Alarmed by A.I. Chatbots, Universities Start Revamping How They Teach

With the rise of the popular new chatbot ChatGPT, colleges are restructuring some courses and taking preventive measures.

By Kalley Huang
Kalley Huang, who covers youth and technology from San Francisco, interviewed more than 30 professors, students and university administrators for this article.

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While grading essays for his world religions course last month, Antony Aumann, a professor of philosophy at Northern Michigan University, read what he said was easily "the best paper in the class." It explored the morality of burqa bans with clean paragraphs, fitting examples and rigorous arguments.

A red flag instantly went up.

Mr. Aumann confronted his student over whether he had written the essay himself. The student confessed to using ChatGPT, a chatbot that delivers information, explains concepts and generates ideas in simple sentences — and, in this case, had written the paper.

Alarmed by his discovery, Mr. Aumann decided to transform essay writing for his courses this semester. He plans to require students to write first drafts in the classroom, using browsers that monitor and restrict computer activity. In later drafts, students have to explain each revision. Mr. Aumann, who may forgo essays in subsequent semesters, also plans to weave ChatGPT into lessons by asking students to evaluate the chatbot's responses.

“What’s happening in class is no longer going to be, ‘Here are some questions — let’s talk about it between us human beings,’” he said, but instead “it’s like, ‘What also does this alien robot think?’”

Across the country, university professors like Mr. Aumann, department chairs and administrators are starting to overhaul classrooms in response to ChatGPT, prompting a potentially huge shift in teaching and learning. Some professors are redesigning their courses entirely, making changes that include more oral exams, group work and handwritten assessments in lieu of typed ones.

After one of his students confessed to using ChatGPT, Antony Aumann, a philosophy professor at Northern Michigan University, plans to implement new rules, including requiring students to write first drafts of essays in class. Christine Lenzen for The New York Times

The moves are part of a real-time grappling with a new technological wave known as generative artificial intelligence. ChatGPT, which was released in November by the artificial intelligence lab OpenAI, is at the forefront of the shift. The chatbot generates eerily articulate and nuanced text in response to short prompts, with people using it to write love letters, poetry, fan fiction — and their schoolwork.

That has upended some middle and high schools, with teachers and administrators trying to discern whether students are using the chatbot to do their schoolwork. Some public school systems, including in New York City and Seattle, have since banned the tool on school Wi-Fi networks and devices to prevent cheating, though students can easily find workarounds to access ChatGPT.

In higher education, colleges and universities have been reluctant to ban the A.I. tool because administrators doubt the move would be effective and they don't want to infringe on academic freedom. That means the way people teach is changing instead.

"We try to institute general policies that certainly back up the faculty member's authority to run a class," instead of targeting specific methods of cheating, said Joe Glover, provost of the University of Florida. "This isn't going to be the last innovation we have to deal with."

That's especially true as generative A.I. is in its early days. OpenAI is expected to soon release another tool, GPT-4, which is better at generating text than previous versions. Google has built LaMDA, a rival chatbot, and Microsoft is discussing a $10 billion investment in OpenAI. Silicon Valley start-ups, including Stability AI and Character.AI, are also working on generative A.I. tools.

An OpenAI spokeswoman said the lab recognized its programs could be used to mislead people and was developing technology to help people identify text generated by ChatGPT.

At many universities, ChatGPT has now vaulted to the top of the agenda. Administrators are establishing task forces and hosting universitywide discussions to respond to the tool, with much of the guidance being to adapt to the technology.

Faculty at the University of Florida in Gainesville met recently to discuss how to deal with ChatGPT. Todd Anderson for The New York Times

At schools including George Washington University in Washington, D.C., Rutgers University in New Brunswick, N.J., and Appalachian State University in Boone, N.C., professors are phasing out take-home, open-book assignments — which became a dominant method of assessment in the pandemic but now seem vulnerable to chatbots. They are instead opting for in-class assignments, handwritten papers, group work and oral exams.

Gone are prompts like “write five pages about this or that.” Some professors are instead crafting questions that they hope will be too clever for chatbots and asking students to write about their own lives and current events.

Students are “plagiarizing this because the assignments can be plagiarized,” said Sid Dobrin, chair of the English department at the University of Florida.

Frederick Luis Aldama, the humanities chair at the University of Texas at Austin, said he planned to teach newer or more niche texts that ChatGPT might have less information about, such as William Shakespeare's early sonnets instead of "A Midsummer Night's Dream."

The chatbot may motivate "people who lean into canonical, primary texts to actually reach beyond their comfort zones for things that are not online," he said.

In case the changes fall short of preventing plagiarism, Mr. Aldama and other professors said they planned to institute stricter standards for what they expect from students and how they grade. It is now not enough for an essay to have just a thesis, introduction, supporting paragraphs and a conclusion.

"We need to up our game," Mr. Aldama said. "The imagination, creativity and innovation of analysis that we usually deem an A paper needs to be trickling down into the B-range papers."

Universities are also aiming to educate students about the new A.I. tools. The University at Buffalo in New York and Furman University in Greenville, S.C., said they planned to embed a discussion of A.I. tools into required courses that teach entering or freshman students about concepts such as academic integrity.

"We have to add a scenario about this, so students can see a concrete example," said Kelly Ahuna, who directs the academic integrity office at the University at Buffalo. "We want to prevent things from happening instead of catch them when they happen."

Other universities are trying to draw boundaries for A.I. Washington University in St. Louis and the University of Vermont in Burlington are drafting revisions to their academic integrity policies so their plagiarism definitions include generative A.I.

John Dyer, vice president for enrollment services and educational technologies at Dallas Theological Seminary, said the language in his seminary's honor code felt "a little archaic anyway." He plans to update its plagiarism definition to include: "using text written by a generation system as one's own (e.g., entering a prompt into an artificial intelligence tool and using the output in a paper)."

The misuse of A.I. tools will most likely not end, so some professors and universities said they planned to use detectors to root out that activity. The plagiarism detection service Turnitin said it would incorporate more features for identifying A.I., including ChatGPT, this year.

More than 6,000 teachers from Harvard University, Yale University, the University of Rhode Island and others have also signed up to use GPTZero, a program that promises to quickly detect A.I.-generated text, said Edward Tian, its creator and a senior at Princeton University.

Lizzie Shackney, a law and design student at the University of Pennsylvania, said she saw both the value and limitations in A.I. tools. Steve Legato for The New York Times

Some students see value in embracing A.I. tools to learn. Lizzie Shackney, 27, a student at the University of Pennsylvania's law school and design school, has started using ChatGPT to brainstorm for papers and debug coding problem sets.

"There are disciplines that want you to share and don't want you to spin your wheels," she said, describing her computer science and statistics classes. "The place where my brain is useful is understanding what the code means."

But she has qualms. ChatGPT, Ms. Shackney said, sometimes incorrectly explains ideas and misquotes sources. The University of Pennsylvania also hasn't instituted any regulations about the tool, so she doesn't want to rely on it in case the school bans it or considers it to be cheating, she said.

Other students have no such scruples, sharing on forums like Reddit that they have submitted assignments written and solved by ChatGPT — and sometimes done so for fellow students too. On TikTok, the hashtag #chatgpt has more than 578 million views, with people sharing videos of the tool writing papers and solving coding problems.

One video shows a student copying a multiple choice exam and pasting it into the tool with the caption saying: "I don't know about y'all but ima just have Chat GPT take my finals. Have fun studying."