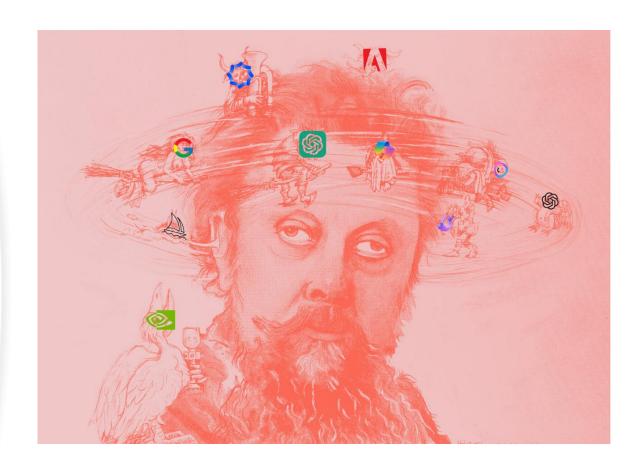
Practical Efficiency and Ethical use of Al in State Government

Marc Watkins

Assistant Director of Academic Innovation





Nadia Piet & Archival Images of AI + AlxDESIGN / Better Images of AI / AI Am Over It / CC-BY 4.0

National Leadership in Al Training

"There is no better place to see the promise and the peril of generative artificial intelligence playing out than in academia. And there's no better place to see how academia is handling the explosion in ChatGPT and its ilk than at Ole Miss"

-Molly Roberts Washington Post

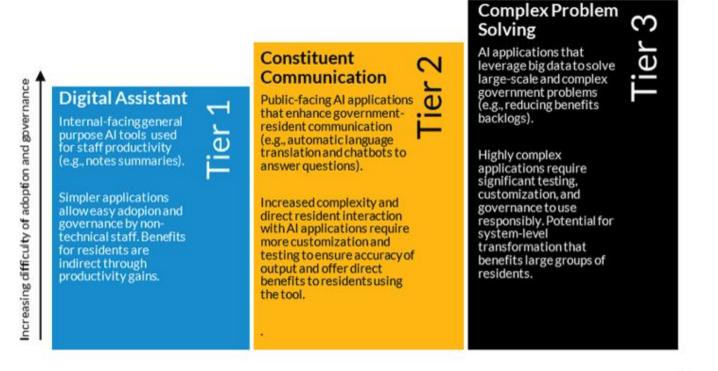
Al is forcing teachers to confront an existential question



How Al is Being Used in Local Governments

- 'Al' isn't just one tool or process
- Generative AI
- Predictive AI
- The more complex the usage the more challenges appear

Local Governments' Use of GenAl Falls into Three Tiers That Increase in Complexity



Increasing magnitude of direct benefits to residents

Al Agents

- ChatGPT now has an Agent, an Al system that can reason, plan, and execute tasks autonomously. The agent operates on its own virtual computer, preserving context across multiple tool uses and allowing fluid transitions between reasoning and action.
- Here's an example from Mini-Max a Chinese rival to OpenAl creating a course on Al agents

Featured Masterpieces

Discover some of the most extraordinary pieces of art history housed in the Louvre Museum. Each artwork tells a unique story.



Mona Lisa (La Gioconda)

Leonardo da Vinci 1503-1519

The Mona Lisa represents the pinnacle of Renaissance portraiture and Leonardo's mastery of the sfuma...

View Details >



Venus de Milo

Alexandros of Antioch (attributed) c. 150-125 BCE

This Hellenistic masterpiece represents the Greek ideal of feminine beauty and marks the height of a...

View Details >



Winged Victory of Samothrace

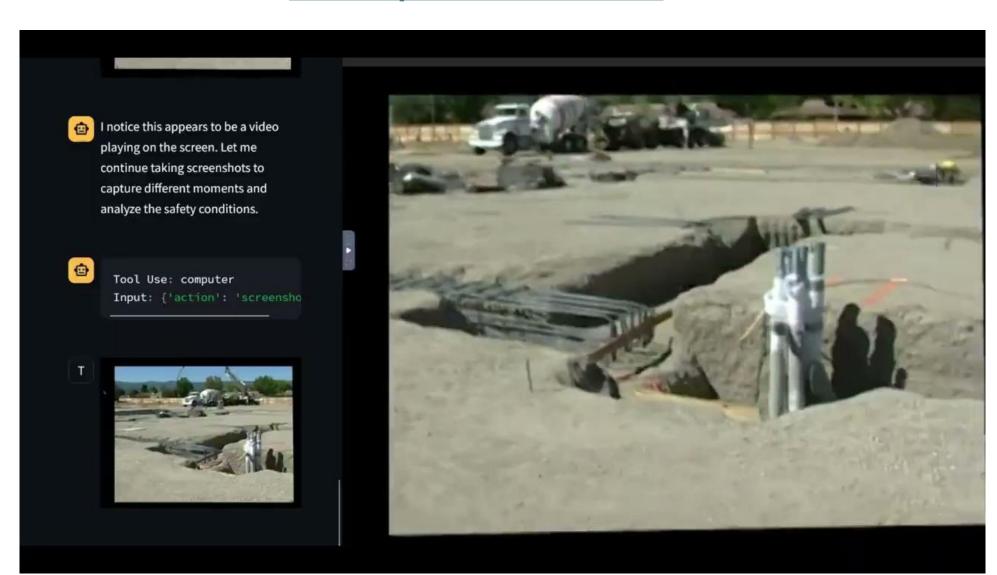
Unknown (Hellenistic) c. 190 BCE

This dramatic sculpture commemorates a naval victory and represents Nike, the Greek goddess of victo...

View Details >

View All Artwor

Computer Vision



Al is Impressive until it Fails

 Complex AI systems suffer from errors, including hallucinations, incorrect data, and good ole' fashion human errors.



This AI technology was supposed to detect guns in school. Here's what happened outside Nashville

By Amanda Musa, CNN

② 8 min read · Published 12:00 PM EST, Sat February 1, 2025





Kristi Rainwater kneels in prayer at a memorial for victims of a shooting at Antioch High School near Nashville, Tennessee, on January 23. George Walker IV/AP

Adversarial Techniques

 People are also using simple tricks to get past Al systems

From the New York Times Scammers
Could Cheat New York's New
Congestion Pricing Tolls

Scammers Could Cheat New York's New Congestion Pricing Tolls

Drivers who obscure their plates or otherwise circumvent paying tolls already cost the city's mass transit system millions of dollars.





Congestion pricing began on Sunday. Hiroko Masuike/The New York Times



Published Jan. 5, 2025 Updated Jan. 6, 2025

Al is Creating Challenges in Hiring

The New York Times

Recruiters Use A.I. to Scan Résumés. Applicants Are Trying to Trick It.

In an escalating cat-and-mouse game, job hunters are trying to fool A.I. into moving their applications to the top of the pile with embedded instructions.

cu9801 _ cu9802 _ cu9803 _ cu9804 _ cu9805 09812 cv9811 cv9810 cv980

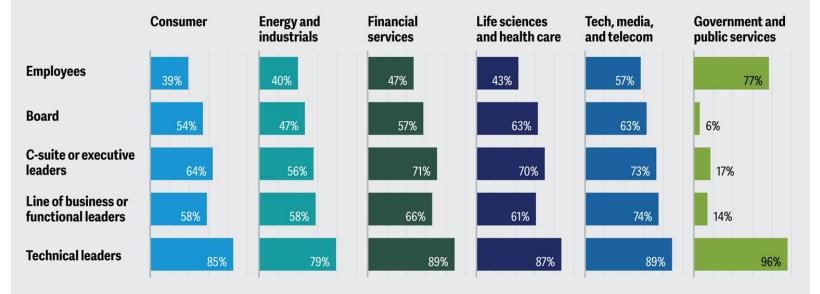
Government Workers are Interested in Al

 From Deloitte's Scaling gen AI in US state and local governments: Opportunities, challenges, and the path to achieving large-scale value

Figure 3

Government employees show greater eagerness to use generative AI than their commercial counterparts

For the following groups in your organization, rate their overall level of interest in generative AI. (High or very high level of interest)

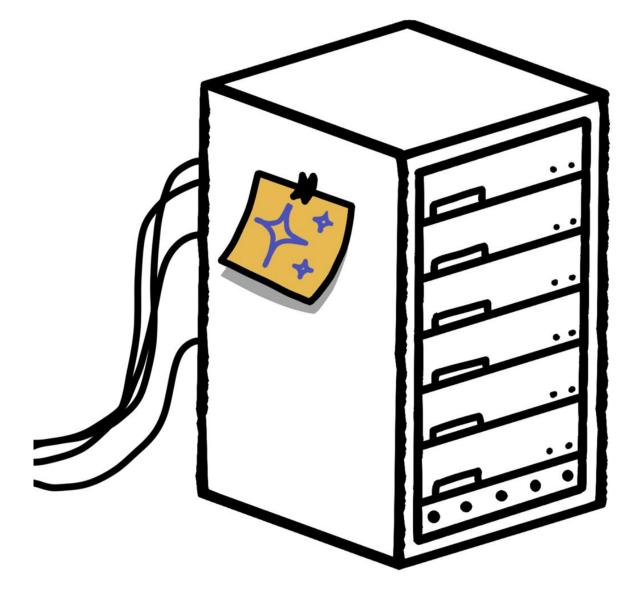


Source: Deloitte's State of Generative AI in the Enterprise, Q3 report, 2024.

Deloitte. deloitte.com/us/en/insights/research-centers/center-for-government-insights.html

Goals for Today

- Overview of the current Allandscape
- Demystifying generative Al
- Begin thinking about Al governance at your agency
- Review the SECURE framework for ethical engagement with AI
- Explore different AI tools and use cases



Beckett LeClair / https://betterimagesofai.org / https://creativecommons.org/licenses/by/4.0/

How We'll Frame Our Discussion

Critical Al Literacy:

focuses on **understanding and analyzing** Al systems

- How the technology works under the hood
- Broader societal implications and consequences
- Critical evaluation of Al's impact

"I understand what this technology is, how it works, and what it means for society"

Al Fluency:

focuses on **practical**, **responsible** use:

- Actually using AI tools effectively and appropriately
- Understanding your role and responsibilities as a user
- Safe and accountable implementation

"I can use this technology responsibly and effectively in my work"

We will need people who can both think critically about AI and use AI responsibly

Government Al Landscape in Mississippi

From Code for America

Select a state:

Mississippi

Mississippi



Mississippi is actively developing AI advancement through strategic planning, governance, and infrastructure investments. While strides have been made in capacity building, the state is in the early stages of implementing the Governor's recent executive order.

Leadership & Governance

Developing

In January 2025, the Governor issued Executive Order No. 1584, marking Mississippi's first formal directive on AI. The order mandates the Mississippi Department of Information Technology Services (ITS) to conduct a comprehensive inventory of AI technologies across state agencies and develop policy recommendations for responsible AI use. The passage of SB2426 during the 2025 Regular Legislative Session established the Artificial Intelligence Regulation (AIR) Task Force which includes the ITS Executive Director and highlights the legislative support of regulatory efforts for AI in Mississippi. Internal to ITS, the AI in Mississippi (AIM) working group continues to implement Executive Order 1584.

AI Capacity Building



The Mississippi Department of Education released Artificial Intelligence: Guidance for K-12 Classrooms in April 2024, providing procedural guidance and instructional strategies for educators. Additionally, the Mississippi Al Collaborative has trained over 1,200 educators statewide and offers programs like the Educator Accelerator to integrate Al into classrooms. There is not a formal program for state employees.

Technical Infrastructure & Capabilities



Mississippi's IT infrastructure is basic but functional. The state has a centralized data center and recently moved some services to the cloud, giving access to scalable computing if needed for AI tasks. The Mississippi Department of Information Technology Services (ITS) announced the launch of the ITS AI Innovation Hub in January 2025. This initiative is designed to position Mississippi as a leader in AI innovation, education, and workforce development. The ITS AI Innovation Hub is a collaborative effort in partnership with Amazon Web Services and the Mississippi Artificial Intelligence Network.

Source: GovTech

Google's Gemini

Al is capable of more than basic text generation. Take Google Gemini as an example for what it can do:

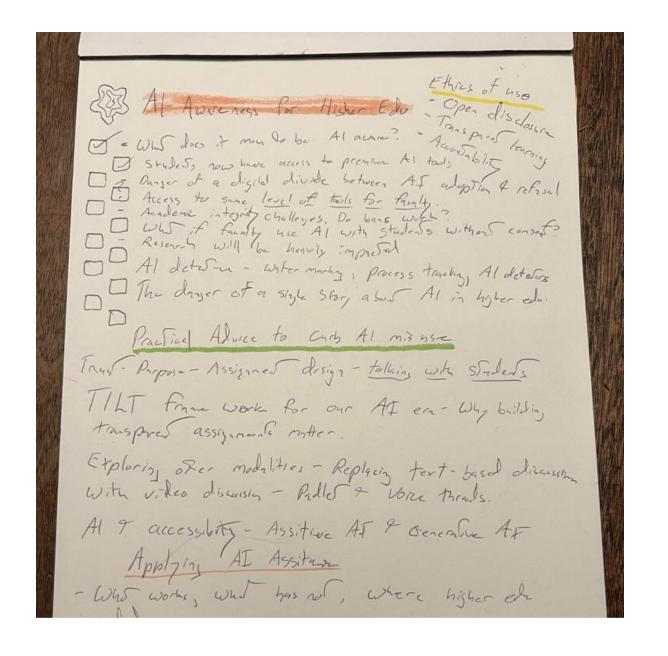
Transcribe

Record

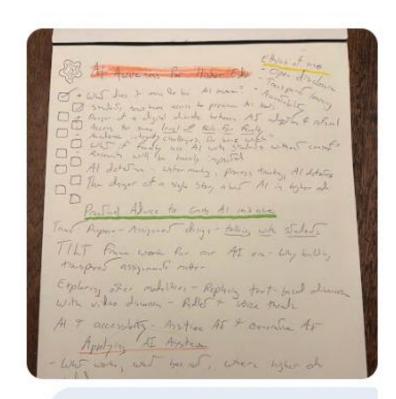
Read & Synthesize

Research

Generate Audio & Video



Generative Al Can Transcribe



Can you transcribe these notes for me?



Okay, I can definitely transcribe these notes for you. Here they are:

Al Awareness for Higher Ed

- What does it mean to be Al aware?
- Students now have access to premium AI tools
- Danger of a digital divide between Al adoption & refusal
- · Access to same level of tools for equity?
- · Academic integrity challenges. Do laws exist?
- · What if faculty use AI with students without consent?
- · Research will be heavily impacted
- Al detection watermarking, process tracking, Al detectors
- The danger of a single story about AI in higher edu.
- Ethics of use
 - · Open disclosure
 - · Transparent learning
 - Accountability

Practical Advice to Curb Al Misuse

- Trust Purpose Assignment design talking with students
- TILT Framework for our AI era Why building transparent assignments matter.
- Exploring other modalities Replacing text-based discussion with video discussion Padlet &

My Notes Become Context

Can you provide updated sources for these items?

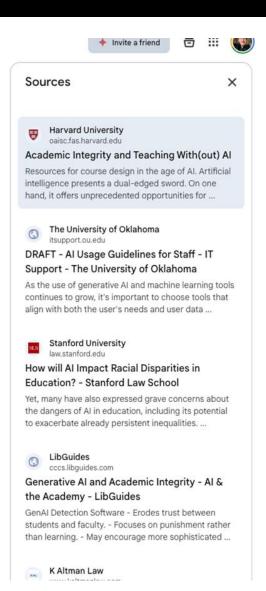


It looks like you're interested in updated information on AI in higher education based on your notes. Here's some more current information related to those topics:

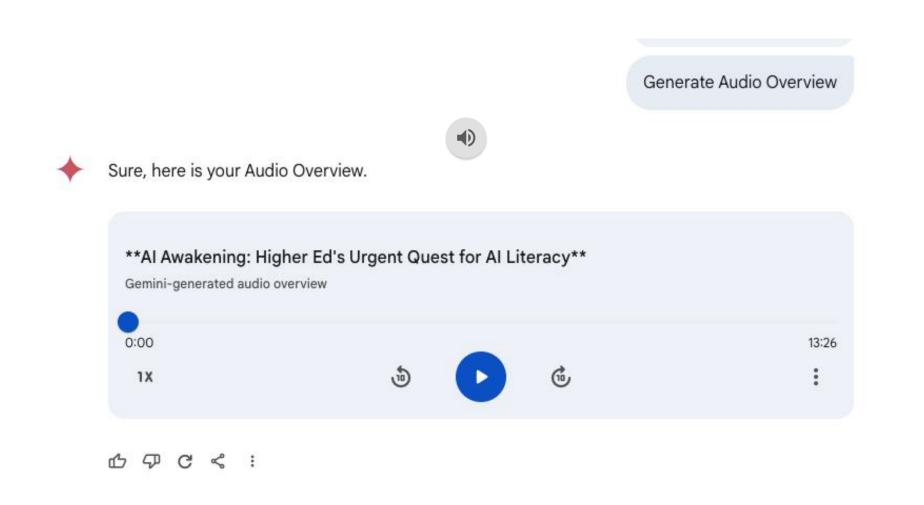
Al Awareness in Higher Ed

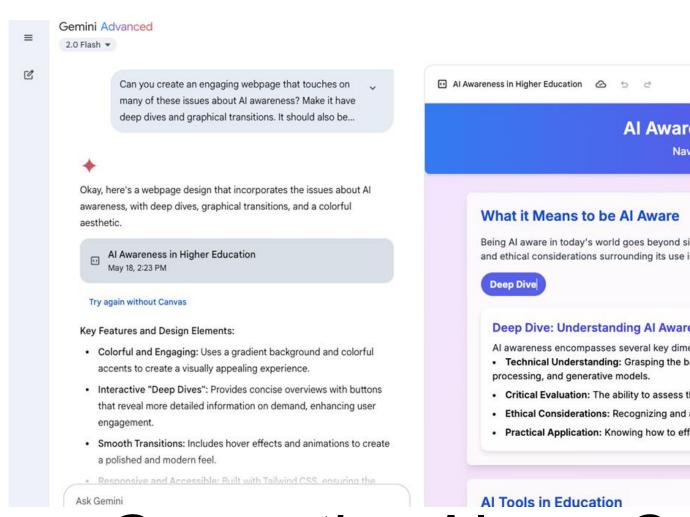
- What it means to be AI aware: This now involves understanding not just the basics of AI but
 also the rapid advancements in generative AI, its potential impact on learning, teaching,
 research, and the ethical considerations that come with it. Being AI aware means educators,
 students, and institutions need to develop a level of "AI literacy." This includes knowing how
 AI works, critically evaluating its applications, and using it responsibly and ethically.
 - For example, understanding that while AI can generate text, it might not always be accurate or unbiased.
- Students now have access to premium AI tools: This is increasingly true, with more
 sophisticated AI tools becoming available, some through institutional subscriptions and
 others directly to students. This raises questions about equitable access and how these tools
 can be used effectively for learning without compromising academic integrity.
 - Many universities are now exploring institutional licenses for AI tools to ensure a Harvard University students have access.
- Danger of a digital divide between AI adoption & refusal: This concern remains relevant.
 Students and faculty with more access, knowledge, or willingness to use AI might have different educational experiences and outcomes compared to those who don't or won't.
 - Institutions are considering how to provide training and support to bridge this gap.

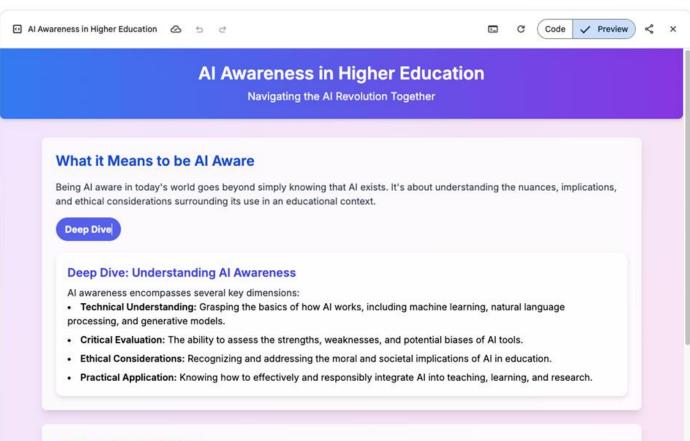




Al Transforms My Notes Into an Audio Overview

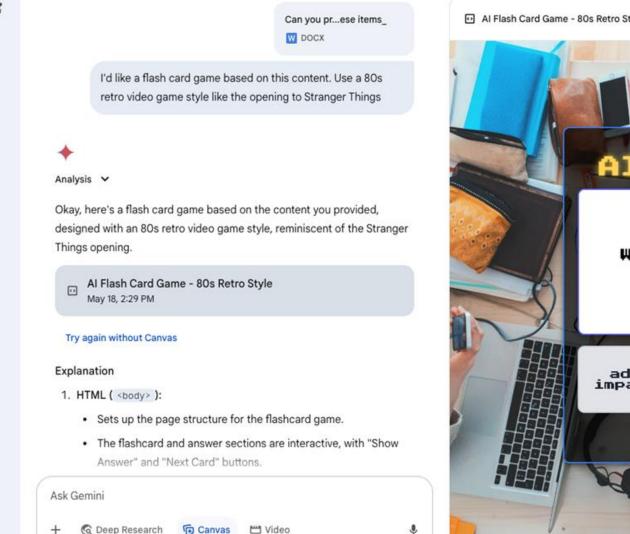






Invite a friend

Generative Al can Code Practical Apps

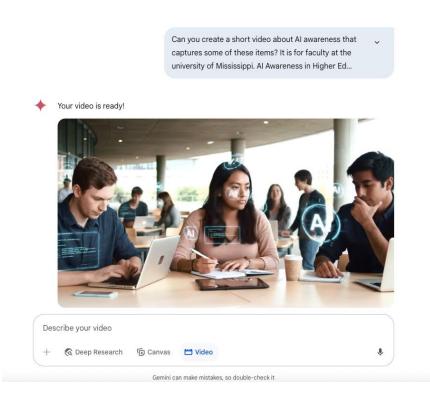


O



Turning My Notes Into Digital Flash Cards

Transforming My Notes Into Video





Demystify 'AI'

Let' explore how neural networks function by playing Google's Quick, Draw!



can a neural network learn to recognize doodling?

Help teach it by adding your drawings to the <u>world's largest doodling</u> data set, shared publicly to help with machine learning research.

Let's Draw!

Using the SECURE Framework

Guidance about using AI in government or other sensitive industries is evolving. It's hard to predict how technology will change and consider the needs of our own response will need to become fluid as well. Below is a framework that attempts to pin down certain evergreen principles for staff to consider before using an AI tool or system. It isn't designed to be exhaustive. Rather, it is something to review, add to, and begin internalizing each time you consider engaging AI.

If the answer to a question is **yes**

If the answer to a question is **no**..

• • •

STOP
DO NOT USE
AI

PROCEED
USE AI WITH
CAUTION

SECURE Framework

Document

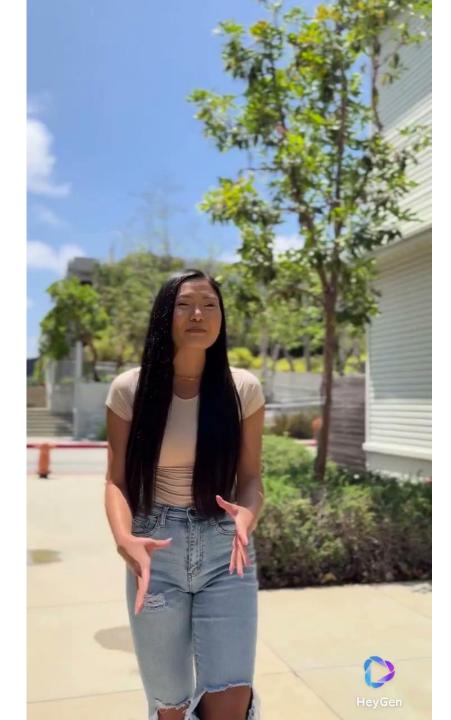
S Security Credentials	E Ethical Use	C Confidential Information	U Use of Personal Information	R Rights Protection	E Evaluation of Outputs
Are you entering information such as system login credentials (e.g. email passwords, key chains); API keys used for accessing external services; Private security tokens or encryption keys; or any credentials used to access internal systems that could compromise the security of an agency system or personal accounts if exposed?	Are you entering or generating information that may raise ethical concerns involving vulnerable groups; using undisclosed Al on a public or private audience; using Al to manipulate or coerce a response, or using the output to harass, harm, intimidate, breach policy or break the law?	Are you entering information which, if disclosed, could cause harm to the agency, state, or individuals, especially if involving external partnerships or proprietary information?	Are you entering personal information, such as names, social security numbers, emails, addresses of individuals? Are you entering other sensitive data, like health, tax, or law enforcement information?	Are you entering original works or creations protected by copyright, trademark, or patent law, into an AI system without permission from the copyright holder?	Are you using the output of GenAl without evaluating it to ensure it is accurate, reliable and unbiased, or using it in isolation to make decisions directly affecting individuals?

Adapted from Mark Bassett's <u>SECURE</u> framework for staff

Al Governance is Crucial

- How is my organization monitoring enterprise adoption of gen AI, whether such
 use is sanctioned or unsanctioned?
- What are our protocols for continual risk assessment and monitoring as gen Al evolves and the organization's approach matures?
- What are our guidelines for official and unofficial use of gen AI? Do we have
 plans to periodically refresh those guidelines based on experience and as
 technology advances? Levers may be as diverse as procurement guidelines,
 technology standards, and employee conduct policies, to name a few.
- Are we evolving the membership of this governance body to include expertise as needed and as adoption matures?

From McKinsey's Deploying generative AI in US state governments: Pilot, scale, adopt



Why Open Disclosure of Al Usage Matters

• Example Al Avatar: poses new possibilities for communication but also challenges public trust

Al Disclosure Label: This video was generated via HeyGen Lab's URL to Video feature using my essay from *The Chronicle* Why We Should Normalize Open Disclosure of Al Use. The Al generated a short summary of the article. I then edited the script using my own language to fit the needs of this presentation.