What it means now that AI/ML is available on campus

Introduction

Last fall, George Washington University (GW) faculty realized a few students had improperly used generative artificial intelligence (AI) for their work. Rather than ban the technology, the institution approached it as a teachable moment — and not just for students.

"We had a gap we needed to fill," says Provost Christopher Alan Bracey. "Faculty, staff, and students are all learning at once what AI can and can't do and the potential impact."

Other institutions need to take a similar approach, says Mark Hampton, executive education advisor for Amazon Web Services (AWS). "There's a lack of understanding about how much AI and machine learning (ML) are already part of our lives," he says. "It's here, and it's about us establishing where it's appropriate and good, where it can get better, and how it empowers humans in each step to do their jobs better."

Shifting the focus

AI/ML tools are not new in higher education. "AI has automated some of the more routine tasks, which can allow staff to spend their time more strategically," Bracey says. At GW, AI powers chatbots that respond to routine student questions and generate web content.

But generative AI presents totally new use cases and concerns. As one example, the technology can mimic human writing, which students can potentially exploit when completing assignments.

Hampton says that while these concerns are valid, cheating and misuse of technology is not a new issue. Instead, higher education leaders should look at how these tools can enhance learning and encourage students to use them in appropriate ways.

Institutions are also exploring how to use AI to measure student performance and progression. Analytics have largely been based on historical data involving student performance. AI/ML can harness large amounts of unstructured and often unused data to produce proactive insights based on even larger sets of historical data and real-time information.

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Changing the conversation

Higher education leaders must first change the larger generative AI conversation. For GW, a handful of cheating incidents in fall 2022 drove discussions about generative AI — but not for long. "Our starting point was to flip the conversation," Bracey says. "The debate is much larger than whether the use of generative AI should constitute cheating. It was about harnessing a new skillset for larger academic objectives."

GW released guidance on AI use ahead of spring exams. The guidance encourages instructors to outline their specific expectations about AI use in their syllabi. "We want faculty and students to use generative AI and be explicit about when it's appropriate to use it," Bracey says.

The guidance also states that all work submitted for evaluation must be the student's own intellectual property, whether it's code, written responses, or ideas generated in part or completely by generative AI. The guidance defines violations as cheating under the university's code of academic integrity.

The university is now considering guidance to encourage greater emphasis on students providing citations and drafts and describing their work in public forums, as well as greater use of plagiarism-detection tools.

"We didn't simply adopt a policy. We found a GW way to address AI," he says. "I suspect other institutions will want to do the same because of their own cultures."

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Strategies for success

Institutions can look to GW's real-world experience with generative AI for current best practices, which include:

■ **Develop guidance.**
Establish a task force or group with broad university representation to create guidance around appropriate AI use. This approach shifts the conversation toward more productive use of AI/ML on campus.

■ **Provide support.**
GW's libraries and academic innovation team helps educate staff and highlights opportunities to use AI/ML. "We weren't fearful about AI because we had people who could translate what its implications might be for us," Bracey says.

■ **Use the right talent.**
Data scientists are an essential part of constructing the right questions and data sets for AI/ML. Institutions may have in-house resources in institutional research offices or academic departments, but they should consider hiring or contracting if they plan to focus extensively on advanced analytics.

■ **Examine new forms of data.**
Think about information — such as real-time data about student activity in learning management systems and campus settings — that could be useful for sophisticated data analysis down the road. "A lot of things we're throwing away can provide insights," Hampton says.

■ **Leverage technology partners.**
Seek partners with tools that can help build models and visualizations and who work with comparable institutions. "Make sure you start with the problem you're trying to solve, then work backwards to the solution, tools, and partners," Hampton says.

■ **Ensure transparency.**
It's important to determine how you will use the data you collect and communicate about it with your students, faculty, and staff.

■ **Prepare for rapid change.**
"I view generative AI like the calculator," Bracey says, noting the calculator was first banned in classrooms and later embraced. "It's accelerating at a logarithmic pace. It behooves every institution to get on top of this now and not wait."

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