REPORT

Task Force on Artificial Intelligence in the Learning Environment

Assembled by Tri-Chairs

Tori Mondelli | Enid Schatz | Ben Trachtenberg

Prepared for Provost Matt Martens | June 28, 2024

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Executive Summary

Over the spring semester, the Task Force on Artificial Intelligence in the Learning Environment conducted research, community discussions, and work sessions to provide a roadmap for the Office of the Provost regarding AI use within the University of Missouri's educational mission. In this report, we propose general recommendations for policy and action to help MU become an "AI forward" institution, including oversight groups, a coordinated campus-wide framework, a general training module for all faculty and many staff, professional development programs, a website, strategic hires, and grant-seeking.

The three areas of focus of this report are: pedagogy, learning, and ethics. Each section has specific recommendations, guidance, and/or budget requests for potential programs and staffing. Following the main report is a group of appendices, many of which are faculty/instructor resources for orienting oneself, a department, or a college for learning environments in the age of AI. The resources are at varying levels of readiness for campus circulation and would benefit from graphic design review and polish.

Pedagogy: To enhance MU educators' ability to prepare students for an AI-enhanced world, the Task Force recommends tiered professional development with financial incentives for faculty participants. Funding one to four new Innovative Teaching Consultant positions is needed to develop and offer a range of programs.

In general, the Task Force recommends that most classroom-level policies are best determined at the course level by the instructor. However, mandatory syllabi statements for all MU courses about AI usage, as well as a reiteration of the policy per assignment should be required of all instructors to ensure clarity for students in the learning environment. Additional policies on faculty disclosure and access/equity matters are also recommended.

Finally, the pedagogy working group recommends selecting and supporting a cache of AI tools that are protected and limited within the walled garden of the university as the best way to meet the privacy and data needs of students and faculty. Discussions with vendors are ongoing, and pricing is shared in the report.

Learning: Recommendations and resources are offered to help campus grow awareness and skill with AI. The focus of this Working Group was twofold: (1) to highlight the needs at the colleges/schools/unit level, with an eye to the discussions that need to happen at these levels related to faculty buy-in and engagement with AI tools and curricular development, and (2) to outline the capabilities and skills students are likely to need related to AI, and ways to ensure they get these. This

section includes more recommendations than policies, as there was a recognition that different units, and students within those units, will have different needs. However, bodies such as the Graduate Faculty Senate and Faculty Council may want to make broad policies at their level and encourage colleges/schools/units that report to them to make specific policies that align with the needs of that entity.

Ethics: To safeguard the MU community, several policies are recommended that pertain to ethical use of AI. The concerns covered by these policies and guidelines are oriented toward privacy, security, intellectual property, and academic integrity. The Task Force recommends new policies and/or guidance in the following areas:

- Requirement for syllabus statements about permissible and impermissible uses of Gen AI tools
- Generative AI and student privacy
- Coordination of policy development
- Submission of student-created work to AI applications
- AI and copyright

DEFINITIONS

For the purposes of this report, AI means:

- **Artificial intelligence**: "... a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments." https://www.state.gov/artificial-intelligence/
- **Generative Artificial Intelligence (Gen AI)**: These tools use deep-learning models to create text, images, sound, and videos. Gen AI models are trained on existing data, allowing them to learn patterns and structures. This information is leveraged to generate content that adheres to those patterns.

Throughout the report, the terms are used interchangeably.

DISCLOSURE

The Task Force used Gen AI tools in some stages of its work to create this report. Any Gen AI use was subject to our members fact checking, iterating, and ultimately revising any Gen AI output that was incorporated. Tools used were ChatGPT, Co-pilot, Perplexity, and Gemini.

Introduction

In early Spring 2024, Matt Martens, Alex Socarides, and Candace Kuby requested that Tori Mondelli, Enid Schatz, and Ben Trachtenberg together lead a Task Force focused on AI in the Learning Environment. The purpose of this Task Force, assembled just for the Spring 2024 semester, was to provide the Provost's Office with a roadmap for concrete steps moving forward in spaces across campus (policy, pedagogy, and learning) that would ensure that MU is ready to address the implications of Gen AI and its impact on the learning environment.

The three key areas the Task Force was charged to address were:

- Pedagogy and professional development for faculty in learning environment
- Ethics
- Expectations related to student learning

In February and early March, the Task Force was constituted. Task Force members were drawn from a set of names put forward by Faculty Council, nominations of faculty and staff with knowledge in this area from chairs and deans, and some self-nominations. The task force did not have a budget. Invitations went out to potential Task Force Members in the middle to end of February. The resulting Task Force was made up of five individuals put forward by Faculty Council, and another 12 members from various departments and entities on campus (see Appendix A for list of Task Force members).

Starting in mid-March, the Task Force met every other week, with each of the three Working Groups meeting in the weeks the full Task force did not meet. The pedagogy group was led by Teaching for Learning Center Director Tori Mondelli, the learning group by Graduate School Associate Dean Enid Schatz, and the ethics group by School of Law Associate Dean Ben Trachtenberg.

Each working group worked independently on its respective area and charge and reported back, allowing for cross-fertilization at the full Task Force meetings. In addition to these meetings, the Task Force chairs led a session that focused on AI at the Spring Department Chairs Retreat on May 2. All three chairs contributed to and participated in the Celebration of Teaching in mid-May that also focused on AI in the learning environment. At each of these occasions, the Task Force engaged with a wider set of MU constituents to understand the current feelings about AI in the learning environment.

POSITIONING OF TASK FORCE

The rapid and everchanging AI landscape, including Generative AI (Gen AI), affects the learning context at MU and how faculty navigate the integration of Gen AI into

their curriculum and coursework to ensure that students attain the skills and knowledge necessary to succeed in their discipline and workforce.

The University of Missouri has four values as the foundation of its community: Respect, Responsibility, Discovery, and Excellence. As we accelerate adoption of artificial intelligence to achieve our land grant mission for the benefit of all Missourians and the wider world, our four values humanize and ensure that ethical use of technology remain at the forefront of our Task Force's "AI-forward" recommendations. By "AI-forward," we mean that our vision for MU is to embrace different types of artificial intelligence appropriately and intentionally for an effective and inclusive learning environment. Society and industry are changing rapidly, and to best prepare our learners for the future, we have a responsibility to educate them and learn together how best to employ AI in various learning contexts and fields.

The Task Force started its charge by scanning our environment to understand how many of faculty and staff have AI expertise. A survey to chairs and deans turned up very few individuals (See Appendix B). Next, we began examining how the university compares to peer and aspirational peer institutions with respect to adopting AI in the learning environment. The Task Force spent time assessing what resources instructors, both faculty and graduate students who teach, need to use AI ethically, and more effectively—both for improving their teaching in general and for teaching about AI more specifically. Below is a brief outline that identifies at least one main MU value and articulates a fundamental approach toward achieving an "AI-forward" culture and practice at our university via each of the Working Groups.

- **Pedagogy – Excellence:** In professional development experiences, educators start to determine how to bring AI into the learning process in their specific courses. They design engaging learning activities and authentic assessments that leverage AI tools to deepen and expand student learning.
- **Learning (Expectations) – Discovery:** Discussions and recommendations or policies at various levels (university, college, unit, program, and course) must be drafted to provide necessary "guardrails" to give educators and learners a clear sense of how to navigate the new environment. Curricula and syllabi must be reviewed and updated to keep pace with changes in society and industry.
- **Ethics - Responsibility & Respect:** Educators have an ethical responsibility to communicate transparently with learners about the use of AI in courses and degree programs.

As we have interacted with various faculty groups on campus over the past semester, it is evident there is a wide continuum of both acceptance and readiness to bring Gen AI into the classroom. MU faculty range from "preservationists," who do not think it is viable or wise to bring Gen AI into the classroom; to "tinkerers," who are willing to experiment with Gen AI and incorporate AI in small or medium ways in their work-life; to those who are all-in or "exemplars," who are already incorporating Gen AI into

their teaching and other work areas (classification terms from presentation by Paige Ware & Jennifer Culver, May 2, 2024, MU Chairs' Retreat). In addition, there are many who have given Gen AI little thought or consideration, so do not have a firm stance. Wherever faculty would situate themselves on this continuum, given the ubiquity of Gen AI and its integration into many of the devices and systems in higher education, they are going to have to engage with it. Thus, it is essential that we encourage academic leaders to begin to discuss Gen AI within their departments, and faculty to discuss it with their students. Our report provides several recommendations and guides for starting these conversations, providing professional development to assist in the knowledge and skills to be leaders in this arena, and policy guidelines for how to approach the landscape ethically and with transparency.

UNIVERSITY OVERSIGHT

The first recommendation is to establish groups with oversight and support responsibilities for AI at our institution. These groups should be aware of the roadmap senior administration endorses, and their cooperation to create a campus-wide coordination framework for AI policies and programs will be necessary for the institution to make meaningful decisions and progress.

We recommend the University establish two groups of campus stakeholders including undergraduate and graduate students, faculty, and staff:

1. A **Campus Standing Committee** to review aspects of AI and Gen AI that cut across areas of shared governance, such as policy and curriculum matters. Recruit members who have expertise in and a solid understanding of how AI and Gen AI affect teaching, learning, and research. (Faculty Council and the Committee on Committees should flesh out how this new committee would interact with existing campus standing committees.)
2. Establish an **AI Board** to support and coordinate the proliferation of campus usage of AI to further the University's mission. Like the IRB and the Teaching for Learning Center, the board should have full-time staff, along with a combination of members including faculty doing service and student representatives.

While this report primarily addresses AI and instruction, the Task Force recommends the Provost's Office collaborate with the Division of Research, Innovation & Impact (RII) and MU Extension to discuss **a comprehensive AI strategy for research and extension activities**, in line with our status as an AAU and land-grant university. While it was beyond the scope of our Task Force to pursue funding to help our institution become "AI-forward," we are aware of the following opportunities to potentially support more expansive facilities and activities, such as a cross-disciplinary

AI Center/Institute or expanding an existing unit, to further efforts with a campus-wide coordination framework.

- NSF AI Initiatives: NSF AI Initiatives
- NIH Bridge2AI, AI/ML for Health Equity: NIH AI Initiatives
- USDA NIFA AI Initiatives: USDA AI Initiatives
- DoD Pentagon's AI Initiatives: DoD AI Initiatives

Additionally, continuing strategic AI hires through the Mizzou Forward program are essential to attract top AI talent to MU. Our future AI initiatives should align seamlessly with the NextGen initiatives to enhance our competitiveness for large-scale extramural funding.

Lastly, we recommend that Human Resources develop/acquire and launch **a required online training module** for this fall. All faculty and many staff must have a basic understanding of security, privacy, and bias concerns in the new AI work environment. This recommendation is broader than the "learning environment," but it is an urgent matter to ensure that MU continues to respect FERPA and HIPAA compliance regulations. Note, Missouri Online is developing some basic AI videos that HR might be able to use.

Summary of Peer Institutions' Approach to AI Disruption and Learning

The world of work is changing rapidly with the advent of highly accessible Gen AI tools. We are entering a "new era of human learning." This seismic shift can be likened to a revolution, which has and will have similar features of the shift that Western society experienced with the Industrial Revolution in the late 18th and 19th centuries. This new era has unique features, though, as it is global, rapid, and in the hands of almost every adult and teenager with a smart phone. Authors Jose Bowen and Edward Watson (2024) describe the change as follows: "Vast new efficiencies are being discovered across a wide range of white-collar sectors, and the expectation is that the impact will be akin to the industrial revolution" (Bowen and Watson, p. 27). Across higher education, there has been a reckoning this academic year. The impact of Gen AI on society and teaching and learning is going to be like nothing we have experienced in our lifetimes.

At Mizzou's winter teaching conference, a featured session titled, "Empowering the AI Workforce of Tomorrow: Navigating the AI Frontier Across Industries," engaged industry partners from five sectors to share updates and their vision for how we can equip ourselves and our students and remain relevant and competitive in this changed environment (Teaching Renewal Week panel discussion, January 2024).

These executives from Moderna, the *Washington Post*, Bayer Crop Science, Schnucks Markets, and Silver Maple Strategies recommended that we accelerate becoming an AI-forward institution for teaching, learning, and research. Their companies have already made initial shifts in using AI to augment previously human-only work. They anticipate an increasing demand for our graduates to be ready to work with AI. Bowen's and Watson's conclusions in *Teaching with AI* overlap with the panel's conclusions: "AI will eliminate some jobs, but it is going to change every job: those who can work with AI will replace those who can't" (p. 28). Noting this, as a recommendation, **units on campus with advisory boards ought to consider adding industry partners to help inform their use of Gen AI** in the coming months and years.

At the recent Higher Learning Commission conference, the keynote presentation by Daniel Susskind, Senior Research Associate at the Institute for Ethics in AI at Oxford University, and Research Professor in Economics at King's College, London, showed the extent to which white-collar work is being disrupted. He said that while only a minority of jobs will become fully automated in the next few years, we will see a majority of white-collar jobs become 30 percent automated or assisted by Gen AI (Keynote, April 14, 2024). As such, the Task Force communicates a sense of urgency for our institution to **commit to a mission-centered and scaled strategic initiative to boost our faculty and students' AI literacy and skills**.

Our degree programs ought to be thoughtfully considering how to modify the curriculum and learning activities, so that all students grow their AI literacy and skills. Without these new competencies, our students will be at a severe disadvantage when they enter the job market for full-time work.

To understand how Mizzou can keep pace with our peer institutions, the Task Force reviewed policies and programs that our AAU and SEC peers have in place. This spreadsheet (Appendix C) details what 17 peer institutions are doing in the AI teaching and learning space. Many of our peer institutions have developed robust policies and guidelines addressing the use of AI in their teaching and learning including:

- Academic integrity
- Use of AI detectors
- Privacy and liability
- Harnessing AI tools to improve student learning
- Crafting assignments using generative AI
- Creating syllabus statements for appropriate use of AI in the classroom

Many schools, such as University of Kansas (KUCTE AI | Center for Teaching Excellence) and Vanderbilt University (Teaching in the Age of AI | Center for Teaching | Vanderbilt University) have also created substantive faculty development modules and programs. States are helping to position their flagship institutions as leaders in

the AI space. This support encompasses the establishment of physical AI institutes and fostering statewide virtual collaborations.

MU should seek additional support from the state. Mizzou can be a leader in coordinating statewide efforts in AI, spanning K-12 education and continuing education. This strategic move would enhance Missouri's competitiveness in the AI domain.

The University of Florida (UF) is at the pinnacle in this area. With hefty financial support from NVIDIA, UF has launched a comprehensive AI initiative across its curriculum that is built on an AI literacy framework. This model highlights interdisciplinary engagement and student career readiness in the following AI categories:

- Enable AI
- Know and Understand AI
- Use and Apply AI
- Evaluate and Create AI
- AI Ethics

The Task Force met with David Reed, Associate Provost for Strategic Initiatives at UF. The UF investment in this AI initiative has been extensive including the following resources and infrastructure:

- Hiring 100 additional AI-focused faculty to increase the university's AI teaching and research capacity
- Promoting hands-on, experiential learning to prepare students for success in a workforce with AI
- Hiring staff and creating an AI2 Center to support and review new AI course content
- Providing seed grants to support new AI curriculum content development
- Developing an AI Fundamentals and Applications Certificate undergraduate program
- Developing an AI Undergraduate Scholars program to recognize students who work on AI related research with faculty
- Developing an AI Undergraduate Medallion program presented at graduation to recognize students who complete a minimum number of AI related courses, experiences, and activities

While UF set the bar high, with fundraising, state support, and strategic investment our institution can ramp up both policies and programs to be a fully engaged university in the new era of generative AI learning and doing.

Pedagogy: Guidance & Support for Instructors

The following Task Force members served on the Pedagogy working group: Tori Mondelli (lead), Kevin Kane, Flower Darby, Christy Goldsmith, Jared Schroeder, Kevin Brown, and Kimberly Moeller.

POLICIES

It is prudent for MU to adopt the following course-level policies with a focus on promoting student success, fostering academic integrity, and maximizing the benefits of AI-enhanced learning experiences. At this time, given the wide range of knowledge about how Gen AI tools can be used to enhance teaching and learning, it is best to have individual instructors determine if, when, and how they might move forward to incorporate Gen AI into the learning environment. In the future, *collective faculty* discussion and deliberation will likely shift the decisions about curriculum and instruction to the evolving needs of the degree program to serve students in a fast-changing world.

These policies are intended for this moment, i.e. academic year 2024-2025, and to apply to both students and faculty so there is robust communication and transparency regarding the use of Gen AI in the learning environment. Ongoing review of these policies should be taken up by existing bodies or new bodies for oversight. Additional policies are outlined in the Tools section.

1. **Required syllabi statements** that clearly communicate to students how Gen AI tools will be used in the course, including their benefits and limitations. Include this information in syllabi and introductory course materials. In the syllabus statement, instructors should provide a rationale for:
    - When the use of AI is permitted with attribution
    - When the use of AI is not permitted
    - What are the consequences for misusing AI (refer to academic integrity policy)
    - Which AI tools are permitted or not permitted

    Additionally, instructors/faculty ought to discuss the policy verbally in class, or in a dedicated manner online (via a video or some other personalized communication), as not all students read the syllabus carefully.

    We may begin to see that students with documented disabilities could have accommodations that allow them to use AI in the learning process. Faculty/instructors should partner with the Office of Disability to navigate and provide reasonable accommodation as the law requires.

These sample syllabi statements can aid instructors in crafting clear and comprehensive course expectations across disciplines. By providing a repository of well-crafted statements addressing diverse topics, such as academic integrity, accessibility, technology usage, and course policies, the university empowers instructors to create syllabi that effectively communicate expectations to students. This resource not only saves instructors time and effort in syllabus development but also ensures consistency and adherence to institutional standards. Additionally, by incorporating best practices and relevant legal and ethical considerations into these sample statements, the university reinforces its commitment to excellence in teaching and learning, while promoting transparency and accountability in the academic environment. The Ethics section of this report provides additional details regarding Syllabus Statements.

2. **Required statements for assignments with AI expectations** can also help create clarity between instructors and students. In addition to a syllabus statement, the Task Force recommends instructors mirror and clarify their course Gen AI policies within individual assignment sheets throughout the course. This policy is a student-centered practice that acknowledges that important (and new) expectations for a course need to be "just-in-time" to remind students of the policy and expectations for each assignment.

3. **Required instructor/faculty disclosure** to explain how Gen AI is being used in the course to assist with student feedback, email, posts, grading, and other processes that relate to teaching and learning. This ought to be in the syllabus, and, in the case of email messages generated with Gen AI, a disclosure statement in the signature block is good practice. Example: "Please note that this email was generated or revised with the assistance of AI technology."

   Instructors may not rely on Gen AI tools to do their work, but they can judiciously explore ways that Gen AI tools can assist them with some teaching/learning processes in compliance with data privacy and security guidelines. It is paramount that instructors remain responsible for all teaching/learning processes and ensure privacy and high quality for all their teaching duties. (Resource here.)

4. Instructors ought to **review and update their course-level AI teaching policy** each semester to align with university policy, advancements in technology, and changes in educational best practices. (Resource here.)

5. **When student use of Gen AI is permitted,** instructors ought to educate students about the ethical implications of using Gen AI, including issues related to privacy, bias, inaccuracies/hallucinations, and the responsible use of

AI-generated content. (See Learning section.)

6. In courses in which the use of Gen AI is directly tied to learning objectives, **a faculty member or instructor should be permitted to require the use of Gen AI** in the learning environment, with the following student-centered policy: (Resource here.)
    - Instructors should consider the learning needs and current level of knowledge and experience of their students when developing course goals and objectives, creating assignments, and choosing which AI tools to use.
    - Instructors should stay abreast of industry standards to know what Gen AI skills students need to know to be successful.
    - Instructors should talk with and explore their students' level of experience with Gen AI and the various tools they are using.
    - Instructors are encouraged to share their own AI experiences with their students.
    - Instructors should discuss concerns for student privacy when incorporating AI tools (FERPA/HIPAA).
    - Instructors must keep equitable access as a priority in their learning environment/courses. They should ask themselves:
        - Considering equity, do all students have an equal opportunity to learn and succeed, using AI to demonstrate their knowledge?
        - When selecting tools to use in class, which students might be excluded from effectively using those tools?
        - If a tool is required, it ought to be one that MU supports and has an enterprise license for so that students in the course all have the same access to that resource. (See Tools section)
    - In this early stage of the advent of Gen AI tools, be willing to let students opt out. There are students who have moral and ethical concerns about using AI. To ensure all MU students have an equal chance to succeed, instructors should provide AI-assisted options for completing assigned tasks as well as alternatives that don't require the use of AI to ensure that every student has an equal chance to succeed at MU. When contemplating whether to include AI in the classroom, this resource may be helpful to guide the decision.

7. The university should create a website on AI & the Learning Environment to serve as a knowledge base with a Frequently Asked Questions section on university policy.

Implementing and maintaining carefully considered policies related to teaching and learning with AI will result in MU upholding its mission and values. With our stated values of Respect, Responsibility, Discovery, and Excellence firmly in view, we ought to proactively invest time and energy in the development and maintenance of

policies that support pedagogical transformation with AI. Such policies ought to be the purview of an existing or new body through a process of shared governance.

PROFESSIONAL DEVELOPMENT

To enhance MU educators' abilities to prepare students to live and work in an AI-enhanced world, it is essential that appropriate professional development for all MU educators be provided and incentivized. This approach was affirmed at the Chairs retreat on May 2. The Task Force recommends a continuum of offerings through a tiered approach that is tailored to the needs of educators. The tiered options allow instructors to select the level at which they can engage given variability in faculty workloads and interest.

Although several options are outlined below, budget allocation will determine what can be achieved and sustained. Proposed programming is dependent on hiring new staff members; the number of new staff that can be hired impacts what level of programming that can be offered (Tier One—least robust, Two—medium, or Three—most robust).

Staffing Resources Needed

We believe that effectively supporting MU educators as we transform into an AI-forward university requires increasing the staff of the T4LC and, potentially, other units such as Libraries who provide much needed instructional support. It will not be possible to effectively do the work of supporting AI-informed pedagogical transformation by adding this new set of duties to existing staff members' workloads (Gonick, 2024).

We recommend permanently funding one to four new Innovative Teaching Consultant positions. These staff members would hold master's degrees in Instructional Design and have knowledge and competency with using Gen AI for teaching and learning. The number of staff needed depends on the level of transformative professional development that MU leadership aspires to attain for its educators and, ultimately, for student learning, success, and continued excellence in career outcomes.

These new positions would provide the following support for MU educators. Please note that HR was not involved in the selection of titles and salary ranges, which may need adjustment if approved.

- Build, facilitate, scale, and maintain professional development programs, updating them when necessary due to emergent technologies and practices
- Manage programming logistics (scheduling, tracking, etc.)
- Assess the effectiveness and impact of programs

- Consult with educators individually and in small groups
- Create and maintain resources related to effective and inclusive teaching with AI
- Engage in continuing professional development to maintain their own and the T4LC team's currency on teaching with AI and other emerging technologies.

Total budget request for all three tiers of PD offerings	**$1,901,151**
Subtotal for Tier Three (excludes Tiers One & Two)	**$987,338**
Subtotal for sustained funding Tier Three (staffing resources)	$415,303
Subtotal for one-time funds with potential for renewal Tier Three (stipends)	$560,785
Subtotal for Tier Two (excludes Tier One)	**$734,819**
Subtotal for sustained funding Tier Two (staffing resources)	$216,403
Subtotal for one-time funds with potential for renewal Tier Two (stipends)	$518,416
Subtotal for Tier One	**$178,994**
Subtotal for sustained funding Tier One (staffing resources)	$103,200
Subtotal for one-time funds with potential for renewal Tier One (stipends)	$75,419

Professional Development Tailored to Educators' Needs

Tier One: Exploratory offerings that serve as an AI sandbox to grow AI literacy among faculty and staff involved in teaching and learning.

Programming offered in Tier One is intended to recognize that some faculty, graduate TAs, and tutors are at the earliest stages of AI use and would benefit from a supportive and collegial experience to help them overcome existing barriers. A model offered by the T4LC, the AI Lunch and Learning Labs, serves as an example of programming offered at this level. These Labs were temporarily funded through a Student Success grant in February 2024. Similar programming will need an annual budget allocation.

Program Name	Description	Available Stipend	Notes
AI Basics Bootcamp for Educators	A 2-day intensive workshop offered three times during AY24-25.	$600 + FICA	Participants learn AI fundamentals and explore practical applications in their courses. Lunch provided. Must attend both days for stipend eligibility. Capacity for each boot camp is 30. Total participants across the three camps would be 90. Estimated stipend budget: $58,131 Estimated food/beverages: $3,600 **Total estimated budget: $61,731**
Generative AI Guilt-free Book Club	Monthly 75-minute meetings from September 2024 to November 2024 and February 2025 to April 2025	$350 + FICA	Educators can collaborate on integrating AI into their learning environments. Sessions involve a combination of brief book discussion, tool exploration, and feedback on ideas for AI adoption. Regular attendance is required. Capacity is 35. Estimated stipend budget: $13,188 Estimated book budget: $875 **Total estimated budget: $14,063**

AI Consultation /Office Hours	Scheduled and/or weekly drop-in sessions from September to December 2024	n/a	Educators can schedule and/or drop in for sessions to ask questions, get hands-on help with AI tools, and discuss integration ideas. Estimated budget: $0 This will, however, require additional staff and student AI scholars.

Resources for Tier One

One new, permanently funded, full-time Innovative Teaching Consultant and 2 AI Student Scholars. These positions will support expanded programming related to teaching and learning with Gen AI. The Innovative Teaching Consultant will offer a high level of technological and pedagogical expertise, while the student scholars will assist with technological and administrative support, as well as provide student perspectives on AI-related topics and issues.

Total budget request for Tier One	**$178,994**
Subtotal for sustained funding for 1 Innovative Teaching Consultant salary range $89,000 - $93,000 including benefits; 2 AI student scholars $7,500 (2 undergraduate) or $10,200 (1 graduate, 1 undergraduate)	$103,200
Subtotal for one-time funds (stipends + FICA) with potential for renewal	$75,794

Tier Two: Programs in Tier Two go beyond the exploratory level and engage MU educators in developing their AI literacy and competency. Topics include ethics and equity considerations, teaching students AI literacy, and course redesign strategies to integrate AI in pedagogically purposeful ways. This tier requires more of a time commitment, and the incentives are increased accordingly. An existing model offered by the T4LC, the Inclusive Teaching Course, serves as an example of programming offered at this level.

Program Name	Description	Available Stipend	Notes
AI-Powered Pedagogy Institute	A semester-long course for educators focusing on integrating AI into their teaching. Weekly meetings, assignments, and implementation of AI tools in courses.	$1,000+FICA	Runs from January 2025 - April 2025. Weekly meetings of 75 minutes. Dissemination in university-wide venue. Regular attendance required and an expectation of implementation of AI tools in courses. Capacity is 25. **Estimated budget: $26,913**
Learning Game Design and Development with Gen AI	A semester-long course for educators focusing on leveraging AI to design and develop interactive learning games for in-person and online courses. Weekly meetings, design assignments, prototyping, and development.	$1,000+FICA	Runs from January 2025 - April 2025. Weekly meetings of 75 minutes. Regular attendance required. Capacity is 25. **Estimated budget: $26,913**
Departmental Grants for Gen AI Innovation	Departments (academic or auxiliary-like Learning and Writing Centers) propose an AI-forward program for their faculty or staff and apply for a budget for faculty incentives, an external facilitator, or growing internal expertise. Programs are focused on professional development of educators or curricular and/or instructional	Departments determine individual stipends based on the scope of the program and deliverables.	Structure and timing of the program is determined by the department to support local agency in design and facilitation. A budget of $400,000 is housed in the Provost's Office for departments to incentivize pedagogical transformation with AI. Departments apply for funding on a first-come, first-served basis. Sharing of experience and

	redesign at the course or program level. Example: ENG 1000, with 101 sections in Fall 2024, curates a Composition AI Leaders program for broader dissemination of knowledge and practices in existing PD offerings in the Composition program. T4LC is not involved in planning or facilitation.		learning is encouraged at a department-, college-, or university-wide venue. **Estimated budget: $400,000**
AI Teaching Fellowship	An intensive program for individual faculty to develop and lead AI-enhanced projects. Includes bi-weekly meetings, project development, peer reviews, and final presentations.	$3,000+FICA	Runs from August 2024 to May 2025. Meetings every other week, 90 minutes. Dissemination in university-wide venue. Regular attendance required. Capacity is 20. **Estimated budget: $64,590**

Resources for Tier Two

Two new, permanently funded, full-time Innovative Teaching Consultants, 1 graduate student (half-time) and 3 AI Student Scholars, 2 undergraduate and 1 hourly graduate. These positions will support expanded programming related to teaching and learning with Gen AI. The Innovative Teaching Consultants will offer a high level of technological and pedagogical expertise and help faculty redesign assessments in the age of AI. The half-time graduate student will lead the learning game design and development. The hourly student scholars will assist with technological support and administrative support, as well as provide student perspectives on AI-related topics and issues.

Total budget request for Tier Two (includes Tier One)	**$913,813**
Subtotal for Tier Two (excludes Tier One)	**$734,819**
Subtotal for sustained funding Tier Two for Graduate student, half time $16,453, 2 Innovative Teaching Consultants salary range	$216,403

$89,000 - $93,000 including benefits; 2 T4LC AI undergraduate student scholars $7,500; 1 T4LC AI graduate scholar, $6,450.	
Subtotal for one-time funds (stipends + FICA) with potential for renewal Tier Two	$518,416
Subtotal for Tier One	**$178,994**
Subtotal for sustained funding Tier One (staffing)	$103,200
Subtotal for one-time funds with potential for renewal Tier One (stipends)	$75,794

Tier Three: Programming offered in Tier Three offers a transformational model and develops MU faculty members as Provost's Innovation Faculty Fellows. This level involves a significant time commitment, warranting a stipend or course release for those selected as fellows. Interested applicants will undertake a self-nomination process to their dean's office. They will choose from a menu of placement options such as: college/school level, T4LC, CWP, and other units. Fellows will work closely with either a director, associate director, or associate dean who will provide guidance to ensure their efforts align with and support the goal of MU as an AI-forward university. A current model of how this would work exists in the T4LC Faculty Fellows program. The Innovation Faculty Fellows will maintain a special focus on innovative teaching with AI and other emerging technologies and will serve as champions for AI-informed inclusive teaching, providing professional development for faculty peers college-wide and/or campus-wide.

Program Name	Description	Available Stipend	Notes
WriteSuccess with GenAI Leaders (CWP)	A semester-long faculty learning community of Writing Intensive Instructors who will learn, implement, and publish findings about adding Generative AI to their Writing Intensive course(s).	$5,000 + FICA	Runs from August 2024 - December 2024. Capacity is 10 participants. Stipend of $5,000 per participant + tech/tool subscription allowance of $100 per person. **Estimated budget: $54,830**

College-based AI Collaboratives	College-based collaborative teams of 3-5 faculty members who undertake the evaluation of meaningful discipline-based assessment.	$10,000 + FICA per Collaborative to be distributed among individual members	Deans' offices invite proposals from teams and set eligibility criteria and additional deliverables. Teams are tasked with examining and recommending modes of assessment in their discipline. Stipend is payable upon submission of a scholarly article to a respected teaching journal that has been approved by the dean. Sharing of experience and learning is encouraged at a department-, college-, or university-wide venue. Capacity is 15 Collaboratives, 1 for each College and 2 for Arts and Science. **Estimated budget:** $150,000 + FICA
Provost's Innovation Faculty Fellows	A year-long commitment of 8 hours/week in service of developing MU instructors as AI-forward educators. Schedule to be determined in accordance with T4LC director and program offerings.	$32,000 per fellow + FICA	Runs from August 2024 to May 2025. Innovation Faculty Fellows will serve MU faculty to scale greater knowledge, expertise, and implementation of emerging best practices for leveraging artificial intelligence for student learning and success. Capacity is 10 fellows distributed across colleges and centralized units. **Estimated budget:** **$344,480**

Resources for Tier Three

Four new, permanently funded, full-time Innovative Teaching Consultants, 1 half-time graduate student and 5 AI Student Scholars, 2 undergraduates and 3 hourly graduates. As noted above, these positions will support expanded programming related to teaching and learning with Gen AI. The Innovative Teaching Consultants will offer a high level of technological and pedagogical expertise and help faculty redesign assessments. The hourly student scholars will assist with technological and administrative support, as well as provide student perspectives on AI-related topics and issues.

Total budget request for Tier Three (includes Tiers One & Two)	**$1,901,151**
Subtotal for Tier Three (excludes Tiers One & Two)	**$987,338**
Subtotal for sustained funding Tier Three for 4 Innovative Teaching Consultants salary range $89,000 - $93,000 including benefits; Graduate student, half time $16,453, 2 T4LC AI undergraduate student scholars $7,500; 3 T4LC AI graduate scholar, $30,600.	$415,303
Subtotal for one-time funds with potential for renewal Tier Three	$560,785
Subtotal for Tier Two (excludes Tier One)	**$734,819**
Subtotal for sustained funding Tier Two (staffing)	$216,403
Subtotal for one-time funds with potential for renewal Tier Two (stipends)	$518,416
Subtotal for Tier One	**$178,994**
Subtotal for sustained funding Tier One (staffing)	$103,200
Subtotal for one-time funds with potential for renewal Tier One (stipends)	$75,794

Conclusion

Investing in permanent staff demonstrates a strong commitment to providing high-quality professional development. It signals to faculty and the broader academic community that the university is dedicated to fostering an environment of continuous learning and pedagogical excellence. The new staff members will enable the T4LC and other units to maintain currency and expand their reach to support pedagogical transformation in an age of AI. Please note, computers for these potential new staff members would also need to be funded, and the cost is not calculated here.

TOOLS

Though ChatGPT has become a focal point for university conversations since its open-access release in Fall 2022, the realities of what our students will face when they reach the job market include a range of AI tools. Text generation, creative production, marketing, and clinical and diagnostic assessment are all AI uses that our graduates will be expected to engage with in their professional careers. Rather than provide a prescriptive list of tools that will soon be outdated, we advocate for a centralized cache of AI applications that is maintained and updated regularly with examples of syllabi, course policies, and sample assignments for faculty and student support.

As we seek to fulfill specific use cases with Gen AI, it will be essential to define and then discover the tools that will fulfill these needs. The approach other AI-forward institutions have taken is to define use cases and then determine the best set of tools to pilot and discover if they meet the specified needs. As the university sets up the recommended campus standing committee and the AI Board, groups like DoIT, Missouri Online, and others can assist with use cases and vendor relations.

Strategies for approaching AI in the curriculum vary widely, ranging from academic units that actively encourage AI interaction to units that prohibit its use. To achieve our goal of becoming an AI-forward campus, we must make decisions based on what students will need to know in the job market. AI literacy is quickly becoming a requirement for our graduates. Large corporations are investing in AI-powered content marketing and analysis tools while healthcare facilities, including those at MU, are utilizing FDA-approved software.

In many ways, AI is already being incorporated in student academic experiences and learning outcomes. Faculty use tools like BeautifulAI, Prezi, and Canva to design aesthetically pleasing presentations. Communication students are exploring ChatGPT and Perplexity; Radiology is using AI software in clinics and ensuring students are aware of the tools; and Engineering introduces numerous tools (i.e., Natural Reader, Leonardo.ai, Pi, ElevenLabs.io, etc.) and offers a graduate certification in AI and Machine Learning. Everyday research and writing tools, from Microsoft Word to Ebsco databases, are incorporating AI technologies.

These tools will become—if they are not already—mainstream for our students' success as professionals. Although several tools are listed above, the most important part of this conversation is ensuring curriculum is focused on learning and student outcomes rather than tool integration. The Association for Writing Across the Curriculum posed important questions for us to consider as part of this ongoing conversation: "Might the acts of critiquing, rewriting, or discussing AI-generated text foster growth? Are there scenarios where student writing might productively be complemented,

supplemented, or assisted by AI language generators? Can this happen in ways that do not preempt student learning?"

To highlight intentional engagement with AI, recommended faculty syllabus statements should address tool use (see Ethics section), especially if particular tools are essential for course activities. However, we advise against listing prohibited tools as it is impossible to make such lists comprehensive and, again, any list of AI tools becomes quickly obsolete.

Centralization

Faculty and students are concerned about access and data safety. One approach to provide data protection, reduce AI hallucinations, and ensure equity in access is the **walled-garden approach** wherein the institution creates (or purchases) a closed platform of AI applications. We know that the most functional and accurate AI tools exist behind paywalls, and walled gardens allow for content to be curated, specialized, and trained to cite its sources. In a state with diverse urban, suburban, and rural populations, the digital divide is a real concern, and research is indicating that AI might further exacerbate the divide unless intentional efforts—such as walled gardens—are made to provide equal and affordable access. Additionally, it is feasible that an easy-to-access walled garden ecosystem might be effective in encouraging resistant faculty and students to engage with the technology.

We recommend initiating a committee to review the best options to invest in a walled garden at MU that can house our sensitive and restricted data safely. This central tool will require a financial investment, whether from MU or at the UM System level. The most common costs associated with walled gardens are purchasing tokens per use or investing in an enterprise agreement to fulfill the pilot use cases. Purchasing tokens can be a challenge to determine how many to purchase and how to allocate to our users, but other universities have gone before us, which we can emulate.

A small group of MU staff is engaging in discussion with other institutions and investigating the cost for a walled-garden approach. So far, they have found the following options:

- **ChatGPT Edu:** OpenAI offers university sign on and a walled-garden approach appearing to meet data protection recommended by this Task Force. Pilot pricing is as follows:
  - ChatGPT Edu Fast Start: Minimum 350 seats, $30/seat/month. Investment for a year: $126,000.
  - ChatGPT Edu: Minimum 10,000 seats, $12/seat/month. Investment for a year: $1.4 Million.
- **Google**: The Governor of Missouri has invested resources into Google's centralized AI tools, which may be of benefit to MU. Opportunities exist and are being pursued for teaching and learning options.

- **Azure and Co-Pilot:** The university has started exploring working with Microsoft regarding use cases related to faculty and student needs. Experts in AI and cloud services are meeting in June. However, Co-Pilot features may not currently ensure the data protection recommended by this Task Force.
- **Anthropic:** Currently no educational pricing structure but eager to work with MU.
- **Other open-source tools:** Many other open-source tools exist, but they are not appropriate for sensitive data. Public data use in these tools is acceptable.

If the university chooses to subscribe to particular tools, we recommend offering a variety of options within a walled-garden environment rather than limiting the choices to generative text, the most basic form of Gen AI.

Specific MU considerations

- Lack of access to broadband internet and technologies in Missouri's rural communities leads to a variance in students' existing AI literacy.
- Students are already resistant to purchasing course materials due to cost. Many Generative AI tools require additional subscription fees, and adding cost to courses would further the already documented digital divide. The OER survey conducted by MU Libraries in 2017 determined that due to the high cost of course materials, 61% of students have chosen not to purchase a required textbook, 75% have delayed purchase until after an exam to determine necessity, and 13% considered leaving MU because they couldn't afford materials. These reports indicate that our approach must be cost-minimal (or subsidized when needed), lest we put our most financially at-risk students at even greater risk.
- Nearly all technology decisions are made at the system rather than university level, and barriers often occur based on proxy approval and individual campus needs.
- With collapsing jobs across the university, talented staff and faculty often incorporate additional roles into their positions, leading to multiple demands on their expertise, difficulty succeeding in all areas, and higher rates of burnout. Adding AI responsibilities to existing positions is not sustainable.

Learning in the New Age of AI Environment

The fast-changing Gen AI landscape is inevitably affecting the learning context of our colleges, schools and units, as well as necessitating that faculty consider and navigate the integration of Gen AI into their curriculum and coursework. For MU to maintain its ability to provide its student body with the skills and knowledge necessary to succeed in their discipline and workforce, all levels of the institution must engage with questions about how, when, and where to incorporate Gen AI to support student learning.

As we have interacted with faculty groups on campus over the past semester, it is evident that there is a wide continuum of both acceptance and readiness to bring Gen AI into the classroom. MU faculty range from preservationists to tinkerers to "all-in" exemplars (classifications from presentation by Paige Ware & Jennifer Culver, May 2, 2024, MU Chairs' Retreat), as well as many who have not thought about Gen AI or have no stance on it. Yet, all faculty are going to have to engage with it in some way in the near future. Thus, **it is essential that we encourage academic leaders to begin to discuss Gen AI** with their departments, and faculty to discuss it with their students.

MU units at a minimum need to engage with and discuss their stance on Gen AI. Some units and programs are going to be closer to "all-in" and will need to have different conversations with their faculty and students. **We recommend that faculty, at the unit and college/school levels, engage with Gen AI in the spirit of continuous learning** as it relates to their roles and responsibilities at the institution. Faculty must think, reflect, and learn more in areas that impact how they do their jobs and must familiarize themselves with Gen AI, have discussions about the incorporation of Gen AI in courses, assess how/when/if they will bring it into their classrooms, and how/when they will have explicit discussions with their students about where Gen AI is allowed in their courses and assignments, as well as how the faculty are using these tools to meet learning objectives in courses.

Similarly, although many of our students are digital technology natives, there is also a continuum of comfort with Gen AI across our students. Most importantly, however, they are looking for direction and guidance on how and when they should use Gen AI. To ensure equity across students, **students must have knowledge and skills to use Gen AI and guidance about using it ethically**.

LEARNING WORKING GROUP CHARGE

Members of the Learning Working Group included Enid Schatz (lead), Raquel Arouca, Jonathan Cisco, Chip Gubera, Clintin Davis-Stober, and Chi-Ren Shyu. The Learning Working Group discussed how to think about Gen AI from two perspectives: Student needs and unit/school/college-level concerns. Thus, we focused on two domains: (1)

what Gen AI literacy and fundamental Gen AI skills and capacities MU student will need to be successful in the workforce and (2) how these may translate to how units/schools/colleges, as collectives, engage with the content, learning objectives, and policies that students are exposed to while at MU.

Given the newness of these technologies, it is likely faculty within these units will need:

- Basic exposure to these tools to increase their knowledge and skills,
- Units and school/college leaders need guidance on conversations to have with their faculty
- Faculty need guidance on conversations to have with their students.

The Learning Working Group's aim is to provide context and recommendations that will assist:

- Academic leaders at various levels at the university engage with their faculty/instructors to productively provide space for knowledge-building and discussions that encourage an AI-forward stance.
- Units/colleges/schools to begin discussions about how to integrate outcomes that specify the application of AI skills pertinent to their discipline into coursework and begin thinking about AI across the curriculum (see Southworth et al. 2023).
- Faculty/instructors in engaging in explicit discussions with their students about individual classroom and departmental Gen AI polices and uses.
- Students in learning ways to make use of Gen AI tools productively and ethically for advancing their learning, in line with what is allowed by their instructors, as well as exposure to discipline-specific AI skills and knowledge.

REACHING ALL STUDENTS

It is essential for all undergraduate and graduate students at MU to have basic Gen AI literacy and fundamentals. Students also must have clarity regarding which courses and instructors allow usage of Gen AI.

For new students at MU, **we recommend adding a module and/or materials on Gen AI in the Learning Environment to orientation** (or Summer Welcome in future years) for undergraduates, to Graduate Teaching Orientation (for GTAs and instructors who will be in the classroom for the first time), for new graduate students through orientation, and at proseminars for continuing graduate students.

To reach broader audiences it would be worth working with the Writing Center, the Teaching for Learning Center, Residential Life, Student Affairs, and Advising. In addition, we recommend programming such as gradEssentials (for graduate students) and other entities (aimed at undergraduates) that provide seminars,

workshops and learning opportunities for current students and faculty. An additional idea for reaching a maximum number of students includes creating a Canvas Commons module available as an "add-in" to courses or standalone for departments to assign to all majors/students.

As Mizzou 101 is developed as a course for all new undergraduate students, we recommend including a module that facilitates basic Gen AI literacy and fundamentals (e.g., what the tools are, basic use, ethics, and conversations to have with instructors prior to use).

For students to know and understand in which projects, assignments, and courses Gen AI is allowed, and in what form or usage, there are a number of recommended steps.

- **Every course must include a syllabus statement** that outlines whether/how Gen AI may be used in the course and for which assignments. The Pedagogy and Ethics sections of this report include further details about these statements. (See Appendix D for sample syllabus statements, including ones specific to particular disciplines or types of assignments).
- Instructors are encouraged to **have a conversation with students at the beginning of the semester about when and how Gen AI may be used in the course**, and the pedagogical aim, learning objective, or reasoning for use/prohibition (See Appendix D for a sample one-page guide for faculty to begin classroom instructions with their students).
- **Instructors are encouraged to seek training for generating student-facing resources to share with students**. These may include tutorials for working with AI, recommendations on how to use AI tools, and an overview of how to have students' reflect on the process. These resources are not yet available at MU. In providing a framework for the projects, assignments, and courses where Gen AI is allowed, it is also important for the instructor to ensure students understand the ethical implications of using Gen AI, including issues related to privacy, bias, inaccuracies/hallucinations and the responsible use of AI-generated content.

REACHING STUDENTS THROUGH THEIR UNIT/SCHOOL/COLLEGE

To begin the Gen AI conversation at the unit or school/college level, academic leaders of these entities first need to have explicit discussions as a collective to ensure faculty members understand what Gen AI is, how it can be used in the learning environment, and to assess the ways the field/discipline might embrace or reject Gen AI.

The aim is to move as many faculty as possible to at least being tinkerers, so they have some knowledge of how Gen AI works and how/why they do or do not want to

use it in the classroom. To assist units/schools/colleges in having these conversations, **we propose creating a one-page, visually intuitive and digestible discussion guides** (draft versions of these can be found under Appendix D). Once these discussions have taken place, units may move on to discussing the systematic incorporation of Gen AI into their courses and programs.

SUGGESTED GEN AI KNOWLEDGE AREAS FOR STUDENTS AND FACULTY

Students and faculty should develop Gen AI skills and knowledge in three broad areas:

1. **Fundamentals of Gen AI:** What is Gen AI, where Gen AI is embedded in daily life, how Gen AI is changing, how to assess Gen AI's validity and reliability, and how to keep information safe in an Gen AI-powered environment.
2. **Gen AI Ethics:** What is appropriate, permissible, and prohibited in the use and application of Gen AI in the educational context and how it differs across classes and instructors, what is equitable use of Gen AI in their field (e.g., financial concerns, access to tools, disabilities and difference), and what are the expectations for the use of Gen AI during their learning at MU overall and in each specific course.
3. **Course/major-specific use of AI:** Which courses are fundamental to learning about AI technology—development and application—to enhance skills needed in the discipline or future workplace.

Further, **we recommend units/colleges/schools discuss how to integrate the capacities and skills below into their curriculum**, including when and how to include explicit conversations within departments and with students about Gen AI use in the areas below.

Even faculty who are not ready to embrace Gen AI themselves require literacy and knowledge to be good teachers and mentors to students. These students must be prepared to be in learning and working environments where AI is integral. The intensity of engagement may differ across departments/schools/colleges and disciplines, but we encourage all faculty to become tinkerers so they are able to act as guides for students in their programs, and so they are able to make informed decisions about how and when to integrate Gen AI in their units' learning objectives.

1. **Gen AI literacy/Gen AI fundamentals**: Students and faculty should be able to recognize when and how Gen AI is used in various domains and become familiar with Gen AI tools and how to use these systems appropriately. Students and faculty should understand prompt writing and the iterative process of AI engagement.
2. **Critical thinking and evaluation**: Students and faculty must be able to critically evaluate the accuracy, biases, and limitations of information

generated by AI tools. They should not blindly accept AI-generated content as fact. They should become proficient in the use of tools and technologies beyond simple users but as critical thinkers.

3. **Adaptability and lifelong learning**: Students should develop the mindset of continuous learning, adapting, and re-learning AI tools to keep pace with the rapid evolution of the tools and technology. Students and faculty should become versed in the interdisciplinary nature of AI and develop interdisciplinary skills to effectively utilize AI-powered technology in a variety of contexts.
4. **Leveraging AI for productivity**: Students and faculty should learn how to use Gen AI tools to enhance their productivity. This usage may include ways of incorporating AI, such as AI assistance in tasks where the student/faculty makes all key decisions, augmenting student/faculty performance where AI and students/faculty share decisions, and AI automates tasks where the AI controls the task.
5. **Ethical AI usage**: Students and faculty should learn to evaluate the ethical implications of using Gen AI, specifically in the areas of academic integrity, privacy, and bias. They will apply these considerations responsibly and transparently in various scenarios.
6. **Complementary human skills**: Departments must help students identify important human skills that are not developed or improved using Gen AI. These are needed building-block skills that AI could be used for but may not be beneficial in the learning process (e.g., when learning to write an essay as part of composition class).

RECOMMENDATIONS

1. While there may be a broad overarching Gen AI policy, **we recommend that most policies concerning Gen AI and student learning be flexible to accommodate varying needs by department/college/school or discipline**. Rigid guidelines could restrict access and limit the use of resources and tools essential for innovative work in specific areas on campus, potentially hindering MU's mission. For the long-term, it might be more effective to establish a tiered policy system. This would allow colleges/schools and departments to choose the level of regulation that best suits their engagement, expertise, and innovative activities with Gen AI.
2. **Undergraduate and graduate students should be included as members of any newly charged AI Board**. This ensures their voices are included in future policies and plans, and that their needs and perspectives on this technology are effectively addressed. Existing student groups (e.g., MSA, GPC) can be used as a means for collecting names of potential members.

3. **MU must offer/ensure equal Gen AI accessibility** to all students. To achieve this, MU can subscribe to Gen AI services that are high quality and available to all students. See Pedagogy, Tools section for further discussion.
4. **MU must develop supports and resources** for faculty and units/schools/colleges.
    a) Create a website that outlines MU policies and links to resources. Examples of such pages include those at Duke and Oregon State.
    b) Create a one-page discussion guide with a three-to-five-minute video that provides a starting point for a department chair or dean to lead a conversation about Gen AI in the classroom (e.g., Oregon State's decision tree model). Units should decide where their faculty are regarding Gen AI use and how to approach the topic. Ideally, discussion guides will be visually pleasing and easy to digest rather than text-filled. (See Appendix D for initial drafts of these documents sans videos).
    c) Create a form where faculty can submit concerns, requests for support or divergent thoughts to the Provost's Office. (See draft version: https://missouri.qualtrics.com/jfe/form/SV_b1MGOye8WkU1ivA)
    d) Encourage all faculty to discuss on the first day of classes their stance on Gen AI and how/when it may (or may not) be used in their class (See Appendix D for draft discussion tools).

Generative AI Ethics and University Policy

This section of the Task Force report describes the processes and recommendations of the working group on ethics. It first sets forth the charge, composition, and activities of the Ethics group. It then offers concrete policy recommendations.

THE WORK OF THE ETHICS GROUP

The working group on ethics was charged with making policy recommendations related to the use of Gen AI in the learning environment. The group included: Roger Fales, Rebecca Graves, Blaine Reeder, Ben Trachtenberg (lead), and Guy Wilson. Our work included finding and reviewing existing university policies, researching publicly-available policies from other institutions, discussing policy options with knowledgeable university personnel within and without the task force, meeting to discuss possible recommendations, and drafting recommendations.

After considering areas in which university policies would be valuable—or even necessary—we divided possible recommendations into three categories:

- Areas in which existing university policies seem to be working well
- Areas in which we identified policies that the university should have and for which we have a policy or draft to suggest (*e.g.*, text that we have written, or an example of an existing policy at another institution that could serve as a good starting point for MU/UM)
- Areas in which we identified policies the university should have but for which the task force is not ready to offer concrete language. For the "should have" policy areas, we suggest who at Mizzou might help to create/approve policies (e.g., Faculty Council, research deans, general counsel), and the suggested constituents will differ depending on the policy area.

UNIVERSITY POLICY RECOMMENDATIONS

University Policy Working Well As-Is: Academic Integrity

In September 2023, the UM System amended CRR 200.010 (Standard of Conduct), which contains the rules prohibiting academic dishonesty by UM students. *See* CRR 200.010.C.1. In the definition of "academic dishonesty," the rule now includes "unauthorized use of artificially generated content," which has a sensible definition. The amendment process involved consultation with the academic integrity officers across the UM System, along with other stakeholders, and resulted in language that focuses on what instructors choose to allow or prohibit. For example, the rule prohibits "submitting work for evaluation as one's own that was produced in material

or substantial part through use of artificial intelligence tools or other tools that generate artificial content without permission from the instructor."

Under this rule, an instructor may allow use of Gen AI or prohibit use as deemed appropriate for a particular course or assignment. The rule protects the academic freedom of faculty, allows faculty to experiment with new technology and adopt it if desired, and allows faculty to protect academic integrity by prohibiting disfavored uses of Gen AI.

Areas in Which University New or Amended Policy Would Be Valuable
The pages that follow contain recommendations for new or amended university policies. For some policy areas, we have either drafted proposed policy language or have identified language from another institution that might serve as a good model for policy here. For other policy areas, we have identified a need, offered some guidance about what a good policy might contain and avoid, and have suggested who should be consulted when an eventually policy is crafted.

Below, we address the following topics in varying levels of detail:

- A "requirement for syllabus statements about permissible and impermissible uses of Gen AI tools"
- Gen AI and student privacy
- Coordination of policy development
- Submission of student-created work to AI applications
- AI and copyright

POLICY CONCERNING REQUIREMENT FOR SYLLABUS STATEMENTS ABOUT PERMISSIBLE AND IMPERMISSIBLE USES OF GENERATIVE AI TOOLS

[Policy language proposed]

Recommendation:
We recommend instructors be required to include syllabus statements related to whether (and how) students may use Gen AI in their courses. As discussed in the pedagogy working group's recommendation, the Task Force, however, does not recommend that the university mandate a one-size-fits-all syllabus statement or otherwise require certain language. Instead, the university should provide instructors options for their syllabus language (see examples below) but otherwise leave policy decisions to individual instructors, who may be guided by policies approved by their departments, schools, or colleges. Our recommendation, in other words, is that the university require each instructor to include an AI policy of some kind in their syllabi

but leave the wording up to the individual instructor. We have collected a variety of sample syllabus statements here.

Justification:
Pursuant to UM CRR 200.010, students commit academic dishonesty when they engage in "unauthorized use of artificially generated content," which the CRR defines as follows:

> The term **unauthorized use of artificially generated content**, includes, but is not limited to (i) use of artificial intelligence tools or other tools that generate artificial content in taking quizzes, tests, examinations, or other assessments without permission from the instructor; (ii) submitting work for evaluation as one's own that was produced in material or substantial part through use of artificial intelligence tools or other tools that generate artificial content without permission from the instructor; (iii) using artificial intelligence tools or other tools that generate artificial content in a manner contrary to instructions from the instructor; or (iv) using artificial intelligence tools or other tools that generate artificial content in a manner that violates any other provision of these rules concerning academic dishonesty. Use of commonly available tools such as spelling or grammar checking software or features of software that propose anticipated words or phrases while text is being written will not be considered unauthorized use of artificially generated content unless such use is contrary to instructions from the instructor.

As the rule makes clear, faculty may permit or prohibit use of artificially generated content. To be fair to students and to prevent inadvertent policy violations, faculty should explain to students which uses of Gen AI are allowed and which are prohibited. A syllabus statement, while likely not sufficient, is a first step in helping students to understand what faculty members expect.

Language for Sample Syllabus Statements:
We suggest that the university charge an existing committee to propose sample syllabus statements, which should be available to instructors on a university website. This committee could review existing sample statements from time to time to see if technological change requires new language. To avoid delay, we propose the following samples, which have the advantage of brevity:

- **Option 1:** Transparency – Gen AI may be used in this course. Proper citation is expected for all sources, however. Using Gen AI tools in assignments requires following the attribution and transparency guidelines outlined in class. Failure to follow these guidelines will constitute an academic integrity violation under university rules.
- **Option 2:** Human-in-the-loop – Generative AI may be used in this course. The content you submit is your responsibility. AI-generated content can be inaccurate, offensive, and biased. Be sure your work accurately reflects your understanding and avoids these pitfalls.

Note: Options 1 and 2 address different concerns regarding generative AI use in coursework. Some instructors may wish to use language from both of them.

- **Option 3:** No AI – Unless students are explicitly told otherwise, this course prohibits Gen AI. Assignments aim to develop your skills. Maintain evidence of your work (drafts, notes, sources) to demonstrate originality. Violations of this policy will constitute academic integrity violations under university rules.

Note: This option leaves room for instructors to provide course-specific explanations on why generative AI is inappropriate for the course, how such uses will be monitored, and what the penalties might be.

Examples from Southern Methodist University

Paige Ware and Jennifer Culver, who visited from SMU this spring to present to MU department chairs, provided additional examples, which have the advantage of providing more detail than the shorter statements above. Edited versions of three of the SMU statements follow:

- **Example 1: Generative AI is not permitted in this course.** The use of any form of Generative AI is not permitted in this course. The assignments have been designed to ensure that you personally develop and demonstrate the knowledge and skills associated with the learning outcomes laid out in the syllabus. To ensure that you can demonstrate ownership of the assignments you submit, you are encouraged to maintain clear evidence of your work (*e.g.*, time-stamped drafts and notes; copies and links to source material). Any violation of these rules will be treated as academic dishonesty punishable under University rules.
- **Example 2: Generative AI may be used with prior instructor permission and appropriate attribution.** You may use Generative AI tools for productivity in this course. In class, we will cover how Generative AI is used within this discipline, including how to navigate its potential uses and abuses, how and when to attribute sources, and other developing topics. When using Generative AI, follow these parameters:
  - Take responsibility for the content (e.g., written and digital/interactive media assignments and project). AI can produce content that contains inaccurate information, offensive language/images, and biased or unethical representations. What you submit is your responsibility across these dimensions.
  - Provide clear attribution of your sources. Any assignments that utilize Generative AI without attribution pursuant to the guidelines shared in this course can be seen as potential academic dishonesty punishable under University rules.

Example 3: Generative AI will be integrated into this course. Assignments in this course have been purposefully designed to integrate Generative AI in support of the learning objectives. In class, we will discuss how Generative AI is used within this discipline, including how to navigate its potential uses and abuses, how and when to attribute sources, and other developing topics.

Further Examples
Good sample syllabus statements have been published by other institutions.

- "Artificial Intelligence Syllabus Policy Statements: A Traffic Light Framework," by the University of Georgia Center for Teaching and Learning, offers "green light," "yellow light," and "red light" options.
- Brandeis University offers example statements (collected from multiple institutions) for "AI Restrictive Policies," "AI Permissive Policies," "AI Mixed Policies," and "Other Examples of Useful AI Language."

Suggestion for short-term action to avoid delay:
The consultation suggested below may make it impossible to implement policy in time for Fall 2024 syllabi. To enjoy the benefits sooner while honoring the need for consultation, we propose that faculty in Fall 2024 be required either (1) to include such statements in their syllabi or (2) to provide an explanation to their department chairs of why they are choosing not to include such statements. During Fall 2024, the university can consider whether to mandate statements in Spring 2025 courses and beyond.

Constituencies who should be consulted about a long-term policy like this before enactment:

- Faculty Council (perhaps via the Academic Affairs Committee)
- Department chairs
- UG Deans
- Student government (MSA, GPC)

GENERATIVE AI AND STUDENT PRIVACY

[Some policy language is proposed. Additional information is needed.]

Issue:
The Ethics Working Group discussed the need for policy associated with the creation of assignments or other student activities that require or strongly encourage students to submit private/identifiable information to AI applications.

Rationale:
Instructors who require or strongly encourage students to submit private/identifiable information to unapproved or unlicensed AI applications may be:

- Forcing or encouraging students to compromise their privacy.
- Forcing or encouraging students to lose intellectual property rights (or at least to allow their IP to be used by others for no compensation)
- Exposing students to security risks.
- Violating FERPA.

Note: This may not require a new policy but only a tightening of policies.

Recommendation:
As recommended by the Pedagogy Working Group, the Ethics Working Group concluded the university should mandate basic training for all MU employees for whom it is relevant. Although technically beyond the scope of this Task Force's purview, we suggest that Human Resources create or acquire an online self-paced training program that addresses FERPA and HIPAA considerations when faculty and staff use AI applications for their work. As many AI features are embedded in existing software, this basic training can mitigate privacy and security concerns.

The university might consider offering guidance to instructors based on the following:

As you and your students interact with AI, it is important to consider the issue of privacy. According to Antoniak (2023) "LLMs store your conversations and can use them as training data," which means any input and any materials uploaded to LMM processors can become part of the model's training set and can then be shared in the future without attribution. Resources and intellectual property may be used in unexpected ways. Any uploaded data flows through an assortment of technological providers who together make up a technology's ecosystem or infrastructure, each with their own privacy policy and terms of use. Note that opting out of terms may not be possible if you intend to use the technology. As a result, you may wish to only share open information or data that does not need to remain private. It's also important to ensure that you never upload or share any student information covered under FERPA and other protections.

If you assign your students AI-enabled assignments, you should remind your students that they should avoid providing sensitive data to AI prompts. The Division of Information Technology (DoIT) recommends instructors who wish to direct their students to utilize Internet-based AI tools include the following language in their syllabi:

> "The Division of Information Technology advises students to avoid entering Personally Identifiable Information (PII) or otherwise sensitive data into any AI prompt because MU does not control the online AI tools associated with the curriculum of this course."

Constituencies who should be consulted about a policy like this before enactment:

- Faculty Council
- Division of Information Technology, Information Security & Access Management

- General Counsel
- Student Government (or other representatives of students)

Sources used to create recommendation:

- https://teaching.cornell.edu/generative-artificial-intelligence/ethical-ai-teaching-and-learning
- https://canvas.oregonstate.edu/courses/1965953/pages/osu-office-of-information-security-statement?wrap=1
- ChatGPT 3.5 and Copilot

COORDINATION OF POLICY DEVELOPMENT

[Guidelines proposed.]

Issue:
The Ethics Working Group noted the risk that, absent coordination of the policy development process, the university risks duplication of effort, enactment of contradictory policies, creation of confusion, and missed opportunities to use internal expertise when crafting policy.

Guideline:
Due to the close relationship between AI policy and its technical implementation, early and frequent consultation with DoIT and Missouri Online is essential for academic and administrative units considering or revising AI policies. Implementing policy changes can be complex with existing technologies, and consultation is vital when adopting or piloting new AI applications or features.

The university should adopt a policy encouraging academic units to consult with DoIT and Missouri Online before enacting or amending policies concerning generative AI. Concurrently, the university should ensure that the consultation process moves with reasonable speed, lest academic units feel compelled to evade the process to act in a timely manner.

Discussion:
Several factors can limit the flexibility of DoIT and Missouri Online in implementing campus, school, college, or department policy decisions in this regard:

- Much of our enterprise and educational software is configured for the entire University of Missouri System. Implementing policies made by campuses or at lower levels may require reconfiguring software to be set up independently for each campus or at a lower organizational level. If it is possible to change these, it may be possible only during intersessions. In terms of applications linked to our LMS (Canvas), this may also break existing assignments or links using that tool.

- Vendors may add new AI features with little or no warning. Ideally these may be enabled or disabled at the enterprise or a lower level (down to individual courses). These features may need to be reviewed for privacy, accessibility, and impact on existing or proposed policies. Review of AI applications is more complex than for most other categories of software.
- Business models for AI software may involve variable costs and pay-as-you-go models that may be difficult for the university to budget for or integrate into student-pay models, such as AutoAccess (Inclusive Access).
- Academic units may not be aware of these issues absent robust consultation.

Links and Resources:

- Requesting New Software Tools (Missouri Online): This page explains the process of getting a new tool that integrates with Canvas approved.
- IT Compliance Guidelines (DoIT): Covers the rules and procedures the university has established to evaluate or reevaluate applications for approval.

Selected Peer Institution Pages related to this topic:
We are not aware of other policies or guidelines that coordinate decentralized AI policymaking with centralized Information and Academic Technology adoption and administration.

Constituencies who should be consulted about a policy like this before enactment:

- DoIT
- Missouri Online
- Deans' Council

SUBMISSION OF STUDENT-CREATED WORK TO AI APPLICATIONS

[Policy language is not proposed. Additional information is needed. Guidance and resources are provided to assist policymakers.]

Issue:
Instructors may wish to submit student-created work (e.g., a paper submitted for a course assignment) to a website or application using AI. For example, AI analysis could assist in grading or in providing feedback to students separate from grading. AI analysis of student work could help an instructor to realize what students are learning well and to identify areas in need of improvement. However, the submission of student-created work to AI applications has risks, such as compromising student privacy and violating the intellectual property rights of students.

Suggestions:

This issue is complicated, and a good policy would be crafted in light of information not yet available to the Task Force, such as information about licenses the university will purchase for use by instructors, how the technology will develop, and how valuable proposed uses are in effective teaching. We are not prepared to offer policy language now. Instead, we have some guideposts to suggest, and we also provide resources from other institutions that may help MU policymakers.

Thoughts on a good policy:
A good policy will include this about submission of student-created work:

- Broadly, a prohibition on submission of student data or material to non-secure, non-approved networked Gen AI tools
- Prohibition on submission of student data or material to repositories used as training corpus for generative AI.

A good policy will not include:

- Prohibition on submission of student data or material to secured, local generative AI tools that do not contribute data to Gen AI training. [See Pedagogy, Tools section for further discussion.]

Constituents that should be consulted before this policy is enacted:

- Faculty Council
- UM System Privacy Officer

Resources from other institutions:

- **Duke University:** An excerpt about student rights to copyright and to control the distribution of their own work:
    - Some time ago, to face the challenge of easy online searches and paid "essay banks," faculty and administrators at Duke discussed whether to license plagiarism detection software for the campus. A decision was made to not license plagiarism detection tools for two main reasons.
    - Plagiarism detection services work by collecting papers from students and use those entries as a database for detecting plagiarism instances within or across institutions. It was felt, at the time, that these services raised serious issues about student rights to copyright on their work and student privacy – by requiring students to submit papers to a service like this, faculty would be forcing students to give up their legal copyright to their work and store their work on outside commercial services in perpetuity.
- **University of Indiana:** Discussion of student submissions to public versions of Gen AI.
    - Types of institutional data that should not be submitted to public versions of generative AI tools, **even when anonymized**, include:
    - Data classified as University-Internal or higher (for examples, visit the Data Classification Matrix)

    - Any data that may be considered student, faculty, or staff intellectual property, unless the individual submitting that intellectual property created it and still retains the copyright. [Note: More about "AI detectors" is provided below.]
    - Specific examples that are **not** appropriate for the public versions of generative AI tools include:
        - Sharing names and information about a real student, employee, research participant, or patient
        - Asking an AI service to summarize and grade a student paper or assignment
        - Sharing employee-related data such as performance or benefit information for communication drafting or analysis
        - Asking an AI service to generate code for IU systems protecting institutional data or sharing IU source code for editing
        - Sharing grant proposals still under review
- **University of Virginia:** Discussion of use of Gen AI to grade student work.
    - Students' original work is (in most cases) their intellectual property, and thus instructors may not enter a student's original work into an AI tool that will add that work to the tool's data set. AI tools are not effective for grading most kinds of assignments, including writing assignments. However, some AI tools can help to ease the grading process, for example by organizing the work and facilitating the use of rubrics. Faculty wishing to make their grading and assessment processes more efficient and consistent are encouraged to explore Gradescope, iRubric, and other tools provided by the university for this purpose.

AI AND COPYRIGHT

[Guidance proposed, including information to provide to students, faculty and staff.]

Issue:
Should there be guidance on faculty importing copyrighted material, such as from textbooks and journal articles, into AIs?

- **Example 1**: An instructor creates a chatbot to provide custom answers for a course. To create the chatbot, the instructor uploads and trains it on materials they have created and also on chapters from a textbook.
- **Example 2**: To generate test questions or assignments, an instructor uploads their own notes and a chapter from a textbook into an AI so that it can create questions specific to that material.

Concerns and Questions:

- Is there any way this could be considered fair use or fall under the TEACH Act?
- Would this violate our agreements and licenses with publishers?

- Are there other university policies that would apply?

Suggestion:
The following information about copyrighted work should be presented to students, faculty, and staff to help them avoid copyright violations when using AI technology.

Importing Copyrighted Work into AI Tools:
In general, there is no sure way to give credit or restrict distribution when an artificial intelligence-enabled tool receives and utilizes uploaded material; therefore, caution should be used when uploading your own work or work created by others to an AI tool, whether copyright is an issue or not.

Law prohibits copyrighted material from being distributed without the permission of the copyright holder. Uploading works such as textbooks or journal articles to AI-enabled or other systems is, in some cases, a restricted use of copyrighted work. Distribution of work for use beyond students in a course is not protected by fair use or the TEACH Act. Learning management software, such as Canvas, and other tools used in teaching may have integration or links with AI technology that lead to the distribution, derivative works, and widespread usage of work, which may conflict with copyright law. Because the presence of AI technology may not be clearly known by users, consistent efforts should be made to let students and faculty know that certain use of technology imbedded into teaching tools may lead to publication of material.

- New technology should be evaluated to determine if there is potential for copyright infringement when work is stored or uploaded to systems utilizing the technology.
- Students, staff, and faculty should be notified of AI technology that may be used to distribute work.
- Copyrighted work should not be uploaded into systems, such as AI-enabled systems, that distribute work beyond the course or in ways that are prohibited by copyright law.

Constituencies who should be consulted about a policy like this before enactment:

- General Counsel
- Faculty (Faculty Council and faculty more generally)
- Staff with expertise related to intellectual property and development of instructional materials
- Students

Resources:

- Definitions useful when considering copyright: https://www.copyright.gov/help/faq/faq-definitions.html

- **Boise State** has developed AI policy with a focus on what not to do. The AI policy is in their Policy Manual. Their policy manual is similar in scope to the UM CRR. The policy cautions against uploading copyrighted work to an AI tool such as ChatGPT.
- **Penn State** has placed guidance on the use of copyrighted work on its website with guidance related to fair use and the TEACH Act.
    - **Fair Use:** https://copyright.psu.edu/copyright-basics/fair-use/
    - **TEACH Act:** https://copyright.psu.edu/copyright-basics/teach-act/

USE OF AI DETECTORS TO POLICE ACADEMIC INTEGRITY

[Policy recommendation proposed.]

Issue:
Websites exist that purport to detect text written by Gen AI tools. Further, companies are selling AI detection services to universities, promising to help protect academic integrity. There is doubt about whether these tools work. In addition, concerns have been raised about the provision of student work to the entities running these detection tools.

We recommend the following policy:

Currently, MU does not allow the use of AI detectors for student work. These tools are likely to provide false results, and dependence upon them may result in false accusations. If used, the results should not be considered sufficient evidence of plagiarism without corroborating evidence. They are, at best, indicative.

No detectors have been approved for use now, and those on the market should not be considered private or safe. This means that only de-identified data should be used with them, which may still raise issues with FERPA and potentially violate students' intellectual property rights.

AI chatbots, such as ChatGPT, Claude, Gemini, and Co-Pilot, are even less accurate at identifying human- or AI-generated content than purpose-built AI detectors and carry the same privacy and intellectual property risks.

Instructors who have concerns about preventing AI plagiarism are strongly encouraged to reach out to the Teaching for Learning Center, Campus Writing Program, or Missouri Online. These groups are here to support instructors and to provide guidance. The Office of Academic Integrity has also issued some general guidelines about AI plagiarism, which can serve as a useful reference.

Discussion:

The use of AI detectors remains controversial. The rates of false positives (indicating that a student used AI in writing a paper when they did not) and false negatives (indicating that a paper was written entirely by a human when it was written wholly or in part by an AI) are unacceptably high and present cause for concern. Other issues include:

- AI detectors accuse non-native English writers at much higher rates than for native writers. In addition, running a paper by a non-native writer through a Gen AI may result in the paper being given a lower score than the original, indicating that it was more likely written by a human.
- There is anecdotal evidence that AI detectors discriminate against certain types of neurodiversity.
- Techniques for beating AI detectors are widely available to students. This includes the existence of paraphrasing applications that can fool both conventional plagiarism checkers and AI detectors.
- Many users will only use AI to help with parts of a paper, making it much more difficult to detect AI usage. Given the ability of tools like Grammarly, features in word processors, or even web browsers that can help with rephrasing on the fly and which rely on Gen AI, this is likely to become more prevalent.
- Until and unless the university has reviewed and approved an AI detector, we must consider that these tools are subject to privacy, security, accessibility, and intellectual property violations. It is unclear if their use violates the Acceptable Use Policy.
- Some faculty across the country have attempted to use AI chatbots to detect AI plagiarism. As noted, these tools are incapable of detecting AI plagiarism and can hallucinate elaborate rationalizations for their judgments.
- The UM System does have a license that includes the Turnitin's AI Indicator. It has not been activated (at the request of the four campuses) and has not undergone review by DoIT and the Registrar. As Turnitin is currently configured, all four campuses would have to agree to its use.

Links and Resources:

University of Missouri Resources:

- ChatGPT, Artificial Intelligence, and Academic Integrity: MU Office of Academic Integrity statement on Gen AI and plagiarism/cheating
- ChatGPT & Generative AI: Missouri Online blog post from February 2023
- Detecting Artificial Intelligence (AI) Plagiarism from Missouri Online

External Discussions of AI Detection:

- Sarah Eaton, The Use of AI-Detection Tools in the Assessment of Student Work. This is written from a Canadian perspective, and accordingly reflects a somewhat different set of legal and educational policy constraints than found in the United States, but it is still valuable to U.S. educators for its clarity of thought and its cautions.

- Lori Salem, et al., Evaluating the Effectiveness of Turnitin's AI Writing Indicator Model.This piece looks at the Turnitin AI Indicator in depth, noting especially its difficulties with hybrid texts and that there seems little relationship between the flagged text and those passages actually written by AI.

Studies of AI Detection:

- Debora Weber-Wulff, et al., Testing of Detection Tools for AI-Generated Text is an examination of 14 AI detectors that also contains an excellent literature review section critiquing earlier studies.
- James Zou, et al., GPT Detectors Are Biased Against Non-Native English Writers is a study of how AI detectors give high percentages of false positives to papers written by non-native English writers. It also shows that the papers are likely to fare better if polished by an AI.

Resources from selected peer institutions concerning the use of AI detectors:
Most peer institutions strongly discourage the use of these tools or encourage caution for reasons similar to those given above. Some example policies are:

- **Indiana University-Bloomington:** About AI detection tools

Summary: After explaining that no AI detection tools are authorized, the page explains the formal process for requesting that the university review a specific tool, explains some of the issues with these tools, and points to some additional pages of recommendations to faculty.

- **University of Iowa:** Artificial Intelligence Tools and Teaching

Summary: After specifically mentioning GPTZero and Turnitin AI Indicator, the article discusses problems with the latter tool, and then points to articles about the unreliability of detectors.

- **University of Kansas:** Why you should use caution with AI detectors

Summary: This page does not express a policy explicitly but gives advice on responsible use of the Turnitin AI Indicator, explains reasons for caution in using it, and provides suggestions on addressing AI plagiarism.

- **University of Virginia:** Frequently Asked Questions About Gen-AI

Summary: The University discourages use of these tools and points to their task force report that states: "these [detecting] tools are notoriously unreliable and hence using them is usually counterproductive and can be risky." It further notes that detectors may violate student intellectual property rights, and that students can easily find guides to trick the detectors.

Constituencies who should be consulted about a policy like this before enactment:

- Office of Academic Integrity
- General Counsel
- Campus Writing
- Faculty Council

Conclusion

Every day more reports are being published and they share a common denominator pointing to action and investment for policies, professional development, and safe tools. In their June 11, 2024, report, Time for Class 2024, Tyton Partners echoes the action we propose in this Task Force report:

> "As the world moves toward a place where generative AI is embedded in education and the workplace, institutions must adapt to increase the value of students' education. Administrators and instructors must balance the innovative potential of AI tools with the ethical, pedagogical, and practical challenges they present. Developing clear and inclusive policies, providing robust training programs for instructors and students, and fostering expanded access to the tools themselves will be crucial for harnessing the benefits of AI while maintaining academic integrity and quality of education" (p. 17).

Tyton also shared a startling finding: 50% of students are likely or highly likely to use AI even if it's banned in a course. When we hear people accept that AI is here to stay, this finding seems like a corollary reality. Teaching and Learning is going to have to shift meaningfully.

In the largest survey of instructors and AI attitudes to date, Ithaka S+R published results in a report titled, Generative AI and Postsecondary Instructional Practices, June 20, 2024. They found that "Most instructors want institutional support to help them integrate GenAI into their courses…. Universities that build out services to support a range of AI-informed instructional uses will have a meaningful audience" (p. 11).

- 2,624 faculty respondents
- Only 18% agreed or strongly agreed that they understand teaching applications of GenAI
- Only 14% agreed or strongly agreed that they feel confident in their ability to use GenAI in their instruction

Lastly, MIT in collaboration with Anthology released a resource for higher education institutions intended to assist institutions to make ready for an AI-world. Their guidance aligns with our report in three ways: establishing "guidelines, guardrails, and governance," ensuring faculty and student preparation, and safeguarding of our community's data. The University of Missouri is poised for continued distinction as an institution committed to the betterment of all Missourians, and now we have a promising roadmap to leverage cutting-edge technology to aid us in our mission.

Appendices

APPENDIX A – TASK FORCE MEMBERS

Name	Dept/Center	Title or rank	Referred by
Raquel Arouca	Graduate School	Assistant Teaching Professor/ Director of Recruitment, Retention & Diversity Initiatives	Enid Schatz
Kevin Brown	Theater, COAS	Associate Professor	Self-nominated (email to Martens)
Jonathan Cisco	Ed Assessment	Director	Tori Mondelli
Flower Darby	T4LC	Associate Director	Tori Mondelli
Clintin P. Davis-Stober	Psych Sciences, COAS	Professor	Faculty Council
Roger Fales	Mechanical & Aerospace Engineering, COE	Assoc Dean	Praveen Edara, Interim Dean
Christy Goldsmith	CWP, CEHD	Associate Director, CWP; Asst Teaching Professor, Learning, Teaching & Curriculum	Tori Mondelli
Rebecca Graves	Health Sciences & Specialized Libraries	Librarian IV	Faculty Council
Chip Gubera	Engineering & Information Technology, COE	Associate Teaching Professor	Hani Salim
Kevin Kane	Clinical Family & Community Medicine, SOM	Interim, Senior Associate Dean for Medical Education Associate Dean for Curriculum and Evaluation	Stevan Witt
Kimberly Moeller	Research & Information Services	Librarian III	Jeannette E. Pierce

Tori Mondelli	Teaching for Learning Center	Director, T4LC	Provost's Office
Blaine Reeder	MUIDSI & Nursing	Associate Professor	Faculty Council
Enid Schatz	Department of Public Health & Graduate School	Professor, and Associate Dean of MU Graduate School	Provost's Office
Jared Schroeder	Journalism Studies, SOJ	Associate Professor	Faculty Council
Chi-Ren Shyu	MUIDSI & COE	Professor, Director of MU Institute for Data Science and Informatics	Faculty Council
Ben Trachtenberg	School of Law and Office of Academic Integrity	Professor of Law, Associate Dean, and Director of OAI	Provost's Office
Guy Wilson	Missouri Online	Instructional Technologist IV	Stephanie McClelland

APPENDIX B – MU EXPERTISE WITH AI

An initial list of some MU faculty the task force identified as having expertise with AI.

APPENDIX C – PEER INSTITUTIONS SPREADSHEET

A collection of information gathered by the task force regarding what other institutions are doing regarding Gen AI.

APPENDIX D – FACULTY AI RESOURCES

- Faculty/Instructor Resource for Syllabi Statements
- Sample Syllabi Statements by Discipline
- DeptResource.FlowchartQuestions.pptx
- DeptResource.DiscussionGuide_FacultyIdeasAboutAI.docx
- Dept_FacultyResource.AI_Continuum.pdf
- Dept_FacultyResource.AssessingAIOutput.pdf
- Dept_FacultyResource.KeepingInfoSafe.pdf
- Dept_FacultyResource.WhatIsGenAI.pdf
- Dept_FacultyResource.WhereIsGenAI.pdf
- FacultyResource.Guide_UsingAI_inCourse.pptx
- FacultyResource.DiscussionGuide.FirstDayClass.docx
- Resource Faculty/Instructor Required AI Disclosure
- Faculty/Instructor Resource If/When Requiring AI for Courses
- Faculty/Instructor Resource Rubric and Checklist for Regular Course Review

APPENDIX E – MODELS FOR DISCUSSION STARTERS

Models and tools to support faculty discussions about AI use.

Oregon State:

- Artificial Intelligence Tools (OSU links below available in sidebar of this starting page): https://ecampus.oregonstate.edu/faculty/artificial-intelligence-tools/
- AI Decision Tree: https://ecampus.oregonstate.edu/faculty/artificial-intelligence-tools/decision-tree/
- Promoting Students' AI Literacy: https://ecampus.oregonstate.edu/faculty/artificial-intelligence-tools/literacy/
- Advancing Meaningful Learning in the Age of AI (includes adapted Bloom's Taxonomy for course outcomes and student learning):
- https://ecampus.oregonstate.edu/faculty/artificial-intelligence-tools/meaningful-learning/

- Ecampus AI Readiness Playbook: https://ecampus.oregonstate.edu/faculty/artificial-intelligence-tools/ai-readiness-playbook.pdf

Videos providing overview of Gen AI that can be used for discussions:

- Generative AI in a Nutshell – how to survive and thrive in the age of AI (~17min)
- Wes Fondren (Associate Dean of Coastal Carolina University's College of Graduate and Continuing Studies) video clips:
  - What is AI? (~4 min): https://www.youtube.com/watch?v=5x_Z1rdqkNQ
  - Interacting with AI (~4 min): https://www.youtube.com/watch?v=8c9M6V6w_Sk
  - Using AI for assignments (~7 min): https://www.youtube.com/watch?v=ypDKoN8S2Zo&t=113s
  - Understanding what AI is good for (~5 min): https://www.youtube.com/watch?v=ifNaOzaOea8

Other tools:

- Developing AI Across Curriculum Article: https://www.sciencedirect.com/science/article/pii/S2666920X23000061

- Best custom instructions for ChatGPT: https://www.godofprompt.ai/blog/how-to-use-custom-instructions-for-chatgpt