Instructional Design & Development

"This isn't going to be the last innovation we have to deal with."

ChatGPT

IDD Response

Joe Glover, provost of the University of Florida, quoted in *The New York Times*, 01/16/2023: <u>Alarmed by A.I. Chatbots</u>, <u>Universities Start Revamping How They Teach</u>

This report begins to identify and evaluate the impact that Artificial Intelligence chatbots, such as ChatGPT, can have on teaching and learning at our university. Here are five questions for consideration:

- 1. What are the concerns about students using chatbots?
- 2. What policies, guidelines, and guardrails are in place to preserve academic integrity?
- 3. What AI detection technology exists and what are its limitations?
- 4. What strategies can we use to deter cheating and plagiarism?
- 5. How can AI be used as a tool that supports or enhances learning?

"I don't know about y'all but ima just have ChatGPT take my finals. Have fun studying."

PART 1

What are the concerns about students using chatbots?

TikTok user, December 2022

On TikTok, the hashtag #chatgpt has over 578 million views, and much of the content instructs viewers how to use ChatGPT to write papers, answer test questions, and even get job interviews. Reddit users are not only open about their less than scrupulous use of chatbots but have begun troubleshooting a workaround to some of the new guardrails that AI companies are attempting to put in place, such as watermarks on content created by OpenAI, including ChatGPT.

Clearly, chatbots pose a risk to academic integrity by making plagiarism and cheating easier to do and harder to detect. However, perhaps a more onerous issue with chatbots is their inherent biases. "Al bias, when it replicates and amplifies historical human discriminatory practices, is well documented." (*Insider*, 06/18/2022) By using chatbots to gain a foundational understanding, users are unwittingly gathering information that fails to represent historically marginalized points of view and even uses language that is non-inclusive and/or discriminatory. While chatbot programmers are working to rectify this issue, Al biases continue to be more the rule than the exception.

- <u>Alarmed by A.I. Chatbots, Universities Start Revamping How They Teach</u>. *New York Times,* 01/16/2023
- <u>ChatGPT could be used for good, but like many other AI models, it's rife with racist and</u> <u>discriminatory bias.</u> *Insider*, 01/16/2023
- Don't worry about AI becoming sentient. Do worry about it finding new ways to discriminate against people. *Insider*, 06/18/2022



"Consider placing a statement in your syllabus or on assignments that explicitly stipulates that the use of AI technologies to generate text is not allowed and will be treated as an academic integrity violation."

PART 2

What policies, guidelines, and guardrails are in place?

Villanova University Office of the Provost Guidance on AI Text Generators

Although some universities have banned ChatGPT while they scramble to gather more information and establish clearer policies, many are embracing the new technology while establishing policies that are equally clear to students, faculty, and administrators. As universities seek to include language in their academic integrity policies that is specific enough to establish AI-generated text as plagiarism, but open enough to allow for its use as a learning tool, two questions seem to trend in these higher education discussions:

- 1. How do we define plagiarism and cheating that includes AI-generated "thinking"?
- 2. What guidelines are in place for students to appropriately cite their use of AI without fear of breeching academic integrity?

Wharton School professor Ethan Mollick has included the following language on his courses' syllabi, "AI is a tool, but one that you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI explaining what you used the AI for and what prompts you used to get the results. Failure to do so is in violation of academic honesty policies."

- <u>'Everybody is cheating': Why this teacher has adopted an open ChatGPT policy</u>, NPR, 01/26/2023
- Practical Responses to ChatGPT, Montclair State University
- <u>Guidance on AI Text Generators</u>, Villanova University





PART 3

What detection technology exists and what are its limitations?

Al detection technologies, such as OpenAl Text Classifier and GPTZero, are being developed alongside the rapid expansion of chatbots. They are highly motivated to be accurate and first to market, however, the newness of the technology means no service has been thoroughly vetted and debugged. For example, they don't always recognize Al-generated text as such because the text is too short, or content isn't easily distinguishable between Al-generated text and human-generated text. OpenAl is also working on developing a watermark that would be detected if anyone tries to use OpenAl-generated text as original work. Finally, Turnitin has a product called "Turnitin Originality," which Turnitin states, "can detect some forms of Al-assisted writing and report on indicators of contract cheating." Turnitin is also working towards further Al-detection technology, but without a roll-out date.

UNC does not currently have any technology specifically designed to detect AI-text, however Canvas does have the Turnitin Similarity check for standard plagiarism screening and may be able to expand to AI-text screening as it is developed. Additionally, it is worth noting that within Canvas, instructors can view the Quiz Log tool, which indicates when students leave the quiz page to open new tabs, browsers, etc., and when they return to a question. While this tracking feature does not prove any wrong-doing, it does give instructors information about how a student takes the quiz.

Additional Resources

- <u>A college student created an app that can tell whether AI wrote an essay</u>. NPR, 01/09/2023
- <u>AI writing: The challenge and opportunity in front of education now</u>. Turnitin blog, 12/15/2022.
- <u>A new AI chatbot might do your homework for you. But it's still not an A+ student</u>. NPR, 12/19/2022
- How do I view a quiz log for a student? Canvas Instructor Guides



"Brains are the only things worth having in this world."

PART 4

What strategies can be used to avoid cheating and plagiarism?

Scarecrow, The Wonderful Wizard of Oz

This section operates on the unfortunate assumption that some students are going to cheat no matter what, and they are going to be able to do so through increasingly sophisticated means. However, for most students, there are strategies to deter them, wittingly or otherwise, from cheating.

Raising student awareness through policies and practice

As with other citation requirements, instructors can provide guidelines for the appropriate use of Algenerated text. Whether chatbots are prohibited or simply require citation, expectations can be addressed through campus policies, department policies, and on course syllabi. Furthermore, instructors may find it beneficial to provide examples of when and how chatbots can and cannot be used. Helping students understand the limitations of a chatbot, such as inaccuracy and biases are as important as encouraging them to critically evaluate any other academic sources. Several universities, including the University of Buffalo and Furman University, have added AI tools and discussions to their required courses for first year students as part of their overall academic integrity curriculum.

Instructor practices and presence

Many instructors have reported they have changed the way they structure their class time to require students to engage in more "in-class" thinking. While this strategy may be adequate for a face-to-face course, it is not possible for fully asynchronous online course offerings. With 64% of UNC graduate students and 48% of undergrads enrolled in at least one asynchronous course during the fall 2022 term ("2022 Fall Final Enrollment," 2023), additional strategies need to be considered. Some teaching practices that are being transformed with the surge of AI include more problem-solving activities, student demonstrations, more group work, and more connections to students' personal experiences and current events. Additionally, some instructors have chosen to focus on the more nuanced elements of a topic that only humans would recognize, at least for now. Montclair State University has updated its



<u>Office for Faculty Excellence page</u> to include some practical tips in response to ChatGPT, including making adjustments to the "Assignment Design."

The most important detector and deterrent of any form of plagiarism is *instructor presence* in his/her/their classroom. Whether a physical or virtual presence, the more instructors know their students and the more they engage in scholarly dialogue, the easier it is for an instructor to spot academic dishonesty.

- <u>All my classes suddenly became AI classes</u>, Ethan Mollick, Wharton School
- Practical Responses to ChatGPT, Montclair State University



"Let's talk about it among us human beings."

PART 5

How can AI be used as a tool that supports or enhances learning?

For all its limitations and causes for concern, AI is still a powerful tool that we will continue to use as the technology is further developed and improved. So, educators have two options, attempt to prohibit it, or learn to embrace it as a learning tool. This section identifies ways in which educators and educational institutions are embracing AI in their curriculum.

AI Curriculum

MIT has developed the <u>DAILy Workshop</u> Curriculum, which is an open source curriculum full of practical activities that explore "AI concepts, ethical issues in AI, creative expression using AI, and how AI relates to your future." A computer science class at the Young Women's Leadership School in the Bronx now includes critiquing chatbots as part of the curriculum to improve students' coding skills.

Critical Thinking Skills

Perhaps one of the greater values of embracing and embedding chatbots into the curriculum, is that they can serve as a starting point for dialogue. Instructors are beginning to embrace the AI-generated text as a baseline for learning or a framework for discovery. Viewing AI as the starting point and not the finished product shifts the conversation from a concern about academic integrity to an exploration of a tool that promotes inquiry, curiosity, and critical thinking.

Some instructors have generated their assignment prompts in ChatGPT to share with their students, with the attitude of: *this is what a robot can create – now what can you do better?* Current chatbots have extensive limitations, particularly in providing multiple points-of-view. Critically investigating what the chatbots got right, but also what they missed can serve to strengthen students critical thinking skills. Furthermore, students can also use chatbots to get feedback on their original works in real time, which can support their revision process.



- <u>AI Text Generators and Teaching Writing: Starting Points For Inquiry</u>. WAC Clearinghhouse
- <u>At This School, Computer Science Class Now Includes Critiquing Chatbots</u>, New York Times, 02/06/2023
- Don't Ban ChatGPT in Schools. Teach With It. New York Times, 01/12/2023



Students First

APPENDIX

Practical suggestions from IDD

This appendix situates the trends and findings of AI-generated text within UNC's Strategic Vision by offering some practical uses of AI in the classroom.

Students First

The burden of generating ideas does not need to land solely on instructors. In a learner-centered environment, instructors and students alike can explore the landscape of ChatGPT together and deepen their understanding of how it works and its limitations. Furthermore, through guided inquiry with the expertise of instructors, students and teachers together can potentially build open educational resources that are more affordable and relevant.

Empower Inclusivity

Through recognizing that AI-generated text is biased because it pulls content from a digital collection of mostly dominant voices, students can critique the content and identify what biases exist and what voices are not represented. Furthermore, students can improve the future of AI by generating their own responses that include marginalized points-of-view, and then publish that content, so that the next iteration of AI-generated text will pull form more diverse content and perspectives.

Enhance & Invest

Students and faculty need a framework for understanding how and where AI fits into the educational environment. As with any new technology, mistakes will be made, so establishing guidelines that include an appeals process allows for exploration of new technology where mistakes and unintentional misuse



are not stigmatized, but rather embraced as part of the learning process. By taking the time to establish clear guidelines, students and faculty can be confident in exploring and learning.

Innovate & Create

Prompting ChatGPT to generate a process to solve problems as a framework for evaluating problem solving processes, students can look critically at what AI generated. Does the chatbot solution work universally or only in certain scenarios? Is the solution the most efficient solution? How can it be modified or improved? While this use lends itself to math and science, it certainly has other practical applications in the arts. Using a variety of prompts, learners can compare and test solutions, encouraging further critical thinking and innovation.

Connect & Celebrate

Al-generated content lends itself to activities in building community by generating relevant meaning through the collective use of chatbots to define and interrogate. Al-generated texts lend themselves to collective annotation and social construction of knowledge. While AI should not be a substitute for research, it can provide a general framework for exploration through multiple points of view.

