Report on Generative Artificial Intelligence (GAI) and Instruction

Provost's Office Working Group

Submitted on November 08, 2023

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BACKGROUND

On August 2, 2023, Provost David Shaw began the process of putting together a Working Group on Generative Artificial Intelligence (GAI) for Teaching and Learning. The formation of the working group was in response to the rapid emergence of ChatGPT and other GAI tools in higher education. Dr. Shaw asked Professor Thomas Anderson to chair the working group.

Members of the working group included

- Thomas Anderson, Chair (Shackouls Honors College, Department of English)
- Barton Moffatt (Department of Philosophy and Religion)
- Elizabeth Miller (Department of English, Composition)
- Jonathan Barlow (Data Science Program)
- Will Davis (Department of Agricultural Economics)
- Merrill Warkentin (Department of Management and Information Systems)
- Matthew Priddy (Department of Mechanical Engineering)
- Sean Owen (College of Professional and Continuing Studies)
- Rebecca Robichaux-Davis (Department of Education, Curriculum & Instruction)
- Deborah Lee (MSU Libraries)
- Michael Seymour (Center for Teaching and Learning, Department of Landscape Architecture)
- Bimal Balakrishnan (College of Architecture, Art, and Design)

The charge of the working group was twofold:

1) To develop language for faculty to use on syllabi that provides reasonable guidance for the use of GAI in the classroom.

2) To define a set of best practices regarding responsible uses of GAI in the classroom, both from the faculty teaching perspective and a student learning perspective.

The working group met virtually on August 10 with Dr. Shaw to reaffirm the charge. It met eight times in person and via email and on TEAMS over the next three months. After the working group had completed its report on the first charge, the Chair met with Dr. Shaw on September 25th to provide an update and confirm the group's plan for its second task. The committee voted unanimously to approve the final report on November 7, 2023.

REPORT

I. Charge 1. To develop language for faculty to use on syllabi that provides reasonable guidance for the use of GAI in the classroom.

Mississippi State has an approved Honor Code that applies to all students, and the working group recommends that it remain unchanged as the University's broad vision statement regarding student integrity. It reads as follows:

> "As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do."

The working group makes the following suggestions (noted in green) to current language from the Provost for inclusion on the University Syllabus regarding academic integrity and GAI.

ACADEMIC INTEGRITY

(CURRENT LANGUAGE FROM PROVOST) Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor Code. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Honor Code. For additional information, please visit: https://honorcode.msstate.edu/policy.

- ***(PROPOSED)*** *Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor Code. These rules make clear that a student's submitted work must be their own. This principle includes content created by generative artificial intelligence (GAI) tools without authorization from the instructor. Students will be required to state their commitment to the honor code on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Honor Code. For more information, visit: https://honorcode.msstate.edu/policy.*

GENERATIVE AI

(CURRENT LANGUAGE FROM PROVOST) Mississippi State University recognizes the introduction of generative artificial intelligence (generative AI) provides opportunities for scholarly rigor, intellectual integrity, and educational excellence. Nevertheless, the use of generative AI also poses issues related to academic integrity. Currently, individual instructors are encouraged to establish class-specific guidelines concerning the use of generative AI within their courses. The student must consult the syllabus for each class they are taking to determine if and to what degree generative AI is allowed.

- ***(PROPOSED)*** *Generative AI tools are computer programs, including online applications that use artificial intelligence methods or processes to create content, including but not limited to text, images, video, audio, computer code, or other data. Mississippi State University expects students to adhere to policies regarding academic integrity, including the use of GAI tools such as ChatGPT, Bard, CoPilot, DALL-E3, and any other GAI tools available or developed in the future. The University recognizes that the introduction of GAI may provide opportunities for scholarly rigor, intellectual inquiry, and educational excellence. Individual instructors are encouraged to establish class-specific guidelines concerning the use of GAI within their courses. The student must consult the syllabus for each class to determine if and to what degree use of GAI is allowed. In the absence of a stated policy in a course syllabus, students must assume that the inclusion of GAI-generated content in course activities, assignments, or examinations is not permitted and will be considered a violation of the university Honor Code.*

II. Charge 2. To define a set of best practices regarding responsible uses of GAI in the classroom, both from the faculty teaching perspective and a student learning perspective.

In response to the second charge, the working group consulted best practice documents from peer institutions and explored research and scholarship on the possibilities and limitations that GAI poses for instruction and student learning. **The working group proposes the creation of a University webpage that provides the following information for faculty.**

Section 1. What is Generative Artificial Intelligence (GAI)?

We marvel at the products of *human intelligence*. Humans create art, devise and test theories, engineer intricate systems, and restlessly explore the mysteries of our own hearts. Educational institutions are monuments to this wonder. The word "artificial" in the term *artificial intelligence* (AI) highlights a contrast between human intelligence and the technologies we create that exhibit many features of intelligence. *Artificial intelligence* has been around for decades. From checkout free shopping at the local market or tools that suggest new shows to stream on Netflix to sophisticated navigation maps or voice-assistants in mobile phones, AI technology already drives much of modern life. Many AI technologies have become so commonplace to us that we think of them simply as "what computers can do" or even "what cars can do."

Generative AI (GAI) is a new species of AI that carries the potential for great disruption in the context of education. In contrast to previous generations of AI technology, GAI produces text, images, and sound that model human writing, photography, visual art, and music. GAI disrupts traditions for judging originality and ensuring academic integrity that are based on the examination of intermediate or final work products. GAI does not create composites of pre-existing human work that would, in principle, be identifiable by traditional means or even by human instinct. GAI is a highly observant "apprentice" to human creators, generating new work that attempts to mirror the quality of the work created by its mentors – us. For example, every essay created by text-based GAI is a unique composition informed by "observing" the way humans write. GAI aims to capture "the way humans write" based on processing a massive dataset of text written by humans in various contexts.

GAI's rapid emergence shortened the typical timeline required to accommodate new technology. Given the widespread availability of generative tools, educational institutions have been forced to consider how educators can support student learning while ensuring academic integrity. On the one hand, students now have the potential for highly individualized instruction by interacting with GAI. On the other hand, some learning objectives may be risked as students lean on the skills of GAI instead of developing their own.

The best way to understand the capabilities of GAI is to experiment. Many GAI applications operate as online AI-powered chatbots in which users input a prompt and the system generates content in real-time as a response. While GAI is most commonly used to generate text (including computer programming code) and images, GAI's ability to produce high-quality audio and video output improves daily.

Some examples of GAI applications include:

- ChatGPT
- Jasper Chat and Google Bard for text
- Dall-E 3 and Stable Diffusion for images
- Lumen5 for video
- Soundraw for music
- OpenAI Codex for code

Section 2. Why Is It important for Faculty to Develop an Understanding of the Role GAI Plays in the Classroom?

The growth in GAI means that educators need to respond thoughtfully to this new technology. While some educators have integrated it into their teaching, others have expressed concerns about its potential impact on student learning and academic integrity.

Integrity is a core value of the university. Creating and transmitting knowledge requires conditions of trust, and trust is made possible by the ethical behavior of all members of the university community. As part of the teaching mission of the university, instructional faculty have a professional obligation to ensure that their courses are designed to deliver appropriate material and accurately assess student learning. GAI presents challenges and opportunities that may require instructors to reconsider their pedagogical practices. As they reflect on GAI and their teaching, all instructors are expected to use their professional judgment to decide whether GAI can be used to meet their course learning objectives and evaluate whether their current assessments appropriately measure student learning. Given the rapidly evolving landscape of GAI, periodic reviews of courses by faculty are essential.

Security, Privacy, and Accessibility

While faculty will decide to what degree GAI will be permitted in their classrooms, those decisions should be informed by current security and privacy concerns.

- GAI may collect and share data.

  ChatGPT's privacy policy, for example, allows data sharing without specifying the recipients or purpose. This policy raises privacy and security concerns for both students and faculty. Be aware of changing privacy and data sharing policies when mandating GAI in the classroom and explore other ways to support learning and meet instructional objectives if students are wary.

- The copyright status of AI-generated works is not settled.

  Debates about who owns AI-generated content are ongoing, and there is no clear answer. It is wise to be careful about claiming full authorship for content produced by ChatGPT or similar GAI systems.

- AI platforms that are available today at no cost may one day require users to pay for services. OpenAI has already introduced ChatGPT Plus, a subscription service. The potential for future pay-for-use services raises questions about fair access for students.

- Faculty and staff should be careful when using novel technologies not supported by Mississippi State University. Do not input sensitive university data into GAI tools. When involving students with such tools, faculty should openly address privacy and security concerns. For more guidance, consult OP01.12.

- Read Mississippi State University's Information Security Policy.

Section 3. Considerations for Using GAI in the Classroom

When deciding when and how GAI tools can be used in the classroom, it is important to consider the tasks that GAI does well and the tasks that GAI does not do well. Some general guidelines are provided below, but instructors will need to keep up to date regarding the capabilities of GAI as the technology continues to evolve. Third-party applications are already being developed that utilize GAI tools to offer more contextualized support for classroom practices and exercises, many of which are specific to various academic disciplines, and GAI is actively being integrated into familiar technology platforms such as Microsoft Word and Adobe that students use every day.

Tasks GAI Does Well.

- Supports drafting in the initial stages of writing.

Foundational GAI tools generate suggested text when students input a question or prompt into the program. The quality and accuracy of output varies but may serve as a starting point for students seeking to evaluate, research and develop their own ideas. Users may find this practice helpful in the challenging early phases of composition.

- Provides assistance with grammar, framing and phrasing, and basic language learning.

GAI tools can recognize, explain, and fix simple grammar errors, but they can also edit and explain more nuanced writing considerations, such as more precise terminology, use of "tone," and formatting recommendations. These tools can also serve as conversational partners for informal language practice, aiding language learners and multilingual students who are mastering the basics of writing.

- Condenses and simplifies lengthy or complex texts. Writes summaries and abstracts.

Programs like ChatGPT can effectively condense and simplify longer texts provided by the user, assisting them with reading and research. These applications can also help in making complex texts easier to understand by providing clear explanations based on the source material. This feature has the potential to benefit learners by making dense academic materials more accessible.

- Designs custom graphical components for reports, based on specific request parameters.

GAI tools such as DALL-E 3 can generate images to fit the illustration of various ideas in a report. This aids the writer and graphic designer in producing high-quality illustrations, humorous images, and other supporting graphical components to improve document presentation.

- Helps with the design and application of computer programming and code.

GAI tools like ChatGPT can be used to develop computer code for specific applications. GAI tools can also suggest potential methods for solving user problems in specific programs (e.g., Excel, R, Python, Stata, Mathematica). This feature can help users unfamiliar with specific applications of programs and coding develop and utilize their code for specific or new applications.

Current Known Limitations of GAI.

- Generates inaccurate information.

All GAI tools rely on the quality and coverage of their training data to produce similar output. While some GAI systems have advanced features that enable access to external sources, self-contained systems are prone to generating incomplete or false information that resembles their training data in the use of language, imagery, or sound. They may produce obvious fabrications, especially when discussing recent events or subjects not prevalent in the training data. All output generated by GAI must be "fact checked" by users to guarantee accuracy.

- Fabricates citations.

When asked to provide research or citations from secondary sources, ChatGPT frequently invents fake references, often referred to as "Ghost Citations", and includes false claims, quotes, and scholars in the text. Future developments may reduce the likelihood of GAI tools producing false information, but all facts and citations should be independently verified by the user.

- Generates plagiarized text.

GAI is not constrained by academic integrity and copyright rules and guidelines, nor does it reflect common practices in various academic disciplines. GAI often reproduces others' ideas, failing to cite its sources properly. This may be difficult for users to detect, so proper attribution (via footnotes and other in-text citations) is vital. In some classroom exercises, GAI may need to be forbidden for this reason.

- Echoes biases and may use discriminatory, non-inclusive language.

Even with safeguards in place to filter out the most extreme or discriminatory content, GAI language and imaging systems can still produce text that perpetuates stereotypes, biases, and particular belief systems.

- Produces stilted, shallow text and simple rhetorical structures.

GAI learns to produce text, images, and audio based on training data. While text-based GAI has the potential to create writing of a high quality, its default behavior often results in text that can sound awkward and lack depth. Because it builds a model of the way humans write about the world, and not a model of the world based on understanding causality or logical relationships, GAI often makes rhetorical mistakes or reasons poorly. Without carefully constructed prompts that encourage GAI output to move away from default behavior, GAI often includes unnecessary filler phrases and relies heavily on certain writing patterns.

Section 4: Best Practices for Use or Non-Use of GAI in Your Course

When Using AI in your classroom, consider the following strategies:

Strategy 1. Align GAI Use to Course Learning Goals and Outcomes

Student learning outcomes (sometimes called "course objectives") anchor decisions about the design of any course. Student learning outcomes specify what students will be able to think, know, or do as a result of completing a specific course. Instructors create instructional materials, develop assessments, and plan activities designed to ensure students achieve course learning outcomes. Therefore, learning outcomes and course objectives provide a clear way to consider and communicate the appropriateness of student use of GAI tools and/or inclusion of GAI content in course activities, assessments, and instruction.

Instructor evaluation of GAI use for a specific assessment or activity can result in one of three primary conclusions: 1) the use of GAI is not possible, 2) the use of GAI is possible, but not beneficial, and 3) the use of GAI is possible and beneficial.

- Option 1: When the use of GAI is not possible:

Even in cases where an instructor determines that the use of GAI within an assessment or activity is impossible (e.g., an oral examination), it still may be useful to make prohibitions explicit. In these cases, instructors may explain how GAI use does not align with learning objectives or student learning outcomes. Instructors should determine the possibility of GAI use for all assessments and activities by first considering their format and delivery. Assessments and activities that are conducted under direct instructor supervision (e.g., oral examinations, in-class paper exams/quizzes, physical activities conducted in a scientific lab) are more likely to prevent the possibility of GAI use. In cases where GAI use is not possible, instructors should consider if GAI tools would prove beneficial in meeting student learning outcomes and potentially restructure the assessment or activity to allow for the use of GAI. Instructors with the goal of preventing GAI use should design assessments and activities so that the use of GAI is not a possibility.

- Option 2: When the use of GAI is possible, but not beneficial:

If the use of GAI within an assessment or activity is possible but not beneficial for achieving course objectives or student learning outcomes, the instructor has the opportunity to explain how the prohibition on use benefits student learning.

Here is an example of language that might be included on an assignment that prohibits student use of GAI:

On this assignment, it is vital that students demonstrate engagement with and critical reflection on the course material that GAI often shortcuts. I will be assessing how you process learning from your first encounter with the material to your final assignment, and at every stage, it is important that I am able to assess your ability to read, summarize, synthesize, critically analyze, and then communicate your own argument about the required material. GAI tools can short circuit these learning objectives critical to your intellectual growth in this course.

- Option 3: When the use of GAI is possible and beneficial

  If the use of GAI within an assessment or activity is possible, and if an instructor determines that its use has positive pedagogical value and enhances learning outcomes, the next consideration is whether any restrictions will apply. Restrictions may include decisions about which tools to allow and how allowed tools should be used within various parts of the assessment. If an instructor allows the inclusion of AI-generated content in student submissions, it is helpful to specify exactly how such content must be cited and how such content will be considered when evaluating student performance.

  For a citation example in APA style, see https://apastyle.apa.org/blog/how-to-cite-chatgpt. Other citations styles such as MLA and Chicago have their own requirements. For information on citation consult, MSU Libraries' Citation Guides at https://guides.library.msstate.edu/citationguides.

The table below illustrates how the limitations and benefits of GAI may support specific learning outcomes.

Scenario
Generative AI tools are increasingly becoming common in creative disciplines. One such example is Krikey (https://www.krikey.ai/), an AI tool that generates 3-dimensional avatar animations from text prompts. Within a (hypothetical) undergraduate game design program, three scenarios of Krikey use are analyzed for its impact on assignment goals and learning outcomes.
AI Use Is Counterproductive to Assignment Goals and Needs Restriction
An introductory 3D character animation class assignment requires students to generate a complete walk-cycle as an initial assignment. This assignment helps students learn the basic mechanics of human movement, the principles of weight and balance, animation looping, consistency, timing, and other skills. Allowing Krikey to generate character animations will be **counterproductive to the learning objectives** as students will miss out on learning **critical fundamental skills**. **In this scenario, using Krikey is not recommended, and instructors must take steps to prevent students from using Krikey.**
AI Use is Integral to Assignment Goals and is Encouraged
Assignment in a junior-level game design course is focused on **emerging technologies** that can reshape 3D animation workflow. Generative AI tools, including Krikey, are rapidly reshaping 3D animation and game design workflows. **In this scenario, for students already having 3D animation skills, using Krikey or similar generative AI tools is integral to the learning outcomes.**
AI Use is Neutral and Can Accelerate Workflow
The final project in a game design curriculum capstone requires students to generate a 3D video game with high sophistication and quality. The complexity and sophistication achieved by a final project in such a context will be significantly limited by the **tedious task of animating every character in every scene**. Krikey, in this scenario, can help a student well-versed in 3D animation **enhance the complexity, sophistication, and scope of the capstone project.**

Strategy 2. Be Transparent and Set Clear Expectations on the Syllabus and on Assignments.

Creating transparent instructional designs significantly boosts learning outcomes, especially for first-generation students and for students in large-enrollment classes. Similarly, sharing clear assessment criteria with students on assignments or on the syllabus encourages responsible student behavior and participation (ChatGPT, 2023).

- Be clear about the type of GAI-related support allowed students in the course.

Communicate in your syllabus the expectations for students' course-related uses of GAI. Be clear about why, when, and how GAI is allowed or not allowed. Discuss openly with the entire class and privately in office hours with students the opportunities and limitations of GAI. Be as explicit as possible and repeat those class policies and preferences often on assignments.

- Let the students decide the level of GAI support on certain assignments

Integrate GAI in the classroom by inviting students into the decision-making process. This allows them to reflect critically on the reasons for using GAI tools to support their work.

Strategy 3. Create Assignments with Student Integrity in Mind

Scholarship on academic integrity shows that when faculty make it easier "to do the right thing and harder to do the wrong thing," student dishonesty on assignments is reduced. Whether GAI tools are allowed or not, consider following ideas for creating thoughtful assignments for your students.

- Develop multimodal assignments for your students.

Creating assignments with multiple steps and multiple reporting outcomes will reduce student reliance on GAI tools. For example, multimodal assignments can engage students in diverse forms of expression and communication, allowing them to demonstrate their understanding of a topic or concept in various creative ways. Instead of having students write a single essay on a topic, ask students to utilize a variety of media and formats to convey their ideas, gearing aspects of the presentation to different learning styles and communication preferences.

- Develop scaffolded assignments for your students.

Assignment scaffolding is the practice of breaking tasks into smaller, manageable steps. This might include developing more detailed assessment guidelines or grading criteria or dividing a large assignment into smaller projects. This approach acknowledges learning as a sequential process, where students master one skill before moving on to the next. It offers more opportunities for constructive evaluation, promoting higher-level critical thinking by guiding students through progressively complex tasks.

- Allow for student self-reflection on the learning process as part of an assignment.

You may ask students to describe their writing or learning process and describe or evaluate the steps they took in completing the assignment. In addition to encouraging students to take ownership of the decisions that they made in the learning process, student reflection helps to make it transparent when an assignment was copied and pasted from another source like ChatGPT.

- Design assignments to support intrinsic motivation.

It's always worth underscoring that clarifying the purpose of each assignment and introducing student choice, personal connection, authentic assignments (case-studies, project proposals, digital portfolios), or real-world content to the topic can help make dishonesty less likely.

- Consider workload.

Students are more likely to engage in academic misconduct if they feel that they are experiencing extreme workloads.

- Don't rely on AI-detection software alone in evaluating the originality of student work.

  Understand that GAI-detection software is currently unreliable and can only be part of a more comprehensive strategy to ensure academic integrity on assignments. Please see AOP 12.07 for Mississippi State University's Student Honor Code Policy.

When Prohibiting GAI in Your Classroom

The decision to discourage ChatGPT and other GAI tools may make sense given your course objectives and teaching goals. If you choose to deter students from using GAI, consider the following strategies:

Strategy 1. Align the decision with Learning Objectives.

The decision to prohibit the use of GAI tools in a course should be consistent with the learning objectives. If the course is intended to foster particular skills, stimulate critical thinking, or assess students' comprehension, faculty may decide to prohibit the student use of AI tools to achieve those goals.

Here is an example of a justification for prohibition of GAI aligned with course objectives in a capstone project-oriented management class:

> *This is a reminder that the use of ChatGPT and similar Generative AI (GAI) software is prohibited in this course. There are several reasons for this policy.*
>
> *First, GAI software companies typically store a user's submission in their database in order to improve their software's machine learning capabilities. This storage compromises the confidentiality and information privacy of your clients.*
>
> *Second, GAI can be wildly inaccurate. A recent article by ZNet stated that in a test of GAI involving 512 questions, 52% were inaccurate and 77% were verbose (https://www.zdnet.com/article/chatgpt-answers- more-than-half-of-software-engineering-questions-incorrectly/). Moreover, GAI accuracy not only seems to be getting worse, but can degrade substantially in just a few months. For example, a team of Stanford and UC Berkeley researchers found that GAI accuracy in one test fell from "nearly 98%" in March 2023 to "less than 3%" in June 2023 for the same task (https://www.popsci.com/technology/chatgpt-human-inaccurate/). Inaccuracies will cause problems for you, your team, and/or your client. Remember that your reports and presentations will be reviewed by the instructor, a knowledgeable panel, and your client. The discovery of such inaccuracies can lead to substantial embarrassment to you and your team. However, it is even worse when such inaccuracies are not discovered because misinformed clients may develop and execute invalid strategies, policies, and/or procedures that waste financial and other resources.*
>
> *Third, the covert use of GAI results - that is, where GAI use is not acknowledged - is plagiarism. In turn, plagiarism is a violation of the MSU Honor Code.*

Given these and other problems, I will check for GAI use in suspicious passages in by employing publicly available GAI detection software. These software packages include but are not limited to ZeroGPT (https://www.zerogpt.com/) and GPTZero (https://gptzero.me/). These are in addition to Turnitin, which is automatically used in our course's Canvas page.

Strategy 2. Specify the scope of prohibition.

A blanket prohibition of GAI may have unintended consequences if students are already using embedded AI tools in programs such as Adobe Creative Cloud, Microsoft Word, and Grammarly. It will help instruction and assessment if faculty specify which AI tools and applications are prohibited and to what degree use is not allowed. Note that AI tools are anticipated to be a part of most major software applications and research databases in the near future.

Strategy 3. Consider the type of learning assessment.

GAI tools can bypass the actual learning process, hindering the instructor's ability to assess a student's progress and knowledge acquisition accurately.

Strategy 4. Communicate the rationale for the decision to prohibit GAI use in the classroom early and often in the course, especially before important assignments that require types of student learning in conflict with any benefit that GAI offers.

Section 5. Additional Information

- **Mississippi State University Operating Procedures**

  OP 01.10: Mississippi State University Information Security Policy
  https://www.policies.msstate.edu/policy/0110

  OP 01.12 Use of Information Technology Resources
  https://www.policies.msstate.edu/policy/0112

  AOP 12.07 Student Honor Code
  https://www.policies.msstate.edu/policy/1207

- **Selected University Best Practice Guides (Faculty Focus)**

AI: Considerations for Teaching and Learning (Ohio State University)
https://teaching.resources.osu.edu/teaching-topics/ai-considerations-teaching-learning

Artificial Intelligence (University of Maryland)
https://tltc.umd.edu/artificial-intelligence-ai

Designing Assignments and Activities with ChatGPT and Generative AI in Mind (North Carolina State University)
https://teaching-resources.delta.ncsu.edu/designing-assignments-with-ai-in-mind/

Generative AI – Best Practices and Resources (University of Pennsylvania-Wharton School)
https://support.wharton.upenn.edu/help/gen-ai

Generative AI Resources for Instructors (Center for Teaching and Learning, Mississippi State University)
https://www.ctl.msstate.edu/resources/generative-ai-resources-instructors

Teaching About the Use of Generative AI (University of North Carolina – Chapel Hill)
https://provost.unc.edu/teaching-generative-ai-guidance/

Teaching and Learning with Generative AI (Stanford University)
https://docs.google.com/document/d/1la8jOJTWfhUdNna5AJYiKgNR2-54MBJswg0gyBcGB-c/edit?pli=1

- **Other Resources**

Citation Guides (Mississippi State University Libraries)
https://guides.library.msstate.edu/citationguides

Copyright and Artificial Intelligence
https://www.copyright.gov/ai/

Generative AI Training Modules (University of North Carolina, Chapel Hill)
https://tarheels.live/aimods/

Student Guide to Generative AI (Barnard College)
https://cep.barnard.edu/student-guide-generative-ai

Top 100+ Generative AI Applications / Use Cases in 2023
https://research.aimultiple.com/generative-ai-applications/

Section 6. Selected Bibliography

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RECOMMENDATIONS

1) Form a "University Standing Committee on GAI and University Policy" that meets at least once a semester to review and revise MSU policy and update public-facing material on AI as necessary. The standing committee should be composed of faculty and staff from every college, university centers, and extension. (See UNC AI Committee: https://provost.unc.edu/committees/#chapter-2)

2) Empower the Standing Committee to report on the best practices for detecting and reporting academy dishonesty involving GAI.

3) Form a "Working Group on GAI Research, Scholarship, and Grantsmanship" to address immediate concerns and opportunities as developments in GAI impact MSU's research enterprise.

4) Form a "Working Group on GAI Staff and Professional Employment" to address immediate concerns and opportunities as developments in GAI impact the daily professional work at the University.

5) Form a "Working Group on GAI Extension" to address immediate concerns and opportunities as developments in GAI impact extension faculty and services.

6) Develop a "GAI and Teaching Submission Portal" where MSU faculty can share resources and assignments that integrate GAI successfully.

7) Consider where student instruction in ethical GAI use will be woven into the general education curriculum or during orientation.