



Eastern Illinois University AI Task Force

INITIAL REPORT TO THE VICE PRESIDENT FOR ACADEMIC AFFAIRS AND PROVOST,
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JULY 2, 2024

Introduction

On November 30, 2022, OpenAI released ChatGPT, a chatbot that is based on large language models (LLMs) which enables a user to hold conversation with an application or web interface that is designed to mimic human conversation through text or voice interactions (AI for Education, 2023). Immediately, the impact that this technology has on higher education were felt across the country and around the world. Publications such as *The Chronicle of Higher Education* and *Inside Higher Ed* began publishing articles both responding to the emergence of AI and the fears felt by faculty, administrators, staff, and students. For example, D'Agostino (2023) summarizes the fear and excitement of ChatGPT's emergence: "Given that the natural language model earned passing scores on the evidence and torts portion of the bar exam, among other feats, some in academe fret that the technology may facilitate widespread cheating. Others see opportunity for accelerating discussions about reimagining teaching to help students write prose that differs from what machines can produce."

The Association for Writing Across the Curriculum (2023) issued a critical position statement on AI writing tools:

"A fundamental tenet of Writing Across the Curriculum is that writing is a mode of learning. Students develop understanding and insights through the act of writing. Rather than writing simply being a matter of presenting existing information or furnishing products for the purpose of testing or grading, writing is a fundamental means to create deep learning and foster cognitive development. Learning to write within a field or major is also one of the most critical ways that emerging scholars and professionals become enculturated in a discourse community. We are concerned that relying on AI text generators limits student learning and enculturation."

Yet, before the release of this chatbot, futurists, computer scientists, and ethicists, among others, were already discussing the potential (and probable) impacts that AI would have on higher education (Aoun 2017; Gruetzemacher & Whittlestone, 2021; Xu & Xu, 2019). To some, the release of ChatGPT in November 2022 was not a surprise, but to a vast majority it signaled a brave new world of technology, access, progress, and challenges to the traditional conceptualizations of academic integrity and rigor.

The Multifaceted Impact of Generative AI on Higher Education

In May 2023, the Center for AI Safety (CAIS) released a Global Statement on AI Risk which has been signed by over 600 AI experts and public figures (Center for AI Safety, 2023) leading to the first Global Summit on Artificial Intelligence (Office of the Prime Minister, 2023). On October 30, 2023, President Biden released "Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence" (The White House, 2023). In this statement the President states, "Artificial intelligence (AI) holds extraordinary potential for both promise and peril. Responsible AI use has the potential to help solve urgent challenges while making our world more prosperous, productive, innovative, and secure. At the same time, irresponsible use could exacerbate societal harms such as fraud, discrimination, bias, and disinformation; displace and disempower workers; stifle competition; and pose risks to national security."

Many of these same concerns are echoed by higher education leaders, with concerns about fraud and disinformation focused on academic integrity and rigor. In November 2023, for example, EDUCAUSE published an article focused specifically on academic integrity challenges in the era of AI. “The landscape instructors face is transforming at an alarming pace. The proliferation of generative AI tools like ChatGPT has opened the door to misuse by learners. Even the concept of “misuse” is a gray area, as few institutions have laid out comprehensive policies around the use of AI tools by learners, instructors, or staff, and the line delineating what constitutes appropriate use has yet to be established” (White 2023). But these concerns do not just land with the students, generative AI has raised concerns with the rigor and validity of academic research and scholarship. For example, journals are amending their editorial policies to reflect the emergence of AI and its use in scholarship (Thorp 2023).

As such, disciplines directly impacted by the emergence of AI released statements and policy documents responding to specific concerns and recommendations within their fields. For instance, the Modern Language Association (MLA) and Conference on College Composition and Communication (CCCC) developed a Joint Task Force on Writing and AI. In their report (2023), this task force details a series of recommendations prefaced with the following: “As organizations working together, we urge educators to respond out of a sense of our own strengths rather than operating out of fear. Rather than looking for quick fixes, we should support ongoing open and iterative processes to develop our responses. At the institutional level, policy should be accompanied by education about AI; when creating policy, institutional actors must prioritize both ethical conduct and the mission of higher education” (p. 10).

Marr (2023) documents the rise of AI in areas of design work across disciplines, including art and architecture, noting that in such work, a key challenge is balancing human creativity with efficiency and automation. Similar to composition and writing, this efficiency and automation comes at a cost. As Munn, Magee, and Arora (2023) found, the corps of information used to create images and designs are still a body of human creations, including the biases, discrimination, and disinformation inherent in human interaction.

Environmental scientists, too, have concerns about generative AI – not entirely on the output – but on the amount of energy and natural resources that are required to produce AI models and their outputs (Saenko 2023). Accordingly, generative tasks – those embarked on by ChatGPT and other generative AI – use tremendous resources and are orders of magnitude worse for the environment than discriminative or inferential tasks. “Given our findings and the increased deployment of generative, multi-purpose AI models, we hope that both [machine learning] researchers and practitioners will practice transparency regarding the nature and impacts of their models, to enable better understanding of their environmental impacts” (Luccioni et al., 2023, p. 14).

A critical need exists within these disciplines, and across the academy, to establish robust frameworks, methodologies, and theoretical constructs for a comprehensive understanding of generative models and their outputs. This endeavor goes beyond simply rectifying misconceptions. The objective is to develop a more nuanced and multifaceted characterization of these models, highlighting both their potential benefits and the associated challenges they present in real-world applications.

As the Chronicle of Higher Education documents, there are still disconnects, questions, grey areas, and non-symmetry in the application of generative AI in all aspects of higher education:

In the 15 months since OpenAI released ChatGPT, generative AI — a type of artificial intelligence — has generated a mercurial mix of excitement, trepidation, and rebuff across all corners of academe...Some instructors have embraced it, retooling their curricula to teach judicious, ethical use of this now-ubiquitous technology, which uses trained algorithms to produce text, images, video, and other media that can be nearly impossible to distinguish from human products. Some academics serving as peer reviewers are using generative AI software to identify gaps in research papers. College marketers and admissions officers on some campuses are tapping the tools as their editorial assistants. Others, though, have been steering clear, deeming the tech too confusing or problematic. (Swaak 2024)

Generative AI and the Evolving Landscape of Information Literacy in Higher Education

In May 2023, the United States Department of Education's Office of Educational Technology released a policy report (2023), "Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations" to address the clear need for sharing knowledge, engaging educators, and refining technology plans and policies for artificial intelligence (AI) use in education. These recommendations include emphasizing the necessary place for humans, aligning AI with shared educational goals, rethinking learning principles to meet emerging technologies, building trust with learners, and developing education-specific guidelines and guardrails considering data privacy rights as well as bias, transparency, and accountability.

Yet discussions about AI and higher education are not new. Nearly forty years ago, positive aspects of AI in higher education were discussed as critical to advancing teaching and learning in terms of computer aided instruction, robotic systems, and language and image recognition (Tillmann, 1984). Like other technological advancements before AI (Gruetzemacher & Whittlestone, 2021), this latest iteration of computing progress – in both human and machine intelligence – is only going to grow. As Miller (2023) notes, students in school now – at all levels – will be living and working in a world where AI exists at some level.

The integration of innovative technologies into higher education has often faced resistance, with some arguing for a slower adoption rate compared to public or industry integration, much like was observed at the dawn of the internet. Traditional classroom structures, characterized by a single instructor delivering lectures to a passive student body, have persisted across higher education. This approach, known as teacher-centered learning, prioritizes the one-way transmission of knowledge from instructor to student (Britic 2023). Generative AI, unequivocally, challenges this traditional transfer of knowledge in college.

Akinwalere and Ivanov (2022) distill the benefits and challenges of AI in higher education, especially along the teaching and learning dimension. They write, "AI can drive efficiency, personalization and streamline administrative tasks to give teachers more time and freedom to provide understanding and adaptability—uniquely human capabilities where machines would struggle. By leveraging the best attributes of both machines and teachers, the vision for AI in education is one where they work together in the best interests of the students" (p. 7).

Likewise, as Mollick and Mollick (2023) outline, generative AI has the potential to transform higher education as they provide new learning tools including as a tutor, coach, mentor, teammate, tool, simulator, and student peer.

One imperative of this technological moment is the tremendous need to grow initiatives around information literacy. According to the Association for Intelligent Information Management (AIIM), information literacy is the understanding of the full information lifecycle and how information can be leveraged to achieve better outcomes (Liu 2024). Accordingly, the Association of College and Research Libraries (ACRL), in their “Framework for Information Literacy for Higher Education,” write, “the rapidly changing higher education environment, along with the dynamic and often uncertain information ecosystem in which all of us work and live, require new attention to be focused on foundational ideas about that ecosystem. Students have a greater role and responsibility in creating new knowledge, in understanding the contours and the changing dynamics of the world of information, and in using information, data, and scholarship ethically” (p. 2). Work has begun to integrate AI into the ACRL framework for information literacy (James & Filgo, 2023). As Archambault (2023) argues, this framework needs an update to include “algorithmic literacy” stating that it is imperative users “understand the underlying power structures at play in the information systems they use for both their academic and personal lives” (p. 545).

While the AI landscape is continually evolving, academic research on information literacy and higher education is also growing – with concerning results. In one study, Damiana et al. (2024) found that students and faculty were unable to determine the inaccuracies from ChatGPT output compared to more accurate options, showing the fundamental need for information literacy and critical thinking. Similarly, Dawa et al. (2024) found no empirical relationship between ChatGPT use by students and information literacy. Saunders (2022) demonstrates that faculty across disciplines are broadly concerned about the impacts of mis/disinformation, but they vary in the extent to which they are incorporating mis/disinformation topics into their courses, and few are working with librarians on the topic. This collaboration is critical as Fleckenstein et al. (2024) demonstrate, novice and veteran instructors cannot differentiate student-written texts from ChatGPT-written texts.

In September of 2023, the Faculty Development and Innovation Center (FDIC) published guidance on AI, image and text generation, and information bias. The goal of this document is to promote information literacy for students, staff and faculty at EIU. Because of the broad disconnect between information use, generative AI, and information literacy, this document provides considerations, research, and steps to confront biases in generated text and images. Further, this guidance was informed by several discipline-specific organizations (Association of College and Research Libraries, 2016; Association for Writing Across the Curriculum, 2023; MLA-CCCC Joint Task Force on Writing and AI, 2023; Stanford University Human-Centered Artificial Intelligence, 2022) and pedagogical literature (Gruetzemacher & Whittlestone, 2021; Miller, 2023; Munn et al., 2023) highlighting the need for information literacy around AI and the university community.

A final facet to information literacy around AI is focused on balancing conversations of AI's inevitability with conversations hallmarked with a skepticism of AI's ubiquity and enduring

limitations. For example, a recent Goldman Sachs report (Nathan et al. 2024) found the return on investment for AI companies has been minimal at best. At this moment, it is incredibly difficult to forecast the omnipresence and benefits of AI moving forward. This particular moment does bring new technological shifts, but the actual scope of those shifts is obfuscated by great promises of what AI will do in the future backed by very little evidence. Gartner, Inc (2023), which tracks technology development and hype, placed generative AI on the peak of inflated expectations in August 2023 and Fast Company has indicated that AI may be headed for another “AI Winter” in late 2024.

EIU AI Task Force

Generative AI and its benefits and challenges to higher education are vast. They depend on the individual student, faculty member, staff person, discipline, institution, and the market. For Eastern Illinois University, this is acute – there needs to be a critical look at how AI impacts EIU and derive a set of recommendations that make sense for the institution and its stakeholders.

In November 2023, the Vice President for Academic Affairs and Provost at EIU convened an AI Task Force to address three main objectives:

- Identify and catalog the existing AI usage on campus;
- Evaluate potential avenues for leveraging AI to enhance teaching, learning, and scholarship;
- Examine issues of academic integrity, ethics, legalities, and social impacts of AI for campus and beyond.

In essence, these three goals attempt to consider this overarching question: what does the emergence and prominence of Artificial Intelligence (AI) mean for students, faculty, and staff of Eastern Illinois University?¹ Considering Schroeder’s (2022) indications about universities ill-prepared for AI, the goals of this Task Force are to help EIU be more equipped in efforts to understand and implement AI technology in the most useful way at this university. Further, the AI Task Force should look at how such technology leads to continuous improvements and efficiencies in teaching and learning, while ensuring academic integrity, rigor, and academic support for EIU students.

The Task Force is composed of stakeholders across all academic colleges, Booth Library, the VPAA office, and graduate and undergraduate students at EIU.² With a broad membership whose individuals reflect the tensions of how AI should and should not be used for learning, teaching, and scholarship, the goals for the first full semester (Spring 2024) of the AI Task Force were to come up with a consensus definition of AI and to host a series of focus groups for the students and faculty on campus.

Definitions of AI

Task Force members conducted research on definitions of AI at other higher education institutions, such as the University of Michigan, University of Illinois-Springfield, University of Illinois-Urbana/Champaign, Georgia State University, Mississippi State University, Notre Dame,

¹ The full, detailed charge is available in Appendix A.

² See Appendix A for a full roster of the EIU AI Task Force.

Penn State University, University of Virginia, University of Tennessee, Stanford University, and Western Michigan University.

In addition, AI definitions from industry sites such as LinkedIn Learning (Reichental, 2023) as well as those used in President Biden's executive order (The White House, 2023) and some literature on AI (Aoun 2017; Ouyan et al., 2022; Shneiderman, 2022), offered a broader definitional base.

For example, Stanford University's Human-Centered Artificial Intelligence (2022) program describes artificial intelligence as "the science and engineering of making intelligent machines." This includes both the ability for humans to train such machines with data to complete a particular task, but also for machines to learn, just like humans do, as they navigate changing criteria. The University of Michigan (2024) similarly defines generative AI as the general term for artificial intelligence that creates new content by generating new data samples that are like the training data. These models excel at learning underlying patterns and structures within data sets allowing them to generate entirely new data samples closely resembling the training data.

Mississippi State University's Provost's Working Group on AI (2023) produced a definition that is both substantive as well as qualitative; accordingly, this report states that generative AI is "a new species of AI that carries the potential for great disruption in the context of education. In contrast to previous generations of AI technology, [generative AI] produces text, images, and sound that model human writing, photography, visual art, and music. [Generative AI] disrupts traditions for judging originality and ensuring academic integrity that are based on the examination of intermediate or final work products (p. 6).

In simpler terms, generative AI can analyze vast amounts of text, music, or images and then use that knowledge to create novel content that retains the characteristics of the originals (Miller, 2023). But these views on AI from institutions of higher education – both positive and challenging potentials – are necessary when understanding not only the definition of AI, but also the possibilities for student learning, faculty teaching, and scholarship. For Ouyan et al., (2022), the functions of AI applications in online higher education follow these definitions and include prediction of learning status, performance or satisfaction, resource recommendation, automatic assessment, and improvement of learning experience. Further, the effects generated by AI applications include a high quality of AI-enabled prediction with multiple input variables, a high quality of AI-enabled recommendations based on student characteristics, an improvement of students' academic performance, and an improvement of online engagement and participation (Bowen and Watson, 2024).

EIU AI Task Force Definition

In the end, the AI Task Force focused on a definition of the *typical* AI used by learners and faculty alike, generative AI.

Our definition of AI focuses on the most popular, accessible form of AI, generative AI:

Generative AI (GenAI) is a general term for artificial intelligence that creates brand-new content by generating new data samples that are similar to the training set. These generative models learn patterns, structures, and features from the input data and can create content with similar characteristics.

GenAI can be used to create text, music, and images that mimic human creation with varying degrees of success. ChatGPT is currently the most well-known GenAI application and is a sophisticated chatbot that has been trained on an enormous collection of text data to develop an understanding of the patterns and structures of human language.

For a broader understanding, the AI Task Force also has found the definition of artificial intelligence provided through President Biden's Executive Order (2023) to be useful:

a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence systems use machine- and human-based inputs to perceive real and virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action.

AI Task Force Focus Groups

The Task Force considered several options for gathering information from both students and faculty members on their understanding and use of generative AI. After considering surveys and interviews, the members decided to hold student focus groups and faculty focus groups to ensure a guided but open discussion of the issues surrounding the use of AI.

First, an extensive list of questions and prompts were generated for both the student and faculty focus groups.³ Next, prompts from each list were identified for use in a Kahoot!⁴ that would allow participants to anonymously answer questions and foster interaction in the process; in addition to these responses, the original lists of prompts were available to solicit conversation within each focus group. Below are the final lists of Kahoot! prompts selected for each group.

Student focus group Kahoot! prompts:

1. What words come to mind when you think about Artificial Intelligence (AI)? (Word cloud)
2. What AI platforms have you used? (Select all that apply)
3. How frequently do you use AI in your daily life?
4. If you have used generative AI in everyday life (outside of course work), how have you used it? (Select any that apply)
5. How frequently do you use AI for course work?
6. If you have used a generative AI application in your course work, how have you used it? (Select all that apply)
7. How has AI been discussed in your courses this semester? (Select all that apply)
8. How well do you feel like you can explain generative AI to a roommate or family member?
9. How do you think AI will impact your career field?

Faculty focus group Kahoot! prompts:

1. What words come to mind when you think about Artificial Intelligence (AI)? (Word cloud)
2. What types of AI platforms have you used? (Select all that apply)

³ A full list of focus group prompts is available in Appendix B.

⁴ Kahoot! is a powerful game-based learning platform designed for rapid creation, sharing, and playing of educational games and trivia quizzes. Ideal for engaging students, colleagues, and family members, Kahoot! transforms learning into an interactive and enjoyable experience in classrooms, offices, and living rooms. <https://kahoot.com/what-is-kahoot/>

3. How frequently have you used AI for your instruction?
4. If you have used a generative AI application in your instruction, how have you used it? (Select all that apply)
5. If you have used a generative AI application in your research, how have you used it? (Select all that apply)
6. How have you discussed AI with your students? (Select all that apply)
7. What types of uses of AI have you encountered by students in your courses? (Select all that apply)
8. Have students used AI tools in a way that undermines the learning objectives of your courses (e.g., writing papers)
9. How do you think AI will impact your discipline?

Participation

Members identified dates and times for the focus groups, and recruitment for each was conducted via social media, word of mouth, through Student Government, the Dean of Students Office, the Faculty Development and Innovation Center, the Center for Student Innovation, and by individual members.

In summary, recruitment resulted in only five total student participants and four faculty participants. There were two total student focus groups, one of which only had one student attend; there was one faculty focus group with all four participants.

The Task Force fully recognizes that the participation and results from these focus groups are not ideal, however they have provided some important insights into the use of AI by both groups of stakeholders, as well as expectations for the other group.

General Findings⁵

The findings revealed a range of knowledge and experience with AI across both groups. While some participants actively used AI to enhance learning and research, others lacked any exposure to these tools. Interestingly, both students and faculty acknowledged the potential benefits of AI, such as increased efficiency and new opportunities for learning, while also expressing concerns about its potential misuse in academic settings.

Knowledge and use of AI. Both faculty and students displayed a range of knowledge and experience with generative AI tools. Some participants were highly immersed, using AI for coursework (students) and course design (faculty). Conversely, others had no experience at all.

Students described AI in terms of progress and making life easier, while faculty focused on efficiency and opportunity. These terms all point to the positive aspects of AI. However, both groups also expressed concerns, using terms like "cheating" and "not authentic." This suggests that both students and faculty recognize both the potential and the challenges of AI in education.

In terms of daily use, AI use varied within each group. Daily and weekly users existed in both students and faculty, with some having no experience at all.

⁵ Anonymized Kahoot! results are available in Appendix C.

AI use in coursework. Students reported using generative AI for brainstorming, personalized learning, and understanding complex topics. Only one student mentioned using it for writing or editing papers. This may be due to concerns about faculty policies, as one student expressed a fear of using AI due to perceived inconsistencies.

Similarly, only one faculty member reported students using AI for assignments, but three felt it had undermined learning objectives. Interestingly, three of the four faculty members admitted using AI for tasks like idea generation, creative formatting, and data analysis – tasks similar to what students reported using AI for in their coursework, but in a research context.

Student understanding of AI. The focus groups revealed that students' familiarity with AI, particularly in academia, centered on text generation tools like ChatGPT, search engines with AI enhancements, and writing assistants like Grammarly. Their primary use was for brainstorming, outlining, and studying.

Most students had a basic understanding of generative AI gleaned from general course discussions. This allowed for casual conversation but not deep comprehension of the technology or its applications. Looking ahead, students expected AI to automate tasks but not fundamentally change their fields.

Faculty understanding of AI. Faculty exposure to and understanding of generative AI also varied widely. Some possessed a strong understanding and actively used various applications, while others had no experience. Those who used AI employed it for creative thinking, brainstorming, content creation, and data analysis.

While some faculty members expressed concern about students misusing AI, others saw it as an opportunity for new research avenues and automation of tasks, freeing up time for higher-level thinking.

Member Reflections

EIU AI Task Force members were offered an opportunity to submit their reflections of the work and conversations from this past year, and to include reflection on how they see AI impacting EIU from their position, department, and/or office. Submissions are alphabetical by the member's last name.

David Bell, Research, Engagement, and Scholarship Faculty Librarian, Booth Library

In general, I am personally optimistic about the potential benefits that generative AI tools can provide in the context of academic research, analysis, and output. As an academic librarian, I can see a great number of possibilities for AI in these areas, including:

- immensely expanding search capabilities – potentially saving huge amounts of time and enabling new research methods that would have been impossible in the print era (or even the pre-AI digital era)
- assisting with development of literature reviews
- formulating useful database search queries
- developing keywords and subject terms
- assisting with understanding and analysis of complex research articles and data
- providing summaries of long, complex content to assist with understanding
- assist with peer review of academic research output

- language translation, allowing researchers to engage with content in languages they cannot read
- brainstorming ideas for student research projects
- assist in creating content, such as charts, graphs, etc.
- proofreading and text analysis to assist with the writing process

While all of these capabilities and potential uses can seem exciting and potentially game-changing in terms of academic research, it is critically important to understand the limitations of generative AI. It is not a substitute for human creativity or for putting in the individual mental work of discovery, comprehension, analysis, and learning. Furthermore, content generated by AI is well-known to contain factual errors, misinterpretations, and even completely made-up information. While AI can be an immensely helpful tool, great care and precautions must be taken to verify facts and scrutinize any interpretations or conclusions generated by AI technologies. I do not think that these limitations are insurmountable, but I do recognize that these challenges need to be accounted for and managed appropriately. Failure to do so could lead to harmful — or even dangerous — analytical failures and misunderstandings. Not wanting to end on an alarmist note, I will repeat that overall, I am excited and optimistic about the many potential uses and benefits of properly deployed and managed generative AI in academic contexts.

Dr. Trevor Burrows, Digital Initiatives Coordinator, Booth Library, and Instructor of History

I have long been a proponent for machine learning in research and am truly excited by developments in many of the areas I have shared above. I am also intrigued by the application of generative AI to certain aspects of the larger research process, such as resource discovery or generating bespoke archives that can be queried through natural language, though here I do have deeper concerns about its use.

But Spring 2024 was the semester that I saw far more obvious and repeated use of ChatGPT in my students' coursework. That this was sometimes done on assignments that were graded on completion — where I just ask the students to share their own authentic thoughts — was particularly surprising to me. It has been hard not to view this increased use alongside the broader challenges that many of our current students have with fairly basic skills in reading and writing. Conversations with colleagues here and elsewhere affirmed that I am not alone in this experience. Taken as a whole, it has raised broader pedagogical questions for me that are bigger than can be addressed here.

But it has also underscored that there is a tremendous opportunity before us to shape how this generation of students engages with these technologies. I would like to see us tackle that challenge holistically, recognizing that generative AI is part of a broader cultural landscape that tends to devalue intentional and slower processes of learning and inquiry in favor of instrumentalization. I would encourage us to worry less about teaching “how to use AI” from a job readiness perspective, and to focus on teaching about AI including how it works, its cultural and socio-economic contexts, and the deeper concerns it raises about questions of truth and the production and distribution of information.

Perhaps above all else, I would suggest that we do not rush to judgment about what may or may not be a new critical tool or skill in light of these developments. For all the hype, even most industries have proven slow to adopt any of the multipurpose AI applications

that have gotten the most attention. These are technologies in development and flux. With this in mind, the work of the task force has only scratched the surface of this area, and more attention would be valuable to continue following new developments, assessing actual use cases by and for our students, and thoughtfully integrating AI awareness into the curriculum.

Dr. Ayse Costello, Professor of Business, Lumpkin School of Business and Technology

The incorporation of AI into the curriculum has not begun yet, even though both School of Business and School of Technology majors and minors are expected to be impacted heavily by AI. In the future, AI Management can probably be a program in its own right, but AI will also become integral in majors, minors, and specific courses in these majors and minors. For example, if we are looking into a major like Digital Media Technology, AI will impact the whole field. Also, it will have a very specific impact on courses such as game development. Anything related to programming will be impacted by AI since AI can write quite complex programs and/or provide access to program libraries, etc. Also, School of Technology graduates may end up creating AI tools themselves. The School of Business will also be impacted. For example, the accounting profession is expected to lose many entry-level positions to AI execution of tasks.

Some faculty find the issue of AI daunting and they think we may not have the resources to offer a major like AI Management, or we may not be able to incorporate AI into the curriculum in the short run. But I think given the speed of change in the environment that we operate in, this attitude will have to change.

In terms of teaching, many faculty try to devise ways to combat AI use by students that reduce student learning. There is consensus that AI should be the starting point of student research into a topic, not a tool for students to copy and paste answers. Some students are tempted to use AI as a shortcut, but others are using it in more productive ways. Some faculty are starting to find good ways to encourage positive use of AI. Somewhat more concerning is that some students are falling behind in exposure to AI. For reasons that range from being less familiar with technology to being worried that their teachers would think that they are cheating, these students stay away from exploring AI. I am concerned that these students will be falling behind.

Finally, some faculty are starting to incorporate AI in their research. For example, I look at the property rights economics implications of AI tools (and AI-generated resources). There is also much that can be explored regarding the ethical implications of the use of AI tools and AI-generated resources.

Michael Gillespie, Director, Faculty Development and Innovation Center and Professor of Sociology; AI Task Force Co-Chair

The incorporation of AI in any form or modality requires the informed critical lens of the positive and challenging aspects of this technology. However, this critical inquiry must also take into consideration the educational mission of the university and its learning goals, the course learning outcomes, the academic freedom of faculty members, and the learning and career readiness of students. If these pillars are in alignment, then it should be easy to determine the level at which AI could or should be used in academic contexts across the university. That is, if there is an educative purpose to using AI in teaching,

learning, and scholarship, then we should prepare students, staff, and faculty to use these tools.

However, when these pillars are not in alignment, as has been revealed through the early work of this Task Force, there needs to be leadership on how AI and EIU can coexist; again, this should be tied to the mission and learning goals of the university. Free and rigorous inquiry in the arts, humanities, sciences, and professions should be paramount, rooted in the rigor, integrity, and innovation of student, staff, and faculty stakeholders. Disconnections between the use of AI by faculty in scholarship, but concerns of AI by students in coursework, for example, promotes misalignment from the mission, not free and rigorous inquiry.

The diverse policies regarding the use of AI in teaching and learning reflect faculty's academic freedom in course design and facilitation. However, upholding academic freedom, rigor, and integrity should not compromise student learning, engagement, or career readiness. Decisions about using AI should be grounded in pedagogical principles, requiring faculty to maintain a critical awareness of their teaching practices. Instruction should not be constrained by traditional educational norms or the advent of modern technologies; the primary goal is student learning. AI should foster innovation and new pedagogies that ultimately support and enhance the teaching and learning process, not replace it.

Students need both basic and advanced training in information literacy and the critical evaluation of AI applications and software. Whether AI is used as an essential or supplementary tool for learning, its uncritical use is inconsistent with the university's mission. Instead, we should develop learning experiences that embrace the complexities of our modern world, which Hanstedt (2018) describes as a "wicked reality." This approach provides students with opportunities to become authorities and develop a sense of authorship over their world and the world they serve. The learning process should thus prepare students for their future environments, creating space and opportunities to cultivate these competencies at EIU.

Recommendations

Collectively, the EIU AI Task Force, based on the work over the Spring 2024 semester, provide the following recommendations:

1. The EIU AI Task Force should remain as a working group or affinity group through (at least) the next academic year. There needs to be space and time for important discussions around AI and its developments, use and non-use on campus, as well as maintaining momentum to ensure EIU is not left behind (and our learners are ready once they graduate).
2. Collaborate with Deans and Department Chairs to connect with professionals/alumni in our fields to learn how AI is being discussed and used in professional and applied settings.
3. Consult with Department Chairs to consider AI program by program - we need to get a good scope of the range and variation, and how AI impacts programs, faculty, and students across campus.

4. Develop coordinated guidance on AI at EIU that addresses its use by students, faculty, and staff inside and outside of the classroom using proven models such as Code.org, et al. (2024).
5. The FDIC should consider a faculty learning community to explore how AI can be used interdisciplinarily.
6. Identify AI ambassadors at the student, staff, and faculty levels to create and facilitate opportunities to educate stakeholders across campus.
7. Conduct a focus group with department chairs to discover departmental-level conversations and the impacts of AI on specific programs.
8. Develop information literacy, digital literacy, and acceptable use resources for students, faculty, and staff accessible electronically and through Booth Library.
9. Find or develop micro-credentials in AI so faculty and students can develop AI skills and be workforce ready.
10. Have a conversation with the CAA General Education committee to see where AI and information literacy might fit within the general education curriculum.
11. Conduct a large-scale survey of students, staff, and faculty on their understanding, use, and literacy of AI.

Conclusion

Institutions like Eastern Illinois University may have been caught off guard when Artificial Intelligence in its current consumable modalities emerged in November 2022. As such, the risk of falling behind at this revolutionary moment is real. As documented, the EIU AI Task Force has considered the depth and breadth of generative AI, its impacts (positive and challenging) on teaching, learning, and scholarship, and has only scratched the surface of how EIU can and should proceed.

A good portion of our time this semester was spent developing a reasonable scope for our work this term as well as working definitions of generative AI; in addition, we created a template for focus groups with some success (but we need more participants), and we have had greatly important conversations - there is just so much more to do.

If we consider the three broad objectives for this Task Force, given the limited time we were able to convene and work on this important initiative, all three objectives – identifying and cataloging existing AI usage on campus; evaluating potential avenues for leveraging AI to enhance teaching, learning, and scholarship; and examining issues of academic integrity, ethics, legalities, and social impacts of AI for campus and beyond – need more time, research, conversation, and collaboration to be fully addressed.

Yet, there are still concrete takeaways from our work this year. First, there needs to be more education of faculty and students, especially in public dialog across campus. This can originate within this working group, but also from leadership at the institution. Second, the issues with AI are great in number and complexity, and continuing our dialog and inviting a broad range of stakeholders to the table can ensure that any policies implemented are those that reflect the values of mission and vision in service to our campus community. Third, as Schroeder (2022) notes, “There are a whole host of ways in which AI can improve learning outcomes, lessen the workload on faculty and staff, and ensure that our learners are getting the best, most relevant education possible. These outcomes do not happen without intention or proactive preparation.” We need to continue to focus on how AI and EIU coexist, with intention and alacrity.

Appendix A: AI Task Force Charge and Roster

This task force should be an inter-disciplinary, inter-divisional group with the time and space to discuss the positive and challenging aspects of AI at EIU, inclusive of the faculty, staff and students.

The objectives of the EIU AI Task Force are to:

- Identify and catalog the existing AI usage on campus;
- Evaluate potential avenues for leveraging AI to enhance teaching, learning, and scholarship;
- Examine issues of academic integrity, ethics, legalities, and social impacts of AI for campus and beyond.

To these ends, the task force should be represented with faculty membership from each academic college and Booth Library, graduate and undergraduate students, a representative of the Vice President for Academic Affairs, a representative for the Dean of Students, a representative for the Dean of Student Success, and associate deans from academic colleges.

Outcomes of the task force could be, but are not limited to:

- Cataloging information about initiatives at EIU and effective practices being adopted at other peer institutions that are focused on balancing the creative, multidisciplinary, and ethical use of generative AI;
- Developing specific recommendations for how generative AI can be used to amplify learning outcomes in undergraduate and graduate education and for faculty and students in research;
- Creating a set of recommended best practices that can be adopted – and adapted – University-wide regarding the use of AI by students and faculty and help prevent its misuse or negative impact on learning outcomes or in research;
- Developing groundwork for a University-wide repository of examples of positive uses for generative AI that others can adopt, as well as misuses others should want to avoid;
- Establishing guidance for the Vice President of Academic Affairs as needed.

A model for this could be what is happening [at Boston University](#) - albeit a completely different type of higher education institution, has a task force looking at making recommendations on, among other things, for how generative AI can be used to amplify learning outcomes in undergraduate and graduate education and for faculty and students in research. [At Millersville University](#), as another example and an institution in EIU's orbit, the conversation is about how AI enhances and impacts the educational process and positive and negative aspects for student learning.

Roster:

Co-Chairs:

Michael Gillespie, Director of Faculty Development and Innovation, Professor of Sociology
Angela Vietto, Professor and Chair, English Department

Members:

College of Education

Christy Hooser, Associate Dean
Kiran Padmaraju, Professor, Teaching, Learning, and Foundations

College of Health and Human Services

Jill Bowers, Associate Dean
Christopher Maniotes, Assistant Professor of Human Services

College of Liberal Arts and Sciences

Chris Mitchell, Associate Dean
Md Farhadur Reza, Assistant Professor of Computer Science (Sciences)

Lumpkin College of Business and Technology

Ayse Costello, School of Business
Toqeer Israr, School of Technology

Booth Library Services

David Bell (RES Faculty)

Dean of Students

Jody Stone

Dean of Student Success

Yesenia Murato

VPAA Representative

Trevor Burrows (Humanities)

Graduate Student

Nancy T Ladeinde, GSAC Representative

Undergraduate Student

Nidhi Patel, SGA President

Appendix B: Kahoot! Prompts

Student Focus Groups

Q1: What words come to mind when you think about Artificial Intelligence (AI)?

- *Word cloud to see commonalities and differences in responses*
- *Facilitators can ask follow-up questions using these prompts*
 - o *Some who used the word “[pick a most common word in the cloud],” can you elaborate on why you thought of [a most common word in the cloud]?*
 - o *Some who used the word “[pick a least common word in the cloud],” can you elaborate on why you thought of [a least common word in the cloud]?*
 - o *Consider other relevant prompts from the student focus group list*

Q2: What AI platforms have you used? (Select all that apply)

- a. ChatGPT
 - b. Grammarly
 - c. Google Translate
 - d. Google Gemini
 - e. Microsoft Copilot
 - f. Otter.ai
 - g. Duolingo
 - h. Other applications
 - i. I have not used any AI applications (that I am aware of)
- *Follow-up prompts can consider the other “options” to discover more platforms, as well as the number of participants who use common applications*

Q3: How frequently do you use AI in your daily life?

- a. Daily
 - b. Weekly
 - c. Once or twice per month
 - d. Once or twice a semester
 - e. Never
- *Follow-up prompts can consider the range and variation of responses, comparing those students who use it often and those who use it rarely or not at all.*

Q4: If you have used a generative AI application in your daily life outside of any uses for course work, how have you used it? (Select all that apply)

- a. Brainstorming ideas
- b. Writing emails
- c. Social media
- d. Navigation
- e. Web searches
- f. Chatbots
- g. Other ways

Q5: How frequently have you used AI for course work?

- a. Daily
- b. Weekly
- c. Once or twice per month
- d. Once or twice a semester
- e. Never

- *Follow-up prompts can consider the range and variation of responses, comparing those students who use it often and those who use it rarely or not at all.*

Q6: If you have used a generative AI application in your course work, how have you used it? (Select all that apply)

- a. Brainstorming ideas
- b. Personalized instruction / tutoring
- c. Editing papers
- d. Generating discussion posts
- e. Translating text
- f. Computations
- g. Understanding difficult content
- h. Other ways

Q7: How has AI been discussed in your courses this semester? (Select all that apply)

- a. We haven't discussed AI at all.
- b. AI has been briefly mentioned as a relevant technology in the field.
- c. We've covered the basic concepts and applications of AI.
- d. We've explored the ethical implications and societal impact of AI.
- e. We've used AI tools or techniques in course assignments or projects.
- f. Other (please specify)

- Q8: How well do you feel like you can explain generative AI to a roommate or family member?
- a. I can explain what it is and give clear examples of how it works.
 - b. I can explain the basic idea and discuss some of its uses.
 - c. I understand the concept of generative AI, but I wouldn't feel comfortable explaining how it creates new content.
 - d. I've heard of it and could follow a conversation, but I wouldn't be able to explain it myself.
 - e. Other (please specify)

- Q9: How do you think AI will impact your career field?
- a. AI will create many new job opportunities in my field. (Positive impact)
 - b. AI will automate some tasks in my field, but I believe it will also create new opportunities. (Mixed impact)
 - c. AI will likely replace some jobs in my field, and I'm concerned about the impact on my career. (Negative impact)
 - d. I am unsure how AI will impact my field. (Neutral)
 - e. AI will fundamentally change the nature of work in my field. (Transformative impact)
-

Faculty Prompts

- Q1: What words come to mind when you think about Artificial Intelligence (AI)?
- *Word cloud to see commonalities and differences in responses*
 - *Facilitators can ask follow-up questions using these prompts*
 - o *Some who used the word "[pick a most common word in the cloud]," can you elaborate on why you thought of [a most common word in the cloud]?*
 - o *Some who used the word "[pick a least common word in the cloud]," can you elaborate on why you thought of [a least common word in the cloud]?*
 - o *Consider other relevant prompts from the faculty focus group list*
- Q2: What types of AI platforms have you used? (Select all that apply)
- a. Text generation and editing tools (e.g., ChatGPT, Grammarly)
 - b. Machine translation tools (e.g., Google Translate)
 - c. Code generation and completion tools (e.g., Microsoft Copilot)
 - d. Speech recognition and transcription tools (e.g., Otter.ai)
 - e. Language learning applications (e.g., Duolingo)
 - f. Research and academic AI platforms
 - g. Creative content generation tools (e.g., art, music)
 - h. Personal assistant or productivity applications
 - i. Social media or entertainment applications with AI features
 - j. I'm not sure if I've used any AI applications.
- *Follow-up prompts can consider the other "options" to discover more uses, as well as the number of participants who use common applications and uses*

Q3: How frequently have you used AI for your instruction?

- f. Daily
- g. Weekly
- h. Once or twice per month
- i. Once or twice a semester
- j. Never

- *Follow-up prompts can consider the range and variation of responses, comparing those faculty who use it often and those who use it rarely or not at all.*

Q4: If you have used a generative AI application in your instruction, how have you used it?

(Select all that apply)

- a. To create engaging or interactive learning materials, like quizzes, simulations, or case studies.
- b. To personalize learning experiences for students based on their individual needs or progress.
- c. To help students develop critical thinking skills by evaluating and analyzing AI-generated content.
- d. To generate prompts, discussion topics, or writing exercises to stimulate creative thinking.
- e. To provide students with practice opportunities in areas requiring specific skills (e.g., data analysis, research).
- f. Other.

Q5: If you have used a generative AI application in your research, how have you used it?

(Select all that apply)

- a. To generate creative text formats, like poems, code, scripts, or musical pieces.
- b. To generate new data or augment existing datasets.
- c. To explore different research ideas or brainstorm new hypotheses.
- d. To summarize or analyze large amounts of text data.
- e. To create images or other visual content relevant to my research.
- f. Other.

Q6: How have you discussed AI with your students? (Select all that apply)

- g. We haven't discussed AI at all.
- h. AI has been briefly mentioned as a relevant technology in the field.
- i. We've covered the basic concepts and applications of AI.
- j. We've explored the ethical implications and societal impact of AI.
- k. We've used AI tools or techniques in course assignments or projects.
- l. Other.

Q7: What types of uses of AI have you encountered by students in your courses? (Select all that apply)

- a. Using AI writing assistants for essays or assignments.
- b. Employing AI translation tools to understand research materials.
- c. Leveraging AI code completion or debugging tools in programming exercises.
- d. Utilizing AI-powered research assistants or literature review tools to find relevant sources.
- e. Engaging with AI-driven simulations, tutorials, or learning experiences.
- f. Discussing the ethical implications or societal impact of AI.
- g. Raising questions or concerns about the use of AI in their work.
- h. Demonstrating knowledge of specific AI applications or tools (e.g., mentioning specific platforms).
- i. Other.

Q8: In your experience, have students used AI tools in a way that undermines the learning objectives of your courses (e.g., using AI applications to complete writing assessments without permission, proper citation, or critical thinking)?

- a. Yes, this has happened frequently in my courses.
- b. Yes, this has happened occasionally in my courses.
- c. I have not encountered this in my courses, but I am concerned about the possibility.
- d. I am not sure if I have encountered this in my courses.

Q9: What types of uses of AI have you encountered by students in your courses? (Select all that apply)

- a. Using AI writing assistants for essays or assignments.
- b. Employing AI translation tools to understand research materials.
- c. Leveraging AI code completion or debugging tools in programming exercises.
- d. Utilizing AI-powered research assistants or literature review tools to find relevant sources.
- e. Engaging with AI-driven simulations, tutorials, or learning experiences.
- f. Discussing the ethical implications or societal impact of AI.
- g. Raising questions or concerns about the use of AI in their work.
- h. Demonstrating knowledge of specific AI applications or tools (e.g., mentioning specific platforms).
- i. Other

Q10: How do you think AI will impact your discipline?

- a. AI will significantly transform the research questions we ask and the methodologies we use.
- b. AI will automate some research tasks and data analysis, allowing us to focus on higher-level thinking.
- c. AI will create new research opportunities and open up entirely new fields of study in my discipline.
- d. AI may raise new ethical considerations specific to my discipline that we need to address.
- e. I am unsure of the overall impact of AI on my discipline.

Appendix C: Anonymized Kahoot! Results

Student Focus Group Kahoot! Results

Question Number	Question	Answer
1 Word cloud	What words come to mind when you think about Artificial Intelligence (AI)?	computer, new, creep
		Progress
		Easy life
		ChatGPT
2 Poll	What AI platforms have you used? (Select all that apply)	Other Generative AI
		ChatGPT, Grammerly, Microsoft Copilot, Google Gemini, Other Generative AI
		ChatGPT, Grammerly, Other Generative AI
		Grammerly, Other Generative AI
		Grammerly, Other Generative AI
3 Poll	How frequently do you use AI in your daily life?	Once or twice a semester
		Daily
		Weekly
		Once or twice a semester
		Weekly
4 Poll	If you have used generative AI in everyday life (outside of course work), how have you used it? (Select any that apply)	Brainstorming ideas
		Brainstorming ideas
		Brainstorming ideas
		Social media
		Brainstorming ideas; writing emails

5 Poll	How frequently do you use AI for course work?	Daily
		Once or twice per month
		Weekly
		Never
		Weekly
6 Poll	If you have used a generative AI application in your course work, how have you used it? (Select all that apply)	Brainstorming ideas, Other ways
		Brainstorming ideas, Personalized instruction/ tutoring
		Brainstorming ideas, Personalized instruction/ tutoring, Editing papers, Understanding difficult content, Other ways
		Other ways
		Personalized instruction / tutoring ; Understanding difficult content
7 Poll	How has AI been discussed in your courses this semester? (Select all that apply)	AI has been briefly mentioned as a relevant technology in the field.
		We have not discussed AI at all.
		AI has been briefly mentioned as a relevant technology in the field., We've covered the basic concepts and application of AI., We've explored the ethical implications and societal impact of AI., We've used AI tools or techniques in course assignments or projects., AI has been discussed in other ways.
		We've explored the ethical implications and societal impact of AI.
		AI has been briefly mentioned as a relevant technology in the field.
8 Poll	How well do you feel like you can explain generative AI to a roommate or family member?	I've heard of it & could follow a conversation, but I couldn't explain it.
		I can explain what it is and give clear examples of how it works.
		I can explain the basic idea and discuss some of its uses.
		I understand, but am not comfortable explaining how creates new content.
		I've heard of it & could follow a conversation, but I couldn't explain it.

9 Poll	How do you think AI will impact your career field?	AI will automate some tasks, but it will also create new opportunities.
		AI will likely replace jobs & I'm concerned about the impact on my career.
		AI will fundamentally change the nature of work in my field.
		AI will automate some tasks, but it will also create new opportunities.
		Other impact(s)

Faculty Focus Group Kahoot! Results

Question Number	Question	Answer
1 Word cloud	What words come to mind when you think about Artificial Intelligence (AI)?	Cheating efficiency
		Opportunity
		Not authentic
		Automatic
2 Poll	What types of AI platforms have you used? (Select all that apply)	Text generation and editing (e.g. ChatGPT, Grammarly)
		Text generation and editing (e.g. ChatGPT, Grammarly), Machine translation tools (e.g., Google Translate) , Code generation and completion tools (e.g., Microsoft Copilot) , Speech recognition and transcription tools (e.g., Otter.ai) , Language learning applications (e.g., Duolingo)
		I am not sure if I have used any AI applications.
		Text generation and editing (e.g. ChatGPT, Grammarly), Machine translation tools (e.g., Google Translate) , Code generation and completion tools (e.g., Microsoft Copilot) , Speech recognition and transcription tools (e.g., Otter.ai)
3 Poll	How frequently have you used AI for your instruction?	Once or twice a semester
		Weekly
		Never
		Daily
4 Poll	If you have used a generative AI application in your instruction, how have you used it? (Select all that apply)	Engaging or interactive learning materials (e.g. quizzes, simulations)., Developing critical thinking skills by evaluating AI-generated content., Generating discussion topics or writing prompts to spark creative thinking., Providing active learning in key skills (e.g., data analysis, research).
		Engaging or interactive learning materials (e.g. quizzes, simulations)., Developing critical thinking skills by evaluating AI-generated content., Generating discussion topics or writing prompts to spark creative thinking., Providing active learning in key skills (e.g., data analysis, research)., Other ways.
		Other ways.
		Engaging or interactive learning materials (e.g. quizzes, simulations)., Developing critical thinking skills by evaluating AI-generated content.

5 Poll	If you have used a generative AI application in your research, how have you used it? (Select all that apply)	Explore different research ideas or brainstorm new hypotheses., Summarize or analyze large amounts of text data.
		Generate creative text formats (e.g., poems, code, scripts, or scores). , Explore different research ideas or brainstorm new
		Other ways.
		Generate creative text formats (e.g., poems, code, scripts, or scores). , Other ways.
6 Poll	How have you discussed AI with your students? (Select all that apply)	AI has been briefly mentioned as a relevant technology in the field. , We've covered the basic concepts and applications of AI. , We've explored the ethical implications and societal impact of AI. , We've used AI tools or techniques in course assignments or projects.
		We've covered the basic concepts and applications of AI. , We've explored the ethical implications and societal impact of AI. , We've used AI tools or techniques in course assignments or projects.
		We haven't discussed AI at all.
		AI has been briefly mentioned as a relevant technology in the field. , We've covered the basic concepts and applications of AI. , We've used AI tools or techniques in course assignments or projects.
7 Poll	What types of uses of AI have you encountered by students in your courses? (Select all that apply)	AI has been used by students in other ways.
		Using AI writing assistants for essays or assignments. , Utilizing AI-powered research assistants or literature review tools. , Raising questions or concerns about the use of AI in their work.
		AI has been used by students in other ways.
8 Poll	Have students used AI tools in a way that undermines the learning objectives of your courses (e.g., writing papers)	Yes, this has happened occasionally in my courses.
		Yes, this has happened occasionally in my courses.
		Yes, this has happened occasionally in my courses.
9 Poll	How do you think AI will impact your discipline?	AI will automate some research tasks, allowing for higher-level thinking.
		AI will create new research opportunities & entirely new fields of study.
		AI will create new research opportunities & entirely new fields of study.

References

- Akinwalere, S. N., & Ivanov, V. (2022). Artificial Intelligence in Higher Education: Challenges and Opportunities. *Border Crossing*, 12(1), 1–15. <https://doi.org/10.33182/bc.v12i1.2015>
- Aoun, J. (2017). *Robot-proof: higher education in the age of artificial intelligence*. The MIT Press.
- Archambault, S. (2023). Expanding on the Frames: Making a Case for Algorithmic Literacy. *Communications in Information Literacy*, 17(2). <https://doi.org/10.15760/comminfolit.2023.17.2.11>
- Association for Writing Across the Curriculum. (2023, January 30). Statement on Artificial Intelligence Writing Tools in Writing Across the Curriculum Settings. <https://wacassociation.org/statement-on-ai-writing-tools-in-wac/>
- Bowen, J.A. and C.E. Watson (2024). *Teaching with AI: A practical guide to a new era of human learning*. Johns Hopkins Press.
- Bratic, V. (2023, July 10). Teaching and Thinking with Technology. Faculty Focus | Higher Ed Teaching & Learning. <https://www.facultyfocus.com/articles/teaching-with-technology-articles/teaching-and-thinking-with-technology/>
- Center for AI Safety. (2023, May 30). Statement on AI Risk. Statement on AI Risk. <https://www.safe.ai/work/statement-on-ai-risk>
- Code.org, CoSN, Digital Promise, European EdTech Alliance, Larimore, J., & PACE. (2024). AI Guidance for Schools Toolkit. <https://www.teachai.org/toolkit>
- D’Agostino, S. (2023, January 11). ChatGPT Advice Academics Can Use Now. *Inside Higher Ed*. <https://www.insidehighered.com/news/2023/01/12/academic-experts-offer-advice-chatgpt>
- Damiano, A. D., Lauría, E. J. M., Sarmiento, C., & Zhao, N. (2024). Early Perceptions of Teaching and Learning Using Generative AI in Higher Education. *Journal of Educational Technology Systems*, 52(3), 346–375. <https://doi.org/10.1177/00472395241233290>
- Dawa, T., Dhendup, S., Tashi, S., & Rosso, M. (2024). University Students’ Perspective on ChatGPT and Technology Literacies. *Educational Innovation and Practice*, 7(1). <https://doi.org/10.17102/eip.7.2024.10>
- Faculty Development and Innovation Center. (2023). AI, Image and Text Generation, and Information Bias. Eastern Illinois University. <https://www.eiu.edu/fdic/Bias-in-AI-image-and-text-generators-Final.pdf>

- Gartner, Inc. (2023, August 16). *Gartner Places Generative AI on the Peak of Inflated Expectations on the 2023 Hype Cycle for Emerging Technologies*.
<https://www.gartner.com/en/newsroom/press-releases/2023-08-16-gartner-places-generative-ai-on-the-peak-of-inflated-expectations-on-the-2023-hype-cycle-for-emerging-technologies>
- Gruetzemacher, R., & Whittlestone, J. (2021). The transformative potential of artificial intelligence. *Journal of Higher Education Policy and Management*.
<https://doi.org/https://doi.org/10.1016/j.futures.2021.102884>
- Hanstedt, P. (2018). *Designing courses for a complex world* (First edition). Stylus.
- James, A. B., & Filgo, E. H. (2023). Where does ChatGPT fit into the Framework for Information Literacy? The possibilities and problems of AI in library instruction. *College & Research Libraries News*, 84(9), 334. <https://doi.org/10.5860/crln.84.9.334>
- Liu, T. M. (2024, April 16). The Growing Need for Information Literacy. <https://info.aiim.org/aiim-blog/the-growing-need-for-information-literacy>
- Luccioni, A. S., Jernite, Y., & Strubell, E. (2023). Power Hungry Processing: Watts Driving the Cost of AI Deployment? <https://doi.org/10.48550/ARXIV.2311.16863>
- Marr, B. (2023, December). The Rise Of Generative AI In Design: Innovations And Challenges. *Forbes*. <https://www.forbes.com/sites/bernardmarr/2023/12/13/the-rise-of-generative-ai-in-design-innovations-and-challenges/>
- Miller, M. (2023). *AI for Educators: learning strategies, teacher efficiencies, and a vision for an artificial intelligence future*. Dave Burgess Consulting, Incorporated.
- Mississippi State University Provost's Office Working Group on AI. (2023, November 8). Report on Generative Artificial Intelligence (GAI) and Instruction.
[https://www.provost.msstate.edu/sites/www.provost.msstate.edu/files/2023-11/AI Working Group Report.pdf](https://www.provost.msstate.edu/sites/www.provost.msstate.edu/files/2023-11/AI%20Working%20Group%20Report.pdf)
- MLA-CCCC Joint Task Force on Writing and AI. (2023). Overview of the Issues, Statement of Principles, and Recommendations [Working Paper].
<https://hcommons.org/app/uploads/sites/1003160/2023/07/MLA-CCCC-Joint-Task-Force-on-Writing-and-AI-Working-Paper-1.pdf>
- Mollick, E. R., & Mollick, L. (2023). Assigning AI: Seven Approaches for Students, with Prompts. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4475995>
- Munn, L., Magee, L., & Arora, V. (2023). Unmaking AI Imagemaking: A Methodological Toolkit for Critical Investigation (No. arXiv:2307.09753). *arXiv*.
<https://doi.org/10.48550/arXiv.2307.09753>

- Nathan, A., Grimberg, J., & Rhodes, A. (2024, June 25). *Gen AI: Too Much Spend, too Little Benefit?* (129; Top of Mind). Goldman Sachs Group. Retrieved July 2, 2024, from <https://www.goldmansachs.com/intelligence/pages/goldman-research/gen-ai-too-much-spend-too-little-benefit/report.pdf>
- Office of the Prime Minister. (2023, June 7). UK to host first global summit on Artificial Intelligence. GOV.UK. <https://www.gov.uk/government/news/uk-to-host-first-global-summit-on-artificial-intelligence>
- Ouyan, F., Zhen, L., & Jiao, P. (2022). Artificial Intelligence in Online Higher Education: A Systematic Review of Empirical Research from 2011-2020. *Education and Information Technologies*, 27(6), 7893–7925. <https://link.springer.com/article/10.1007/s10639-022-10925-9>
- Reichental, J. (2023, September). GPT and Generative AI - Introduction to Generative AI with GPT Video Tutorial [Video]. LinkedIn Learning. <https://www.linkedin.com/learning/introduction-to-generative-ai-with-gpt/gpt-and-generative-ai>
- Saenko, K. (2023, May 25). A Computer Scientist Breaks Down Generative AI's Hefty Carbon Footprint. *Scientific American*. <https://www.scientificamerican.com/article/a-computer-scientist-breaks-down-generative-ais-hefty-carbon-footprint/>
- Saunders, L. (2022). Faculty Perspectives on Mis- and Disinformation across Disciplines. *College & Research Libraries*, 83(2). <https://doi.org/10.5860/crl.83.2.221>
- Schroeder, R. (2022). AI Transforming Education. *Insider Higher Ed*. <https://www.insidehighered.com/digital-learning/blogs/online-trending-now/ai-transforming-education>
- Shneiderman, B. (2022). *Human-centered AI*. Oxford University Press.
- Stanford University Human-Center Artificial Intelligence. (2022, April 1). Brief Definitions of Key Terms in AI. <https://hai.stanford.edu/node/9901>
- Sullivan, M. (2024, April 25). *Why we may be headed for a generative AI winter*. *Fast Company: AI Decoded*. <https://www.fastcompany.com/91112588/we-may-be-headed-for-a-generative-ai-winter>
- Swaak, T. (2024, February 26). AI Will Shake Up Higher Ed. Are Colleges Ready? *Chronicle of Higher Education*. <https://www.chronicle.com/article/ai-will-shake-up-higher-ed-are-colleges-ready>
- The White House. (2023, October 30). Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence. The White House. <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>

- Thorp, H. H. (2023). ChatGPT is fun, but not an author. *Science*, 379(6630), 313–313.
<https://doi.org/10.1126/science.adg7879>
- Tilman, M. J. (1984). Artificial Intelligence & Its Importance in Education.
<https://eric.ed.gov/?id=ED253198>
- U.S. Department of Education, Office of Educational Technology. (2023). Artificial Intelligence and Future of Teaching and Learning: Insights and Recommendations. <https://tech.ed.gov/ai/>
- University of Michigan Information Technology Services. (2024). About Generative Artificial Intelligence. Generative AI at University of Michigan. <https://genai.umich.edu/about-generative-ai>
- White, J. (2023, November 6). Academic Integrity in the Age of AI. EDUCAUSE Review.
<https://er.educause.edu/articles/sponsored/2023/11/academic-integrity-in-the-age-of-ai>
- Xu, D., & Xu. (2019). The Promises and Limits of Online Higher Education: Understand How Distance Education Affects Access, Cost, and Quality. AEI.
<https://files.eric.ed.gov/fulltext/ED596296.pdf>