



• **BETHANY MILLER, PH.D.**

ASSOCIATE PROVOST & CHIEF
DATA OFFICER MACALESTER
COLLEGE

• **MICHELE J. HANSEN, PH.D.**
ASSOCIATE VICE PRESIDENT
INSTITUTIONAL RESEARCH AND
PLANNING, THE OHIO STATE
UNIVERSITY

• ASSESSMENT INSTITUTE •
OCTOBER 2024

THE ROLE OF ASSESSMENT AND IE/IR PROFESSIONALS IN BUILDING EQUITY- MINDED DECISION CULTURES

WELCOME & INTRODUCTIONS



Source: Wallpapers.com

- Name
- Organization
- Role
- What is your favorite thing about the month of October?

WORKSHOP PLAN

Participants in this workshop will understand:

- Ways in which you can support your organizations' DEI-related work
- How to bring an equity lens to your roles
- The commitment required to ensure equity within your units and our profession, at large

In this space:

- We will learn together
- Questions are welcome
- All perspectives and experiences are welcome
- There is no pressure

Definitions: Clarifying Terms

Diversity

recognizes a range of identities & values varied perspectives

Equity


seeks to ensure all individuals' access to opportunities & resources

Inclusion

is systems & dispositions that engage individuals from diverse backgrounds & are welcoming

Social justice

is cultural responsiveness, avoiding bias, & seeking to understand social structures on power and oppression



Equity is grounded in the principle of fairness. In higher education, equity refers to **ensuring that each student receives what they need to be successful through the intentional design of the college experience.**

- Achieving the Dream



WE'RE ALL CALLED TO ENGAGE IN THIS WORK

- Many of us are **producers** of data and information – formally or informally – in that we collect data, analyze them, synthesize results, and produce reports for decision makers
- All of us are **consumers** of data and we need the relevant amount of data literacy to consume that information and make decisions large and small (this is true in our personal lives, too)
- Are producers and consumers **coordinated** across the institution? Even within our own units? How does coordination (or lack thereof) affect equity work?

TOGETHER WE NEED TO:

- **Look beyond the numbers** to explore the *why* and the *how*.
- **Seek to expand data literacy across the institution.** Not everyone needs to be a data maven, but all stakeholders make decisions, and together we can learn to be more savvy consumers of information, which leads us to pose more informed questions, and in turn to explore the *why* and the *how* in full.
- **Keep assumptions and deficit perspectives in check,** which is often a challenge when we explore gaps and ground conversations about achievement differences in the characteristics of students.

TOGETHER WE NEED TO (CONTINUED):

- **Question what there is to learn** beyond what we're already prompted to explore. Do we have blinders? Do we keep doing what we've always done?
- **Ensure that equity is kept at the forefront.** We can't afford to be passive. Data producers can't wait for questions to be posed by clients, and data consumers can't assume that data producers are always exploring the "so what" and the "why". All of us have a responsibility to bring ethical and equitable approach to our work.

The background is a solid teal color with a subtle gradient. In the corners, there are decorative white line-art patterns resembling circuit boards or neural networks, with lines connecting to small circles.

What Does it Mean to be Equity Minded?

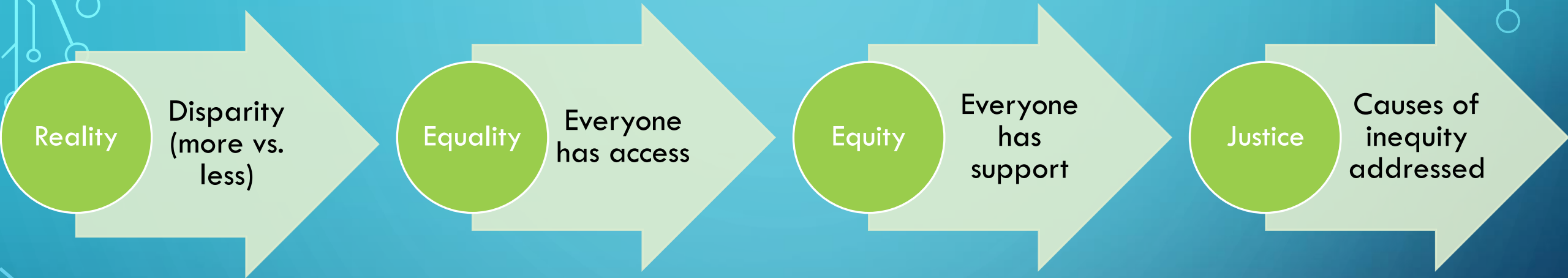
INTENTIONALITY OF EQUITY IN OUR WORK



Equity requires us to address systemic issues, including racism, bias, sexism, and more through policy, culture, and practice at all levels.

Image source: The Chamber of Commerce for Greater Philadelphia

CONTINUUM ACTIVITY



Where is your office on this continuum? Your institution/organization? You?

Take a few minutes to reflect. You are welcome to share your thoughts and questions, but there is no expectation that you do so. Know that you are not alone in this work regardless of whether this information is new to you or if you have a lot of experience. We are here to learn together!

- What words come to mind as you reflect on the continuum exercise?



As you listen to the examples shared, key questions to keep in mind include:



What can I do within my realm of responsibility or within the realities of the culture in which I work?



How can I (or my office) be part of relevant equity-related conversations if we aren't already?



What assumptions are being made at the small and large scales, and every place in between?



Who has responsibility for the data related to equity work? IR/assessment? Equity offices?



What data and information exist, and who has access?

DEEP-ROOTED CHALLENGES

Systems and structures often utilize:

- A deficit approach (e.g., the problem is with the students)
- Lagging indicators instead of leading indicators
- White, male, neuro-typical students' performance and experiences as benchmarks

We can't address challenges like these without an equity mindset.

- What structures or barriers affect the student experience?
- What information will help inform our understanding of the student experience during those experiences? How do students' experiences differ?
- What contexts inform our understanding of this topic (e.g., race, socioeconomics, first generation status, culture, etc.)?

The background features a light blue gradient with a faint clock face. The numbers 10, 12, and 8 are visible. A red hand is positioned near the 12. Overlaid on the clock is a white circuit board pattern with various lines and nodes.

15-MINUTE BREAK

Assessment Trends

1. Ensuring our assessment practices and methods are socially just, evidence-based, consider power structures, and promote equity rather than enhancing or even maintaining inequities.

IN PRACTICE

- Be mindful of the student population(s) being served and involve students in the process of assessing learning.
- Use appropriate student-focused and cultural language in learning outcomes statements to ensure students understand what is expected of them.
- Develop and/or use assessment tools and multiple sources of evidence that are culturally responsive to current students.
- Intentional improvement of student learning through disaggregated data-driven change that examines structures, demonstrations of learning, and supports which may privilege some students' learning while marginalizing others.

Montenegro, E. & Jankowski, N. A. (2020, January). A new decade for assessment: Embedding equity into assessment praxis (Occasional Paper No. 42). University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

Key Strategies for Applying an Inclusive Lens to IR/IE, Data and Analytics Practice



- We as IR/IE, data, and analytics professionals key play a key role in building equity-centered decision cultures.
- Create shared understandings and meanings. The Language we use matters.
- Critical to understand institutional contexts and foster understanding of what structures, policies, implicit biases, stereotype threats and factors that are contributing to inequities.
- Important to be aware that many frameworks do not fully consider the experiences of marginalized groups or approach their experiences from a deficit perspective. We need to make sure to take time to thoughtfully select a framework to help answer proposed research questions.
- We need to pay attention to small populations. All voices are important.
- Rethink comparisons and reference groups. White students' experiences are often held as the norm to which other groups are compared (Mayhew & Simonoff, 2015), carrying the assumption that White students' experience is "normal" and implying this should be achieved by other student groups.

Assessment Trends

2. Consider inclusion and equity at all levels of assessment practice
 - Developing assignments (transparent with clear goals and purposes)
 - Articulating student learning outcomes and involving students in assessment work and outcomes development
 - Developing faculty who can assess the student holistically
 - Disaggregating data and considering intersectionality

IN PRACTICE – CREATING INCLUSIVE CLASSROOM ASSESSMENT ENVIRONMENTS

1. Ensure your course reflects a diverse society and world.
2. Ensure course media are accessible.
3. Ensure your syllabi set the tone for diversity and inclusion.
4. Use inclusive language.
5. Share your gender pronouns.
6. Learn and use students' preferred names.
7. Engage students in a small group introductions activity.
8. Use an interest survey to connect with students.
9. Offer inclusive office hours.
10. Set expectations for valuing diverse viewpoints.

Assessment Trends

3. Assessment practitioners and scholars play a vital role in supporting institution-wide equity efforts and helping institutions live out a commitment to equity and inclusion.

What roles are you playing?

Assessment Trends

4. Internal assessment practices must support the recruitment and retention of diverse assessment professionals
 - Ensure access and opportunities to learn about current trends in equity and inclusion
 - Hire assessment practitioners who represent diversity
 - Offer opportunities for continuous learning about inclusion trends as part of assessment culture

Assessment Trends

5. When working to integrate equity and inclusion into assessment efforts, it is important to consider social, institutional, and external contexts.

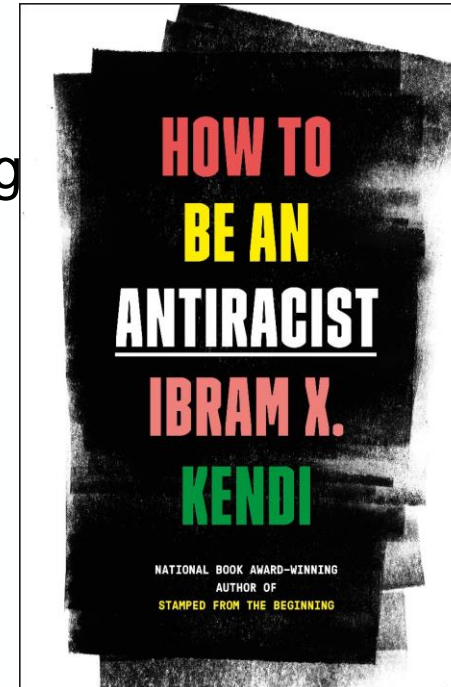
What social, institutional, and external contexts may be important to consider at your organization/institution?

Framework for Assessment

“Americans have long been trained to see the deficiencies of people rather than policy. It's a pretty easy mistake to make: People are in our faces. Policies are distant. We are particularly poor at seeing the policies lurking behind the struggles of people.”

“What if we realized the best way to ensure an effective educational system is not by standardizing our curricula and tests but by standardizing the opportunities available to all students?”

— Ibram X. Kendi (2019), *How to Be An Antiracist*



New Innovations and Challenges in Building Equity Minded Decision Cultures



Current Narrative

“It is a difficult time to be a DEI professional in higher education—especially in states where the field has come under intense scrutiny from lawmakers seeking to legislate it out of existence at public institutions. Or in states like Florida, Ohio and Texas, where they already have.”

Inside Higher Ed *DEI as an ‘Act of Resistance’*

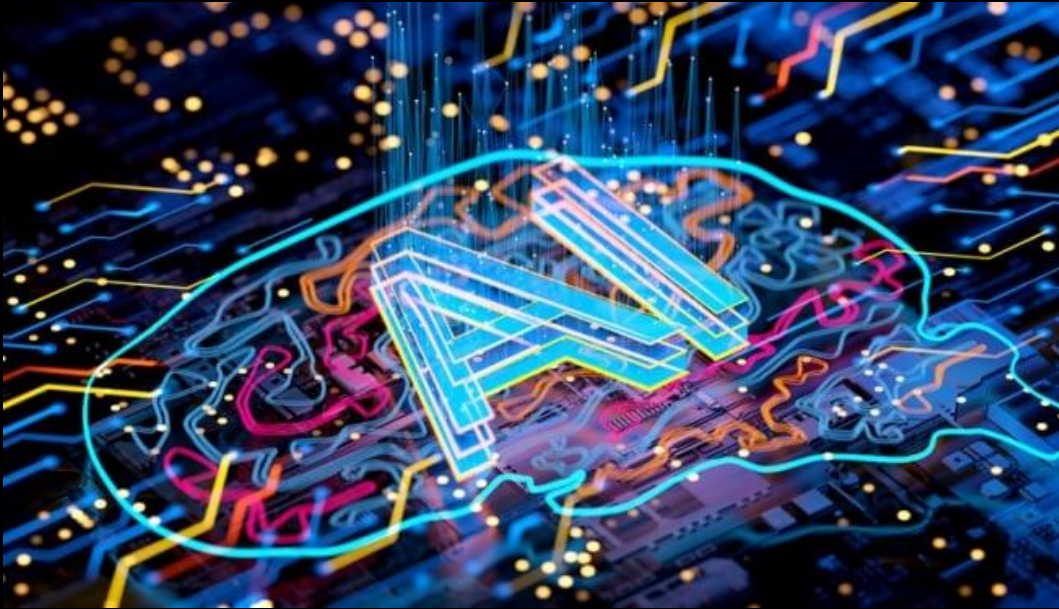
How has this affected your work and institution?



Tracking Higher Ed’s Dismantling of DEI By Erin Gretzinger, Maggie Hicks, Christa Dutton, and Jasper Smith October 11, 2024

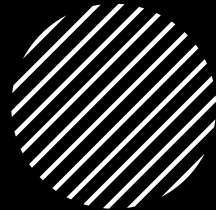
Colleges Affected by DEI Legislation

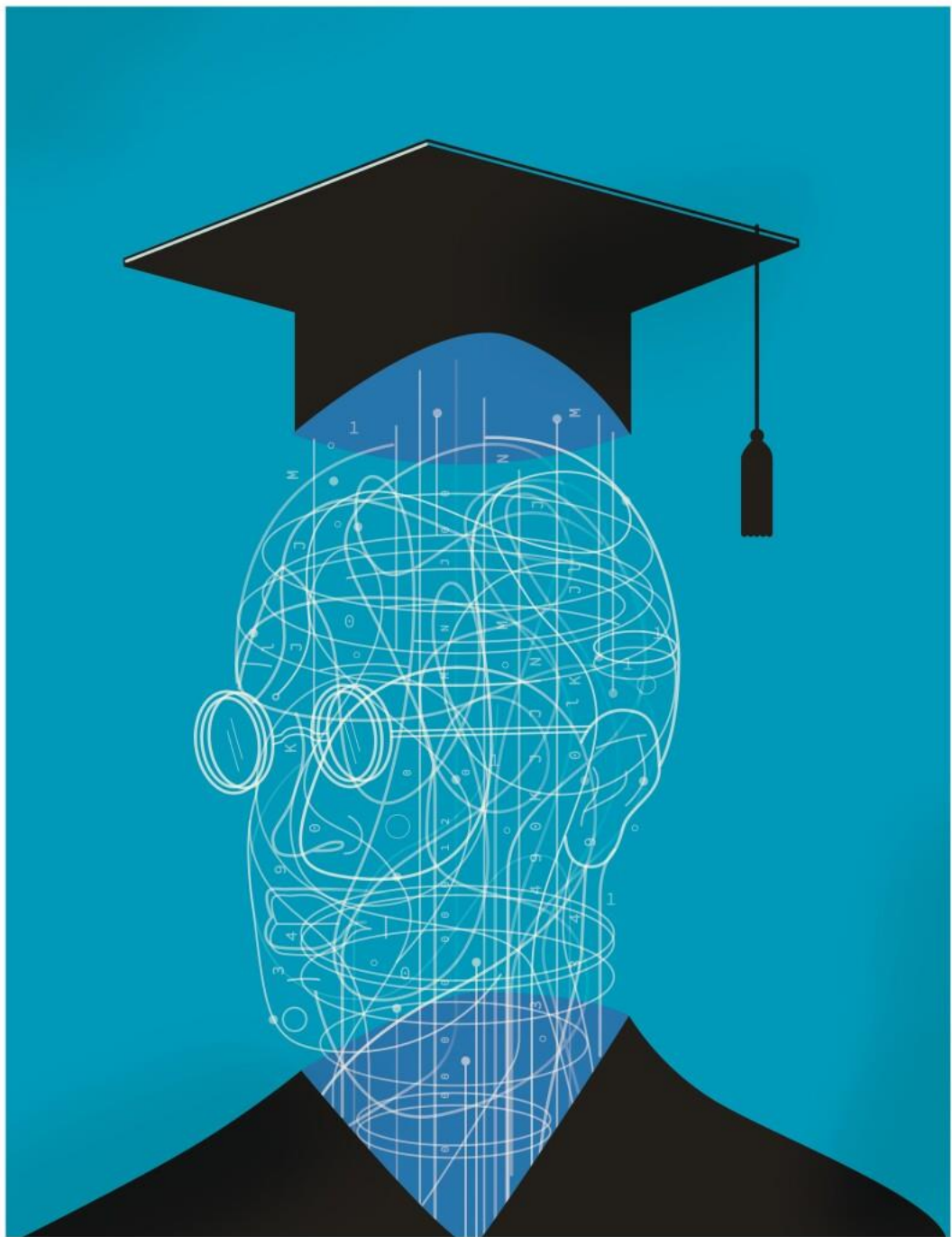
Alabama | Arizona | Arkansas | California | Colorado | Florida | Georgia | Idaho | Indiana | Iowa | Kansas | Kentucky | Louisiana | Maine | Massachusetts | Michigan | Mississippi | Missouri | Nebraska | North Carolina | North Dakota | Ohio | Oklahoma | Pennsylvania | South Carolina | Tennessee | Texas | Utah | Virginia | Wisconsin | Wyoming



“Artificial intelligence is emerging as one of the most powerful agents of change in higher education, presenting the sector with unprecedented academic, ethical and legal challenges. Through its algorithmic ability to adapt, self-correct and learn, AI is pushing the boundaries of human intelligence, making the future of higher education inextricably intertwined with AI.”

M’hammed Abdous





“The release of ChatGPT suggests that we’re at the dawn of an era marked by rapid advances in artificial intelligence, with far-reaching consequences for nearly every facet of society, including higher education. From admissions to assessment, academic integrity to scholarly research, university operations to disappearing jobs...”

<https://www.insidehighered.com/views/2023/03/22/hohttps://www.chronicle.com/article/how-will-artificial-intelligence-change-higher-edw-ai-shaping-future-higher-ed-opinion>

DEFINITIONS

- **Intelligence** might be defined as the ability to learn and perform suitable techniques to solve problems and achieve goals, appropriate to the context in an uncertain, ever-varying world. A fully pre-programmed factory robot is flexible, accurate, and consistent but not intelligent.
- **Artificial Intelligence (AI)**, a term coined by emeritus Stanford Professor John McCarthy in 1955, was defined by him as “the science and engineering of making intelligent machines”. Much research has humans program machines to behave in a clever way, like playing chess, but, today, we emphasize machines that can learn, at least somewhat like human beings do.
 - Stanford University Human –Centered Artificial Intelligence
- **AI** is “a machine’s ability to perform the cognitive functions we associate with human minds, such as perceiving, reasoning, learning, interacting with an environment, problem solving, and even exercising creativity. “
 - McKinsey and Company

DEFINITIONS

- **Generative artificial intelligence (AI)** describes algorithms (such as ChatGPT) that can be used to create new content, including audio, code, images, text, simulations, and videos. Recent breakthroughs in the field have the potential to drastically change the way we approach content creation. The practice of getting machines to mimic human intelligence to perform tasks.
- **Machine learning** is a type of artificial intelligence. Through machine learning, practitioners develop artificial intelligence through models that can “learn” from data patterns without human direction. The unmanageably huge volume and complexity of data (unmanageable by humans) that is now being generated has increased the potential of machine learning, as well as the need for it.
 - McKinsey and Company
- **Artificial intelligence (AI) and machine learning** are often used interchangeably, but machine learning is a subset of the broader category of AI. Put in context, artificial intelligence refers to the general ability of computers to emulate human thought and perform tasks in real-world environments, while machine learning refers to the technologies and algorithms that enable systems to identify patterns, make decisions, and improve themselves through experience and data.
 - Columbia Engineering
- **Generative artificial intelligence** AI models learn from a vast amount of data to understand patterns and generate something entirely new based on that knowledge. This process is often accomplished using an AI “neural network,” which mimics how human brains work by simulating interconnected neurons. Generative AI tools such as ChatGPT are based on natural language processing techniques, allowing them to output human-like text.
 - Kamb, 2023. *The Use of Generative Artificial Intelligence in Higher Education: Too intimidating or my new and improved virtual assistant?*

AI in Higher Education Landscape Uses

- **Administrative Support**

- crunch data on recruitment/admissions, aid decision making, assess productivity and performance

- **Teaching Support**

- adaptive assessments, personalized tutoring, generate context, resolve accessibility issues

- **Learning support**

- self-service chats bots, flag at-risk students, recommend courses, predict student performance

- **Research Support**

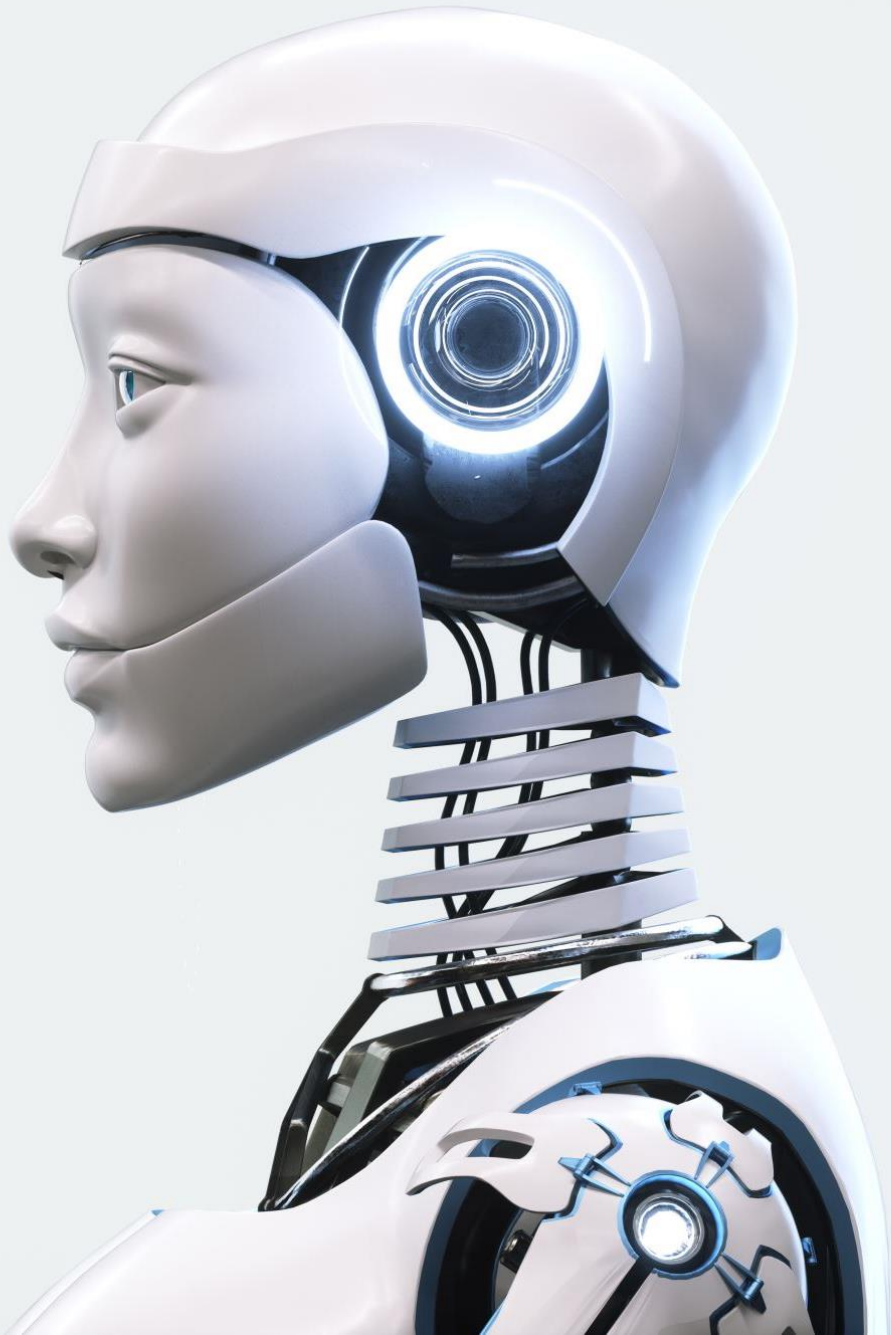
- Shift through large datasets to identify patterns, recommend relevant articles, prepare manuscripts for publication



Group/Table Conversation: Generative AI



- How used at your institution or in assessment?
- How benefitted or positive implications?
- What concerns or negative implications?
- Inclusion and equity concerns?



MAJOR TRENDS AND INITIATIVES

- Integrated in Many Tools (e.g., chatbots, search engines, Tableau, Explorance Blue Course Evaluations)
- Advocacy for “Human in the Loop”
- Increased Government Regulation and Concerns
- Increased Focus on Ethical Considerations
- Ongoing Concerns About Data Privacy and Lack of Transparency
- Warnings about Accuracy and Hallucinations
- Promotion of Appropriate Use (e.g., augment work rather than replace human higher-order cognitive functioning, ideal use by experts who can check veracity, public data rather than restricted or private).
- Universities Investing in More Secure Tools (e.g., Microsoft Co-Pilot)

Microsoft Co-Pilot: Top Skills and Top Employers Ohio State University Graduates LinkedIn Profiles



Top Skills

- Data Analysis
- Microsoft Office
- Project Management
- Customer Service
- Leadership
- Public Speaking
- Research
- Teamwork
- Sales
- Marketing

Top Employers

- The Ohio State University
- JPMorgan Chase & Co.
- Nationwide
- Cardinal Health
- Amazon
- Huntington National Bank
- Deloitte
- Accenture
- IBM
- Wendy's



These employers reflect the diverse career paths that Ohio State graduates pursue, spanning industries such as finance, healthcare, technology, and consulting.

Tips, Tricks & Lessons Learned

- Clarification and Transparency
 - Challenging to clarify what “human in the loop” means in terms of optimizing efficiency while also ensuring valid and reliable results.
 - Important to be transparent and clearly describe how Generative AI was employed in methods sections.
- Limitations and Challenges
 - Microsoft Co-Pilot may not be as advanced as paid for version of ChatGPT 4 (but not authorized for university use).
 - It does hallucinate - made up students’ comments and did not always analyze all comments. It required continuous checking and prompting.
 - It seems to be integrated in tools stealthily (may not know it is operating behind the scenes).
- Effective Use and Best Practices
 - The prompts matter! Important to be as specific as possible.
 - Copilot works best as a conversation (multiple prompts & refinement or reuse).
 - Best used as a starting point to optimize work for experts rather than performing work of novices.
 - Can be effective for literature reviews, bios, and crafting emails provided it is checked for accuracy.
- Potential Benefits
 - Can be useful in analyzing mass quantities of publicly available data.

