## GUIDANCE: ADDRESSING ARTIFICIAL INTELLIGENCE AND ACADEMIC INTEGRITY

Like many institutions, we are collectively learning how best to respond to the evolving challenges and opportunities AI presents in our classrooms. The development of effective AI tutors is one example of how this technology can be very supportive of learning within your class. In addition, expectations placed on our students post-graduation suggest that the ethical and effective use of AI must now be an important college learning outcome. To learn more about the many ways these tools can be used positively in the classroom, we encourage you to visit a resource created by Clemson's Office of Institutional Effectiveness and our libraries<sup>1</sup>.

While AI tools can support learning and the appropriate use of AI is an important learning outcome for students, these tools also challenge traditional definitions of academic originality and authorship, especially when they are used without transparency. Navigating these tensions is now key to providing a quality university education that supports academic integrity, and we at Clemson are not alone in addressing this challenge. Our team's sincere hope is to work together with you and share some guidance that we hope will be helpful. If you have found other approaches particularly valuable in maintaining academic integrity in this age of AI, please reach out so that we can share them with others.

The guidance provided below may be grouped into two categories:

- Preventative Seeking to intervene in student use of AI before a violation occurs
- Reactive Managing situations in which you suspect a violation has occurred

Preventative Approach 1: Clarify expectations early and often

You have likely already taken the initial step that we typically recommend, which is to clearly describe to your students your expectations and class policies regarding the use of AI. As you know, your course AI policy is a required component of your syllabus, and guidance has also been provided to help you design these course policies<sup>2</sup>. Beyond the syllabus, it can also be helpful to discuss with your class how these course policies support their education and success. You may also consider repeating or referencing these expectations and limits on the actual assignments or exams. In this way, your expectations are 'front and center' when the students engage in their coursework.

Helpful tips for communicating your expectations regarding AI:

- Clearly describe to your students your expectations and class policies regarding the use of AI.
- Let the students know that you personally understand the value of such tools, and that learning how to use these tools effectively and ethically is an important outcome of their college education.
- If you use AI for anything, sharing this example can further emphasize to students that you understand the value of these tools.
- Explain that there are also risks to their education associated with these tools
- Describe the limits you place on the use of AI in your class, and <u>how these limits</u> are intended to mitigate the risks associated with these tools.
- Explain how the limits that you place on the use of AI in the classroom support students in their current and future success.
  - Consider whether the limits you are imposing also likely to apply in a post-graduation professional context for these students. If so, this can be one reason why working within these limits in class is helping to prepare them for professional success later.
- Point students to AI Literacy resources that teach them about appropriate uses of AI such as the Libraries Canvas Course<sup>3</sup>.

## Preventative Approach 2: Design assignments with AI in mind

It is possible to design assessments that are less compatible with generative AI problem-solving. While we understand this can be burdensome, please remember that your Office of Teaching Effectiveness and Innovation (OTEI) can help.

Tips for designing assignments with AI in mind:

- Assess intermediate stages of work.
- Assess student reflections on the process of completing the assignment.
- Integrate AI into the assignment by asking students to critically analyze and evaluate the output of AI tools.
- Create assignments that are based on each student's individual past experiences or are based on in-class discussions that an AI would have difficulty integrating into its response.
- Create assignments that tie directly to real-world applications, where students can quickly understand the relevance and value in engaging in the assignment without AI support.
- Create assignments that have an 'oral defense' component to them, or (in the case of written assignments) require students to submit their version history with the assignment.
- Provide in-class/proctored assignments when appropriate.

Additional resources are available to help you consider the redesign of assignments in the age of generative AI<sup>4</sup>.

## Preventative Approach 3: Consider ways to address the pressures to cheat

It is valuable to remember that the vast majority of students who cheat do so not out of indifference but because of the enormous pressure they are under. Not all of this pressure is necessarily academic, but there are steps we can take on the academic side to reduce the frequency of cheating:

- Encourage and periodically remind students to visit you during your office hours if they need a little extra help or just want to put themselves in the best position to excel in the course.
- Occasionally remind students to speak with their academic advisor to learn more about other university academic support resources that might further enhance their academic success.
- Ensure that students are aware of resources to help them develop or improve their time-management skills can have <u>very</u> positive impacts on both integrity and learning<sup>5</sup>.
  - o Examples of these resources include the Avoiding Plagiarism Canvas Course provided by the Libraries.
- Teach students ethical and appropriate uses of AI. The Libraries provides resources that can support a deeper understanding of AI Literacy.

Reactive Approach: What to do if you suspect a student of unauthorized AI use

Finally, let's talk about <u>reacting</u> to a specific student who may submit work produced through the unauthorized use of AI. If you feel that you have evidence that a student submitted such unauthorized work as their own, please reach out to our team and we can move forward with a formal academic integrity violation charge.

From our team's experience in this area, it seems that integrity hearing boards (who review such charges and are comprised of faculty and students) are looking for something other than the results of an AI detector. Research is showing that such detectors are not reliable enough or transparent enough to be the only evidence supporting an academic integrity charge, and universities are establishing guidelines that discourage such use of AI detectors<sup>6-11</sup>. Instead, evidence in support of unauthorized AI use might include (but are not limited to):

- 1) Clear hallucinations in the assignment, such as references that do not exist, and/or
- 2) Inclusion of material that was not part of the course... perhaps something that is far too advanced or too esoteric/obscure, which suggests an AI or other source was used to create the assignment, and/or
- 3) Identifying distinct "voices" in a single assignment that might indicate different sources for different portions of the assignment, and/or
- 4) Sentences or paragraphs that are abruptly terminated or oddly formatted.

While AI detector results alone are not sufficient to support an academic integrity charge, you may find that such results are useful in starting a constructive (rather than punitive) conversation between you and the student. Consider the following tips for such a conversation:

- Start such a conversation with questions that are based in genuine curiosity rather than a means to extract a confession.
- Ask the student to describe the different steps (or strategies) that you took when doing this assignment.
- Ask the student whether they believe AI could be a valuable tool when working on an assignment such as this.
- Ask the student whether they believe that at least some applications of AI to an assignment like this might result in learning less in a class.
- Ask the student whether they have considered time-management techniques or other strategies that might help reduce the temptation to use AI in a way that would negatively impact their learning.

We understand that addressing the topic of AI and academic integrity can be discipline-specific and complicated. We hope that at least some of the information above might be useful to you as you navigate this complex and important topic in your class. Our team's sincere hope is to work together with you and share some guidance that we hope will be helpful. If you have found other approaches particularly valuable in maintaining academic integrity in this age of generative AI, <u>please</u> reach out so that we can share them with others. We are happy to help in any way that we can.

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- 2. https://media.clemson.edu/otei/documents/AI-use-statements.pdf
- 3. https://libraries.clemson.edu/teaching/tutorials/
- 4. <a href="https://ynagbxzy.manus.space">https://ynagbxzy.manus.space</a>
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