Arizona State University: Incorporating AI in Higher Education



National Conference of Academic Deans

17 July 2024

Anne Katherine Jones, vice provost for undergraduate education

11 =

11.111

ASU Charter

ASU is a comprehensive **public research university**, measured not by whom it excludes, but by **whom it includes** and how they **succeed**; advancing **research and discovery** of public value; and assuming **fundamental responsibility** for the economic, social, cultural and overall health of the **communities** it serves.



Who we include:

In fall 2023, 145,655 students enrolled at ASU

Our undergraduate and graduate students enroll on four campuses in the greater Phoenix metropolitan region and at centers and locations in the state of Arizona – and across the nation and globally through ASU Online.



The Vision



The Status Quo

The Path



We envision a future in which AI greatly augments the cognitive and creative powers of the ASU community, making personalized and adaptive learning at scale the norm, and access and excellence inextricably linked. In this vision of augmented-humanity, all may instantly harness the sum of human knowledge, thought, and imagination, empowering them to produce fresh discoveries and compelling new visions, to accelerate research, facilitate problem-solving, and vastly expand creativity.



The Status Quo

Throughout work, everyone is using AI. A ChatGPT window has become as used as a Google window.

Anant Agarwal, Founder of edX

> Surveys suggest from 50-80% students are using Generative AI in their studies. Within a given data set, the proportion of university faculty reporting using Generative AI is significantly lower.





Copyright © 2024 Arizona Board of Regents

ASU Tactics supporting Al in Teaching and Learning

GenAl Literacy Training for Faculty and Students

Al Innovation Challenge: Experimentation, Collaboration, and Research

Guidelines, Tools and Policies

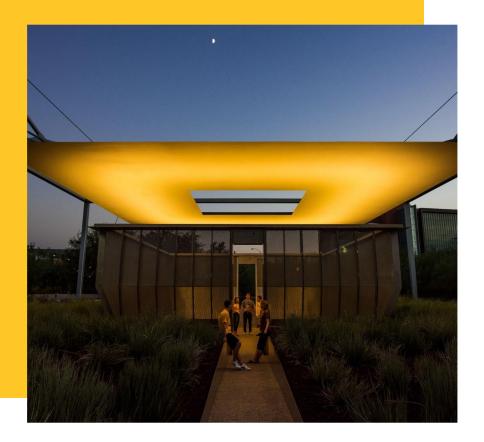
GenAl Literacy Training for Faculty and Students



GenAl Literacy

Al literacy is the evolving set of knowledge and skills necessary to understand, critically evaluate and use AI responsibly and effectively. Al literacy enables informed, ethical decision making to equitably advance the wellbeing of the communities ASU serves.





GenAl Learning Outcomes

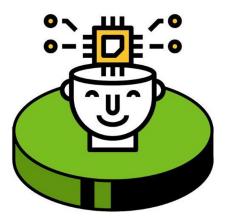
- Understand: Describe AI technologies including how they are created, learn, and work.
- 2. Evaluate Critically: Analyze questions arising from the regulation, development, deployment or use of Al.
- 3. Create: Use AI effectively and responsibly to produce discipline-relevant materials.

GenAl Literacy for Faculty

<u>https://careercatalyst.asu.edu/programs/teaching-learning-generative-ai/</u> Cost \$25 with Voucher Code: ChronicleASU24

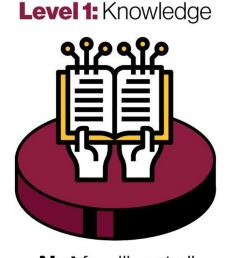
>2500 ASU faculty and staff enrolled in the course

49 nd ASU Experts in Contributing to the Course Level 3: Application



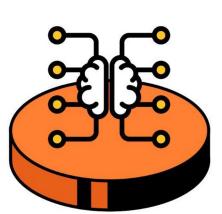
Very familiar (regularly use AI tools)

Module 6



Not familiar at all (never used an AI tool)

Modules 1, 2, and 3

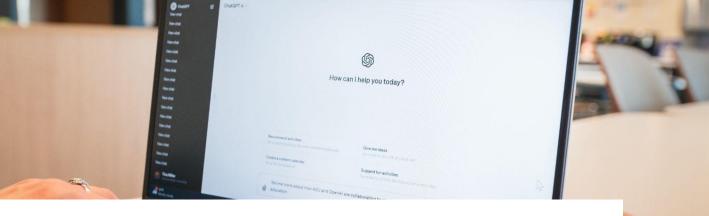


Somewhat familiar (used one or more Al tool(s))

Modules 4 and 5

Experimentation, Collaboration, and Research





ASU's collaboration with OpenAl charts the future of Al in higher education

On January 18, 2024, ASU made international headlines as the **first university to collaborate with OpenAl**, the Al research and deployment company behind ChatGPT.

The collaboration brings the advanced capabilities of ChatGPT Enterprise into higher education, setting a new precedent for how universities enhance learning, research and business operations.

ChatGPT Enterprise offers enhanced capabilities



Any prompts the ASU community inputs into ChatGPT Enterprise remain private; meaning that OpenAI does not use this data for its training models



Unlimited access to ChatGPT-4

This is the most current version of ChatGPT available, offering higher-speeds than ever before.



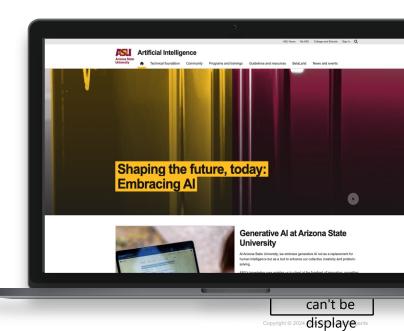
Safeguards ASU's intellectual property

ChatGPT Enterprise offers a multi-tenant approach that ensures ASU data remain secure and private.

Al Innovation Challenge: Faculty and Staff at the Forefront of Discovery and Implementation

Launched February 1, 2024, the Al Innovation Challenge at ASU invited faculty and staff to submit proposals for how they would harness **ChatGPT Enterprise** to actively shape the future of learning, research and work.

ai.asu.edu/AI-Innovation-Challenge



Submissions highlights

at a glance

400+

proposals submitted

200+ proposals accepted to date

Projects across three areas of impact

- 1. Advance innovations in teaching and learning
- 2. Enhance AI research with societal impact
- 3. Explore scaling the public enterprise

Projects span across **all three ASU Enterprises** – Academic, Knowledge and Learning

15 out of the 17 schools and colleges are represented in the spring 2024 projects

Innovations in teaching and learning

Proposal spotlight

BehavioralSim will leverage ChatGPT Enterprise to revolutionize Doctor of Behavioral Health (DBH) education and other health solutions courses with counseling components at ASU. This Al-driven bot will enable students to navigate through realistic scenarios, enhancing their role-playing, practical skills, and theoretical application of person-centered counseling techniques. Initially piloted with student workers, it aims to provide a controlled, immersive environment for learning counseling techniques, bridging academic learning with practical application in preparation for real-world challenges in behavioral health professions.

College of Health Solutions

Additional examples

Al-enabled "Language Buddy" to support asynchronous language learning environments <u>College of Liberal Arts and Sciences</u> FacilitatorBot: Enhancing course delivery with Al-powered faculty support EdPlus

By the numbers

49 proposals for innovations in teaching and learning

432 licenses awarded across projects

Top themes surfaced

Course design Content development Faculty and student support tools Personalized feedback support Study tools

Echo Fusion – Scalable Al history feedback with a human touch Learning Enterprise

Teaching and Learning Research Projects

AI Writing Study

Project is currently underway with data collection pending IRB approval. 29 faculty teaching ~1,800 students study using Gen AI tool WordTune and ChatGPT in the course of their regular classroom assignments. Collect data on the integration of AI tools in the writing process, faculty integration of AI in curriculum, and student perceptions of the use of generative AI in the writing process.

Al research with societal impact

Proposal spotlight

This project will focus on understanding whether and how well ChatGPT is able to detect bias, including anti-Black, cultural, linguistic, and ability-based bias. Successful exploration would progress toward an innovative GPT that could be employed at ASU to reduce the harm of unchecked bias before it happens and improve inclusion and accessibility in the process. Beginning in the context of the higher education classroom, a tool of this sort could prove indispensable in many other contexts as well.

Watts College of Public Service and Community Solutions

By the numbers

24 proposals to enhance Al research with societal impact

116 licenses awarded across projects

Top themes surfaced

Analysis Accuracy Coding Ethics and bias Sciences Coding

Additional examples

Assessment of ChatGPT for improving coding efficiency for large desert carbon cycle datasets <u>College of Liberal Arts and Sciences</u> Evaluation of AI for the development of biologically based models in toxicology <u>New College</u> An exploration of Al-human collaborative data labeling practice for research on culturally nuanced social topics <u>Walter Cronkite</u>

Scaling the public enterprise

Proposal spotlight

Our project leverages ChatGPT Enterprise to establish a framework for assessing GenAI's influence on the workforce in Arizona, focusing on augmenting worker capabilities, enhancing productivity, and identifying essential skills to maintain and acquire.

We aim to utilize occupational datasets and labor statistics from the Department of Labor, employing ChatGPT Enterprise for literature review, framework development, data analysis, prompt testing, and custom GPT construction. We will identify underrepresented workers in Arizona and focus on how they can benefit from GenAI.

Decision Theater

Additional examples

Enhancing mid-manager leadership development through Al-driven training <u>EdPlus</u> RapidResponse GPT: Enhancing incident communications at ASU Enterprise Technology

By the numbers

32 proposals to explore scaling the public enterprise

315 licenses awarded across projects

Top themes surfaced

Analysis Operations Reporting Training and support Workforce development

Audience-aligned idea generation for social media creative <u>MRSC</u>

Guidelines, Tools and Policies



Guidelines, Tools and Policies

Digital Trust Guidelines for Generative Artificial Intelligence Use

https://ai.asu.edu/digital-trust-guidelines

These guidelines have been reviewed and approved by Enterprise Technology Digital Trust, Cybersecurity, Al Acceleration, Learning Experience and the Office of General Council.

Generative AI Tools

https://ai.asu.edu/generative-ai-tools

View the generative AI tools that have completed the ASU VITRA process and are approved for use at the departmental level.

Academic Integrity: Syllabus Guidelines

https://docs.google.com/document/d/1u9RGD8oU3e16XkdFNC6k8tgXIzYW2L7yZ2ELW 5LfZqQ/edit



ai.asu.edu

This website serves as a showcase and central hub to highlight the multifaceted impact of augmented intelligence (AI) on learning, research, and work. Outlining the enterprise's holistic approach to AI, it provides compelling success stories, valuable resources, and opportunities for active participation.

