KENNESAW STATE UNIVERSITY

NORMAN J. RADOW COLLEGE OF
HUMANITIES AND SOCIAL SCIENCE
Office of Academic Innovation

RCHSS
GENERATIVE ARTIFICIAL INTELLIGENCE TOOLKIT
2023

ACKNOWLEDGEMENTS

This toolkit is the result of the expertise of many faculty in our college as well as the Office of Academic Innovation Faculty Fellows. Thanks to everyone for offering their thoughts, feedback, and guidance. This guide is a living document and will continue to evolve as faculty and other stakeholders offer input and engage with this resource.

DISCLAIMER: This toolkit is designed to be a resource. As you can imagine, these topics evolve rapidly. Every effort will be made to ensure the information in this guide is accurate and up to date; however, there is no guarantee, explicit or implied, regarding the information presented in this guide.

If you have any questions, suggestions, or feedback, please contact Kris DuRocher (kduroche@kennesaw.edu).

CONTENT

WHAT IS GENERATIVE AI?

Generative AI is a type of artificial intelligence technology that can produce various types of content. Generative AI uses a type of deep learning called generative adversarial networks (GANs) to create new content. A GAN consists of two neural networks: a generator that creates new data and a discriminator that evaluates the data. The generator and discriminator work together, with the generator improving its outputs based on the feedback it receives from the discriminator until it generates content that is indistinguishable from real data. While various versions of Generative AI have been around for years (think Chatbots), this technology has increased with the introduction of large language modules that can encompass billions or even trillions of parameters.

Generative AI tools can:
· Respond to prompts and questions
· Summarize and synthesize information
· Revise and edit content
· Generate creative works like musical compositions, stories, jokes, and poems
· Write and correct code
· Manipulate data
· Play games

CHATGPT

In November 2022, Open AI released ChatGPT (Chat Generative Pre-Trained Transformer), a free generative artificial intelligence (AI) chatbot. Generative AI tools like ChatGPT, Quillbot, and DALL-E 2 use machine learning models to produce new content like text or images in response to a prompt or instructions. ChatGPT number is a natural language processing (NLP) AI-powered chatbot designed to understand and generate human-like text in a conversational manner. ChatGPT has been trained on a vast amount of text data from the internet and is capable of answering questions, providing explanations, generating creative text, and engaging in text-based conversations with users. It can be used for a wide range of applications, including chatbots, virtual assistants, content generation, and more. ChatGPT can be accessed at: https://chat.openai.com/

WHAT IS GENERATIVE AI?

DALL-E

This is a text-to-image generative AI that was released in January 2021 by OpenAI. It uses a neural network that was trained on images with accompanying text descriptions. Users can input descriptive text, and DALL-E will generate photorealistic imagery based on the prompt. It can also create variations on the generated image in different styles and from different perspectives. DALL-E can also edit images, whether by making changes within an image (known in the software as Inpainting) or extending an image beyond its original proportions or boundaries (referred to as Outpainting). DALL-E can be accessed at: https://openai.com/dall-e-2

BARD

In March 2023, Bard was released for public use in the United States and the United Kingdom, with plans to expand to more countries in more languages in the future. Bard is a text-to-text generative AI interface based on Google's large language model LaMDA (Language Model for Dialogue Applications). Like ChatGPT, Bard is a chatbot powered by AI technology that can answer questions or generate text based on user-given prompts. Google bills it as a "complementary experience to Google Search."
Bard can be accessed at: https://bard.google.com/

SOURCES

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4. University of Pittsburgh. (2023, September 14). ChatGPT Resources for Faculty.

HOW DOES GENERATIVE AI WORK?

Generative AI models use a complex computing process known as deep learning to analyze common patterns and arrangements in large sets of data and then use this information to create new, convincing outputs. The models do this by incorporating machine learning techniques known as neural networks, which are loosely inspired by the way the human brain processes and interprets information and then learns from it over time.

Generative AI starts with a prompt that could be in the form of text, an image, a video, a design, musical notes, or any input that the AI system can process. Various AI algorithms then return new content in response to the prompt.

Part of the umbrella category of machine learning called deep learning, generative AI uses a neural network that allows it to handle more complex patterns than traditional machine learning. Inspired by the human brain, neural networks do not necessarily require human supervision or intervention to distinguish differences or patterns in the training data.

The training process for a generative AI model involves feeding it a large dataset of examples, such as images, text, audio, and videos. Then, the model analyzes the patterns and relationships within the input data to understand the underlying rules governing the content. It generates new data by sampling from a probability distribution it has learned.

HOW DOES GENERATIVE AI WORK?

Generative AI models become more sophisticated as they receive and generate more data thanks to the underlying deep learning and neural network techniques. As a result, the more content a generative AI model generates, the more convincing and human-like its outputs become.

For example, a generative AI model trained on a dataset of cat images could be used to create new images of cats by sampling from the learned distribution and then refining the output through a process called "inference." Generative AI can produce outputs in the same medium in which it is prompted (e.g., text-to-text) or in a different medium from the given prompt (e.g., text-to-image or image-to-video).

The McKinsey Global Institute predicts that by 2030, activities that currently account for around 30% of U.S. work hours could be automated, prompted by the acceleration of generative AI. This would result in 12 million occupational transitions.

SOURCES

1. Hughes, O. (2023, August 7) Generative AI Defined: How it Works, Benefits and Dangers. TechRepublic.
2. Bell, E. (2023, May 26). Generative AI: How It Works, History, and Pros and Cons. Investopedia.
3. Dhaduk, H. (2023, July 18) How does Generative AI work: A deep dive into Generative AI models. Simform.
4. Ellingrud, K., Sanghvi, S., Dandona, G. S., Madgavkar, A., Chui, M., White, O., & Hasebe, P. (2023, July 26) Generative AI and the future of work in America. McKinsey & Company.
5. IBM. "What Is Artificial Intelligence (AI)?"
6. Lawton, G. (2023, September) What is Generative AI? Everything you need to know. Enterprise AI.

WHAT ARE THE LIMITATIONS OF GENERATIVE AI TOOLS?
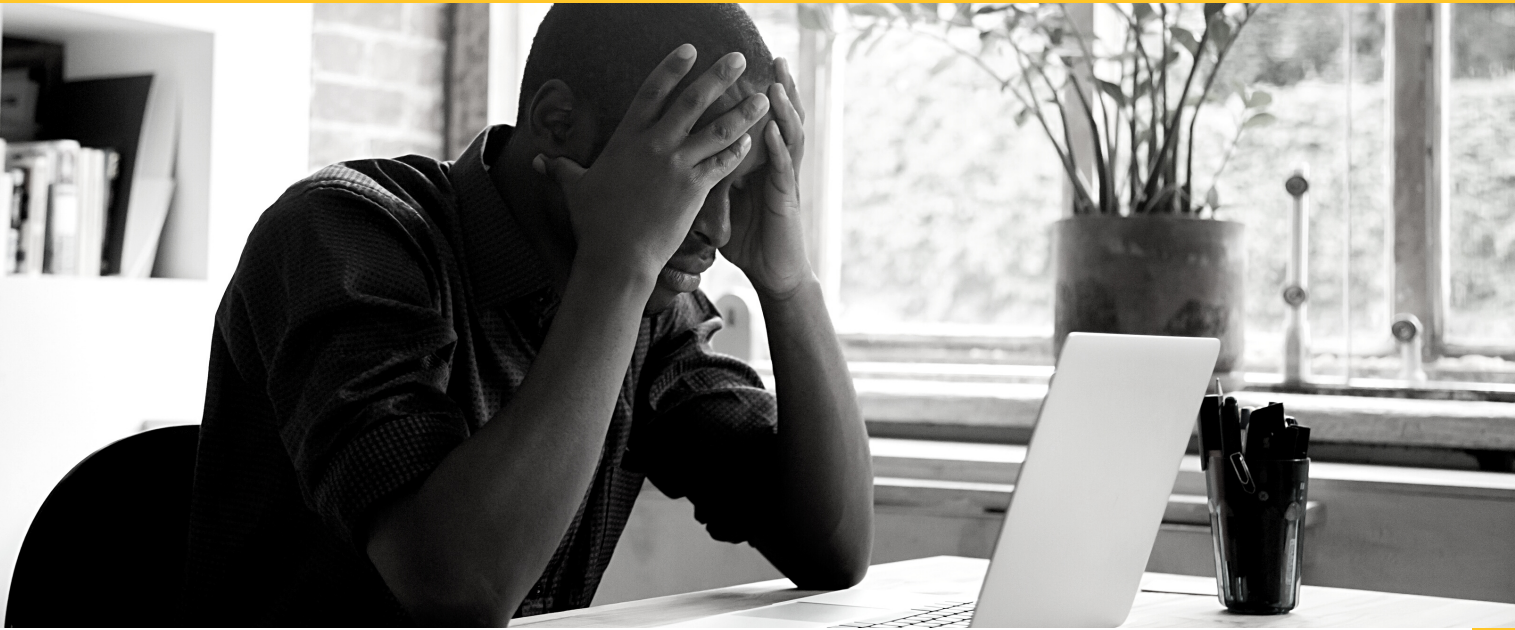
Generative AI tools are constantly learning and evolving. Currently, generative AI tools are limited in the following ways:

➡️ **Limitations to its knowledge base.** Generative AI is based on the text it was trained on. It may not be aware of recent events or developments beyond its training data, which has a cutoff date. For example, ChatGPT was trained using data up to 2021.

➡️ **Creating potentially incorrect, oversimplified, unsophisticated, or biased responses to questions or prompts.** As its sources and queries may contain biased or incorrect information, so may the responses generated. For example, ChatGPT may sometimes provide nonsensical or inaccurate responses to certain questions or situations. Generative AI will not ask for clarification and may guess the user's intent.

➡️ **Sensitivity to input phrasing or question wording.** The way a question or statement is phrased can significantly affect the quality of the response. Generative AI may give different answers to slight variations in input phrasing, and it can be sensitive to how questions are framed. Generative AI can generate content that is harmful, offensive, or inappropriate. It cannot detect subtle emotional cues or respond appropriately to complex emotional situations. ChatGPT, for example, has difficulty understanding context, especially sarcasm and humor.

WHAT ARE THE LIMITATIONS OF GENERATIVE AI TOOLS?

➡️ **Trouble generating long-form, structured content.** At this time, ChatGPT has some trouble generating long-form, structured content. While the model can create coherent and grammatically correct sentences, it struggles to produce lengthy pieces of content that follow a particular structure, format, or narrative.

➡️ **Limitations in handling multiple tasks at the same time.** The model performs best when given a single task or objective to focus on. If you ask ChatGPT to perform multiple tasks at once, it will struggle to prioritize them, which will lead to a decrease in effectiveness and accuracy.

➡️ **Length of responses.** ChatGPT tends to generate long and verbose responses, which may not always be what the user is looking for. Users may have to sift through unnecessary information to find the answer they need. It will also produce repetitive responses, particularly when there is not enough information to provide a diverse answer.

➡️ **Privacy concerns.** AI like ChatGPT raises ethical concerns related to privacy, security, and the potential for misuse, such as for creating deepfake content or spreading disinformation.

➡️ **Intellectual property (IP) and copyright.** There are currently no verifiable data governance and protection assurances regarding confidential enterprise information, thus anything you enter into Generative AI can be assumed to become part of the public record.

Users and developers of Generative AI need to be aware of these limitations and use the technology responsibly, considering its strengths and weaknesses in various contexts.

SOURCES

1. University of Pittsburg, University Center for Teaching and Learning. Generative AI Resources for Faculty.
2. Marr, B. (2023, March 3). The Top 10 Limitations of ChatGPT. Forbes.
3. Generative AI: From human, to machine, to artificial intelligence. Gartner.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

OVERALL CONSIDERATIONS

New generative AI technologies have sometimes been described as general-purpose technologies akin to steam power, electricity, and computing because they can profoundly affect many industries and use cases. Generative AI can be applied to many areas with a focus on on interpreting and understanding existing content and creating new content. Generative AI can improve existing workflows, with an eye to adapting workflows entirely to take advantage of the technology.

It's essential to keep in mind that, like previous general-purpose technologies, it often took decades for people to find the best way to organize workflows to take advantage of the new approach rather than speeding up small portions of existing workflows. However, generative AI is being utilized to advance and transform many fields, such as transportation, natural sciences, and entertainment. For example, in the financial world, generative AI can watch transactions in the context of an individual's history to build better fraud detection systems. In medical research, generative AI can assist in research by developing new protein sequences for drug discovery. It can automate tasks such as scribing, medical coding, medical imaging, and genomic analysis. Generative AI has been used to convert X-rays or CT scans to photo-realistic images to better diagnose dangerous diseases like cancer. The logistics and transportation industry can convert satellite images to map views for accurate location services using generative AI.

In higher education, generative AI has been viewed skeptically by many, but as with any new technology, it has benefits along with risks. These costs and benefits likely vary based on discipline as well. Generative AI tools can help both students and faculty to access large amounts of information in a short time frame, generate new ideas, and get alternative explanations for course concepts.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

BACKWARD DESIGN AND USING AI

Your approach may vary from course to course. To consider how best to use, or not use AI in your class, start with a backward design mindset.

Backward design begins with the student learning outcomes and final course products in mind. Consider the following questions:
- What do you want students to achieve at the conclusion of the course?
- How do you want your students to be different at the end of the course?
- What are the final products they will have generated at the end that can provide evidence of this change and/or learning?
- What other assignments are completed throughout the semester that support the learning outcomes?

To begin:
1. List all required course assignments and activities.
2. Identify whether any of these assignments or activities could involve the use of Generative AI. Does it make sense to have students use these tools for any part of the assignment?
   a. Could students use Generative AI for brainstorming and preparation for the assignment? Consider the various ways in which it could be used aside from completing a final assignment.
3. Regardless of the conclusion on the use of Generative AI, incorporate a statement into the syllabus clearly outlining the instances when their use is or is not allowed. (See the section in this toolkit on sample statements on page 15.)
4. If the use of Generative AI is not allowed, make sure to include in the syllabus statement the consequences of using it and make sure to actually follow through with those policies.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

AI DETECTION

AI detection software is not yet reliable enough to be deployed without a substantial risk of false positives and the consequential issues such accusations imply for both students and faculty. Use of the detection tools at this time is simply not supported by the data and does not represent a teaching practice that we can endorse or support.

If you have prohibited the use of AI-based tools, such as ChatGPT, and suspect that a student has engaged in academic misconduct, ensure that you have clearly laid out the expectations for the course or assignment and proceed in a manner similar any other violation to the KSU Code of Academic Integrity.

There is no single standard for judging how AI generated work should be treated and it largely depends on your course policies. Consider these "red flags" identified by North Carolina State University when reviewing assignments:

- A factual error or made-up citation
- Missing required assignment data sources or article text
- "Too perfect" in terms of grammar and usage
- Overly formal, detached, or impersonal style/tone
- Predictable formations like a five-paragraph essay
- The writing too directly and repetitively parallels the assignment directions

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DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

AI USE IN THE CLASSROOM CONSIDERATIONS

With the release of ChatGPT, some educators and journalists have already proclaimed that the "essay is dead" and even have gone so far as to pronounce "The End of High-School English" (Herman, 2022). Why should students do research and write papers when they can just ask an AI system to do that activity for them? The AI writing tool can free students from spending time trying to find basic, textbook-style information online (and potentially getting lost in the process) so they can spend more time thinking like historians and acting like writers.
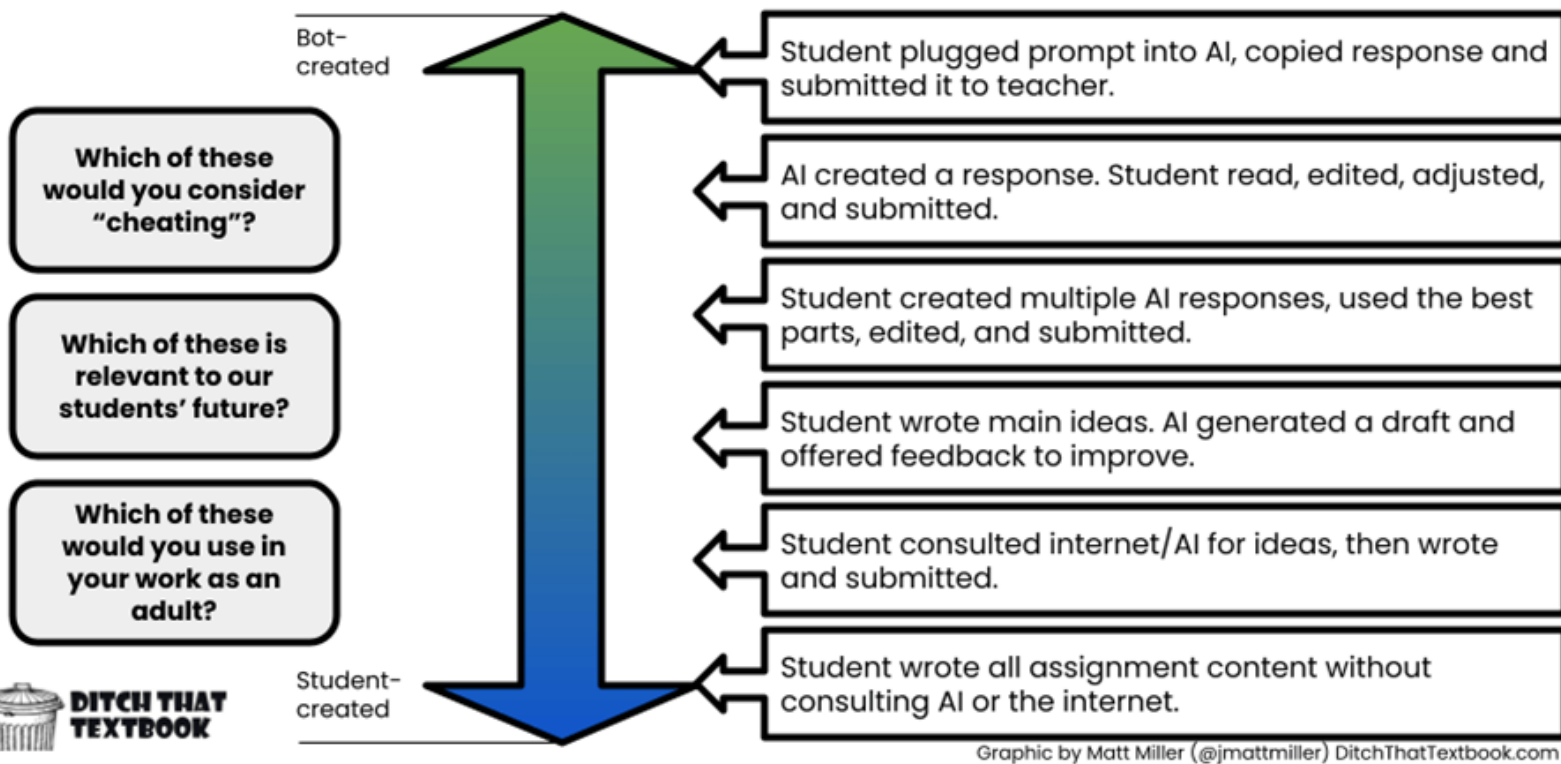
If you want to require or encourage the use of AI, identify where ChatGPT can best benefit your students. Consider how you could teach students to do what artificial intelligence cannot do as a contrast to the skills and knowledge they gain in the course. We need to teach students to know how to ask questions and to learn how to critique their own questions, frameworks, and the answers generated by AI.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

AI USE AND CHEATING

The use of AI also prompts the question of how do we define cheating and plagiarism with AI generation? As these tools are everywhere, each faculty member needs to think about their own teaching goals and course content. Below is an image that can assist us in thinking of this issue as a continuum.

Bot-created

Which of these would you consider "cheating"?

Which of these is relevant to our students' future?

Which of these would you use in your work as an adult?

Student-created

DITCH THAT TEXTBOOK

Student plugged prompt into AI, copied response and submitted it to teacher.

AI created a response. Student read, edited, adjusted, and submitted.

Student created multiple AI responses, used the best parts, edited, and submitted.

Student wrote main ideas. AI generated a draft and offered feedback to improve.

Student consulted internet/AI for ideas, then wrote and submitted.

Student wrote all assignment content without consulting AI or the internet.

Graphic by Matt Miller (@jmattmiller) DitchThatTextbook.com

It can be difficult to prove that a student used chatbots to cheat on an assignment. A Washington Post columnist found that a popular detection tool, in place at more than 10,000 secondary and higher education institutions, can falsely accuse students of using AI-generated text for their assignments.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

AI USE IN THE CLASSROOM AND CITATIONS

If requiring or allowing students to utilize AI, faculty are strongly encouraged to train students on best practices for the proper use of AI generative tools. Additionally, faculty should include information on how AI generated work should be cited.

Some guidance on citations can be found at the links below (click the style).

- APA
- MLA
- Chicago

In addition to citations, ensure that you discuss with the students how using the tools sometimes subverts the learning process and help them identify where and when it can be the most useful and ethical to use this resource.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

AI USE IN THE CLASSROOM AND EXPECTATIONS

Regardless of how you choose to use (or not use) generative AI in your courses, ensure that you have communicated that clearly to students. Further resources on how you may want to incorporate AI tools are later in this toolkit. As with any pedagogical tool, adequately preparing your course syllabi and schedule are essential for being successful. This is especially important with new tools and pedagogical strategies. Finally, recognize that these tools and technologies are rapidly evolving, and choices that faculty make now about the use of them may change from semester to semester or year to year. While the hope is that this toolkit can provide guidance on actions right now, this may change as the generative AI technologies evolve. Faculty should consider current practices and policies on AI at the time of course planning each semester.

SOURCES

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2. Fink, L. D. (2003). A self-directed guide to designing courses for significant learning. University of Oklahoma, 27(11), 1-33.
3. Strashnaya, R. & Dow, E.A.A. Purposeful Pedagogy through Backward Course Design. In R. Obeid, A. Schartz, C. ShaneSimpson, & P. J. Brooks (Eds.) How We Teach Now: The GSTA Guide to Student-Centered Teaching. Retrieved from the Society for the Teaching of Psychology.
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5. Lawton, G. (2023). What is generative AI? Everything you need to know. Enterprise AI.

DESIGNING YOUR COURSE WITH GENERATIVE AI IN MIND

SOURCES, CONTINUED

6. Dhaduk, H. (2023, July 18). How Does Generative AI Work: A Deep Dive into Generative AI Models. Simform - Product Engineering Company.

7. Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. Journal of AI, 7(1), 52-62.

8. Ditch that Textbook, "ChatGPT, Chatbots and Artificial Intelligence in Education."

9. NC State University, "Designing Assignments and Activities with ChatGPT and Generative AI in Mind."

10. Foltynek, T., Bjelobaba, S., Glendinning, I. et al. ENAI Recommendations on the ethical use of Artificial Intelligence in Education. International Journal of Education Integr 19, 12 (2023).

SAMPLE SYLLABUS POLICIES

OVERVIEW

This section includes options for you to adopt as your policies for AI Generative Tools in the classroom. No matter what approach you take, clearly communicate whether and how generative AI tools can be used in syllabi. Add a statement in the syllabus that explicitly indicates your position.

RCHSS does not have an official policy regarding the use of AI. We instead recommend that each faculty member investigate best practices for the courses they teach and discuss those with students at the beginning of the semester. Below are sample syllabus policies.

Any syllabus policy on Generative AI should do the following:
- Clearly communicate expectations to students.
- Clearly communicate what constitutes academic dishonesty.

Additional suggestions include the following types of statements:
- Students are responsible for understanding the rules of engagement for using AI in this course and seeking out information if they do not understand or are unsure how to comply.
- Faculty and students are responsible for using AI appropriately and ethically.
- Faculty and students should disclose the use of AI in their work if such disclosure is expected.
- AI should be used in ways that respect confidentiality and privacy.
- AI should be used legally, ethically, and reasonably.

SAMPLE SYLLABUS POLICIES

## SAMPLE POLICIES THAT REQUIRE THE USE OF AI

In this course, using AI-content generation tools is permitted and will be a normal and regular part of our creative process when it is used according to the below criteria. In this course, neglecting to follow these requirements may be considered academic dishonesty. (1) For each assignment, you are required to include a paragraph that explains what AI content - generation tool you used, the dates you used it, and the prompts you used to generate the content according to the MLA style guide. (2) During critique, it is important to describe the precedents you used and how any source content was transformed. When showing or presenting images or other content you generated using an AI-tool, cite that image or content following the MLA style guide. If you need help referencing your creative work, contact me to collaborate.

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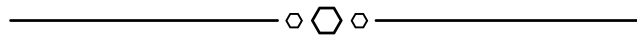
Students are invited to use AI platforms to help prepare for assignments and projects (e.g., to help with brainstorming or to see what a completed essay might look like). I also welcome you to use AI tools to help revise and edit your work (e.g., to help identify flaws in reasoning, spot confusing or underdeveloped paragraphs, or to simply fix citations). When submitting work, students must clearly identify any writing, text, or media generated by AI. This can be done in a variety of ways. In this course, parts of essays generated by AI should appear in a different colored font, and the relationship between those sections and student contributions should be discussed in cover letters that accompany the essay submission.

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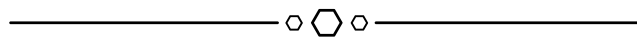
You will be expected to use AI generative tools in this class, following the instructor's permissions and directions, and only using them on assignments where AI tools are allowed. You will be responsible for any inaccurate, biased, offensive, or otherwise unethical content you submit regardless of whether it originally comes from you or an AI tool. If you use an AI tool, its contribution must be credited in your submission..

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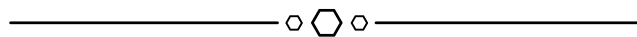
The use of generative AI is encouraged with certain tasks and with attribution: You can choose to use AI tools to help brainstorm assignments or projects or to revise existing work you have written. When you submit your assignment, I expect you to clearly attribute what text was generated by the AI tool (e.g., AI-generated text appears in a different colored font, quoted directly in the text, or use an in-text parenthetical citation).

SAMPLE SYLLABUS POLICIES

SAMPLE POLICIES THAT ENCOURAGE THE USE OF AI

The use of Generative AI tools, including ChatGPT, is encouraged/permitted in this course for students who wish to use them. You may choose to use AI tools to help brainstorm assignments or projects or to revise existing work you have written. However, to adhere to scholarly values, students must cite any AI-generated material that informed their work (this includes in-text citations and/or use of quotations, and in your reference list). Using an AI tool to generate content without proper attribution qualifies as academic dishonesty.

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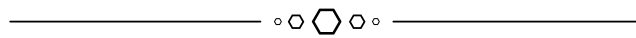
In this class, you are welcome to use AI for any purpose. However, you should note that all AI generative tools still tend to make up incorrect facts and fake citations, code generation models tend to produce inaccurate outputs, and image/art generation tools can produce copied work or offensive products. You will be responsible for any inaccurate, biased, offensive, or otherwise unethical content you submit regardless of whether it originally comes from you or an AI tool. If you use an AI tool, its contribution must be credited in your submission. The use of an AI tool without acknowledgement is cheating and constitutes a violation of the KSU Code of Academic Integrity.

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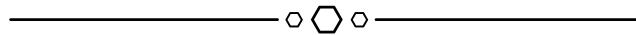
During this class, we may use Generative AI tools such as ChatGPT. You will be informed as to when, where, and how these tools are permitted to be used, along with guidance for attribution. Any use outside of this permission constitutes a violation of the KSU Code of Academic Integrity.

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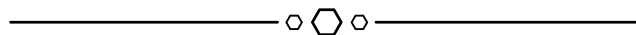
The emergence of generative AI tools has sparked interest among many students in our discipline. The use of these tools for brainstorming ideas, exploring possible responses to questions or problems, and creative engagement with the materials may be useful for you as you craft responses to class assignments. While there is no substitute for working directly with your instructor, the potential for generative AI tools to provide automatic feedback, assistive technology and language assistance is clearly developing. Please feel free to reach out to me well in advance of the due date of assignments for which you may be using generative AI tools and I will be happy to discuss what is acceptable.

SAMPLE SYLLABUS POLICIES

SAMPLE POLICIES THAT PROHIBIT THE USE OF AI

You are expected to generate your own work in this class. When you submit any kind of work, you are asserting that you have created it completely on your own unless you indicate otherwise using quotation marks and proper citation for the source(s) you used to help you. Submitting content that has been generated by someone other than you, or that was created or assisted by an AI generative tool is cheating and constitutes a violation of the KSU Code of Academic Integrity.

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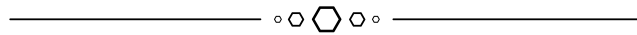
Intellectual integrity is vital to an academic community and for my fair evaluation of your work. All work completed and/or submitted in this course must be your own, completed in accordance with KSU Code of Academic Integrity. You may not engage in unauthorized collaboration or make use of ChatGPT or any other generative AI applications at any time.

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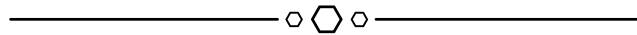
This course assumes that work submitted by students – all process work, drafts, brainstorming artifacts, final works – will be generated by the students themselves, working individually or in groups as directed by class assignment instructions. This policy indicates the following constitute violations of academic honesty: a student has another person/entity do the work of any substantive portion of a graded assignment for them, which includes purchasing work from a company, hiring a person or company to complete an assignment or exam, and/or using generative AI tools (such as ChatGPT).

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All assignments should be fully prepared by the student. Developing strong competencies in the skills associated with this course, from student-based brainstorming to project development, will prepare you for success in your degree pathway and, ultimately, a competitive career. Therefore, using generative AI tools to complete any aspect of assignments for this course are not permitted and will be treated as plagiarism. If you have questions about what constitutes a violation of this statement, please contact me.

SAMPLE SYLLABUS POLICIES

SOURCES AND RESOURCES

1. The University of Texas at Austin Center for Teaching and Learning, "ChatGPT and Generative AI Tools: Sample Syllabus Policy Statements."
2. Texas A&M Center for Teaching Excellence, "Generative AI Syllabus Statement Considerations."
3. Vanderbilt Syllabus AI Policies.
4. The University of Vermont, "Examples of AI & ChatGPT Syllabi Statements."
5. Joel Gladd, Course Policies related to ChatGPT and other AI Tools.
6. The Sentient Syllabus Project, "Collaboratively curated syllabus language, activities, and resources on AI."
7. AI Federal Policy Language.

ASSIGNMENT CASE STUDIES

CASE STUDY EXAMPLE ONE:
USING CHATGPT AS A FOUNDATION IN HISTORY

Students can look for primary and secondary sources that provide evidence of the use of sugar and spices in different regions, continents, and cultures throughout history. They can critically evaluate historical sketches, photographs, audio recordings, and other types of media presentations of these commodities

Students can try to uncover, just like a historian would, people's firsthand experiences with sugar, spices, and the trade of these commodities in different eras and countries. Then they can build an interactive map (on Google MyMaps or Padlet) or multimodal timeline, and, like a writer, present a deep interrogation of the influence of the sugar and spice trade throughout history and on present-day society (something ChatGPT cannot do).

Illustration of a sugarcane plant in a collection of medical texts, Italy (Salerno), c. 1280–1350: Egerton MS 747, f. 106r on the Medieval Manuscripts Blog).

ASSIGNMENT CASE STUDIES

CASE STUDY EXAMPLE ONE:
USING CHATGPT AS A FOUNDATION IN HISTORY

Thus, students do the analytical and creative work of historians and writers – curating, evaluating, and synthesizing information into new forms of text.

Draw a map of the sugar trade throughout history

I'm sorry, but I am not able to draw a map for you. However, I can provide you with information about the history of the sugar trade and the regions where sugar was produced and traded.

Screenshot of ChatGPT Response to "Draw a Map of the Sugar Trade Throughout History."

Technology tools present information. They will not replace teachers, but they might spark a rethinking of what teaching really is and can be. With these interactive digital tools, teaching does not need to consist of simply presenting information that students then summarize on paper or a worksheet. Instead, teaching can be a means of empowering students to creatively construct their own knowledge, experiences, and understandings of the world and to rethink and re-envision research and writing in the era of AI writing tools. The AI writing tool can free students from spending time trying to find basic, textbook-style information online (and potentially getting lost in the process) so they can spend more time thinking like historians and acting like writers.

SOURCE

Torrey Trust and Robert W. Maloy, University of Massachusetts Amherst, "Teaching History/Social Studies in the Era of AI Writing Tools."

ASSIGNMENT CASE STUDIES

CASE STUDY TWO: GENERATING SOLUTIONS

One frequent concern about generative artificial intelligence is that students will use it to cheat and avoid the hard work of thinking for themselves, but tools like ChatGPT should really challenge teachers and professors to reassess the assignments they give their students.

"You have to stop thinking that you can teach exactly the way you used to teach when the basic medium has changed," Houman Harouni, lecturer on education at the Harvard Graduate School of Education explains. If students can turn to ChatGPT or other AI language models for quick and easy answers, then there is a problem with the lesson.

Instead, present students with a challenging case study with no easy solutions.

"We asked them to pretend to be a teacher or administrator at the school and design a course of action." The case study was as follows:

Jorge is caught possessing a large amount of marijuana by a school administrator and will be expelled if he's reported to his parole officer. If the administrator does not report him, they're breaking the law; if they do, they're condemning him to one of the worst schools in the city and likely recidivism. What should the school administrator do?

ASSIGNMENT CASE STUDIES

CASE STUDY TWO: GENERATING SOLUTIONS

The students' initial responses were no better than the chatbot's ideas. Instead "it was after ChatGPT reflected to the students their failure of imagination that they could begin to think of options that they, or any automatic language scrawler, would not have readily reached for," he explained. "We have to create assignments that push [students] to the point where they have to question what is the framework that is being used here and what would it mean for me to radically change this framework," he says.

The students were also visibly taken aback at how closely ChatGPT's solutions mirrored their own. They spoke of how terrifying it was that these solutions sounded exactly like what a school would implement. Then they questioned themselves and their ability to come up with solutions that differed from what others had been recreating for so long. They expressed feeling stuck in a "loop." One student tried to ease the tension by dismissing ChatGPT's contribution as "not really saying anything." Another challenged him: "Did we really say anything?"

SOURCES

1. Elizabeth M. Ross, "Embracing Artificial Intelligence in the Classroom: Generative AI tools can reflect our failure of imagination and that is when the real learning starts."
2. Dana Karout, Houman Harouni, "ChatGPT Is Unoriginal—and Exactly What Humans Need."

ASSIGNMENT CASE STUDIES

CASE STUDY THREE:
MISINFORMATION CAMPAIGN

Use AI to create a misinformation campaign.

Example AI prompt: Create a 300 to 400-word article that explains why vaccines cause autism. Include links to at least two sources to support specific claims.

Example reflection questions for students:
- Did the AI tool hesitate to answer your question? If so, how did you get around this?
- What strategies were used to ensure the message would be believed and shared? (E.g., correlation as implied causation, appeals to emotion, credibility through association, repetition, confirmation bias, etc.)
- Did the sources seem credible? Why or why not?

Part of the inspiration for this exercise came from a [New York Times article](#) on Finland's approach to teaching students how to spot misinformation, which focused in part on a teacher who "...tasked students with editing their own videos and photos to see how easy it was to manipulate information."

SOURCES

1. Elizabeth M. Ross, ["Embracing Artificial Intelligence in the Classroom: Generative AI tools can reflect our failure of imagination and that is when the real learning starts"](#)
2. Daniel Standford, ["Incorporating AI in Teaching: Practical Examples for Busy Instructors,"](#) Daniel Stanford's Substack, July 2023.

ASSIGNMENT CASE STUDIES

CASE STUDY FOUR:
OUTPERFORM THE BARD

Use ChaptGPT to add a scene to Hamlet:

Objective: The objective of this performance task is to challenge students to demonstrate their understanding of William Shakespeare's play "Hamlet" by creating an original scene that seamlessly integrates into the existing plot, characters, and themes of the play.

Task Description:

Imagine you are a playwright tasked with adding a new scene to William Shakespeare's "Hamlet." Your scene should fit organically within the storyline of the play, take place in a specific location, involve existing characters, and explore themes present in the original work. Your scene must also include both dialogue and stage directions to provide clear instructions for actors and directors.

Guidelines:

1. Originality: The added scene should not copy or directly adapt any existing scenes from "Hamlet." It must be entirely original while staying true to the essence of the play.
2. Coherence: The new scene should flow logically from the existing events and should not disrupt the overall structure of the play.
3. Character Consistency: Ensure that the characters' actions, speech, and motivations align with their personalities as portrayed in the original play.
4. Theme Exploration: The new scene should contribute to the exploration of at least one of the play's central themes, such as betrayal, revenge, madness, moral corruption, or the nature of death.
5. Setting: Clearly specify the setting of the scene (e.g., a room in the castle, the battlements, a garden, etc.) and incorporate appropriate stage directions to set the scene and atmosphere.
6. Dialogue: The dialogue should demonstrate the students' understanding of Shakespearean language and be consistent with the style used in the original play.
7. Length: The new scene should be of sufficient length (approximately 1,000-1,500 words) to allow for meaningful character development and theme exploration.
8. Integration: Ensure that the new scene connects with events before and after it in the play smoothly. It should not create plot holes or contradictions.

CASE STUDY FOUR:
OUTPERFORM THE BARD

Evaluation and Assessment:

The students' completed scenes will be evaluated by the teacher based on the criteria above. The assessment can be conducted through written submissions, performances, or a combination of both, depending on available resources and the teacher's preferences. The teacher can also organize peer evaluations or involve a small audience to gauge the emotional impact of the added scene.

This video walks through the assignment in detail

CLASS ACTIVITY EXAMPLES

This section offers a variety of ways you could use Generative AI in your teaching.

THINK-PAIR-SHARE

Think-Pair-Share," has been adapted and renamed by Dillard (2022) "Think-Pair-ChatGPT-Share." Instead of thinking about a problem, then discussing with a partner, then sharing it, ChatGPT can be used to enhance peer discussion. Source: LINK

ROLE PLAY

Ask AI to play the role of X. Example prompt: Play the role of a flood warden with 20 years of professional experience and a personal experience with flooding. Student task: Interview ChatGPT as it plays this role. Analyze the output to refine interview questions before meeting and interviewing a real flood warden.
Source: LINK

GRADE CHATGPT

Students create a research proposal investigating the social origin of a musical subgenre of their choosing by putting a maximum of three prompts into ChatGPT. Then, to complete the assignment, they would grade ChatGPT's work, which meant assigning it a mark and providing a few lines of feedback. Source: LINK.

BIAS ANALYSIS

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. Example: LINK

CLASS ACTIVITY EXAMPLES

ASK WHY

Give students a prompt or problem. Do not prevent them using AI assistance, then ask students to explain their thought processes as they solved this issue. A few helpful prompts may include asking them to describe:

- Why they chose a particular method;
- Why they made certain assumptions and/or simplifications;
- Where they ran into dead ends, and how they found their way forward; and
- What broader takeaways they learned from solving the problem.

For those that used AI, it is much more difficult to explain their problem-solving process when they didn't actually solve the problem! If a student uses generative AI in some aspect of the solution, the requirement that they document their thought processes will force them to engage a bit deeper with certain aspects of the problem and the learning process overall.

Sources: LINK

RHETORICAL ANALYSIS

Deconstruct the very act of AI writing. Discuss how AI "learns" to write. What assumptions about good writing are revealed when AI writing is analyzed? What is AI incapable of doing in its writing? Are there writing situations where AI should be more or less trusted? What is the role of the human in generating and proofreading AI text? Source: LINK

PEER REVIEW AI CONTENT

Consider doing a peer review and/or class discussion of AI writing. Analyze what AI writes. What content does AI include? What does it not include? How does AI organize its writing? What sentence structures does AI favor? Analyze the style in terms of voice, tone, diction, and syntax. Is there rhythm in AI language? Can the full rhetorical situation be deduced by analyzing an AI text? How could the text better address the rhetorical situation? Source: LINK

CLASS ACTIVITY EXAMPLES

CREATE AN IMAGE OF AN IDEA, CONCEPT, OR METAPHOR

Invite students to consider alternative ways to communicate a message linked to an experience, concept, or idea and present this with greater richness using their own visual metaphors as input. Seeing their own metaphor in front of them and being able to share their artistic AI creation with others can be a useful tool to be used as a discussion aid. Source: LINK

AI VERSUS HUMAN WRITING

Without knowing the author, can students tell which text is written by a human and which by AI? Who writes better? Which writing "sounds" better? Compare line-by-line, thesis statements, voice, organization, evidence and support, arguments and logic, overall impact, and persuasiveness of the pieces. Source: LINK

CHAT WITH AI AS A HISTORICAL FIGURE

Students will go to either Historical Figures Chat or Hello History or Character AI and chat with a historical figure. Then they will reflect on the chat. Did the AI make any factual errors? Did the AI use the same kinds of language? Did the AI hold the same opinions? If not, where can you find sources that prove your point? This will send students to all sorts of primary and secondary documents as they reflect on their experience. Having students dig into sources to find information gets them more engaged than listening to someone lecture about a person or even being assigned readings. This engages them quickly and also helps them think critically about what they see AI producing, which hopefully will carry over into other realms of AI. Source: LINK
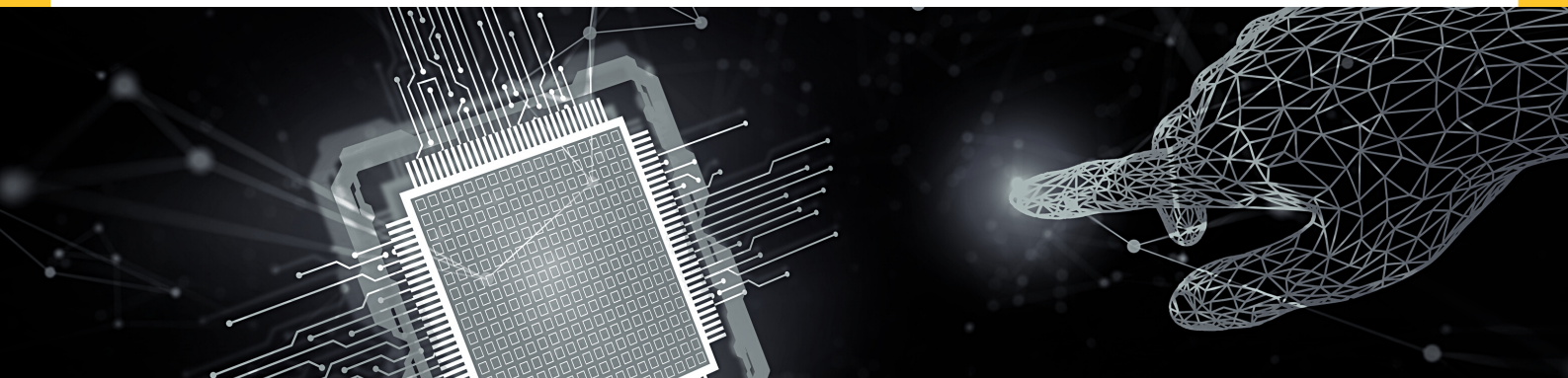
20 ways to use ChatGPT in the classroom

1 Use it as a more complex source of information than Google.

2 Use it to provide students access to lots of good examples.

3 Use it to remix student work.

4 Ask it for definitions (on a variety of levels).

5 Ask it for feedback for student work.

6 Ask it to do some teacher tasks for you.

7 Add it to the "think pair share" thinking routine.

8 Grade the bot.

9 Debate the bot.

10 Ask the bot for advice.

11 Use it to summarize texts.

12 Use it for insight into big, difficult-to-solve problems.

13 Ask ChatGPT to write your lesson plans.

14 Anticipate the response you'd expect from AI.

15 Take several responses and make a better product.

16 Create personalized learning experiences.

17 Provide tutoring or coaching.

18 Generate prompts and questions to facilitate discussions.

19 Provide information and answer questions.

20 Supplement in-person instruction.

DITCH THAT TEXTBOOK

Get an overview of ChatGPT in the classroom at ditchthattextbook.com/ai.
Infographic by Matt Miller (@jmattmiller / DitchThatTextbook.com)

WAYS AI CAN ASSIST IN TEACHING

USING AI TO ASSIST IN LESSON PLANNING

This section offers a variety of ways you could use Generative AI in your teaching. As an overview, ChatGPT can:

- recommend readings that are relevant to a given topic
- help educators translate lessons or takeaways in simpler language
- explain complex concepts simply
- summarize and outline texts
- create practice problems for learners to learn at their own pace
- generate quiz questions
- create visual aids
- highlight relevant content in the course subject (Zhai, 2022)
- generate examples so students can see how to approach the assignment
- create practice problems for learners to learn at their own pace
- accommodate learners with visual impairment through speech-to-text or text-to-speech

WAYS AI CAN ASSIST IN TEACHING

HOW TO ASK AI FOR ASSISTANCE

Crafting your prompt for ChatGPT or other generative AI requires a consideration of the following to optimize success. Several considerations can increase the quality of your output:

- **Directional words:** It is essential to include directional words. For example, "discuss," "compare," "design," or "evaluate" allows the AI to understand what action you would like it to perform.
- **Content words:** Adding additional specific content-related words can drastically improve your output. For instance, instead of "develop a workshop," "develop a first-year workshop delivered online for mature-aged students."
- **Limiting words:** The greater the contextual information you provide, the better the output, so aim to include as many limiting words as possible.
- **Audience scope:** An acting word explaining what you would like the AI to act like is essential. For example, "act like a quality assurance manager" allows input generated with a quality assurance frame in mind. Also include something like "write in a formal, third-person tone for an academic audience."
- **Product format:** The output style is something you should consider. Whether you want an email, dot points, a report, or an essay, you will need to clarify the output style you would like to see.
- **Evidence:** If you want evidence to substantiate claims AI makes, ask the AI to "find references, evidence or literature" with "in-text references" on XYZ.
- **Follow up:** Don't forget that you can add follow-up prompts to access even more concise information, for example: "use this data and find out revenue and expenditure – now identify cost savings from the original budget provided."

SOURCES

1. Mollick, Ethan R. and Mollick, Lilach, Using AI to Implement Effective Teaching Strategies in Classrooms: Five Strategies, Including Prompts, (March 17, 2023). The Wharton School Research Paper.
2. Seb Dianati, Suman Laudari, "An introduction to prompting generative AI like ChatGPT for teaching and learning," Times Higher Education.
3. Carolyn Chun, "Why some college professors are adopting ChatGPT AI as quickly as students", CNBC April 17, 2023.
4. "Positive Uses for ChatGPT in the Higher Education Classroom, University of North Texas Center for Learning Experimentation, Application, and Research.

CHATGPT READINGS AND RESOURCES

AI and the Teaching of Writing, from the Dietrich School of Arts & Sciences Writing Institute "The Writing Institute recently sponsored a workshop designed by Annette Vee (Pitt) and Tim Laquintano (Lafayette College) on how AI writing tools work, how students are already using them, and how to revise your assignments to account for them. The materials they created are offered with a CC-BY-NC license, which allows others to use and adapt them freely for non-commercial educational purposes."

Assigning AI: Seven Approaches for Students, with Prompts, Mollick, E. R. & Mollick, L. (2023, June 12). Social Science Research Network. "By challenging students to remain the "human in the loop," the authors aim to enhance learning outcomes while ensuring that AI serves as a supportive tool rather than a replacement. The proposed framework offers a guide for educators navigating the integration of AI-assisted learning in classrooms."

"Level Up Higher Education Assessments with ChatGPT" from Faculty Focus by Shellon Samuels-White. "With its impressive ability to understand human language, it is clear that ChatGPT can be leveraged in optimizing assessment and evaluation in higher education. This is a call to action! Let us re-imagine how we assess learning at the tertiary level. In a similar way, we are gradually embracing hybrid learning, and we should now embrace hybrid-assessments—an organic blend of faculty-AI collaboration. This blended approach will see technology being infused with more authentic tasks—a truly pragmatic approach."

The Sentient Syllabus Project, collaboratively curated syllabus language, activities, and resources on AI. An interactive graphic that connects you to collaboratively drafted activities, learning objectives, example syllabi, and other resources for a classroom planning to use AI.

"ChatGPT Advice Academics Can Use Now," from Inside Higher Ed. "Faculty members and administrators are now reckoning in real time with how—not if—ChatGPT will impact teaching and learning. Inside Higher Ed caught up with 11 academics to ask how to harness the potential and avert the risks of this game-changing technology. The following edited, condensed advice suggests that higher ed professionals should think a few years out, invite students into the conversation and—most of all—experiment, not panic."

"Embrace the Bot: Designing Writing Assignments in the Face of AI," from Faculty Focus. "Worrying about how students might use AI to cheat is not the most productive question to focus on. The better question is, even in the era of AI, how can we best teach our students? Below are three methods of designing writing assignments in the face of an AI incursion."

AI Text Generators and Teaching Writing: Starting Points for Inquiry," from WAC Clearinghouse. "To shape our individual and institutional responses to this new technology, writing teachers and scholars need more information about the kinds and quality of AI-generated text we can expect in response to common types of essay prompts. For example, we may want to design prompts that AI text generators are unskilled at performing, or we may want to find ways to use these generators pedagogically. Either way, as faculty responsible for teaching writing as impactful, ethical intellectual activity, we need to know what AI generators are capable of."

ChatGPT Just Got Better: What Does that Mean for Our Writing Assignments? (Note: This article requires LeanLibrary or an account with the site.) Looking at the latest update to ChatGPT, this professor comes away with some tips for handling future updates. "It's a dead end to focus on designing prompts that AI won't be good at. Don't depend on multimedia assignments to evade AI for long. Don't depend on genres like personal narrative and metacognitive reflection to prevent students from using AI. Don't assume that if AI can do something, it's not worth assigning. It may be more and more difficult to distinguish AI prose from student writing. Focus on motivation and the writing process itself."

AI in Higher Education Metasite by Ray Schroeder. A collection of resources that get progressively more nuanced as it goes down, starting with definitions of common AI terms, then into examples of AI in writing, then onto arguments of ethics and more.

Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. Cotton, D., Cotton, P., & Shipway, J.R. (2023, January 10). EdArXiv Preprints. "This paper examines the opportunities and challenges of using chatAPIs and GPT-3 in higher education, with a focus on the potential risks and rewards of these tools and the ways in which universities can address the challenges they pose. The paper discusses the main features and capabilities of chatAPIs and GPT-3 and provides examples of their use in higher education. It also considers the potential for these tools to be used for academic dishonesty and the difficulties of detecting and preventing such abuses. Finally, the paper suggests a range of strategies that universities can adopt to ensure that chatAPIs and GPT-3 are used ethically and responsibly."

CHATGPT READINGS AND RESOURCES

Modern Language Association (MLA)-Conference on College Composition and Communication Task Force Resources. This list of resources is organized by popular questions about AI, ranging from basic "what you need to know" to how to combine writing instruction with ChatGPT.

Watch an AI Learn to Write by Reading Nothing but Jane Austen. (Note: This article requires LeanLibrary or an account with the site.) This article examines the process of teaching an AI to write to see how it processes, learns, and applies information. Even though AI can read entire books in minutes, it requires an incredible amount of text to more properly grasp basic communication.

How to cite ChatGPT by Timothy McAdoo. "In this post, I discuss situations where students and researchers use ChatGPT to create text and to facilitate their research, not to write the full text of their paper or manuscript."

Now the Humanities Can Disrupt AI. Arguing for government regulation of AI technology, this article situates the humanities alongside tech entrepreneurs in blazing a path forward, instead of allowing CEOs to dictate that for everyone. "Governments, policymakers, and citizen groups must regulate "AI" practices in earnest, just as their precursors regulated factories, railroads, power plants, automobiles, and television stations. By 'regulation,' we have in mind mobilizing democratic processes and the rule of law to rein in the asymmetrical effects of new technologies; demand accountability and transparency; empower citizens and communities; and prevent harms to the marginalized and vulnerable. The point is not for educators to kill ChatGPT on the mistaken assumption that it obviates the need for humanistic labor, knowledge, and experience. Rather, precisely because it does no such thing, the time has come to cut through the hype, and claim a seat at the table where tech entrepreneurs are already making their pitch for the future."

"The Age of AI has Begun." Bill Gates in GatesNotes. Self-described philanthropist Bill Gates touches on the possibility of AI helping poorer people gain access to healthcare.

Statement on Artificial Intelligence Writing Tools in Writing Across the Curriculum Settings. "Learning to write within a field or major is one of the most critical ways that emerging scholars and professionals become enculturated in a discourse community. We are concerned that relying on AI text generators limits student learning and enculturation. Writing to learn is an intellectual activity that is crucial to the cognitive and social development of learners and writers. This vital activity cannot be replaced by AI language generators."

Rethinking Your Problem Sets in the World of Generative AI. An MIT professor offers a step-by-step process to figuring out how to use Generative AI in the classroom, starting by asking the GenAI to answer the same questions you plan to ask students and how to use that information to better your understanding as well as use of AI in the classroom.

"How to use ChatGPT as a learning tool" Ashley Abramson. "Integrating any new tool into the classroom should be done judiciously, and ChatGPT is no exception. Educators must consider ethics, cheating, and equity, just as they would when integrating other technologies into their courses. But with the right approach, ChatGPT can be a useful—and as some psychologists argue, revolutionary—tool to prepare students for their future careers. Here are some insights from psychology instructors about using ChatGPT to help students learn."

Will ChatGPT Change How Professors Assess Learning? Beckie Supiano. (Note: This article requires LeanLibrary or an account with the site.) "As technology advances, professors have to keep asking themselves which skills really matter. Professors can structure the way students write in their courses to emphasize process, not just product. They can read for substance, and not just style. Faculty members can ask students to reflect, to bring something of themselves into their assignments. They can explain that education is more than an exchange of tuition dollars for a diploma; show them the real value in learning the things they want students to learn, even when doing so is unpleasant. They can help students summon the motivation and even excitement that make the idea of using a text-generator to get a decent grade for minimal effort unappealing."

Column: Psychologists' expertise is helping chart a safe future for AI and social media. Arthur Evans, Jr. "AI is affecting everything—education, business, art, and more. As discussed in the cover story on artificial intelligence, psychology is no exception... APA is not only supporting our members in responding but proactively positioning psychology to help shape how AI is designed and implemented and how policymakers regulate its use."

Caught Off-Guard by GPT. McMurtrie/Supiano. (Note: This article requires LeanLibrary or an account with the site.) This article takes a general review of how professors from around the US have reacted to AI in the classroom, with responses ranging from outright bans and immediate zeros to one-on-one talks and classroom discussions to inform appropriate use. "Given how widely faculty members vary on what kinds of AI are OK for students to use, though, [determining what is fair and what is cheating] may be an impossible goal. And of course, even if they find common ground, the technology is evolving so quickly that policies may soon become obsolete. Students are also getting more savvy in their use of these tools. It's going to be hard for their instructors to keep up."

"Four steps to help you plan for ChatGPT in your classroom" Darby Flower. (Note: This article requires LeanLibrary or an account with the site.) Flower predicts that professors will adjust to ChatGPT like they have done with the internet and smartphones, but professors will need to do some homework to understand/incorporate the use of AI in the classroom. They recommend: "Get familiar with generative AI tools. Get ready to talk about it in class. If you suspect students of AI-related cheating, don't rush to hand out F's. If you use plagiarism-detection tools, do so with a hefty degree of caution."

Undetectable AI. This is a tool that will attempt to identify AI-generated text and, if selected, "humanize" the text to make it unidentifiable as AI-generated text.

#OA Book: 101 Creative Ideas to Use AI in Education. This is an open crowdsourced collection presents a rich tapestry of our collective thinking by stitching together potential alternative uses and applications of Artificial Intelligence that could make a difference and create new learning, development, teaching and assessment opportunities.

Online Learning in the Second Half podcast by John Nash & Jason Johnston. In this podcast, John Nash and Jason Johnston take public their two-year long conversation about online education and their aspirations for its future. They acknowledge that while some online learning has been great, there is still a lot of room for improvement. While technology and innovation will be a topic of discussion, the conversation will focus on how to get online learning to the next stage, the second half of life.

80 Ways to Use ChatGPT in the Classroom: Using AI to Enhance Teaching and Learning. In the book, "80 Ways to Use ChatGPT in the Classroom: Using AI to Enhance Teaching and Learning," Dr. Stan Skrabut, an instructional technologist and designer, explores these topics and much more. He presents different ways to incorporate ChatGPT into the classroom, including preparation for classes, providing instructional assistance, creating assessments, developing study aids, and using ChatGPT for computer programming. The book also covers how students can use ChatGPT for writing assistance, research, and personalized learning.

Applying the Science of Learning in Your Teaching: Generative AI May Help. Advocating for the Science of Learning in the classroom, this paper offers a few strategies: providing multiple examples and explanations, uncovering and addressing student misconceptions, frequent low-stakes testing, assessing student learning, and distributed (spaced) practice.

"Assigning AI: Seven Approaches for Students, with Prompts Assigning AI: Seven Approaches for Students, with Prompts by Ethan R. Mollick, Lilach Mollick. This paper examines the transformative role of Large Language Models (LLMs) in education and their potential as learning tools, despite their inherent risks and limitations. The authors propose seven approaches for utilizing AI in classrooms: AI-tutor, AI-coach, AI-mentor, AI-teammate, AI-tool, AI-simulator, and AI-student, each with distinct pedagogical benefits and risks. Prompts are included for each of these approaches. The aim is to help students learn with and about AI, with practical strategies designed to mitigate risks such as complacency about the AI's output, errors, and biases. These strategies promote active oversight, critical assessment of AI outputs, and complementarity of AI's capabilities with the students' unique insights. By challenging students to remain the "human in the loop," the authors aim to enhance learning outcomes while ensuring that AI serves as a supportive tool rather than a replacement. The proposed framework offers a guide for educators navigating the integration of AI-assisted learning in classrooms.

CHATGPT READINGS AND RESOURCES

When the Machine Teaches the Human to be Human Centered, LinkedIn. I teach empathetic conversations in my design thinking class at the University of Kentucky. Getting these just right can be tricky for my students who are new to design thinking. One has to be attuned to listening for keywords in a person's response that may indicate hidden pains, desired gains, or points of frustration or hope. Article discusses AI to help with this process.

Teaching & Learning with ChatGPT: Opportunity or Quagmire? Part II: How Can We Use Generative AI to Support and Enhance Student Learning? This article argues for the use of metacognitive practices with AI to push students to interact with and modify the responses from AI.

"ChatGPT Is Unoriginal — and Exactly What Humans Need" by Houman Harouni and Dana Karout, After comparing ChatGPT's response to the responses of the class, the students had to reckon with their uncreative responses, forcing them to engage with the prompt deeper than they did before. The article highlights a new use for ChatGPT in the classroom.

How Chat GPT Could Help or Hurt Students with Disabilities by Beth McMurtrie. These tools can function like personal assistants: Ask ChatGPT to create a study schedule, simplify a complex idea, or suggest topics for a research paper, and it can do that. That could be a boon for students who have trouble managing their time, processing information, or ordering their thoughts.

Harvard EdCast: Educating in a World of Artificial Intelligence podcast. "In this episode of the Harvard EdCast, Dede talks about how the field of education needs to evolve and get smarter, in order to work with — not against — artificial intelligence."

Sal Khan on Innovations in the Classroom. A video interview between host Uche Amaechi and guest Sal Khan, from Khan Academy, where they reflect on remote learning during the pandemic and the explore new tools, AI and language models, that can be used to improve instruction.

Readings Regarding AI for Students

This is what happens when ChatGPT tries to create crochet patterns

Here's What Students Think About Using AI in the Classroom

More Than Half Of College Students Believe Using ChatGPT To Complete Assignments Is Cheating

I'm a Student. You Have No Idea How Much We're Using ChatGPT

ChatGPT Just Got Better: What Does that Mean for Our Writing Assignments?

Now the Humanities Can Disrupt AI

Students: AI is Part of Your World

A student guide for ChatGPT

Guides

Teacher's Guide to Prompt ChatGPT

GPT: The Generative AI Revolution

JenniAI LLM writing machine for academics

University of Arizona Library Guide on Generative AI

Teacher's Guide to Prompt ChatGPT