UTEP Guidance for Teaching with AI Technologies

Drafted December 2023

OVERVIEW

In response to a request from the Provost's Office, the Institute for Scholarship, Pedagogy, Innovation, and Research Excellence (InSPIRE) assembled a team of 10 staff, faculty, and administrators representing diverse disciplines and colleges/schools from across campus to lead efforts around the adoption and use of artificial intelligence (AI) technologies in the classroom. What follows are recommendations generated by this Teaching with AI Taskforce. It is important to note that the choice to make use of AI technologies in the classroom and the specific policies around AI usage in such contexts is generally at faculty discretion. Questions or concerns regarding the guidance provided should be directed to inspire@utep.edu.

WHAT IS ARTIFICIAL INTELLIGENCE (AI) TECHNOLOGY?

Artificial Intelligence (AI) technology refers to the development and implementation of computational systems that possess the ability to perform tasks that typically require human intelligence. Ideally, these tasks enable individuals to engage in a wide range of activities including learning, reasoning, problem-solving, perception, language understanding, and decision-making. Within educational contexts, understanding what AI tools exist to support these activities and developing individuals' AI literacy (their ability to comprehend, critically evaluate, and apply AI output) is of essential importance.

EXAMPLES OF AI TOOLS IN HIGHER EDUCATION

Generative AI Tools

Generative AI refers to a class of AI models and systems that has the ability to generate new content, data, or outputs that resemble and, in some cases, are indistinguishable from human-created content. These systems are designed to identify patterns and structures from existing data and then use that knowledge to create novel outputs.

Examples:

- <u>ChatGPT</u> is a conversational AI model developed by OpenAI, based on the GPT-3.5 architecture. It excels in natural language understanding and generation, allowing it to engage in dynamic and contextually-relevant conversations. Trained on diverse Internet text, ChatGPT can provide information, answer questions, and generate human-like responses across a wide range of topics.
- <u>Grammarly</u> is a writing assistance tool that helps users improve the quality and correctness of their written content. It employs advanced algorithms to identify and correct grammar, spelling, punctuation, and style issues in real time, providing users with suggestions to enhance the clarity and coherence of their writing. Grammarly is available as a browser extension, desktop application, and mobile app, making it a versatile tool for individuals seeking to enhance their writing proficiency.
- <u>DALL-E</u> is an artificial intelligence model created by OpenAI that specializes in image generation. It is a variant of the GPT-3 architecture and is capable of creating unique and diverse images based on textual descriptions. DALL-E can generate images from textual prompts, demonstrating the ability to create imaginative and novel visuals by extrapolating from the patterns it learned during training.

To explore Generative AI programs in greater depth:

- 50 Best Al Tools
- Always Up-to-date AI Tools Database

Intelligent Tutoring Systems

Al-driven tutoring systems can provide additional support to students by offering personalized assistance and guidance. These systems can adapt to individual learning styles and provide targeted help in areas where a student may be struggling. Learn More.

Predictive Analytics

Al is used for predictive modeling to identify students who may be at risk of falling behind or dropping out. By analyzing various data points—such as attendance, grades, and engagement—institutions can intervene early to provide support and resources to struggling students. Learn More.

Natural Language Processing (NLP)

By leveraging AI in NLP, researchers can streamline the analysis of textual data and enhance the efficiency of knowledge extraction from diverse academic resources. In academia, AI-powered NLP systems can be employed for tasks such as automated essay grading, sentiment analysis of scholarly articles, and information extraction from vast volumes of research literature. Learn More.

RECOMMENDATIONS FOR DISCUSSING AI TECHNOLOGY USE IN YOUR CLASSROOM

We suggest that you discuss your policies with your students directly, specifically when approaching assignments that may encourage AI use.

Set clear expectations

It is important to have clear policies outlining whether the use of AI is permitted for all, some, or no course activities. Please consider including the following elements in your syllabus:

- Examples of what constitutes AI
- Language that states when, why, and how AI may or may not be used for assignments
- An explanation of how AI either assists or undermines learning goals
- Clear policies for what will happen if a violation occurs
- A reminder to students that they are responsible for any and all work that they put their name to, regardless of whether or not they used AI to complete it

Establish transparency in student learning goals

Tell the students your rationale for allowing the use of AI on certain assignments but not on others. Telling them what knowledge and skills they will develop by completing an activity can help mitigate the temptation to use AI in a way that undermines a learning exercise. If your aim is to enhance students' AI literacy, include this as an explicit learning goal or objective for your course or for specific lessons.

Discuss how unauthorized use of AI may be handled in your course

Below are things to consider for developing a policy for unauthorized use in your classroom.

- Determine at what point AI use in your classroom is unacceptable, and make that boundary clear
- Discuss how disciplinary referrals will be made if that boundary is crossed. Any investigation or disciplinary measures for academic dishonesty must be handled through the Office of Student Conduct & Conflict Resolution (OSCCR) at UTEP. <u>Learn More</u>.

Empower students to take responsibility for their work

It is important to impress upon your students the fact that if they are putting their name on an assignment, they must take complete responsibility for its contents. That means that if the AI program generates content that does not adhere to the assignment, makes logical errors, or fails to adequately think through a problem, the resulting grade will belong to the student, not the AI program.

- Remind students that AI cannot reproduce critical thought, reflection, or personal insights
- Discuss with your student that AI is only a tool to be used, but it does not replace human intellect
- Discuss with students the ethical as well as practical ramifications of using falsified information and references, which generative AI content often includes (as applicable)

Sample syllabus language*:

Using AI for brainstorming

Some AI technologies or automated tools, particularly generative AI such as <u>ChatGPT</u> or <u>DALL-E</u>, can be beneficial during the early brainstorming stages of an activity, and you are welcome to explore them for that purpose. However, keep in mind that AI-generated ideas are not your own and may hinder your ability to think critically and creatively about a problem. It is also important to remember that these technologies often "hallucinate" or produce materials and information that are inaccurate or incomplete—even providing false citations for use.

That said, you are not allowed to submit any AI-generated work in this course as your own. If you use any information or materials created by AI technology, you are required to cite it like you would any other source. Consider how this will affect your credibility as a writer and scholar before doing so. Any direct use of AI-generated materials submitted as your own work will be treated as plagiarism and reported to the Office of Student Conduct and Conflict Resolution (OSCCR).

AI prohibited

Use of AI technologies or automated tools, particularly generative AI such as <u>ChatGPT</u> or <u>DALL-E</u>, is **not allowed** for assignments in this class. Each student is expected to use critical and creative thinking skills to complete tasks and not rely on computer-generated ideas. Any direct use of AI-generated materials submitted as your own work will be treated as plagiarism and reported to the Office of Student Conduct and Conflict Resolution (OSCCR).

AI allowed only with prior permission from instructor

Use of AI technologies or automated tools, particularly generative AI such as <u>ChatGPT</u> or <u>DALL-E</u>, is **only allowed with approval from the instructor BEFORE being used**. Without permission, you will be expected to think creatively and critically to complete assignments without assistance from these tools.

If given permission to use any of these tools, students must properly cite and give full credit to the program used upon submission of every relevant assignment. For example, text generated using ChatGPT must be cited:

Chat-GPT(version). Date of query (year/month/day). "Text of your query." Generated using OpenAI. <u>https://chat.openai.com/</u>

A short paragraph describing how the tool(s) was/were used for the assignment must be included.

AI allowed with proper acknowledgement

Use of AI technologies or automated tools, particularly generative AI such as <u>ChatGPT</u> or <u>DALL-E</u>, is **only allowed with proper attribution given for its use**.

Students must properly cite and give full credit to the program used upon submission of every relevant assignment. For example, text generated using ChatGPT must be cited:

Chat-GPT(version). Date of query (year/month/day). "Text of your query." Generated using OpenAI. <u>https://chat.openai.com/</u>

A short paragraph describing how the tool(s) was/were used for the assignment must be included.

Free use of AI without acknowledgement

Use of AI technologies or automated tools, including generative AI such as <u>ChatGPT</u> or <u>DALL-E</u>, is permitted in this class. Students must include a short paragraph, with each relevant assignment, explaining how the tool was used.

FREQUENTLY ASKED QUESTIONS (FAQ) FOR INSTRUCTORS

- What AI technologies are permitted for use in my course(s)? Currently, there are no restrictions on the types of AI technologies that you can incorporate into your course(s). However, please be mindful that some AI tools have a financial cost associated with them and so may be inaccessible to individuals in the learning environment.
- Do I need to obtain approval to use AI in my course(s) from my department/division head or other administrator at UTEP?

There is no University-wide requirement to obtain such approval, though specific units may have rules about standardization of certain courses or curricula; while we encourage open discussion about AI use in teaching and learning contexts, approval is not explicitly required from any party. If you have concerns about data or information privacy, we strongly encourage you to contact <u>Information Security</u>.

• Can I make use of SafeAssign or Turnitin to screen student work for AI plagiarism?

SafeAssign does not currently possess AI detection capabilities, and UTEP does not have an institutional license for Turnitin. More importantly, perhaps, research (e.g., <u>Hayes & Introna, 2005</u>) suggests that AI detection software can produce many false positives, labeling individuals as plagiarists when that is not actually the case. For these reasons, if you suspect plagiarism, please directly refer the case to the Office of Student Conduct and Conflict Resolution (OSCCR; see below).

- What should I do if I suspect AI plagiarism?
 Please <u>submit a report</u> to the UTEP Office of Student Conduct and Conflict Resolution (OSCCR), just as you would for any other case where potential plagiarism is suspected.
- Where can I learn more about making use of AI in the classroom? While there are now innumerable online resources available regarding the instructional use of AI technologies, we encourage you to attend the "Teaching with AI" workshop series offered by InSPIRE during the semester.

*REFERENCES:

Grammarly (2023). About. Grammarly. <u>https://www.grammarly.com/about</u> McKinsey and Company (2023, April 24). *What is AI?* McKinsey and Company. https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-ai

- OpenAI (2022, November 30). *Introducing ChatGPT*. OpenAI. <u>https://openai.com/blog/chatgpt#OpenAI</u> OpenAI (2022, November 30). *DALL-E* 2. OpenAI. <u>https://openai.com/dall-e-2</u>
- University of Delaware Center for Teaching and Assessment of Learning. (2023). *Considerations for using and addressing advanced automated tools in coursework and assignments*. Retrieved December 14, 2023, from https://ctal.udel.edu/advanced-automated-tools/
- Zeide, Elana (2019, August 26). Artificial Intelligence in Higher Education: Applications, Promise and Perils, and Ethical Questions. EDUCAUSE Review. <u>https://er.educause.edu/articles/2019/8/artificial-intelligence-in-higher-education-applications-promise-and-perils-and-ethical-questions</u>