



Implications of AI for Higher Ed and the Future of Work

New Presidents Intensive
June 2025

The Key Question for This Discussion

What is my role as president in shaping my institution's approach to AI?



Seven Challenges in Leading AI Strategy

The Critical But Limited Role of the President

1. The president is never the most knowledgeable person on campus about AI
2. As president you have your own personal biases when it comes to AI
3. The technology and its use cases are evolving more rapidly than anyone can keep up with
4. You probably do not have a robust overall institutional strategy that would support your AI strategy
5. Even if you had a clear AI strategy, you can neither require nor prevent the use of Gen AI by individuals in your community
6. On your campus you have thousands of individuals with different goals, fears, perspectives, and levels of comfort with AI
7. You have limited time and money to invest in AI

The president's job is to facilitate the creation of a high-level vision, create a governance framework, and incentivize behavior that aligns with your university's strategic priorities



The Known Unknowns for Gen AI in Higher Education

THE KNOWN UNKOWNS OF AI IN HIGHER EDUCATION

- 1 Will AI eliminate entry-level jobs or just change the skill requirements?
- 2 Will AI improve learning outcomes or will it lead to the decline of critical thinking?
- 3 Will emotional relationships with AI enhance mental health or worsen it?
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SOMETHING ALARMING IS HAPPENING TO THE JOB MARKET

A new sign that AI is competing with college grads

The New Grad Gap



Source: U.S. Census Bureau and U.S. Bureau of Labor Statistics, Current Population Survey (IPUMS).

Source: [The Atlantic](#), 2025.

Employers Don't Actually Know What They Want



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Generative AI Can Be Broken Down into Many Distinct Skills

- Artificial Video Generation
- Sentiment Analysis
- Stable Diffusion
- Claude
- Model Output Evaluation
- Anomaly Detection
- Conversational AI
- Transparent AI Use
- AI Bias
- Retrieval Augmented Generation
- Image Recognition
- Datarails FP&A Genius
- Hallucination Detection
- Microsoft Copilot
- AI Plugins
- Instruction-tuning
- AI Ethics
- Guardrails
- Data Privacy for Prompting
- Ambient AI Scribes
- Deterministic Models
- Gen AI Data Requirements
- Enterprise AI
- Automated Claims Processing
- AI Speech Generation
- AI Based Credit Scoring
- Benchmarking
- Automatic Speech Recognition
- Hyperparameters
- Collective Learning
- Discriminative Models
- Recursive Prompting
- Tokenization
- AI Temperature

But Language in GenAI Job Postings Remains Vague

71%

of relevant job postings in the past year did not include any other AI keywords beyond "Generative AI" or "ChatGPT"

We're seeking a visionary AI Product Marketing Leader to disrupt marketing and transform customer experiences through cutting-edge AI

As a Senior UX/UI designer you will be responsible for designing solutions that responsibly incorporate generative AI into user experiences and address the goals of our business

Ability to leverage ChatGPT and other AI tools.

Technology enthusiast who is proficient in Microsoft Office Suite and has working knowledge of generative AI tools such as ChatGPT

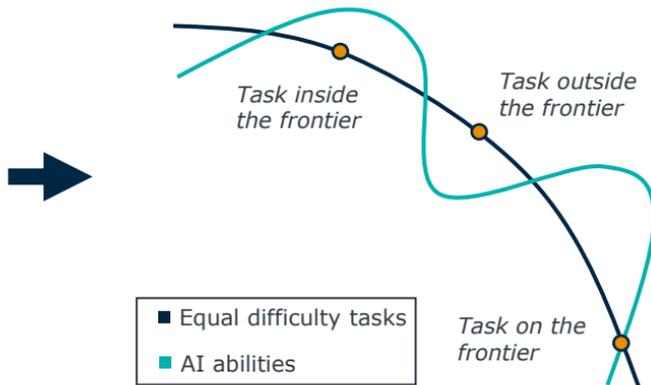
Less Learning a Skill... More Like a New Colleague

The T-Shaped Model Sees GenAI as a Skill to Master



- ▶ GenAI is a skill that can be learned by taking in the right information
- ▶ GenAI is a skill some workers will master and others will not need to use

The Jagged Frontier Sees GenAI as an Intelligence to Understand



- ▶ GenAI is a core competency that every worker needs to possess
- ▶ Workers need to engage GenAI flexibly, adapting as the tools adapt
- ▶ Workers need to know how to manage different GenAI personalities and respond to inconsistent behavior



How to Know When to Delegate

Knowing What Is a Human Task and What Is a Delegated Task

Automation: when GenAI can perform a task completely without human intervention

Tasks Likely to Be Automated

Data Scientist

- Data entry and checking
- Basic coding tasks

Healthcare Admin

- Appointment scheduling
- Billing and coding

Augmentation: when GenAI works in conjunction with humans to amplify human skills

Tasks Likely to Be Augmented

Data Scientist

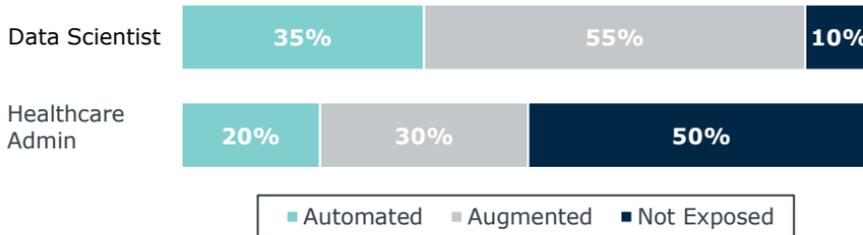
- Data decision making
- Results analysis

Healthcare Admin

- Patient care coordination
- Regulatory compliance



GenAI Exposure and Automation/Augmentation Potential, By Estimated Percentage of Tasks



New Responsibilities Across Fields



Cybersecurity



Before GenAI

Spend time manually evaluating phishing attempts

After GenAI

More time to strategically prepare for future phishing attempts

IT



Before GenAI

Spend time troubleshooting persistent issues and bugs

After GenAI

More time to take on new clients due to GenAI-enhanced solution generation

Marketing



Before GenAI

Spend time designing images in Photoshop

After GenAI

More time focused on content strategy and creative concepts

Nursing



Before GenAI

Spend time updating electronic health records (EHRs)

After GenAI

More time to administer treatments and respond to patient questions

HR



Before GenAI

Spend time screening resumes for the right qualifications

After GenAI

More time developing employee education plans, interviewing candidates

Education



Before GenAI

Spend time grading student work, making lesson plans

After GenAI

More time to focus on students' social and emotional development

Gently Lead the Horse (Employers) to Water



University of Florida Asks Questions to Build Upskilling Demand

Find Employers GenAI Solutions

- ✓ Replace asking employers about the skills they need with questions about **the challenges they face**
- ✓ Use your understanding of GenAI to **recommend solutions**
- ✓ **Differentiate from alternative providers** by providing the company upskilling tailored to their needs
- ✓ Create a **base GenAI module** to minimize new content builds



UF's Partnership With Agriculture Industry



Florida farmers and ranchers reached out to UF for advice on how GenAI is transforming agriculture

UF interviewed farmers, consulted faculty experts, and recommended upskilling based on farmers' specific needs

UF designed the course around 2/3 common, reusable content and created 1/3 of the content custom to the field

"We've worked with twelve companies so far and are anticipating serving more as GenAI advances. Companies very much need to be guided toward integrating GenAI into their work."

David Reed, Associate Provost, University of Florida

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AI and the Homework Apocalypse



Many Faculty Are Not Yet Willing or Able to Integrate GenAI Into Their Teaching

Majority of Faculty Are Skeptical About the Value of AI

75%

of faculty believe that AI will have a **negative impact on teaching** in the next five years

Many Faculty Simply Refuse to Allow AI in Their Classroom

42%

of instructors completely prohibit their students from using generative AI

Representative Responses to Northeastern University's Faculty Survey on AI, 2024

"What additional support would enhance your integration of AI in teaching and research?"

*"Requiring students to turn in assignments through an **AI checker** as well as a plagiarism checker."*

*"I only want to use it in the context of **detecting AI**-written student papers."*

*"The university should provide tools to faculty members for free to **detect the use of ChatGPT** in students' e coursework."*

*"Support deep learning rather than defending deep faking. Provide **AI detection tools**."*

*"Students have been using ChatGPT to **cheat**. This has been a major problem."*

*"**Ban it.**"*



Does Gen AI Help or Hurt Learning Outcomes?



Competing Evidence

Accelerated Learning

“We find that students learn more than twice as much in less time when using an AI tutor, compared with the active learning class. They also feel more engaged and more motivated. These findings offer empirical evidence for the efficacy of a widely accessible AI-powered pedagogy in significantly enhancing learning outcomes, presenting a compelling case for its broad adoption in learning environments.”

“AI Tutoring Outperforms Active Learning” (May 2024)

Cognitive Offloading

“While LLMs offer immediate convenience, our findings highlight potential cognitive costs. Over four months, LLM users consistently underperformed at neural, linguistic, and behavioral levels. These results raise concerns about the long-term educational implications of LLM reliance and underscore the need for deeper inquiry into AI's role in learning.”

“Your Brain on ChatGPT” (June 2025)

Emphasize Faculty Engagement Not Adoption



Critical Engagement with AI is the First Step to Reducing Unethical Use

“

Engaging with AI doesn't equal adoption... AI literacy isn't advocating for a specific position about AI—far from it. Rather, it aims to inform users and equip them with knowledge while removing the hype around these tools that are often marketed as magic to our students.

*Marc Watkins
Assistant Director of Academic
Innovation, University of Mississippi*



Know what tasks generative AI does well...and what it's really bad at



Get familiar with ethical AI use and the risks of using AI tools



Understand what makes it easy for students to use AI unethically



“Future-proof” classroom assignments and assessments

Common Barriers to Faculty Engagement



Four Unconscious Assumptions Blocking the Path to AI Engagement



Engaging with AI means I must **fully embrace using AI tools**



I must **prevent students from using AI tools** in order to prevent cheating



Adopting AI in class will **open the floodgates** for students to use it however they want



Learning to teach with AI will take **more time** than I have in my schedule

Four New Ways to Think About AI



Challenging Our Assumptions to Become AI Educators

1

Informed skepticism is a critically important faculty perspective on AI

2

Human interaction is the key to addressing unethical use

3

A nuanced **adoption spectrum** from AI-proof to full AI is necessary for classroom learning

4

Free and easy-to-use resources can save you time in teaching and learning with AI

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The (artificial intelligence) therapist can see you now

APRIL 7, 2025 · 7:00 AM ET

HEARD ON ALL THINGS CONSIDERED

By [Katia Riddle](#)

Your Compassionate Digital Partner

Life's journey can be daunting but remember that you aren't alone. Therabot is here to support you, offering encouragement, resilience, and hope. Together, we will navigate the path ahead.

 Chat
NOW

 Group
Therapy

 Join a
Community

Google AI has better bedside manner than human doctors – and makes better diagnoses

Researchers say their artificial-intelligence system could help to democratize medicine.

“...the AMIE chatbot, based on a large language model (LLM) developed by Google — which has been [focused](#) on deploying AI solutions within the healthcare sector — **was more accurate than the physicians** in diagnosing, among other ailments, both respiratory and cardiovascular conditions. Compared to the doctors, the **AI system also scored higher on empathy**.

Google’s healthcare **AI ranked higher than human physicians across 24 of 26 conversational axes**, according to the patient actors in the study, who reported that AMIE outperformed across areas like politeness, coming across as honest, explaining the condition and treatment, and expressing care and commitment.”

She Is in Love With ChatGPT

A 28-year-old woman with a busy social life spends hours on end talking to her A.I. boyfriend for advice and consolation. And yes, they do have sex.



“We find significant risks...”

Measuring the Downsides of Gen AI Companions

“LLM-based systems are being used as companions, confidants, and therapists, and some people see real benefits,” said Nick Haber, an assistant professor at the Stanford Graduate School of Education, affiliate of the Stanford Institute for Human-Centered AI, and senior author on the new study. “But we find significant risks, and I think it’s important to lay out the more safety-critical aspects of therapy and to talk about some of these fundamental differences.”

“Exploring the Dangers of AI in Mental Health Care”
(June 2025)

A Different Role for AI in Supporting Counselors



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Nebula: ICare¹ Advising Application for Social Support Staff

Problem: Four ICare support staff spend 30-60 minutes doing background research before meeting with distressed students

- ▶ **Creates background summary notes** about students using OpenAI's API² and leveraging Ithaca's data Lakehouse
- ▶ Trained to **collect student information from systems** like SIS³, Housing, Learning Management, and Student Success

Results:



+150

Additional students that staff can meet with in an academic year



Why Ithaca College Chose to Scale the Nebula Pilot



Lower Risk

- Not directly student-interfacing
- Staff maintain all decision-making regarding students



Solves Scoped Problem

- ICare staff overwhelmed with existing workload
- Rated pilot highly



Cost Effective

- Significantly cheaper than comparable vendor solutions
- Processing costs ~\$17 for 5,000 student records

1) Ithaca College Awareness, Response, and Education (ICare) team.

2) Application programming interface.

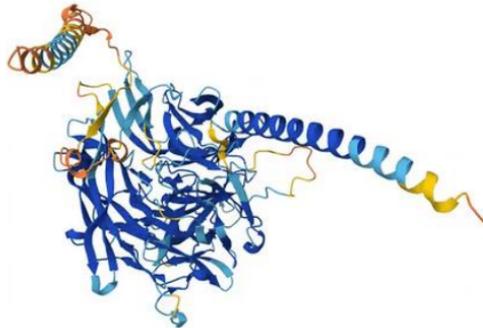
3) Student information system.

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Did AI Solve the Protein-Folding Problem?

Now that AlphaFold has tackled biology's greatest challenge, scientists can turn to even bigger questions



But Is It Really Research?



Concerns that AI “Research” Misses Key Aspects of the Discovery Process

“We find that current GenAI can make only incremental discoveries but cannot achieve fundamental discoveries from scratch as humans can... Therefore, current GenAI is good only at discovery tasks involving either a known representation of the domain knowledge or access to the human scientists’ knowledge space.”

“Generative AI Lacks The Human Creativity To Achieve Scientific Discovery From Scratch” (March 2025)

The Fractured Foundations of the Research Enterprise 28

Problems Were Apparent Even Before ChatGPT

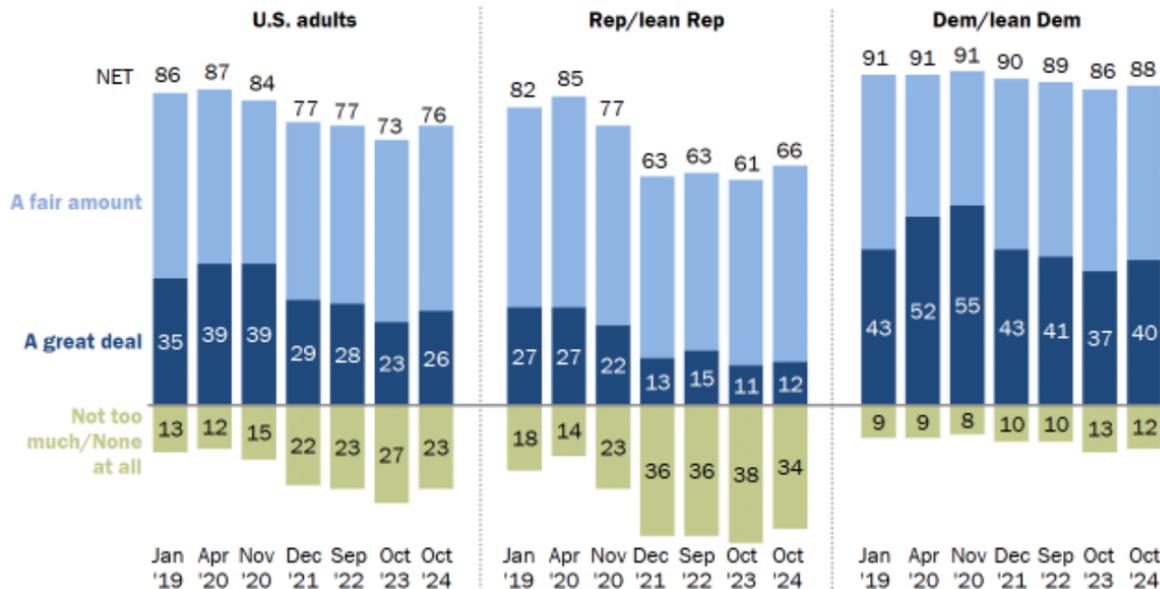
- Nearly three-quarters of biomedical researchers believe there is a reproducibility crisis in science ([Nature](#))
- An estimated 18% of statistical results in peer-reviewed articles in psychological journals are incorrectly reported ([PNAS](#))
- More than 10,000 research papers were retracted in 2023 ([Nature](#))
- Approximately two-thirds of retractions stem from academic misconduct, including plagiarism, data fabrication, and falsification ([Nature](#))
- Differing estimates put the share of paper mill productions between 2% and 20% of published academic papers ([Nature](#))
- Industry-sponsored studies are 30 times more likely than non-industry-sponsored studies to report statistically significant efficacy estimates for drugs ([NAS](#))

COVID Severely Impacted Confidence in Scientists

Major Differences by Political Affiliation

Confidence in scientists remains higher among Democrats than Republicans

% who have ___ of confidence in scientists to act in the best interests of the public



Note: Respondents who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Oct. 21-27, 2024.

"Public Trust in Scientists and Views on Their Role in Policymaking"

Source: <https://www.pewresearch.org/science/2024/11/14/public-trust-in-scientists-and-views-on-their-role-in-policymaking/>

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Don't Expect Instant Productivity Gains



Few Organizations Seeing Rapid Returns to GenAI Investment

96%

of C-suite leaders say they expect the use of AI tools to increase their company's overall productivity levels.

Already, 39% of companies are mandating the use of AI tools, with an additional 46% encouraging their use

77%

of employees say AI tools have actually decreased their productivity and added to their workload

Nearly half (47%) of employees say they have no idea how to achieve the productivity gains their employers expect

Upwork Research Institute Survey of 2,500 global C-suite executives, full-time employees, and freelancers in the U.S., UK, Australia, and Canada, July 2024

USF's AI-Powered IT Service Desk Triage System



USF's AI IT Service Desk

Problem: USF student workers manually sorted 100K tickets annually for USF's IT Service Desk; high volume demanded extensive student labor and attention.

Results



76%

Anticipated reduction in service desk operating costs (\$90K to \$21K)

Key Components



Automated Ticket Classification

Classifies incoming service tickets, automatically sorting requests based on status, service team, issue type, and priority



Targets Semantic Similarity

AI model compares new tickets to **historical data** and deploys the Completion API to generate a response



Continuous Improvement

Ticket information updates in Jira and creates a **feedback loop** that will improve classification over time



RICE

Rice University HR Chatbot

Problem: Low utilization of self-service resources leads to high volume of HR inquiries (~500/month); ~25% abandoned, distracting HR staff from higher skill work.

Results



400

conversations fielded by HR chatbot in first six weeks

Key Components



Vendor Partner Selected

In early 2024, Office of Transformational Technology & Innovation developed generative AI chatbot using **Ivy.ai** platform



Chatbot Trained on Common Questions

Rice employees trained chatbot on **250 most common HR questions** and evaluated answers to understand what types of responses to provide

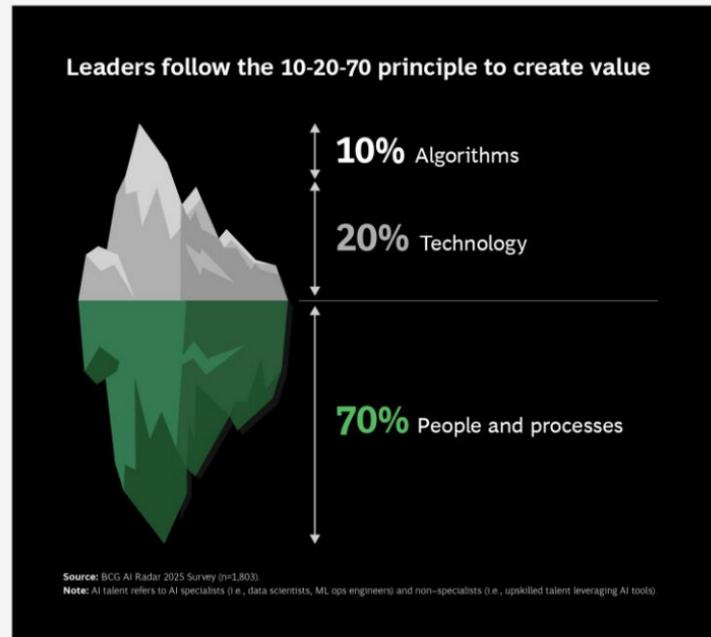


Two Types of Responses

Chatbot answers straightforward questions with **prebuilt** response. More complex questions are sent to ChatGPT 4 for **custom** response

Even Corporations Are Struggling to Reduce Costs

BCG Survey of 1,800 Corporate Executives (Jan 2025)



... but

2 in 3

companies struggle to:

- Reimagine workflows and drive incentives, culture, and change
- Hire AI talent and upskill workforce

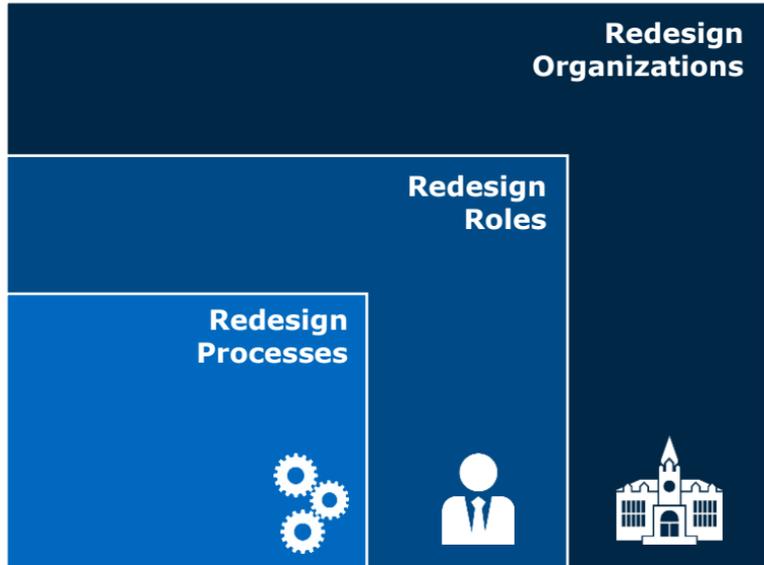
Less than 10% of executives expect a decrease in headcount due to AI automation

The Real Challenge Now Is Redesign



AI Will Stimulate and Facilitate Changes to Processes, Roles, and Structures

- Don't fall into the trap of constantly striving to do more with less
- Rethink both what you are doing and how you are doing it
- New tools like AI can be an occasion for rethinking how you work, not a simple substitute





Building an AI Governance Model



AI Governance– The Academic Side of the Equation

Academic Governance Level



Corresponding Style of Guidance

Statement on AI

Communicates commitment to AI literacy and integration

Acceptable Use Policy

Defines [allowable uses](#) of AI to align with data privacy and academic integrity policies

Formal Guardrails

Enables (even requires) faculty to create clarity on AI use for students at course and assignment level

Framing Your Institutional Commitment



Public Statement Encourages Faculty to Adopt AI-Responsive Teaching

Key Commitments



Support AI Literacy Development



Push for Faculty AI Literacy



Insist on Teaching Adaptation



Champion Academic Integrity



Commit to Ongoing Leadership

RUSSELL GROUP Principles on the Use of GenAI Tools in Education

- ▶ Universities will support students and staff to become AI-literate.
- ▶ Staff should be equipped to support students to use generative AI tools effectively and appropriately in their learning experience.
- ▶ Universities will adapt teaching and assessment to incorporate the ethical use of generative AI and support equal access.
- ▶ Universities will ensure academic rigour and integrity is upheld.
- ▶ Universities will work collaboratively to share best practice as the technology and its application in education evolves.

Set Expectations for AI Use



How to Move Past Academic Integrity Concerns With AI



Discourage the Use of AI Plagiarism Detectors



Voice Support for AI Tools in the Classroom



Trust Faculty to Define AI Bounds, But Push Them to Set Clear Expectations

○ **Duke University** Learning Innovation and Lifetime Education office [recommends](#) faculty against using AI detection software, citing three key reasons:

- 1) *The products are unreliable¹*
- 2) *Detection software is biased against segments of learners*
- 3) *As AI changes, detection software cannot keep up*

○ The **University of Southern California's** academic senate published [guidelines](#) clearly embracing AI:

"Instructors should encourage USC students to explore generative artificial intelligence (AI), using these new tools to... inspire them to generate their own academic work."

○ **Ohio State University's** (OSU) Teaching and Learning Resource Center [urges](#) faculty to set clear AI expectations from the syllabi to individual assignment level.

OSU provides faculty a course template where they can explicitly define which AI actions are:

- Prohibited
- Permitted
- Encouraged
- Required

1) [AI detection software reports high rates of false positives and negatives.](#)

Surface Innovators/Enthusiasts From Across Campus

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Miami CIO Convened a Full-Day AI Symposium for All Campus Stakeholders

Miami AI Symposium

15 Presentations from Faculty, Staff, and Students in Three Tracks



Policy, Law, and Changing Pedagogy

Exploring the implications of generative AI with IP¹ and academic integrity



Academic

How generative AI will impact teaching and learning



General AI

A look into what generative AI is capable of and the risks associated with AI models

Sessions include:

- Generative AI and IP: Frenemies or BFFs?
- AI: The Future of Creative Teaching and Learning is Now
- ChatGPT vs. Google: A Comparative Study of Search Performance and User Experience
- Writing with Generative AI and Human-Machine Teaming: Insights and Recommendations from Faculty and Students



*There was way more interest than we imagined from across campus. Our **student government, enrollment office, and our president** all came up to me and volunteered to co-sponsor the symposium."*

*David Seidl, CIO
Miami University of Ohio*

1) Intellectual property.

Pull Together Dedicated Group of AI Leaders



Dickinson

CIO Drives Presidential AI Working Group Focused on Operations

The Presidential Working Group on AI and LLMs¹ aims to address the operational implications of AI by developing a **comprehensive roadmap** that:

- Explores the responsible use of AI
- Identifies appropriate applications
- Shapes the future of AI integration



Involvement From Campus Stakeholders

Established based on the recommendation of the IT department, this group has members of faculty, students, and staff from various departments, including but not limited to:

- Finance and Administration
- Human Resources
- Enrollment Management

Group Focused on Both Short-Term and Long-Term Goals

- ▶ **Raise awareness** and foster understanding of AI and its use in working, teaching, and learning
- ▶ **Explore collaboration** with external organizations, industry experts, or academic institutions in AI
- ▶ **Assess the feasibility** and potential benefits of investing in AI tools
- ▶ Develop mechanisms to **evaluate the impact** and effectiveness of AI initiatives
- ▶ **Conduct policy reviews** to safeguard against abusive or illegal use of AI
- ▶ **Identify professional development** opportunities to upskill in AI for both employees and students

1) Large language model.

Strategy Supported by AI, Rather than AI Strategy



Keep the University Focused on Institutional Priorities

Typical Questions about AI

- How are my peers using this technology?
- Which products should we use?
- How much/ how fast should I invest?
- What's the ROI?
- What are the risks?

Better Strategy Questions

- What are my university's or unit's top three priorities?
- What are the biggest barriers to success in each of those areas?
- Which activities are likely to have the greatest impact on achieving our top priorities?
- What contribution can my university or unit uniquely make?

From AI Strategy to AI “Posture”

PART 1: DEVELOP AN INSTITUTIONAL POSTURE FOR AI IMPLEMENTATION

Three Institutional AI Postures:



**Off-the-Shelf
Optimizer**



**Iterative
Innovator**



**Community
Empowerer**

PART 2: LESSONS ON AI GOVERNANCE, ENABLEMENT, AND APPLICATION



Governance

- Define AI Principles to Guide Campus Initiatives
- Accelerate AI Adoption Through Strategic Pilot Mandates
- Fast-Track AI Projects and Establish Risk Escalation Paths
- Position Faculty to Help Guide Ethical Use of AI



Enablement

- Prioritize Posture-Aligned Roles
- Build AI Capacity With Student Teams
- Reduce AI Startup Costs Through Partnerships
- Diversify Funding for Initiatives
- Implement Tool and Role-Specific Training



Application

- Design Right-Fit Pilots for Your Campus
- Train Users Early and Continuously Monitor Pilots
- Align AI Data Preparation Efforts With Application Risk
- Incorporate Ongoing Domain Expertise to Mitigate Risk

What If AI Is Not Really the Problem (or the Solution)?

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Too Often, Talking about the Technology Shifts Our Focus from Deeper Issues

Some of the Problems Universities Are Trying to Address

- Students don't think cheating is wrong
- Students don't get the personalized support they need
- Students are lonely and anxious
- The research enterprise is under unsustainable pressure
- Our admin services are inefficient and unresponsive
- Our faculty and staff are overworked and underpaid
- Faculty resist new approaches to teaching
- Employers feel that recent graduates lack essential skills

New technologies will not solve these deeper problems. They will require deep conversations about values and outcomes



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