, doctor, pilot and professor with diverse racial representation"

61

**July 12, 2023**  
**8. Engagement, Involvement:**  
**A. Analyze AI Bias**  
**Daniel Stanford's Substack**  
[https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=beta&utm\\_campaign=post&utm\\_medium=web](https://danielstanford.substack.com/p/incorporating-ai-in-teaching-practical?r=beta&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](https://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](https://openai.com/product/dall-e-2))

62

**May 11, 2020**  
**9. Tension, Challenge, Controversy, etc.:**  
**A. What is smileUP & How to use it?**  
**SMILE, Stanford**  
<https://www.youtube.com/watch?v=pblU8sSALWo>

63

**May 11, 2020**  
**9. Tension, Challenge, Controversy, etc.:**  
**A. What is smileUP & How to use it?**  
**SMILE, Stanford**  
<https://www.youtube.com/watch?v=pblU8sSALWo>

**SMILE is connected to ChatGPT to give feedback and guidance. Have student experiment to see who can ask Level 4 and Level questions. Professor Trang Phan fosters critical thinking by having her education students at Fresno State ask the same question and phrase differently every time and reflect on the authenticity, accuracy, trustworthiness, and the ethical and moral nature of the responses. And also record the level of question according to SMILE.**

64

**May 11, 2020**  
**9. Tension, Challenge, Controversy, etc.:**  
**A. What is smileUP & How to use it?**  
**SMILE, Stanford**  
<https://ask.smile.stanford.edu/>

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

65

**May 11, 2020**  
**9. Tension, Challenge, Controversy, etc.:**  
**A. What is smileUP & How to use it?**  
**SMILE, Stanford**  
<https://www.youtube.com/watch?v=pblU8sSALWo>

**Thematic question rules for GPT-3.5**

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

**Submit question**

Great job! This is a level 3 question. It involves speculation and uncertainty about the future reunification of structures, 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 and:


1. Diplomatic negotiations: Engaging in sustained diplomatic dialogues between both Korea, as well as the United States and China, to address the historical tensions and build trust.
2. Trust-building measures: Building trust and confidence between the two nations through various means, such as cultural exchanges, trade agreements, and people-to-people interactions.
3. Security concerns: Addressing security concerns from both sides, ensuring the protection of the interests of both North and South Korea.
4. Economic integration: Establishing mechanisms for economic integration and harmonization of policies to

66

**May 25, 2023**

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

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



67

**October 5, 2023**

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

Students were asked to work with ChatGPT in a technical professional-writing course and a writing about literature course. In both courses, she says, students were overwhelmed by the product. In the technical writing course, students used **ChatGPT to write job-application materials, such as cover letters and resumes**. Most of them, she wrote, found that the chatbot actually created work because, even with multiple prompts, the writing did not have much personality and was repetitive. The same held true in her writing course when she used ChatGPT in class and also when students reviewed a ChatGPT-generated essay.



68

**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**



69

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

70

**The R2D2 Model**


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



71

**1. Auditory or Verbal Learners**

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



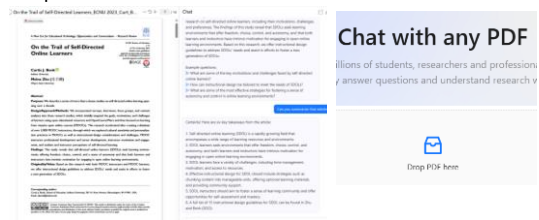
72

## August 21, 2023

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

[https://curtbank.com/R622\\_online\\_syllabus\\_Fall\\_2023.htm](https://curtbank.com/R622_online_syllabus_Fall_2023.htm)

**Option:** Input one or more of the assigned articles and have ChatPDF generate questions on it or key points or both.



73

## June 17, 2023, YouTubers using ChatGPT

### Will AI change the future of language learning?

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



74

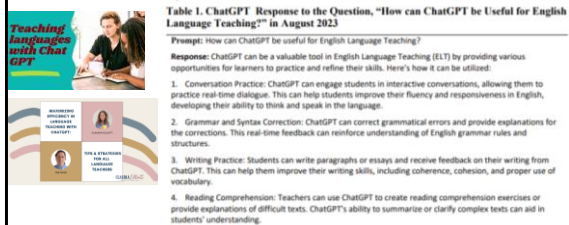
## November 2023

### Design Prompts

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

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

<https://chat.openai.com/>



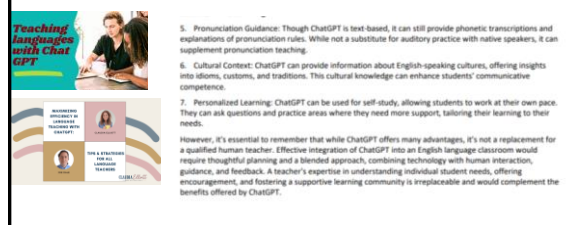
75

## November 2023

### Design Prompts

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

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



76

## April 3, 2023

### Affordances and Pedagogical Benefits

#### ChatGPT for Language Teaching and Learning

<https://journals-sagepub-com.proxylib.uits.lsu.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

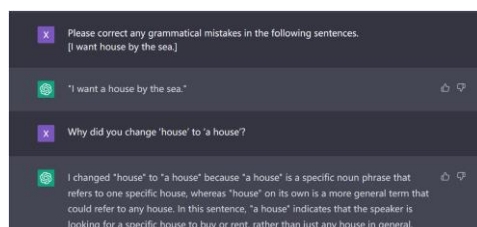
77

## April 3, 2023

### Ask ChatGPT to correct grammatical mistakes in a passage

#### ChatGPT for Language Teaching and Learning

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



78



**April 3, 2023**  
**Clarify Word Meanings**  
**ChatGPT for Language Teaching and Learning**

<https://journals-sagepub-com.proxihub.wlks.lu.edu/doi/epub/10.1177/00336882231162868>

**X** Hi, I don't understand what 'dyslexia' means in the following magazine article. Can you explain it to me?



**D** Dyslexia is a learning disorder that affects reading and writing. It is characterized by difficulty in decoding words and understanding written language, despite having normal or above-average intelligence.

People with dyslexia often have trouble recognizing and manipulating the individual sounds, or phonemes, that make up words. They may also have difficulty with spelling and may confuse similar-looking words. Dyslexia can affect people of any age, but it is most commonly diagnosed in children during the early years of school.

79

**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





80

**August 31, 2023**  
**Reflect 2a. Critical Thinking on the Credibility of Sources**

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

Geetha Venugopal, a high school computer science teacher at the American International School in Chennai, India, likens teaching students about AI tools to teaching students how to use the internet responsibly. In her classroom, she advises students to remember that the answers that ChatGPT gives may not be credible and accurate all the time, and to think critically about whether they should trust the answer, and then confirm the information through other primary resources. The goal is to help them "understand the importance of constantly working on their original critical thinking, problem solving and creativity skills."



81

**November 23, 2023**  
**Reflect 2b. Translating Policy Document into Plain English (TextGenEd)**

Timothy Laquintano, Lafayette College

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

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




82

**November 23, 2023**  
**Reflect 2c. Using LLMs as Peer Reviewers for Revising Essays (TextGenEd)**

Antonio Byrd, Univ. of Missouri at KC

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

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



83


**November 23, 2023**  
**Reflect 2d. AI for Editing (TextGenEd)**

Nupoor Ranade, George Mason University

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

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

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







84

**November 23, 2023**

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

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

This 4-week assignment asks advanced undergraduate students to hold a **sustained 'conversation' on a topic with an AI chatbot to decode the pattern, limitations and possibilities of the AI-based writing technology. Students analyze their conversation, write a report, and make an oral presentation.** The assignment provides writing faculty a wide window to teach almost any issue of interest in AI writing while offering students an immersive, analytical, and writing experience.


85

**November 23, 2023**

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

Paul Fyfe, North Carolina State University  
<https://wac.colostate.edu/repository/collections/textgened/ethical-considerations/>



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



86

**3. Visual Learners**

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

87

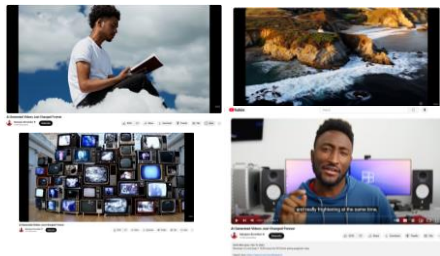
Sora

**February 15, 2024**

**Learning is More Visual**

**Display 3a. AI Generated Videos Just Changed Forever**

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




88

**February 16, 2024**

**OpenAI's Video Generator Sora Is Stunning and Utterly Terrifying**

Tony Ho Tron, The Daily Beast  
<https://www.thedailybeast.com/openais-video-generator-sora-is-stunning-and-utterly-terrifying>




OpenAI's Sora video generator has produced a scene that is eerily realistic. In the image, a group of mammoths are walking through a snowy, mountainous landscape. The scene is captured from a low angle, emphasizing the scale of the animals. The lighting is soft and natural, highlighting the texture of the snow and the fur of the mammoths. The overall composition is cinematic and visually stunning.

89

**February 16, 2024**

**OpenAI's Video Generator Sora Is Stunning and Utterly Terrifying**

Tony Ho Tron, The Daily Beast  
<https://www.thedailybeast.com/openais-video-generator-sora-is-stunning-and-utterly-terrifying>




Prompt: A stylish woman walks down a Tokyo street filled with warm glowing neon and animated city signage. She wears a black leather jacket, a long red dress, and black boots, and carries a black purse. She wears sunglasses and red lipstick. She walks confidently and casually. The street is damp and reflective, creating a mirror effect of the colorful lights. Many pedestrians walk about.

90

**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>



Prompt: Animated scene features a close-up of a short fluffy monster kneeling beside a melting red candle. The art style is 3D and realistic, with a focus on lighting and texture. The mood of the painting is one of wonder and curiosity, as the monster gazes at the flame with wide eyes and open mouth. Its pose and expression convey a sense of innocence and playfulness, as if it is exploring the world around it for the first time. The use of warm colors and dramatic lighting further enhances the cozy atmosphere of the image.

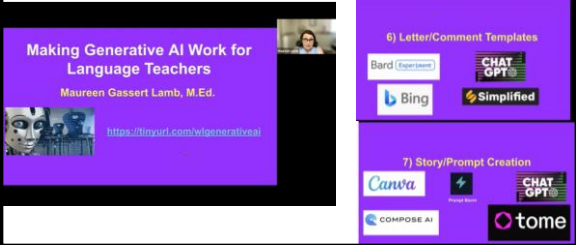
OpenAI

91

**June 5, 2023**

**Display 3b. Short Demonstration Videos**  
IALLT June Webinar 2023 –  
Making Generative AI Work for Language Teachers

<https://iftmag.com/generative-ai-webinar/>  
<https://www.youtube.com/watch?v=MkIEI6ppgys>




92

**June 7, 2023**

**Display 3c. Bing Chat for stories, plays, poems, images, etc.**

Users can easily write a prompt to create an image directly in the chat. OpenAI's **DALL-E** (it can also be used at [bing.com/create](https://bing.com/create)). Users can create as many images as they would like for free. <https://tesl-ej.org/pdf/ej107/int.pdf>



93

**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.



94

**February 19, 2023**

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

DALL-E: An "Intelligent" Illustrator for your Language Classroom  
<https://iftmag.com/dall-e-c274b7e/>


- 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.

95

**Poll #4. Closing questions...**

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

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



**BRAINY IDEAS**

96

## Poll #5. Closing questions...

5. How many **ideas** did you get from this session for using ChatGPT or other Generative AI tools in your formal and informal **learning**?

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



97

## Remember...

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

"I cannot do this alone."

"I cannot do this alone."

"I cannot do this alone."



98

## Any Questions or Comments?

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

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

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

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

Curtis J. Bonk, IST Professor, Indiana University

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

Free!	Free!	Free!	Not Free!

99