Pedagogical Use of Generative AI: Issues & Recommendations

Washburn University AI Group

AY 2023-2024 Report

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History

The AI Group of Washburn University emerged in Fall 2023 as an ad hoc committee in response to global developments in generative AI technologies and large language models (e.g., ChatGPT). After witnessing campus stakeholder concerns regarding AI use in pedagogical settings, the executive officers of Faculty Senate organized the AI Group to explore possible pathways for institutionally supporting instructors, helping students achieve career-readiness, and responding to the complex, global duality of technological advancement and ethical specificity within disciplines.

Membership

All contributors and consultants joined and participated within this committee voluntarily. Members received no compensation for serving on this committee.

Purpose

The AI Group sought to collaboratively (a) identify core issues regarding students' use of generative AI in Washburn University classrooms and (b) outline informed recommendations for addressing core issues on an institutional level.

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Introduction

Carson Kay

The following report reflects the 5-month collaborative reflection, discussion, and overall conclusions generated by faculty and staff members of the ad hoc AI committee (referenced in this document as the AI Group). The following content is not a definitive solution, as the generative artificial intelligence (AI) landscape is still rapidly developing. Rather, the following conversations reflect the core issues that this body believes warrant prompt action. Paired with perceived issues are the AI Group's recommendations for next steps, practical actions that Washburn University may take to proactively—and reactively— respond to current challenges.

This report focuses explicitly on generative AI because of its strong presence on college campuses and its particular complication of pedagogical praxis. Although AI extends beyond the boundaries of generative, language-based models, our use of AI refers specifically to generative models. Moreover, this report focuses on student and instructor use of generative AI in classroom contexts. There is rich potential to expand this lens to include faculty scholarship, but the AI Group limited their scope to what we perceive to be the most pressing challenge to our campus at this moment: Students using generative AI in pedagogically deleterious ways and instructors navigating an ethical challenge that has not yet been defined on an institutional level.

The following pages are organized into four topical sections. Within each section is (1) a description of AI-related issues for our campus community and (2) a summary of core recommendations that respective campus stakeholders may apply to address said issues. Section 1 summarizes practical challenges that AI poses from the student and faculty perspective and general recommendations to frame our discussion. Section 2 relays training issues related to AI and recommendations for educating instructors through accessible resources, resources that respond to many of the practical concerns. In Section 3, we expand our discussion to technical issues, describing how generative AI works and identifying security risks, confidentiality concerns, and next steps for using the technology and navigating training needs. Finally, in Section 4, we explore the structural and equity concerns of generative AI, focusing on the implications of organizational language regarding this technology and identifying documents and policies that would benefit from revision to address student use of generative AI in classroom contexts.

Section 1: Practical Issues & Recommendations

Patricia Dahl & Miguel Gonzalez-Abellas

Student Perspectives on Generative AI: Uses and Constraints

From the students' perspective, there are positive and negative practical uses of generative AI. A punitive approach to constraining AI use will not work at this point, since our students are using it in high school now (and those are the students we will receive in the next few years). While students who use generative AI to plagiarize should still face sanction, our approach has to consider many other ways in which students now use it.

On the positive side, the main uses of AI could be as a reference tool, as a learning tool, and as a point of comparison:

- **Reference tool:** AI documents (i.e., ChatGPT) can be used to find out information, in a similar way to using Encyclopedia Britannica or any other reference tool, printed or online. Instructors can ask students to incorporate AI into their work but indicate in the assignment prompt that students' work must include how the information was generated.

- **Learning tool:** Students can use AI as a prompt to initiate an essay. It can help with writer's block or the fear of the blank page, or even with organization by helping students create an outline. This is how generative AI is promoted in some high school classes.

- **Comparative tool:** Students can use AI documents to compare/contrast with other documents related to their assignments. In a translation class, students can compare the translation documents generated by ChatGPT with the same translation in other tools, like Google Translation, and with their own. By comparing, students reflect on translation differences and determine what they might modify. Students can then justify where there are differences between computer-assisted translation versions and discuss why the differences exist. This entertaining use of generative AI allows students to gain experience using the technology while also helping students learn about AI's practical limitations.

On the negative side, the use of AI can lead students to claim material that is not their own work:

- **Plagiarism.** AI-generated documents do not provide their sources of information. In fact, there have been legal issues with AI-generated documents because they are perceived as plagiarizing sources available online without giving proper credit to their sources (see Andersen v. Stability AI Ltd., 2023; Appel et al., 2023).

Instructor Perspectives on Generative AI: Uses and Constraints

From an instructor's perspective, AI can be used to design assignments, to assess assignments, and to assist in the instructor's area of research if applicable, legal, and ethical.

For instructors to best incorporate generative AI into their classrooms, however, the instructors must receive institutional support to further their training. Specifically, the institution must provide resources and training opportunities to make sure instructors are educated in how to use generative AI effectively, legally, and ethically. Currently, students are potentially more familiar with this technology than most instructors. Thus, rich training opportunities regarding (a) technological or practical issues with generative AI use, (b) legal and ethical issues, and (c) use of AI in instructional design are necessary to increase instructor confidence in navigating generative AI.

Within instructional design training, in particular, we believe a central need of our faculty is support in designing assignments that integrate AI without being "hackable" through AI. For example, instructors might need support in rewriting assignments that AI cannot accurately answer. While instructors need support in crafting assignments that cannot be answered by generative AI, we also acknowledge that the point of such support would not be to create traps within our assignments. Although instructor-written prompts that generate AI hallucinations or self-referencing (i.e., "As an LLM, I am not certain . . .") could help instructors identify cases of improper AI use, these assignment prompts might, more importantly, identify the students who really need support from their instructors.

Institutionally, we owe it to our students to use AI in a legal and ethical manner, since some jobs are seeking expertise in using AI and some higher learning

institutions are already creating programs in prompt engineering to help young professionals obtain accurate results when using AI (see Arizona State University, n.d.; Purdue University, n.d.; University of Texas at Austin, n.d.). We need to support students so that they can meet industry expectations.

Core Recommendations

1. When considering policy revisions, the decision-making collectives of Washburn University should recognize the duality of preparing students for careers and reaffirming academic integrity.
2. Instructors should acknowledge the beneficial potentials of AI to facilitate learning both in class and in homework assignments.
3. Instructors should craft clear expectations regarding AI use and class assessments.
4. Washburn University should provide and incentivize opportunities for instructors to seek affordable training in using generative AI.
5. Instructors (and revisions to policy) should acknowledge that generative AI is not appropriate in all forms of assessment and reasonable boundary-setting is appropriate.

Section 2: Training Issues & Recommendations

Adebanke Adebayo & Patricia Dahl

As generative AI becomes increasingly available to the public and to industries, higher education is compelled to help faculty, staff, and students understand the principles of this technology (Chan, 2023). Training faculty, staff, and students to effectively use AI will require a combination of educational opportunities, hands-on experiences, a variety of resources, and ongoing educational and technological support to meet the constantly evolving demands of the AI age. By providing these elements, we can empower faculty and staff who want to incorporate AI into their work and help college students be better prepared for an AI world while also preparing students to be ethical users. AI training can take several forms centered around faculty, staff, and students' needs. The structure of AI training can include the following facets.

Understanding AI: Use and Application

Training for understanding how AI works and its many applications can initially involve CTEL seminars and workshops to introduce faculty and staff to the fundamentals of AI (including commonly used AI platforms and tools), its applications in various academic settings (AI-assisted content creation and assessment), and its potential impact on the higher education sector (both positive and negative factors). Essentially, training should range from introductory use of AI to advanced use of AI in teaching. The seminars and workshops can provide reading materials, classroom learning (both on campus and virtual), and guest trainers/lecturers to facilitate the understanding of the AI topics. Similarly, exploring how AI can be applied and not applied in teaching and learning helps answer the question, "What should AI *not* be used for in teaching and learning?" This application idea is discussed in Section 4 of this report.

Identifying how AI is used by faculty and staff will involve collaboration and communication between groups and individuals. These collaborative efforts can involve faculty and staff on campus, industry partners in the community, and AI experts. Some standard uses of AI can include adapting AI to the D2L learning platform, continuously incorporating AI-based training for faculty and staff, using AI for curriculum content (assignments, grading, assessments), and using AI detection tools.

Offering Hands-On Training

Offering hands-on training sessions where faculty and staff can experiment with AI platforms and tools under the guidance of a facilitator could be helpful. The hands-on training opportunities can help foster a culture of experimentation and innovation where faculty and staff feel comfortable exploring AI technologies and incorporating them into their teaching, research, and administrative best practices.

Students across campus can also be provided training and resources about AI and its ethical use. Similar to the faculty technology training across campus, there could be training dedicated to student AI awareness. Student-targeted training can be done in collaboration with Washburn's Information Technology Services (ITS).

Educating Others about Ethical Implications

AI training of faculty, staff, and students will also need to include the ethical and social implications of AI, including issues related to bias, privacy, security, employment (job preparedness), and plagiarism. Since there are currently no programs that accurately identify AI-generated work, this begs the question of whose work would most likely be identified—perhaps incorrectly—as "plagiarized." Brief elaboration of such biases is noted in Section 4. Citation resources for MLA, APA, and Chicago style are presented later in this section (see "Some Resources for Training").

Developing Curriculum Content

One of the most important aspects of AI training involves assisting faculty with integrating AI-related content and policies into their curriculum and classrooms. This assistance could begin with technological and educational staff designing new courses focused on AI learning and AI "how to" information for various skill levels. Further, it will be necessary to assist faculty with incorporating AI content into existing courses through their course content, assignments, projects involving AI technologies, changes to course-level assessment practices, accommodations relative to AI, guidance on what to do when the uncertainties of students' possible use of AI for schoolwork surfaces, and other policy-related elements.

Integrating AI into teaching also requires designing meaningful and practical assignments. These trainings can be designed as workshops to encourage faculty members to create assignments that challenge students to demonstrate their own

knowledge and skills without relying heavily on AI-generated content, irrespective of their discipline.

Providing Guidance on Assessment and Evaluation

Training involving faculty will need to include guidance on how to assess university, department, course, and student learning outcomes related to the integration of AI into faculty coursework. Assessment training could include developing rubrics for AI-related assignments and projects, incorporating AI-generated content into courses, using AI-generated questions for quizzes, tests, and exams, and maintaining transparency and fairness in grading procedures.

AI can support potentially reintroducing oral examinations into the classroom. The increased use of oral exams can give students more practice in the "soft skills," which could benefit them professionally. The drawbacks, however, could include exacerbating communication in the classroom and increasing apprehension and anxiety among neurodivergent student populations. Further, oral examinations could increase faculty time investment in assessment since oral exams may take longer to proctor than written exams.

One recommendation for reintroducing oral examinations is to provide faculty with opportunities to explore new assessment practices. These could include a variety of CTEL programs on creating scalable oral assignments, developing in-class writing assignments, utilizing voice assignments, designing for intrinsic motivation (such as universal design, scaffolding, applied or active learning tools), and engaging in pedagogical programs on navigating student accommodations as they pertain to oral assignments. Another recommendation for use of oral exams involves initiating conversations with local high schools to identify and assess their common AI practices and to better understand student expectations when they begin college.

Faculty can also consider the use of localized or contextualized examples when designing assessments. For instance, they can incorporate student-led discussions and collaborations where applicable. These assignment will enhance student soft skills which are top-tier employability skills (Business-Higher Education Forum, 2019; Hart Research Associates, 2018; National Association of Colleges and Employers, 2016). Using reflection questions and process-driven questions can steer students to be more accountable and harness their critical thinking skills.

Finally, considering the use of blended or flipped classroom formats might limit the use of AI. In the flipped classroom model, students would learn content outside of class time and then use class time for the application of what they learned.

Creating a Community of Continuous Support

It could be useful to establish a campus community where faculty and staff can share their experiences, resources, and best practices related to AI on an ongoing basis. The community could take the form of regular meetings (on campus or via Zoom), online forums or discussion boards, or any other place where collaborative ideas and projects can be shared to help everyone continuously network and learn from each other about AI.

Faculty and staff will need to be encouraged to stay up to date on the latest developments in the rapidly changing world of AI. Ongoing professional development learning could involve local, regional, and national technology, educational, and security-related conferences, workshops, and online resources. A feedback process will be needed for faculty and staff to share the information, techniques, and skills they acquire from the ongoing learning opportunities. Feedback from faculty and staff who are staying current with AI information can continuously help identify areas in need of improvement and refinement for both training and outcome efforts.

Some Resources for Training

Given the instructional need for AI-informed training, we offer the following resource categories that Washburn University can draw upon to support its faculty.

Center for Teaching Excellence and Learning (CTEL)

CTEL has many AI-related links and tutorials provided on CTEL's D2L site under the "Generative AI (ChatGPT) Resources" module. CTEL also distributes articles through Teaching Tuesday emails and through the resource modules. There are also ongoing CTEL workshops related to AI. Some examples of resources shared include content from the following entities:

- **The Chronicle of Higher Education** has a lot of sources for students and faculty. For example, Cassuto (2023) offers the resource, "Artificial Intelligence: A Graduate-Student User's Guide," to guide master's and doctoral students in navigating their coursework.

- **EdX and Coursera** offer online certificate programs ranging in difficulty that are free and take 3-4 weeks to complete. Notable examples include the following: "AI for Anyone" (Google, n.d.); "AI for Everyone: Master the Basics" (IBM, n.d.a.) and "Introduction to Generative AI" (IBM, n.d.b.).

- **Alchemy** has videos and other information for various audiences. The webpage, "AI and ChatGPT Resources for Higher Education," provides access to these resources (see Alchemy, n.d.).

Social Annotations

Activities through programs like Hypothes.is can help students and educators explore content meaningfully. For example, Hypothes.is hosted a webinar about "Leveraging Social Annotations in the Age of AI" (see Hypothes.is, 2023).

Writing Guidelines

Standards for incorporating and citing AI-generated content are now available through major style-guide organizations (see The Chicago Manual of Style, n.d.; McAdoo, 2024; MLA, 2023;). The following links relay guidance on referencing AI-generated texts.

APA
https://apastyle.apa.org/blog/how-to-cite-chatgpt

MLA
https://style.mla.org/citing-generative-ai/

Chicago Style
https://www.chicagomanualofstyle.org/qanda/data/faq/topics/Documentation/faq0422.html

Core Recommendations

1. Washburn University (perhaps through CTEL) should organize AI forums for faculty to share their questions, thoughts, and concerns. The responses can then be used to create need-specific training sessions across disciplines.
2. Generative AI training should be incorporated into core and general education courses to enhance awareness and ethical use.

3. CTEL should continue to offer workshops directed towards faculty use of AI to reinforce inclusive teaching and learning practices across disciplines.
4. Washburn University should create an institutionalized AI advisory committee to assist in navigating the implications of the constantly evolving AI age for teaching, learning, and service.
5. CTEL and ITS should offer collaborative and targeted (staff and faculty) training sessions to acknowledge, embrace, and enhance ethical use of AI in teaching, learning, and service.

Section 3: Technological, Security, and Related Issues & Recommendations

John Haverty, Joseph Kendall-Morwick, Homer Manila, Brenda White, & David Rubenstein

What is Generative AI?

Machine Learning Algorithms and Models

Artificial Intelligence is an extremely broad area of academic research and technological development within which the subfield of machine learning has gained prominence through the last decade (some calling it the AI Spring; see Bommasani, 2023). Stripped to its essentials, machine learning is a statistical technique that learns from data to make classifications or predictions for new data inputs. Machine learning is characterized by algorithms that read large data sets as input (called training data) and develop models of that data as output. Training data sets are often composed of query/answer pairs (such as an image of an animal matched with the text species of that animal) and are developed to train an ML (Machine Learning) model on a more general concept (such as predicting species of an animal based on appearance). Unlike traditional computer algorithms that require extensive manual coding, machine learning algorithms learn and improve by being exposed to large amounts of data. The models, the products of these algorithms, are used to perform tasks.

Neural Networks

Neural networks are one specific type of machine learning model that is not new. Neural networks were theorized as early as the 1940s but have recently become the cornerstone of popular generative AI applications. Neural networks are inspired from the brains of animals—collections of biological neurons networked together to perform cognitive functions. Similarly neural network models are specifications of networks of software neurons linked together to compute the output of a numeric function through a simulation of their biological counterparts (see Hardesty, 2017).

Deep Learning

Deep learning is the deployment of large neural networks with many layers of artificial neurons capable of much more complex tasks than those developed before the 2010s. These advances were made possible by the increase in computational

power of modern computers, the availability of large datasets for training through the internet, and the development of more sophisticated architectures of networks. Fully connected layers of neural networks (layers in which every artificial neuron is connected to every other neuron) are too dense and complex to train efficiently when the networks are large. Advances in network architectures (such as convolutional neural networks) limit how dense the networks need to be while still retaining the depth to complete complex tasks (such as image recognition), making training possible with the computing resources available (see Lau, 2017). Deep neural networks are a subset of sophisticated machine learning algorithms that have been trained to classify images, recognize faces, translate languages, predict human emotions, personalize online experiences, and much more.

Generative AI

Generative AI is a specialized form of machine learning. Like other machine learning, it uses algorithms that learn from data. It refers to modern neural network models that make predictions of the likelihood of small parts of a complex output, randomly select options based on those probabilities, and replicate or repeat the process over a large, complex output such as an image or a collection of text. Like other neural networks, these models develop outputs based on the data they were trained over and the specific queries provided to the model. More uniquely, the different components of the output from these models will also be dependent on the random selections made for other components of the output such that the overall output will have cohesion and structure (for example, in text generation, if the word "eat" is selected, the next word generated will likely be some kind of food). In other words, the key difference is that generative AI creates new data that *resembles* its training data, while non-generative AI machine learning makes predictions and classifications *about* data. For example, generative AI could create a realistic fake photo, while regular machine learning could predict whether a photo is real or fake.

Capabilities of Generative AI Models

These models will generate output quickly and can be used to generate substantial amounts of content that humans would struggle to generate in the same amount of time. Because they are trained on extremely broad datasets (crawls over much of the internet and all of Wikipedia) they can produce output with substantial depth and breadth of knowledge. Training data is often carefully filtered such that common errors (misspellings, grammatical errors) are unlikely to be generated in the output. The randomness incorporated into their use means that there will be

significant distinction in outputs from the models even for the exact same query.

Limitations of Generative AI Models

These models may be able to quickly produce cohesive and structured output, but the relationships between components of the output are only based on common patterns in the training data for the model. The models cannot generate novel patterns and their outputs will necessarily be derivative of their training data. Because a model's outputs are stochastic and only constrained by the probabilities generated by the model, it is certainly possible for models to generate nonsensical outputs that often manifest as incorrect assertions in text generation or violated natural constraints in image generation (such as additional fingers). These are commonly referred to as "hallucinations" (see Lakhani, n.d.; MIT, n.d.).

Although their outputs are stochastic, the patterns they were trained with can lead to recognizable or predictable features of their output. For similar queries, related results are likely to be generated and the space of likely outputs may not be extremely broad or incorporate the same diversity we might expect from different humans answering the same query.

While these models have been trained on a large set of data, they can only generate output based on the information they were provided through training or through the query, and even with powerful computers, training can take an extraordinarily long time (months in the case of ChatGPT4). Thus, models will not always be equipped with the most recent data and may not adapt to current events and recent phenomena.

Ensuring Data Privacy and Security: Core Issues

Privacy and Confidentiality

There is currently a lack of accountability in the use of AI tools. Their prevalence makes use accessible, but misuse is inevitable. These tools are typically cloud–based, meaning that data must be shared with a third-party to use the service. These tools are oftentimes free, or inexpensive, but also just as often unregulated by the companies whose staff find them valuable. It is even possible that some tools may be developed by bad actors for the express purpose of luring users in to sharing proprietary information. Users may also be unaware of the implications of sharing copyrighted material or the proprietary material of others outside of the

institution with a third party that may not be trusted by the owners of those materials (see Luqman et al., 2024).

Institutions that do not have effective controls on their AI usage should not be surprised to find their enterprise data eagerly shared with these tools, being stored, or parsed on cloud services that (as well as its users) now have access to proprietary information. DLP (Data Loss Prevention) is only one tool that can help curb this abuse, if tuned appropriately, but it will not win the fight alone. Policies and staff training need to be aligned, and staff need to be made aware of not only the legal requirements in this space, but also of contractual ones that may be established with existing customers. Currently, there is no legal AI exemption on the books, but as the U.S. Federal Trade Commission (2024) reports, "Like all firms, model-as-a-service companies that deceive customers or users about how their data is collected—whether explicitly or implicitly, by inclusion or by omission—may be violating the law" (para. 7). Additionally, ensuring that those in possession of proprietary materials (especially students) are aware of their rights to sharing those materials and making copyright notices explicit and clear within these materials may help mitigate accidental breeches of confidentiality.

Deepfake Phishing/Scams

AI has been utilized to create more realistic videos, audio, and pictures, easily mistaken as legitimate representations. Attackers are now using these techniques to create more sophisticated and convincing phishing and scam attacks. Milmo and Hern (2024) explain that

> Generative AI tools already helped make approaches to potential victims more convincing by creating fake "lure documents" that did not contain the translation, spelling or grammatical errors that tended to give away phishing attacks – their contents having been crafted or corrected by chatbots. (para. 9)

Similarly, Hulme (2023) underscores that

> Because of the effectiveness of…large language models (LLMs), attackers can better impersonate influential (or at least the right) people within organizations, such as the CEO or someone from the IT or finance departments. This is helpful for scams that typically start with an email, such as Business Email Compromise (BEC) attacks. A BEC attack is where the attacker impersonates the CEO, some other executive, or even a business partner to trick employees into making a wire transfer. These attacks have

> historically taken place as email phishing attacks. Increasingly, you should expect AI-driven social media and text messaging, deep fake videos, and deep fake voice mails. Attackers are even using virtual meeting platforms. (para. 4)

Humans are always the weakest link in any security program, and as such, need to be prescribed training that will be absorbed, and effect change in their behavior. Hulme (2023) concurs,

> In the age of GenAI and AI-enhanced phishing threats, the human factor plays a critical last line of defense. Should maliciously crafted phishing emails slip past the set layers of protection — and some small percentage will undoubtedly do so — a well-trained staff will be better prepared to not click on the malware-laced attachments or malicious URLs. (para. 12)

A typical training method is simulating phishing attacks, but the need for phishing tests that closely emulate current types of phishing attacks will only increase with the prevalence of AI-generated phishing attacks. Attacks will be more convincing due to language and grammar-correcting AI algorithms when combined with deepfake videos, audio, and pictures. Training the populace to discern fraudulent representations from reality will be of utmost importance. Mandatory security awareness training is also often required by cybersecurity insurance but is another method by which employees can be trained to recognize deepfakes and scams.

There are many projects currently underway to recognize and help detect the use of AI, but their accuracy rates are not high enough to warrant confidence in these tools for important decisions. Furthermore, AI models are frequently updated and adapt to changes in queries making detection a moving target and thus even more difficult to consistently make reliable predictions.

Copyright

Beyond the copyright concerns mentioned in the privacy section, another concern is the copyright conditions of the materials used to train ML models and the possibility of derivative work appearing in some form in generated content. As of the time of this writing, lawsuits are being considered over whether content generated by AI models can be copyrighted (with some current results indicating it cannot be; see Brittain, 2023) and whether content generated by AI models trained over copyrighted material is violating those copyrights (with some current results

indicating it may not be; see Brittain, 2024). Users of AI should be aware of the dynamic nature of the law around copyright and use of AI and consider the risks this ambiguity poses.

Existing Technologies

Support Chatbots

AI-powered chatbots for information retrieval are currently available. These chatbots can be deployed on university websites or communication platforms to provide instant responses to frequently asked questions. They can help students and staff find information about admissions, course schedules, campus facilities, and more. Currently, the following AI-powered chatbots are being used at Washburn and at comparable institutions.

- Brightspace Desire2Learn End User Support Virtual Assistant (as of January 2024)
- Slate AI Chatbot
- Tier I IT Support (University of Kansas)
- Zoom Virtual Agents
- Zoom AI Companion
- LibGuides-Mabee Library

Video and Visual AI-Generated Tools

Additional AI-powered tools are currently available. Examples include the following.

- DeepDream
- RunwayML
- Vid2Vid
- Open Pose
- Rekall
- Deep Art.io
- Clarifai
- Pix2PixHD
- Womba Dream
- SambaNova
- Sora-text to video

Technologies in Development

MS Copilot

Microsoft Copilot is part of Office Suite currently based on a subscription for Copilot. Copilot replaced what was previously known as Cortana which was a tool to help search for information. Copilot is a large language model that will help cite sources, author poems, or write a song.

Review Engines/AI Content Detection Tools

There are many projects currently underway to recognize and help detect the use of AI, but their accuracy rates need to improve as AI development continues. The following AI content detection engines are not perfect, but attempt to reflect instances of AI at work:

- Content at Scale
- ContentDetector.ai
- Copyleaks
- Crossf
- CrossPlag
- GPT Radar
- GPTZero
- Grammica
- IvyPanda
- OpenAI
- Originality.ai
- Sapling
- Scribbr
- SEO.ai
- TurnItIn
- Writer
- ZeroGPTi

Studies are ongoing, but initial studies show less efficacy (more false positives) when attempting to detect student ChatGPT 4 usage vs ChatGPT 3.5 (see Elkhatat et al., 2023; Walters, 2023). Using markers besides AI detection tool results is recommended.

Supporting AI Technology

Integration with Existing Systems

Educational institutions often use a variety of software systems for administration, learning management, and communication. Integrating new AI tools with existing systems seamlessly can be technically challenging and requires interoperability standards.

Scalability

As the number of students and courses increases, the scalability of AI solutions becomes crucial. Designing systems that can handle a growing user base without compromising performance is a technical challenge.

Infrastructure and Resource Requirements

Implementing AI solutions often requires robust computational infrastructure and significant resources. Many educational institutions may face challenges in providing the necessary hardware, software, and cloud services for AI training.

Training

Faculty, staff, and students may lack the necessary skills to effectively use and integrate AI technologies into their daily work or educational environment. There may also be resistance to change and embrace AI in the educational environment and/or workplace. There may also be a lack of AI experts to deliver the training needed. Consistent communication regarding the benefits and genuine constraints of AI, as well as concerns about job displacement, ethical considerations, and changes in teaching paradigms, is essential as this technology progresses.

Training programs are needed to bridge these skill gaps and ensure that educators are proficient in leveraging AI tools for teaching and administrative tasks. ITS (Information Technology Services) staff and Computer Information Sciences faculty can provide a collaborative training session through CTEL to help bridge the gap for faculty and staff.

We also recognize there is a gap in mandatory training for students. Currently, ITS Security has not purchased training for students that would include AI use. We recommend purchasing and deploying the student security training for Washburn

students. We also recommend that this student training be a curriculum requirement in WU 101 courses. Security training and/or training on AI in general could be addressed in the online student resource center.

Core Recommendations

- Washburn University should prioritize DLP (Data Loss Prevention). Appropriately tuned DLP is a tool that can help curb the abuse that AI has of data privacy and confidentiality.
- Washburn University's decision-making collectives should ensure that policies and staff training are aligned, and staff need to be made aware of not only the legal requirements in this space, but also of contractual ones that may be established with existing customers.
- Washburn University should require mandatory security awareness training that reflects current AI attack methods. This includes phishing simulation training.
- Instructors and administrators should exercise caution in using AI recognition engines to assess possible cases of academic impropriety.
- Washburn University should invest in training programs to bridge skill gaps and ensure that instructors are proficient in leveraging AI tools for teaching and administrative tasks.
- ITS and faculty should collaborate with CTEL to create training sessions to help bridge the gap for faculty and staff.
- ITS should purchase and deploy student security training for Washburn students.
- Washburn University's Center for Student Success and Retention (CSSR) should consider making student security training a curriculum requirement in WU 101 courses.
- Washburn University should address security training and/or training on AI in general in the online student resource center.

Section 4: Structural and Equity Issues & Recommendations

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When reflecting upon the overarching issues of generative AI (LLM) use in pedagogical spaces, a common thread emerges: structural concerns. Namely, Washburn University's response to the pedagogical use of AI has the potential to either reaffirm its formal commitment to equitable teaching or further exacerbate inequity among our student body by maladapting its existing policies. Although Escotet (2023) underscores the benefits of infusing AI-learning into the classroom, he also acknowledges that the traditional structures of higher education institutions are experiencing considerable turbulence as the global society becomes increasingly computer-mediated and remotely oriented. As universities begin to adjust to these new advances, they must balance equitable dualities amid disciplinary norms, professional ethics, academic freedom, and the positioning of accountability when crafting official responses and restructuring existing policy. In this section, we (1) summarize the core complexity regarding our potential organizational response to students using AI in pedagogical contexts and (2) present recommendations for Washburn's next steps.

Crafting an organizational response to AI use in the classroom is complicated because academic disciplines and related employers can have vastly different needs. Indeed, it might be tempting to simply forbid students from using ChatGPT and comparable AI technologies. Yet, a university-wide ban on students' use of AI would both prevent educators from teaching skillsets that employers desire and prevent educators from using AI technologies to facilitate learning. Moreover, given that certificate programs in prompt engineering have already started training individuals in using ChatGPT effectively (see Vanderbilt University, 2023), we risk holding our students back from employment opportunities if we refuse to permit AI use in any classroom spaces. Still, if we restructure our existing integrity expectations to account for AI, we must be acutely aware of the ways in which we could inadvertently create systemic inconsistency in how we categorize AI use amid our academic impropriety standards. Additionally, as preliminary analyses suggest that AI detection programs disproportionately flag papers written by students who are not native English speakers (Myers, 2023) and can perpetuate racial, cultural, and gender biases in their responses (Ray, 2023), it is necessary that we both cultivate structural expectations that prevent the penalization of marginalized

students and actively teach our students that ChatGPT is not bias-free and not above reproach.

Is the answer, then, to simply not make any structural adjustments to our current process for maintaining academic integrity? We argue that while this would be the easiest path forward, having a blanket permittance of AI technologies would also be too extreme, as the absence of organizational response disregards disciplinary specificity regarding the use of AI. What is appropriate use in one discipline's courses might be profoundly unethical in another's courses. For example, a modern languages instructor might use ChatGPT to help students learn how to translate languages. In contrast, a qualitative methodology instructor might forbid the use of AI in analyzing data because doing so would require feeding sensitive information into the program which would violate confidentiality expectations. Although it could be argued that no organizational response grants strategic ambiguity so instructors can make individual calls on ethics in their courses, no response could also grant the illusion that the institution has no opinion on whether students use this technology in lieu of completing their assignments as instructed. This duality complicates organizational response and procedure, yet it does bring with it a learning opportunity. Namely, this duality offers students a chance to transition away from the familiar, highly structured K-12 educative norms and to navigate and adapt to ethical ambiguity across contexts. This navigation requires critical thinking and personal accountability alike, as instructor-specific policies would vary, so students would practice adjusting to different class cultures and norms, just as they have and/or will adjust to different expectations in workplace environments.

Still, this variation is a new experience for many students, which is why we support Washburn University offering simple, official language that students and educators alike can draw upon when making pedagogical choices. While we defer to the respective decision-making collectives on campus to craft exact language, we will offer our rationale for this general recommendation. Overall, we recommend that Washburn University modifies the language within its academic impropriety policy to provide some reasonable boundaries regarding AI use in classroom contexts, but to also underscore that decisions to prohibit or include AI are at the instructor's discretion. We recognize that this approach will not be without its challenges. Indeed, the presence of vastly different instructor-specific policies could result in inconsistent responses to AI violations. The same use of AI in an assignment could be reported to Student Life as problematic by one instructor and be deemed

acceptable by another instructor. However, we concur that if there was language clearly noting that AI use is at the instructor's discretion, and if instructors explained to students why they could or could not use generative AI like ChatGPT to complete assignments in their courses, students would have the information they need to both experience discipline-specific ethics and make constructive decisions.

The final reason that we recommend that Washburn formally support instructor discretion through policy revision relates to academic freedom, institutional support of educators, and organizational accountability. By revising existing policy to underscore instructor discretion, Washburn University would reaffirm academic freedom while simultaneously signaling to its instructors that the institution will support them in making difficult decisions regarding course-specific boundary maintenance and academic impropriety reporting. Now, it could be argued that a more universal policy could result in more consistency in how academic impropriety is managed across courses. It could also be argued that a university-wide policy outlining exactly how AI can and cannot be used would allow the institution to grant instructors an explicit set of guidelines to follow. Such language might also semantically function as an organizational commitment to maintaining this overarching policy and, when necessary, protecting instructors from undue public criticism. Indeed, if university-wide language exists, educators can empathize with student frustrations while pointing out that their actions violated university-level expectations. However, as mentioned previously, a one-size-fits-all approach to incorporating AI in the classroom could unintentionally prevent instructors and disciplines from using AI technologies constructively and/or preparing students to use generative AI as they will be asked to do in future jobs. Because of the disciplinary specificity, we *do not* recommend that Washburn University cultivates a *universal rule* regarding how AI can and cannot be used in pedagogical spaces *regardless* of discipline.

We do, however, recommend university-wide language that reaffirms instructor discretion, but for the sake of transparency, we will acknowledge the complexities associated with instructor-specific policies. Incorporating language that underscores instructor discretion in our academic impropriety policies grants strategic ambiguity that better aligns with the complex realities of our represented disciplines. Permitting instructors to make informed decisions about the appropriateness of AI technologies in their courses illustrates an institutional commitment to academic freedom and pedagogical flexibility. Such allowances

would grant instructors the capacity to craft laboratories in which students can practice using AI effectively and ethically. Yet, leaving these decisions solely to instructors without providing explicit organizational support could, from a critical perspective, allow the institution to rhetorically absolve itself from responsibility should instructors be publicly challenged over their policies. Without university-level language that notes (a) the potential for academic impropriety and (b) that instructors make the decisions regarding AI use in their classrooms, instructors could feel unsupported or even pressured to modify their policies amid appeal processes. Alternatively stated, the complete absence of any organizational language reaffirming instructor discretion could further exacerbate power inequities within the organizational structure itself. University rhetoric and its implications for accountability placement must be cautiously considered to ensure that instructors are formally supported in crafting course-specific AI policies. Thus, we concur that clearly stating within our academic impropriety policies that instructors determine AI's appropriateness in their classrooms would both maintain academic freedom and pedagogical flexibility while simultaneously displaying an institutional commitment to protecting faculty as they make these complex decisions. To respect committee boundaries regarding policy and protocol revisions, and recognize our decision-making limitations as an ad hoc committee, we are not providing exact language in this report. However, we are underscoring the need for language in the Washburn University Faculty Handbook, Student Conduct Code, and University Syllabus that underscores that AI-generated work may be academically improper and that AI policies for classroom learning are at the discretion of the instructor (see Drexel University, 2023 for an example approach).

Such language would clarify the process for navigating AI-related cases of academic impropriety. When students use AI in ways that do not comport with the policies established by their instructors, instructors need to be able to treat it in the same way that they would treat other forms of academic impropriety. Thus, we advise that mention of AI-generated work be incorporated into the Faculty Handbook (perhaps in Section 7.C.). Similarly, we recommend language underscoring that faculty must be trained in university policy and kept accountable to follow it. In that way, we can maintain the academic integrity of a Washburn degree and respect students' rights to equitable treatment.

We also recommend that the University Syllabus include model language about AI and academic impropriety. Right now, it just includes a link to the policies. We recommend that 1) academic impropriety language be spelled out explicitly in the

University Syllabus itself, 2) the university offer training (via documents as well as interactive sessions) on any updated language within our academic impropriety policy, and 3) instructors include model language in their own syllabi that both reflect the academic impropriety policy and accommodate it to meet their particular class's needs.

Regarding the latter two recommendations above, we advise that faculty continue to receive training in the formal process for navigating academic impropriety. Faculty can unilaterally require students to revise and resubmit their work, but any further sanctions (including grade adjustment and automatic failure) require the faculty member to report the matter and permit students the right to appeal the decision. Faculty and students need to know and follow these policies, as they provide mechanisms to both enforce academic integrity and to ensure that such enforcement is equitable to students.

Lastly, we acknowledge as a committee that expert stakeholders on our campus must be actively involved in decision-making and that our community needs continued review of the generative AI landscape to best adapt policy and procedure. For example, we recognize that generative AI may have a place within certain student accommodations. However, we underscore that decision-making power regarding generative AI and reasonable accommodations must remain with our campus experts, in this example, Student Accessibility Services. Similarly, because the AI landscape will rapidly change, we cannot underscore enough the importance of a standing committee on campus that reviews AI advancements annually. Continued conversation is needed to determine the best committee home for this responsibility, or whether a new committee is needed.

Core Recommendations

1. Washburn University should craft institutional-level language that (a) notes the potential of generative AI use to constitute academic impropriety (e.g., plagiarism) and (b) affirms that the appropriateness of generative AI use in the classroom is determined by the instructor.
2. Washburn University's decision-making collectives should revise the institutional academic impropriety language in the Faculty Handbook, Student Conduct Code, and University Syllabus to explicitly mention the potential of generative AI use to constitute academic impropriety.

3. Washburn should continue to promote its official policies and reporting mechanisms for academic impropriety to faculty to ensure greater consistency in their application.
4. Washburn University should continue to support expert units on campus (i.e., Student Accessibility Services, ITS, CSSR, etc.) as they assess opportunities for and boundaries regarding student use of generative AI in classroom contexts.
5. Washburn University should conduct a review of AI updates at least once per academic year. We suggest this review take place during the fall semester and that necessary changes be implemented in the spring. This responsibility could be held by a pre-existing committee or be assigned to a new campus AI collective.

This report reflects the information available when the document was written. As generative AI advances and more information becomes available, claims crafted in this document should be updated in subsequent reports.

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