

# Research Corner

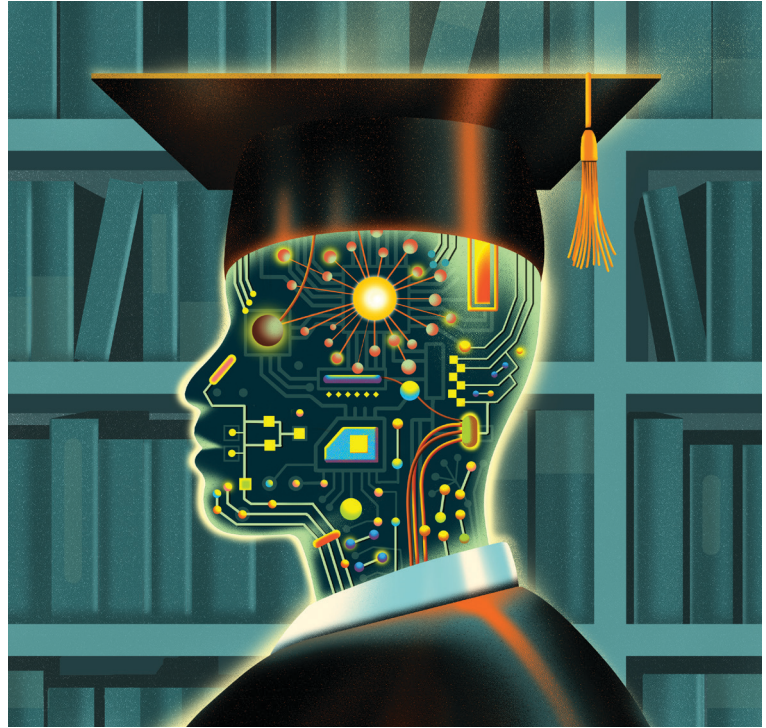
Studies and analysis from the world of liberal education

## A NEW ERA OF HUMAN THINKING

How is AI reshaping higher education?













Since the debut of ChatGPT in November 2022, generative artificial intelligence tools (GenAI) have been all the buzz at colleges and universities. Reactions have ranged from concerns over cheating to enthusiasm for technology that could aid learning. But what are educators actually experiencing? To get a clearer picture of GenAI's current effects and future impact on teaching and learning, the American Association of Colleges and Universities (AAC&U) partnered with Elon University's Imagining the Digital Future Center to query higher ed leaders on what they are seeing on their campuses. More than 330 university presidents, chancellors, provosts, rectors, academic affairs vice presidents, and academic deans responded to the survey, which was conducted between November 4 and December 7, 2024.

AAC&U's C. Edward Watson and Elon University's Lee Rainie detail the survey results in the report *Leading through Disruption: Higher Education Executives Assess AI's Impacts on Teaching and Learning*. The hope is that the findings empower faculty and administrators as they help their campuses navigate technological innovations. Here are some of the highlights from the report.



### GenAI in practice

Besides large language models like ChatGPT, Gemini, Claude, Llama, and Pi (which can comprehend and generate language and other content), some of the most popular tools among students, faculty, and administrators include:

- |  |   |
|--|---|
|  <b>Copilot</b> (writing, image generation) |  <b>NotebookLM</b> (research)                                    |
|  <b>Grammarly</b> (writing)                 |  <b>TurboLearn AI</b> (study tools, practice tests, flash cards) |
|  <b>QuillBot</b> (writing)                  |  <b>Cactus AI</b> (study assistance)                             |
|  <b>OneNote</b> (notetaking)                |  <b>Wolfram Alpha</b> (math learning)                            |
|  <b>Otter.ai</b> (notetaking)               |  <b>Canva</b> (presentation and design)                          |
|  <b>Elicit</b> (research)                   |  <b>DALL-E</b> (image generation)                                |

GenAI tools are transforming higher ed by providing:

- Student support via chatbots and tutoring
- Content creation for lectures and study materials
- Research assistance and data analysis
- Administrative task automation
- Accessibility improvements for diverse learners
- Automated grading and personalized feedback




**45%** of higher ed leaders think the impact of GenAI on their institutions over the next five years will be more positive than negative.


**ONLY 2%** of higher ed leaders think that a clear majority of their faculty members are well prepared to use GenAI tools in their teaching.


### Faculty gap

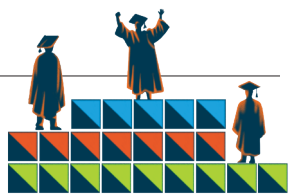
83% of higher ed leaders say they use GenAI tools but report that less than 40% of faculty do. Most leaders estimate that at least half of their students use GenAI tools for coursework. Most common uses among leaders include:

 Summarizing research papers, meeting notes, survey data, and lengthy documents

 Analyzing information by feeding unstructured data and datasets into Gen AI tools to seek insights into qualitative data trends and student feedback

 Drafting emails, letters of recommendation, speeches, policies, reports, and marketing materials

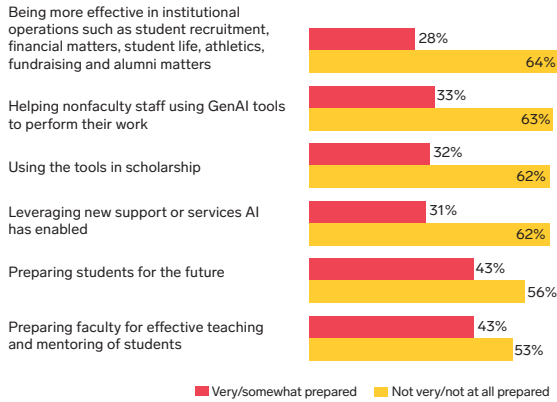
 Brainstorming course descriptions, outlining presentations, generating research topics, and synthesizing policy options



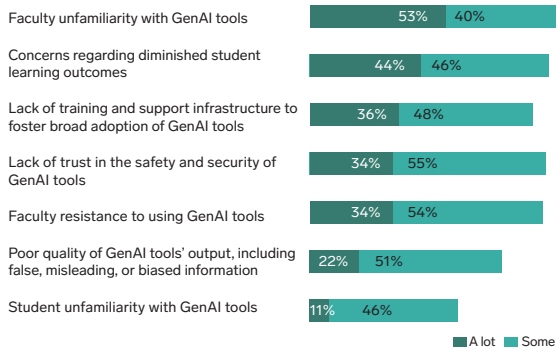
## Is your campus ready?

More than a third of leaders say their institutions are behind in using GenAI tools compared to their peers. 56% of leaders say their institutions are not ready to prepare students for AI-driven jobs, and 59% say spring 2024's graduates were unprepared for roles requiring AI proficiency.

### How prepared do you feel your institution is to use GenAI tools effectively for these purposes?



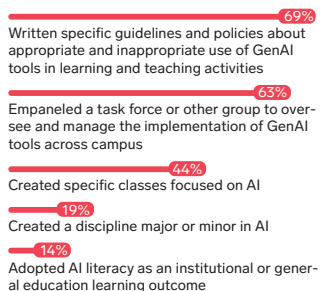
### To what extent do you think the following are challenges to adopting GenAI tools in existing courses at your institution?



## Investments and curricular adaptations

Larger institutions are leading in overseeing GenAI implementation across campuses and developing courses in AI. Smaller institutions are focusing on policies about appropriate use of GenAI tools. 63% of institutions are spending more on personnel, hardware, and software for GenAI integration.

### Have you done any of the following at your institution in response to the rise of GenAI tools?



## More change is on the way

**48%** of leaders anticipate major changes to their institution's teaching model over the next five years.

**35%** of leaders say in the next five years their campus will likely offer a lot or some self-paced and personalized instruction to students built around GenAI tools.

**91%** of campus leaders expect GenAI to enhance and customize learning experiences.

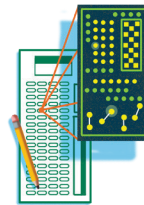
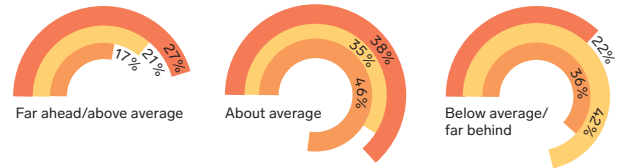
**75%** predict improvements in students' research skills.

## Peer perceptions

% of institutions in each category by enrollment size that rate their use of GenAI tools this way, compared with other institutions

How colleges and universities see their performance with GenAI tools compared with other institutions

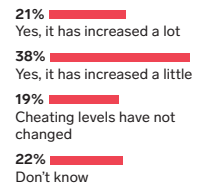
Far ahead/above average About average Below average/far behind



## Cheating concerns and faculty challenges

59% of leaders say cheating has increased since GenAI tools became widely available, with 21% noting a significant increase. Students are finding myriad ways to leverage GenAI to write papers, complete assignments, take tests, and circumvent intended learning outcomes, often putting them at odds with academic integrity policies. But faculty, say 54% of campus leaders, are struggling to detect AI-generated content, particularly as cheating-detection tools are proving inadequate.

### Has cheating increased on your campus since GenAI tools became widely available?



## Role in society

45% of leaders say the impact of GenAI in the broader society will make the public feel more positive than negative about colleges and universities.

**24%** say GenAI tools will enhance the role colleges and universities play in society.

**15%** say GenAI tools will diminish the role colleges and universities play in society.

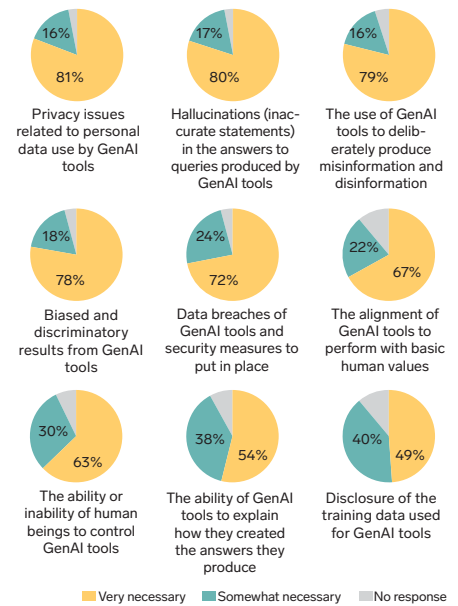
**62%** say GenAI tools will enhance some aspects of the role colleges and universities play in society and diminish others.



## A matter of ethics

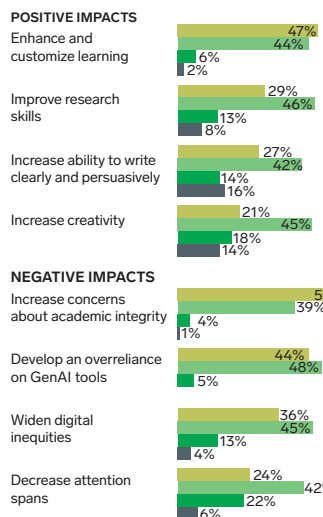
A majority of higher ed leaders think ethical issues tied to GenAI need to be taught in the classroom.

### How necessary do you feel it is that the following issues be addressed in classroom discussions and activities?



### To what extent do you believe GenAI tools may impact future students when it comes to these aspects of their academic lives?

A lot Some Not much Not at all



## Steps for leaders

- > Investigate the risks and rewards of AI.
- > Provide professional development for faculty and staff around AI.
- > Create jobs and allocate money to implement AI.
- > Test and validate new AI processes.
- > Infuse AI literacy and ethics throughout the curriculum.

## LEARN MORE

Leading through Disruption: Higher Education Executives Assess AI's Impacts on Teaching and Learning [aacu.org/ai-disruption](https://aacu.org/ai-disruption)