Texas Tech University Navigating Generative AI Together

Generative AI is reshaping teaching, learning, assessment, research, and creativity. At Texas Tech University, faculty are engaging with this technology in diverse and evolving ways.

This resource draws from existing university policy, national guidance, and evolving best practices to help you make decisions about whether you might use AI in ways that encourage innovation while protecting academic integrity, student data, and ethical standards. This living document will grow alongside the technology, with your professional judgment and student learning at its core.

Broad Ethical Considerations

Faculty should be aware of potential limitations of AI tools, including:

Content-related Risks:

- Misinformation and inaccuracies in AI-generated content that are presented by the AI
 as 'truth' but are factually incorrect (often referred to as ""AI hallucinations")
- Bias and unintentional harm stemming from the training data or model design, leading to stereotypical, exclusionary, or culturally insensitive outputs
- Inappropriate or offensive content that may still be produced despite content filters

Systemic and Design Risks:

- Algorithmic implications, including the potential for AI to reinforce harmful patterns,
 stifle innovation, make flawed inferences, or reflect opaque decision-making processes
- Adverse environmental impacts related to the energy consumption and carbon footprint of training and running large AI models

Student Learning Risks:

- Over-reliance on AI that may diminish critical thinking, writing fluency, skill development or loss of personal voice
- Equity issues may arise for students without consistent access to AI or paid subscriptions to AI applications

Privacy and Legal Risks:

- Data privacy and security risks if sensitive, proprietary, or personally identifiable information is entered into AI systems
- Intellectual property concerns when AI-generated content overlaps with copyrighted material or lacks clear ownership

Ethical Implications of Grading with Generative AI:

A longstanding responsibility for faculty is the role of assessor. Traditionally, we use our disciplinary expertise to assess a student's learning of course material.

There are significant ethical considerations regarding the use of AI tools with grading, including implications for the role of faculty, public perception of a higher education degree, trust issues between students and faculty, and the value we place on feedback, assessment and transparency. The Office of Student Conduct reports an increase in questions from students about whether their personally identifiable information has been uploaded to AI detection software.

If a faculty member chooses to grade with AI, considerations should include differentiating the AI feedback from human feedback with disclosure statements, extending the AI feedback with the instructor's critique or encouragement, or pointing out potential flaws with AI feedback. AI feedback seems most appropriate for low-stakes assignments or as a part of ungraded feedback to allow students to refine and draft their work.

We acknowledge that careful consideration should be given to the implications of AI grading. At a minimum, faculty should disclose any AI grading practices with students to model expected behavior in terms of transparent disclosure of AI use.

A Word of Caution on Generative Al Tools and Data Privacy

As interest in generative AI tools continues to grow, it is important to proceed with awareness and caution. Currently, Texas Tech does not hold institutional agreements with generative AI providers. As a result, no university-level data protections are in place for faculty or students using these tools. Best practices suggest that you use discretion when entering any academic or research-related content and consider maintaining an "AI-use ledger" for institutional due-diligence to record the tool's name, version, date, and type of content you are entering.

- Some Al tools may mine or retain the data you input, including sensitive or proprietary information. Always assume that any input into an Al tool unless explicitly protected by a contract is now public.
- **No institutional safeguards** currently exist to protect university users or data when using these tools.
- Use of Al platforms is at your own risk, especially when it comes to academic, research, or student-related materials.
- Current information security policies still apply and can be found at <u>IT Security</u>
 <u>Policies | IT Division | TTU</u>

While **Microsoft Copilot** is available through TTU single sign-on with your eRaider credentials. This sign-on addresses TTU authentication policies but does not mean it is officially supported or protected by a university-wide agreement. There is no guarantee that data privacy standards align with institutional expectations. Be aware that:

- Copilot may access and analyze content across your Microsoft 365 account, including Outlook, OneDrive, Teams, and more. Some users feel that this allows for personalized assistance and automation of your repetitive tasks, while others are uncomfortable with this level of access to personal data.
- Your data could be used to train or refine AI models, in accordance with Microsoft's terms of service.

Data Protection Guidelines

While some types of materials and data may be appropriate for use with generative AI tools, faculty should exercise professional judgment and carefully consider privacy, intellectual property (IP), proprietary information (PI), and personally identifiable information (PII) before using any AI tool. As such, any use of these tools should be approached with caution and in alignment with university values and ethical standards.

Private and Sensitive Data — Not Appropriate for Use with Al Platforms

Faculty should **never** input the following types of information into AI tools, even when using university-supported platforms:

- Personally Identifiable Information (PII) (e.g., names, eRaider, R-numbers, addresses, student records)
- Proprietary Information (PI) (e.g., internal operations, unpublished data)

- Intellectual Property (IP) not owned by the user or used without permission
- Institutional Data not already made public
- Confidential Data, including:
 - o FERPA-protected student records
 - Unpublished research (without express consent)
 - o Payment data (PCI)
 - Social Security Numbers
 - o HIPAA-protected health information
 - Controlled Unclassified Information (CUI)
- * For more information about the Family Educational Rights and Privacy Act (FERPA), please review information from the <u>Office of the Registrar</u>.
- ** If you have questions about data for a specific use case or are unsure about the sensitivity of data, please contact afdmd.staff@ttu.edu for assistance.

Examples of Public Educational Data Relevant for Al Use



Course Materials

- Basic course descriptions & objectives
- Reading lists & course schedules
- Generic assignment descriptions
- Learning outcomes & competenccies
- Course policies (non-sensitive)
- Lecture notes/slides (no student-data)
- Open Educational Resources (OERs)
- Public textbooks, readings, videos, pocatsts
- Discussion prompts & learning activities



Teaching & Instructional Content

- Instructional design templates
- Teaching strategies & assesment methods
- Graduation requirements & engagement



Institutional Information

- Departmental course descriptions
- Program learning outcomes
- Graduation requirements
- Course catalogs & calendars



Academic & Research Resources

- Published articles, books, chapters
- Putelis dates ats (no restrictions)
- Educational & competency frameworks

OpenAl ChatGPT. (2025, June 9). Generated response to prompt: "Create an infographic based on this uploaded about appropriate data for faculty use with generative Al." Retrieved from https://chat.openai.com.

Academic Integrity Considerations

Instructors who incorporate generative AI should adopt a developmental, co-learning approach—supporting student growth while reinforcing ethical and academic standards. Faculty are encouraged to model responsible use themselves and reinforce that AI is a tool—not a substitute—for critical thinking, academic effort, and ethical learning.

According to <u>Texas Tech's guidance on academic misconduct and AI</u>, instructors are responsible for clearly defining the appropriate use of AI in their courses and helping students understand the ethical boundaries of its use.

This could include:

- Using the Texas Tech <u>recommended AI syllabus statements</u> and/or developing a more course-specific AI policy outlined in the syllabus, including the instructor's requirements for preferred citation style and/or disclosure statement;
- Embedding clear AI usage guidelines in assignment instructions and nudging students toward reflective, responsible use;
- Redesigning assessments to function well in an AI-enabled environment, including rubrics that account for and evaluate AI-supported work or suspected AI misrepresentation of content;
- Teaching students how to use generative AI with appropriate considerations for privacy, intellectual property (IP), proprietary information (PI), and personally identifiable information (PII); and
- Guiding students to critically evaluate AI-generated content for bias, accuracy, and ethical concerns.

How Can a Faculty Member Use AI for Teaching?

Example 1: Course Redesign

A professor inputs an existing course syllabus, learning objectives, and general assignment descriptions into an AI tool. The tool provides ideas for restructuring the course, sequencing topics differently, or incorporating new active learning strategies that align with the course goals.

Example 2: Assignment Development

A faculty member shares a publicly available disciplinary competency framework with an AI tool. The AI generates assignment prompts targeting specific competencies, helping to ensure alignment between assignments and learning outcomes.

Example 3: Content Creation

An instructor uses AI to develop explanatory materials about complex concepts. By referencing open-access textbooks or academic sources, the tool helps create simplified summaries or diagrams that support student understanding.

Example 4: Assessment Planning

A professor enters general grading criteria and learning outcomes into an AI tool. The tool assists in creating a rubric template and proposes a variety of assessment formats (i.e., reflective journals, case studies, presentations) tailored to these outcomes.

Example 5: Pedagogical Innovation

A faculty member asks an AI tool to suggest evidence-based teaching strategies specific to their discipline.

We welcome your feedback regarding this resource. Consider contacting either <u>Karen Alexander</u> or <u>Suzanne Tapp</u> (Co-chairs, Teaching and Learning, Al Working Group) or <u>Lisa Low</u> (TLPDC Faculty Fellow).

Using a Human-Centered and Pedagogically Appropriate Approach (UNESCO)

Researchers and educators should prioritize human agency and responsible, pedagogically appropriate interaction between humans and AI tools when determining whether and how to use generative AI. This approach includes five key considerations:

- Educational value: The tool should address human needs and enhance learning or research more effectively than a no-tech or alternative approach.
- 2. Intrinsic motivation: Educators' and learners' use of the tool should stem from internal motivation, not external pressure.
 - For example, an instructor prompts ChatGPT to generate possible expansions or case studies to add to a discussion question prompt but does not rely on ChatGPT to write all questions due to lack of time.
- 3. Human control: The use of the tool must remain under the control of human educators, learners, or researchers.
- 4. Contextual appropriateness: The selection and organization of AI tools and their content should align with:
 - the expected outcomes, and
 - the nature of the target knowledge (e.g., factual, conceptual, procedural, or metacognitive) or the type of problem (e.g., well-structured vs. ill-structured).
- 5. Human engagement and accountability: Usage should promote human interaction with AI, support higher-order thinking, and ensure human accountability for:
 - the accuracy of Al-generated content,
 - o teaching or research strategies, and
 - their influence on human behavior, particularly recognizing that AI may positively influence our creativity and brainstorming or it may negatively tempt us to take short-cuts, take information at face value with minimal investigation or misrepresent content as our own.

Co-Designing the Use of Generative AI in Education and Research

The use of generative AI in education and research should not be imposed through topdown mandates or driven by commercial hype. Instead, its implementation should be codesigned by teachers, learners, and researchers. This co-design process must be supported by rigorous piloting and evaluation to assess both effectiveness and long-term impact.

To use GenAl to co-design appropriate resources and interactions, UNESCO proposes a framework for faculty that prioritizes six principles. We are asked to consider:

- Appropriate domains of knowledge or problem types (mean the purpose of the course and the learning outcomes)
- Expected outcomes from using Generative AI
- Appropriate tools and comparative advantages of Generative AI
- User requirements (skills, knowledge, ethical awareness)
- Required human pedagogical methods and example prompts
- Ethical risks involved in implementation

This co-design framework encourages pedagogically sound uses of Generative AI that upholds human agency. The following list identifies a starting place of examples that represent how Generative AI could be responsibly integrated across a wide range of educational and research domains:

- Supporting research practices
- Assisting in classroom teaching
- Coaching learners in the self-paced development of foundational skills
- Facilitating higher-order thinking
- Aiding learners with special needs

We recommend visiting this <u>UNESCO document</u> to view charts illustrating how co-design might work in practice as related to each of the domains above.

Texas House Bill 149: Texas Responsible Artificial Intelligence Governance Act (TRAIGA) TRAIGA or the Texas AI Act goes into effect on January 1, 2026. TRAIGA applies to developers and "deployers" of AI systems operating in Texas, both in the public and private sectors but expressly excludes institutions of higher education and hospital districts. However, this reference is included for information and awareness purposes.

According to a June 24, 2025 article on www.wiley.law, "The law places obligations and

restrictions on government use of AI and prohibits a person from developing or deploying AI systems for certain illegal purposes. The new law also amends existing privacy laws to address AI-specific issues. Finally, the law establishes the Texas Artificial Intelligence Council and creates a regulatory sandbox program for artificial intelligence systems."