

Artificial Intelligence Toolkit for GSW Faculty

By Gary Fisk

Introduction

The recent introduction of advanced artificial intelligence (AI) technologies has significantly impacted higher education. Like any new technology, this impact will have mixed effects. Some experts propose that AI may bring about an educational revolution. AI-driven tutoring and more engaging forms of active learning are new possibilities. The downside is that today's students can generate lengthy essays in less than a minute by merely giving simple instructions to AI systems. Inappropriate AI uses may negatively impact student learning and raise challenging ethical issues.

The pedagogy of higher education courses must be reconsidered to adapt to the new AI environment. This is a brief introduction to AI-issues in higher education, with emphasis upon practical steps that faculty can take to address challenges and be creative in AI uses.

How does AI work?

It is helpful to know the basics of AI technology workings to appreciate how it works and what it can do. The following explains some basic features and terminology of how AI systems are formed and used. Feel free to skip ahead to the next section if you have some proficiency with AI systems.

AI comes in “models” such as ChatGPT (OpenAI), Gemini (Google), and Co-pilot (Microsoft). The foundation of these models is huge amounts of data collected from Internet and print sources. Data source examples include Wikipedia, textbooks, and discussion forums like Reddit.com. The models are sometimes called “large language models” (LLM) given the huge amount of text that goes into the model building process. The units of language, typically words, are called “tokens.” The data from these sources is represented in a highly abstract mathematical form.

The next step in model development is a training process comparable to human learning. Human trainers teach the model about human interactions to be polite and respectful to users. Sensitive topics are made off-limits (example: How can I build a bomb?) to build in ethical guardrails.

When finished, users of the AI system make requests called “prompts”, like the term writing prompt from the field of English. Here's a prompt example: “Summarize the major historical events of the Revolutionary War in the United States.” The AI responds with several paragraphs describing key historical highlights from the Revolutionary War. Subsequent prompts can refine

the output or explore details in further depth. The back-and-forth dialog between user and AI is called a “chat” based on the similarity to having a conversation with another person.

User instructions to the AI model take the form of normal sentences: natural language programming. No formal computer programming is required, which lowers learning barriers to using these systems. Proficient natural language programming requires having good writing skills to express the desired outcomes in detail.

The AI outputs are created through complex statistics. The prompt sentences entered by users activate similar word relationships in the AI model. Advanced statistics are used to anticipate what the next reasonable word would be for an output sentence. The sentence creation methods have similarities to predictive text features on smart phones.

The exact word relationships and statistics that make an AI model form a particular output are unknowable to humans. The data are too vast and the numerical relationships are too abstract to understand. This makes AI a bit mysterious. It justifiably makes some people uneasy. A good analogy for this mysteriousness is the human mind. When you talk and walk, you have no ability to know exactly how the words are chosen or how the muscles are coordinated. These details are hidden away from your consciousness. You’re only aware of the output, like talking and walking, rather than the millions of tiny neural decisions that went into making these behaviors. AI has parallels to the human brain in that the output is public and obvious, but the inner workings that made this output are inaccessible.

AI use can give the strong impression that there is a human being at the other end who is responding to requests. This intuition is inaccurate though. The truth is that AI is a technology based upon complex human language patterns.

Some people struggle to understand how AI relates to past computer technology. AI is different from traditional web searches like Google. Search engines match user key terms to web pages and provide links to web sources. This is like a librarian suggesting sources that might be useful to a library patron. In contrast, the AI user asks questions like talking to another person. In return, the user receives text that is custom built to address their instructions. Another difference from traditional web searches is that some systems, like ChatGPT, may not provide the user with source links to click upon. AI is also different from traditional computer programming languages like javascript or C++ by being more informal (natural language inputs). The outputs also differ from traditional computer software in being less rigid and less predictable. AI outputs may also vary between models and even by session. Finally, AI is developed to provide a more socially-oriented computer interaction experience than traditional computer applications.

John Wilson’s Libguide on What is AI? <https://libguides.gsw.edu/c.php?g=1413838>

Ethical Implications

Before the widespread availability of AI, there was a basic assumption that all writing was created by a human author. Now, human authorship can no longer be assumed for anything written after about 2020. The origin of the AI output may have been started with human writing data, but the output expression can take non-human forms. The dividing line between human and machine is being blurred. In the future we are likely to see complex blends of human and AI text. The ethical uses of AI in scholarship and writing are still in uncertain exploratory phases.

AI technologies are very good at creating summaries. The human skill of summarizing and reporting is possibly being devalued. Traditional journalism and mid-level management may be vulnerable job fields. Futurologists have predicted that anywhere from 40% to 80% of some occupations may be replaced by AI technologies.

AI built from human data may express biased output. The most concerning forms would be racism, sexism, and ageism. The AI makers try to reduce or eliminate these biases in the training of their models. However, AI outputs are ultimately a reflection of real human thoughts that they were trained upon, which includes inaccurate and damaging ways of thinking.

AI use may divide students based on socioeconomic status. Some of the better AI products require subscriptions that only students from higher income families can afford. In contrast, the free AI models that are more likely to be used by lower income students have limited features. This asymmetry in access to AI technology may favor students from higher income backgrounds.

Some faculty are advocating for use of AI in grading student essays and other written work. The general concept is that an educator would upload a rubric, student submissions, and prompt instructions to apply the rubric to the student work. The advantages of AI grading might be increased objectivity. Machine-based grading would also be faster and take less effort. However, there are significant reservations though about using AI for grading purposes. AI might just fabricate grades without really applying a rubric. In addition, AI grading might be a violation of student privacy if student work is uploaded to unsecure AI systems.

Creative Pedagogy Possibilities

A broad strategy is to focus upon critiquing AI outputs. Students can be asked to prompt AI on the topic of interest. The student's role is to vet the output for accuracy. This critical analysis is an important AI skill given the propensity of AI models to make hallucination errors. Another strength is that the analysis process requires higher order cognitive skills. A potential downside is that students might turn this exercise into a low-effort analysis by merely declaring that the output "looks good."

AI could be used to address topics missing from the textbook or skipped during class time. The following example from a statistics class is about the relatively recent replication crisis in science. These instructions are for the students (not to the AI) to explore the replication crisis and how it relates to the field of statistics. The follow-up AI chat questions are open to the student, allowing them to explore aspects of the replication crisis that they find the most interesting. The assignment also requires a student reflection essay to encourage metacognition about what was learned from this exercise. A cautionary recommendation is to be observant for fabrications that might be created by AI.

Have a conversation with an AI system (ChatGPT, Co-pilot, Perplexity, etc.) about the replication crisis. Start with a basic opening question, like "Explain the science problem of the replication crisis." Follow-up this question with additional questions that you create to learn more about the aspects that interest you. The scope could be restricted to psychology, but it is fine if you want to explore biomedical or other science areas. At least one question needs to ask about proposed solutions or improvements to science methods and statistics. At least three prompts/interactions with the AI are needed.

Danielle Taylor (Lecturer of Accounting) shared an example of how AI can make multiple-choice exam questions with the Teaching with Technology group. This example illustrates how AI prompts must utilize very specific instructions.

Some cautions are in order. The generated test questions must be carefully vetted for accuracy. The AI system might make questions that are not covered in your lectures or textbook, which could create a fairness problem. Another weakness to consider is that test questions generated by AI can also be easily answered via AI.

I am a college professor teaching accounting information systems. Make me a multiple choice exam with 25 questions about risk assessment and internal controls of an internal control system. Include these topics: four steps of enterprise risk management, functions of internal control, distinguishing between preventive detective and corrective controls including examples, proper segregation of duties, management override, collusion, physical vs IT controls, IT general controls vs IT application controls, manual vs. automated controls, the function of internal audit, internal audit reporting structure, SOX compliance, and the COSO framework.

AI can be used to format article references in scholarly papers. The following AI prompt for references in the American Psychological Association (APA format works in Microsoft Co-pilot, Perplexity.ai, and Google's Gemini. ChatGPT (free version) does not provide a specifically formatted reference. Some models will produce minor errors. The link can be changed to the home page for any journal article. A critical part is that the web page must be an open access

article that is freely available to everyone on the web. This could be a creative way to teach the order of publication information in a reference. Students could also be asked to inspect the outputs for minor mistakes.

Access the journal article available at this web location:

<https://www.jneurosci.org/content/17/11/4302>

Next, extract important publication information from this article. The key information is author, publication date, title, journal name, volume, issue, page numbers, and digital object identifier (doi). Next, use this extracted publication information to format this publication in a reference style used by the American Psychological Association (APA). The APA reference formatting order is author (last name, first initial), date, title, journal name, volume, issue, page numbers, and digital object identifier or web hyperlink. You must exactly follow the official formatting rules provided by the American Psychological Association (APA). Produce an APA formatted reference for the user in a form that can be easily copied.

Specialized AI systems can quickly create summaries from .pdf documents or online videos. These might be useful for generating quick descriptions of the resource in the learning management system. Microsoft Teams also has some similar voice-to-text features for transcribing meetings.

[ChatPDF - Chat with any PDF!](#)

[TLDR This - Article Summarizer & Online Text Summarizing Tool](#)

[summarize.tech: AI-powered video summaries](#)

AI technology can convert text from images into regular text that can be manipulated in word processors. This might be useful for scanning text from pictures of assignments that students upload to GeorgiaVIEW from their phones. The example prompt contains key terms used by computer systems for image to text conversion. The image file would need to be uploaded separately from the prompt.

Perform optical character recognition (OCR) to convert the text in this image into ascii text that can be easily copied.

Kosslyn (2023, p. 19 - 20) provides the following prompt for creating an AI-student interactive debate on a political science topic. The AI chooses the sides of a controversial topic. The student role is to provide reasons supporting their assigned side of the argument. The AI responds to the student with reasons supporting the other side of the argument. This chat dialog is an active form of learning that may be more engaging and memorable than simply

reading lists of evidence for each side of this controversy. This AI prompt could be modified for use with other topics. Student reflections upon this exercise is recommended.

You will play the role of an instructor who is trying to help a student achieve the following learning objective: "Identify the pros and cons of laws that fund elections publicly." As the first step, you will ask the human student to ask you questions about this topic. Before continuing, wait for the student to type in a question. Then answer the question to help the student to build the cases for both the pro and con sides of this proposition: "Laws should be passed to fund elections publicly." Be sure to provide a balanced case. When the student is ready, they will tell you that they are ready to debate. When the student so indicates, choose one side at random — "pro" or "con" — and tell the student that they will take that side, and you will begin the debate with an argument for the other side. You then begin the debate by taking your side, whichever it is, and providing a good argument for that position. The student will counter with an argument for the other side, and you will provide a counterargument to support your side. Have four exchanges, and then thank the student for a stimulating debate.

For more possibilities, Microsoft Copilot recommends the following key elements for writing effective AI prompts. These ideas should be helpful for working with any AI system.

1. Goal: What response do you want from Copilot?
2. Context: Why do you need it and who is involved?
3. Source: Which information sources or samples should Copilot use?
4. Expectations: How should Copilot best meet your expectations?

Expressing needs and refinement of output are also important.

https://support.microsoft.com/en-us/topic/cooking-up-a-great-prompt-getting-the-most-from-copilot-7b614306-d5aa-4b62-8509-e46674a29165?ocid=CopilotLab_SMC_Article_GetTips

Recommended teaching practices: Defining AI usage

GSW policy on academic integrity has a short description of AI plagiarism. Here is the relevant section of the Faculty Handbook (Policy on Academic Integrity, Responsibilities of the Student).

Artificial intelligence (AI) plagiarism occurs when products created by generative AI technology (example: ChatGPT) are misrepresented as original student work. However, the faculty have the freedom to create educational assignments that use generative AI, with the provisions that this technology use must be explicitly authorized and accompanied by instructions for work attribution (AI generated versus student work).

The responsibility for defining acceptable vs. unacceptable AI use is placed entirely upon faculty members. Accordingly, all faculty should have a syllabus statement or AI policy document that defines the professor's views of proper and improper AI use. These statements may be critical for deciding responses needed when AI is used to violate academic integrity.

The statement should include a conceptual definition of acceptable and unacceptable AI uses. These concepts should address student intentions that constitute an academic integrity violation, such as misrepresentation of sources, collaborators, and student effort.

Possible acceptable AI uses:

- Brainstorming ideas for a paper assignment
- A quick review that can prepare students for a literature search
- Feedback or critiques of written papers

Possible unacceptable AI uses:

- AI plagiarism: Significant AI-generated text that lacks proper direct quotes, citation, and/or reference information.
- Unauthorized collaboration: AI as an unacknowledged co-author is a misrepresentation of authorship.
- Using AI to answer multiple-choice questions

AI policies can include persuasive reasons why a particular policy is being adopted. The critical argument is that banning AI is not simply to create unnecessary work for students. Academic work and mental challenges are essential for learning and personal growth.

Conceptual definitions can be supported by a behavioral definition that is concrete and observable. Taking this step can clarify vague or abstract concepts. For example, if AI use is forbidden, AI plagiarism could be defined as having an AI percentage score of 30% or higher on Turnitin.com's AI detector.

AI policies might also include actions that will occur if the policy is broken. These would need to be broad statements of typical responses to AI-based academic integrity violations.

John Wilson's Libguide on AI policies: <https://libguides.gsw.edu/c.php?g=1414992>

John Wilson's Libguide on AI citations: <https://libguides.gsw.edu/c.php?g=1414757>

Recommended practices: Syllabus statements

The following syllabus statements may be helpful starting points for developing your own AI policies. The first example is my statement from 2023 that aims to be persuasive about why students should aim to do their own work rather than using AI. It attempts to concisely explain

the reasons why AI use might be detrimental to educational outcomes. The following is an example of an AI policy that forbids AI use. Please feel free to use or modify this statement to suit your own needs.

Recent technology innovations have made it possible to create essays, pictures, songs, and more through artificial intelligence (AI). These systems take everyday language commands, like "Write an essay about Mark Twain." The technology rearranges words or images that were originally made by others into new forms to satisfy the user's request.

Although amazing and potentially useful, there are serious concerns about the impact of AI upon college-level education.

- The accuracy problem: AI sometimes makes up incorrect answers called "hallucinations." These AI fabrications may be hard to distinguish from accurate answers. In addition, AI trained on biased sources (examples: racist, sexist) will repeat these biases in the outputs.
- The dishonesty problem: Using AI technology to generate college work is a form of plagiarism - misrepresenting someone else's work as your own. The original work of other authors is used to create the AI systems, yet it often goes unacknowledged in the AI outputs.
- The personal growth problem: Using AI to do assignments may defeat self-improvement efforts.
 - AI-generated work is low effort, but developing higher-level thinking skills requires a high degree of effort.
 - Technologies that copy the work of others are contrary to the goal of developing our own opinions and reasoning skills.

For these reasons, the expectation is that student assignments will be original work, meaning something written by the student rather than generated by AI technology. Be an authentic person by doing your own work. The effort that you put into your mental development will be worthwhile in the long run.

The following is a syllabus policy that allows some, but not unlimited AI use.

This course will use artificial intelligence (AI) in a careful and deliberate way as a form of learning support or enhancement. Each assignment will have explicit instructions about what AI use is allowed or not allowed. Please refer to each assignment for detailed instructions of what is acceptable or unacceptable use of AI. Failure to follow instructions on approved uses of AI will likely result in non-passing grades.

Broadly speaking, what is not allowed is having AI do all your work for you and then failing to acknowledge the role of AI in making the submitted work. A human comparison is helpful for understanding this principle. It is not acceptable to have a friend write the assignments for you, then turning in your friend's work as your own work. This misrepresentation of authorship is a form of academic dishonesty. Similarly, using AI to generate the entire assignment for you is not your own work, and should not be presented as your own work. When the use of AI is forbidden, submissions that have an AI score of over 30% on turnitin.com will receive non-passing grades and do-over work will be necessary.

The use of Grammarly and similar technologies for writing enhancement is not allowed. Grammarly is an AI-powered technology that takes human sentences and then reworks them into new, possibly improved AI sentences. The concern about Grammarly is that it encourages weak writing by circumventing challenges that are needed to grow writing skills. A second Grammarly concern is overwriting: Excessive use of flowery terms (example: "rich tapestry") and long, incoherent sentences that attempt to "sound academic." This writing style is contrary to the goal of scientific communications, which is clear, concise writing.

The use of Turnitin Draft Coach is encouraged. Unlike Grammarly, it does not rewrite human sentences. It can find problematic copied passages and help with citations. Directions for using Draft Coach are available in the course information folder. Another Draft Coach advantage is that GSW provides this service for free.

The following passage expands upon AI plagiarism in the section of the syllabus that addresses academic dishonesty. Note that this section finishes with a concrete definition of AI plagiarism (30% detection scores or higher) and the consequences (redoing the assignment).

Using artificial intelligence (AI) software, such as ChatGPT, to generate essays and papers is also form of plagiarism. Here's a good way to remember this principle: If you didn't write it, you must cite it. Failure to treat AI-generated text as a direct quote with proper citation/reference is a misrepresentation of writing authorship. It's like asking a friend to write a paper for you. Submissions with AI detection scores of 30% or higher will be graded non-passing and will need to be redone.

Recommended practices: Authenticity of multiple-choice exams

Multiple-choice and true/false questions are popular methods for assessing memorization and understanding of key terms and information. Students often prefer multiple-choice questions over essay formats, possibly because they like having a menu of options to choose from for each question. Professors benefit from the objective scoring that can be easily performed by

machines or computers. Unfortunately, the authenticity of this popular assessment method is threatened by AI products that are highly successful at answering multiple-choice questions. For example, Virtualprofessor.io offers a web browser plug-in that accurately answers multiple choice questions delivered through web browsers. The student highlights the question on the screen, then the virtualprofessor.io AI system provides the answer.

The general strategy for upholding the authenticity of multiple-choice exams is to control the testing environment. For traditional classes, tests can be taken on paper in a classroom environment in which access to phones, computers, and other technology can be prohibited. Online classes can use proctoring services such as Proctor U to achieve a similar form of restricted access to computer resources.

Another possibility for online classes is to require the use of Respondus Lock-down browser for exams. This software prevents the use of browser extensions and other web browsers during the testing period. The Lock-down browser is another method for controlling the testing environment, but it provides a lower degree of control than a carefully proctored environment. For example, students might look up answers on their phones while taking a test via the lock-down browser.

For the long run, faculty should aim to transition away from multiple-choice tests in unsecured online environments because these assessments can be easily faked with AI. Instead, faculty should consider replacing the multiple-choice testing format with other methods of assessment. These might include writing assignments (including in-class writing), presentations, projects, and other forms of pedagogy that require active learning. Writing projects that last an entire semester have the added benefit of slowly progressing over time in ways that help to prevent abuse of AI technologies.

Recommended practices: Address AI writing enhancement technology

Many students are enthused about Grammarly. This technology is often viewed as a grammar fixer, but it should be more accurately viewed as an AI-powered writing enhancer. It takes rough drafts and rewrites them as more polished AI-text. This results in a mixture of AI with student original work that can be ambiguous to interpret. Grammarly use can cause high AI detection scores on AI detectors because the final product is mostly AI-generated text. Grammarly is a prominent example of this technology, but this rewriting technology is also available in products from Microsoft and Google.

Most students seem unaware that Grammarly is a form of AI technology. When asked, they might swear that they don't use AI for writing their paper, but then admit to using Grammarly when discussing their writing processes. They are narrowly thinking of ChatGPT and similar models as AI while overlooking the presence of AI technology in other products. This student

view likely results from the somewhat misleading marketing of Grammarly as being a mere grammar fixer.

A pedagogical concern is that writing enhancement technologies may promote a composition problem called [overwriting](#): excessive detail and convoluted sentences. Grammarly users can select a writing style voice called “academic” that is geared towards long sentences written at a high reading level. The resulting tortured sentences may “sound academic” to inexperienced students. However, this awkwardness is really the opposite of the clarity and conciseness that are highly valued in academic writing.

It is important to define and communicate your views about writing enhancement technology. Some faculty might allow it as a form of instructional support that gives students feedback about their work that might improve their writing. In contrast, there is some evidence that students who use AI writing enhancement technology are using the technology as a crutch and are failing to demonstrate growth in writing skills. It may be covering up weak writing rather than educating students towards the goal of being a better writer.

Grammarly is not a free product. GSW students have asked for GSW to pay for Grammarly through student government. This request was denied. Instead, we provide writing support technology through Microsoft Word and Turnitin.com’s Draft Coach (an online Microsoft Word add-in). These technologies are free to GSW students through our licensing agreements with Microsoft and Turnitin.com. Faculty are encouraged to promote the use of the Draft Coach technology as a Grammarly alternative. GSW also provides writing support from human beings via the Writing Center.

[Faculty Resources | Georgia Southwestern State University \(gsw.edu\)](#) see Turnitin Draft Coach

[Writing Center | Georgia Southwestern State University \(gsw.edu\)](#)

Recommended practices: Using AI detectors

When AI use is forbidden, the practical challenge of finding AI in student work is raised. Sometimes synthetic text is easy to spot. More commonly though, the presence of AI in student writing is hard to detect. Numerous scientific tests have shown that people are generally very poor at discriminating between human-authored and AI-generated text.

Using AI detection technology is recommended for finding AI-generated text in student submissions. GSW has licensed the use of Turnitin.com, which now includes an AI detection technology. Turnitin gives student work an AI score ranging from 0 to 100% in addition to the traditional match score. The text must be of sufficient length to run this analysis. Short essays might not work.

There are numerous similar AI detection services available, including some that offer a few scans for free.

- [AI Detector | ChatGPT Detector | AI Checker - Copyleaks](#)
- [The Trusted AI Detector for ChatGPT, GPT-4, & More | GPTZero](#)
- [Originality AI Plagiarism and Fact Checker - Publish With Integrity](#)

The interpretation of AI positive results from these detectors requires careful faculty judgement because AI detectors work differently than traditional plagiarism detection. Traditional plagiarism detection can show an exact match between a source and student submission. This is strong evidence of misconduct. In contrast, AI detection is based on quantitative writing style analyses directed towards finding a synthetic writing style. A human analogy would be noting that someone is non-native because they speak English with a foreign accent even though their voice is fluent and easy to understand. The overall implication is that AI detection technology results are a relatively weak form of evidence. A positive score on an AI detection test means that AI use was likely, yet complete certainty is not possible to establish. The key point: AI detectors do not provide indisputable evidence of AI plagiarism.

It has become fashionable for college faculty to declare that they won't use AI detection systems because the results can't be trusted. There is no question that AI detection systems will occasionally flag authentic student writing as AI-generated (false positive errors). The makers of AI detection systems readily acknowledge that the results are not perfect. However, the requirement that a technology must provide 100% certain evidence is an unreasonable standard. Demanding perfection leads to a false dichotomy logical error: Either AI detection must be perfect or it shouldn't be used at all. Instead, a middle-ground approach is more reasonable. AI detection provides useful evidence for upholding academic standards that must be cautiously interpreted in context with other evidence of wrongdoing. Professional judgment also matters. The reservations about false positive errors might be alleviated by recommending that the consequences for high AI detection scores should be frank discussions with students about improper AI use and do-over opportunities instead of punishment. See Fisk (2024) for further exploration of this issue.

Recommended practices: Human detection and analysis

Professors can evaluate abstract dimensions of student work that go beyond the AI detectors. AI-generated submissions often have excellent summaries yet may fail to address critical thinking points and higher conceptual assignment goals. Opinions on controversies may be lacking or the opinions of both sides are merely summarized without taking a position. Submissions that are mostly AI-driven summaries can be faulted for only partly addressing the goals of the assignment.

Look carefully for invented information that might be a sign of AI hallucination errors. The sources may be fabricated. Even terminology is sometimes invented. For example, one of my

student submissions repeatedly used the term “cognitive resonance imaging”: a technology that doesn’t exist.

Another sign to watch for is information coming from unusual or inappropriate sources. For example, student submissions made with AI might ignore terminology from your course while inexplicably using terminology from a related field in another discipline.

Sometimes formatting can provide clues of AI origin. Many AI systems make output in a listicle form. This is an introduction paragraph, three short paragraphs (one to three sentences) that list points like a PowerPoint presentation, then a closing paragraph that reiterates the key points. Sudden shifts of writing style from informal to formal may also be a sign of plagiarized text.

Recommended practices: Discussions with students

Having discussions about acceptable and unacceptable AI uses with students is important. The key concern is possible harm to the learning process. Real learning must be challenging: a concept called desirable difficulties in educational psychology. Accordingly, low-effort approaches to learning, including an over-reliance upon AI, might be harmful to the learning process.

Three top concerns to discuss are ...

- The accuracy problem
 - AI sometimes makes up incorrect answers called "hallucinations" that may be hard to distinguish from accurate answers.
 - AI trained on biased sources (examples: racist, sexist) may repeat these biases in the outputs.
- The dishonesty problem: Using AI technology to generate college work is a form of plagiarism by misrepresenting someone else's work as the student’s own work.
- The personal growth problem: Using AI to do assignments may defeat self-improvement efforts.
 - AI-generated work is low effort, but developing higher-level thinking skills requires a high degree of effort.
 - Technologies that copy the work of others are contrary to the goal of developing our own thoughts, opinions, and reasoning skills.

A useful way to clarify thinking about the appropriateness of AI use is to think of AI as being another person rather than a technology (Mollick, 2024). Here’s an application of this idea that might address the use of AI-powered writing enhancers like Grammarly. Imagine that a student does a crude draft, then gives it to a smart friend (who goes by the initials A.I.) for editing and

polishing. The student turns in the writing that was improved by the friend as their own work. No acknowledgment was given about the friend's writing contribution. Would this student-friend collaboration be acceptable? The reason why this anthropomorphic reasoning works is that human beings have a strong sensibility regarding social interactions. Framing student-AI interactions as working with a friend may unlock a new perspective on the ethics of AI use.

The widespread introduction of AI has not eliminated academic standards. When students turn in assignments, the basic assumption is that the submission is their own work, not the work of other people or technologies. Writing that comes from others must be in quotation marks if a direct quote is used. Paraphrased information and direct quotes also need accurate citations and references. A second issue is that unauthorized collaborations are forbidden. Extensive use of AI in student assignments could be considered a form of human-technology collaboration.

Recommended Practices: Responding to Inappropriate AI Use

When AI use is evident, tell students they have a high AI detection score. Ask how this could have happened. Ask if they used Grammarly. Ask about their work processes. These conversations can trigger deeper learning through an evaluation of fundamental assumptions about writing.

The traditional response to academic integrity violations was punishment: Failing grades and referrals to student misconduct boards. With AI, some faculty have expressed reservations about punishment for AI plagiarism given that AI detection technologies fail to meet the standard of absolute certainty.

Instead of punishment, consider emphasizing student writing growth and personal growth. Redoing an assignment might be a valuable learning experience. The offending student can redo everything highlighted as possible AI text from the AI detection results. Another suggestion is that students with weak writing skills should seek assistance from Writing Center tutors rather than relying upon AI technology to cover their weakness.

Faculty should prepare for possible AI misconduct by taking the proactive steps of defining problematic AI use and discussing ethical issues with their students. There are no clear cultural or institutional standards at the present time, so the professor needs to fill this void. The actions taken to address inappropriate AI use will critically depend on how the professor defined appropriate uses in their policies. When acceptable and unacceptable uses are undefined, it is difficult to judge what constitutes inappropriate use, thereby weakening faculty responses to misconduct situations.

John Wilson's Libguide on academic integrity: <https://libguides.gsw.edu/c.php?g=1414036>

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