

ARTIFICIAL INTELLIGENCE

## ChatGPT: Five Important Things to Know About the Nascent Tech

The viral technology sensation has taken the internet by storm, raising questions about how the artificial intelligence platform works and whether or not it could replace human ideas and creations.

February 22, 2023 | Aarti Rajanikant, The State Working News



Shutterstock

[TNS] — In November, the research company OpenAI released a bot called ChatGPT. The chatbot has generated a lot of buzz and has quickly become a popular topic of conversation.

- Most Read**
- Automatic Investigative Data Released in Oakland Cyber Attack
  - Connecticut Legislature Proposes Bill to Ban AI in Government
  - State of the Net: 'This Is Our Chance to Connect Everyone'
  - True Elements HAD got
  - Cloud Procurement Guide Update Offers Practical Advice for Government

HIGHER EDUCATION

## North Dakota Higher Ed Task Force to Study Risks of AI

The North Dakota University System is recruiting leaders and planning seminars to combat the negative effects of artificial intelligence and discuss the potential for further applications in curriculum development.

February 08, 2023 | Joe Barnish, Grand Forks Herald, N.D.

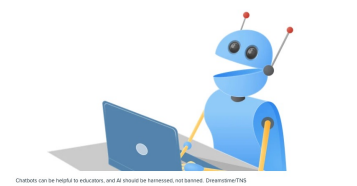


K-12 EDUCATION

## Opinion: ChatGPT Should Be Harnessed, Not Banned

Professors from the University of Pennsylvania argue that banning artificial intelligence-driven chatbots is a practical impossibility, so teachers should consider ways to embed them into the learning process.

January 20, 2023 | Angela Dubose and Life Links, Los Angeles Times



Chatbots can be helpful to educators, but AI should be harnessed, not banned. OpenSourceTNS

[TNS] — Will chatbots that can generate sophisticated prose destroy education as we know it?



Content from Verizon

- How a Smart Connected Campus Enhances the Student Experience
- Zero Trust Security for K-12 and Higher Education
- The Connected Campus: Exploring the Future of Digital and Smart Campuses
- Enhancing Education with 5G
- Case Study: University of Illinois Campus Modernization

# ChatGPT is #Trending in Education

HIGHER EDUCATION

## LSU Faculty, Students Weigh How ChatGPT Will Change College

Louisiana State University students say using ChatGPT to cheat can be counterproductive in the long run, and faculty are divided on how it will change teaching or whether university-wide regulations would be appropriate.

March 13, 2023 | James Wilkins, The Times-Picayune | The New Orleans Advocate



Shutterstock



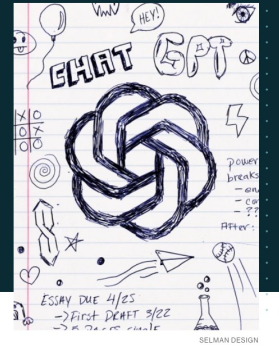
ARTIFICIAL INTELLIGENCE

## ChatGPT is going to change education, not destroy it

The narrative around cheating students doesn't tell the whole story. Meet the teachers who think generative AI could actually make learning better.

By Will Douglas Heaven

April 6, 2023



SELMAN DESIGN

The response from schools and universities was swift and decisive.

Just days after OpenAI dropped ChatGPT in late November 2022, the chatbot was widely denounced as a free essay-writing, test-taking tool that made it laughably easy to cheat on assignments.

## Disinformation Researchers Raise Alarms About A.I. Chatbots

Researchers used ChatGPT to produce clean, convincing text that repeated conspiracy theories and misleading narratives.

Give this article 183



Alamy



## ChatGPT Used by Teachers More Than Students, New Survey from Walton Family Foundation Finds

[K-12 Education](#) | Press Release on March 1, 2023

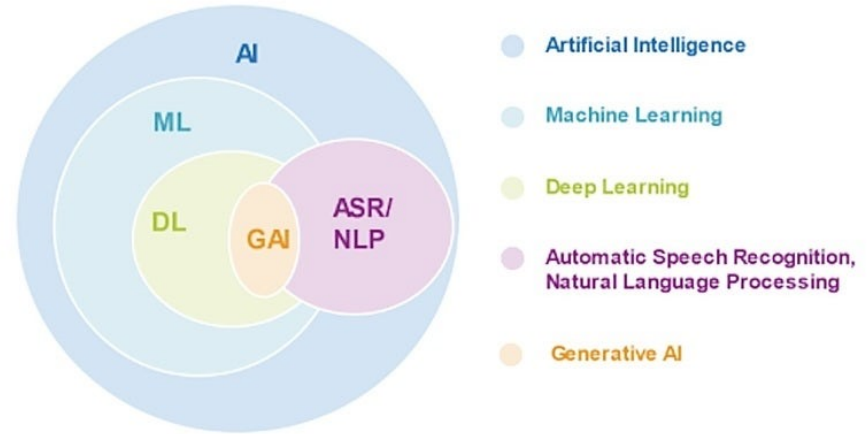
WASHINGTON, D.C., March 1, 2023—Teachers use OpenAI's ChatGPT for lesson planning and to generate creative ideas for classes, according to the first national survey of teachers and students about ChatGPT and technology, released today by the Walton Family Foundation. While much attention has been given to the potential for students to cheat using ChatGPT, teachers surveyed by Impact Research have a much different view of the technology, with the majority seeing an opportunity for it to help accelerate learning.



According to the survey, **64% of teachers plan to implement the technology more often**, from lesson planning, to creating new ideas, to using it as part of curriculum.

## What is Generative AI?

Generative AI refers to a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more.



# Generative AI Text

+ New chat

# ChatGPT



## Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



## Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Trained to decline inappropriate requests



## Limitations

May occasionally generate incorrect information

May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021

🌙 Dark mode

🗨️ OpenAI Discord

🔗 Updates & FAQ

🚪 Log out

Microsoft Bing SEARCH CHAT 967

Choose a conversation style

what is an upcoming webinar on generative ai in k-12 and higher education

✓ Searching for: **upcoming webinar generative ai k-12 higher education**

✓ Generating answers for you...

Yes, there is an upcoming webinar on generative AI in K-12 and higher education called "ChatGPT Unleashed: The Future of Generative AI for K-12 and Higher Education" which will be held on April 14, 2023, at 10 a.m. Pacific Time/1 p.m. Eastern Time<sup>1</sup>. During this webinar, you will learn about the fundamentals of generative AI and how ChatGPT works in an educational setting. You will also discover the potential use cases of ChatGPT in education, such as personalized learning, academic support, and language translation<sup>1</sup>.

Learn more: [1. webinars.govtech.com](#) [2. edtechmagazine.com](#) +3 more 1 of 20

Microsoft Bing ([bing.com/chat](https://bing.com/chat))

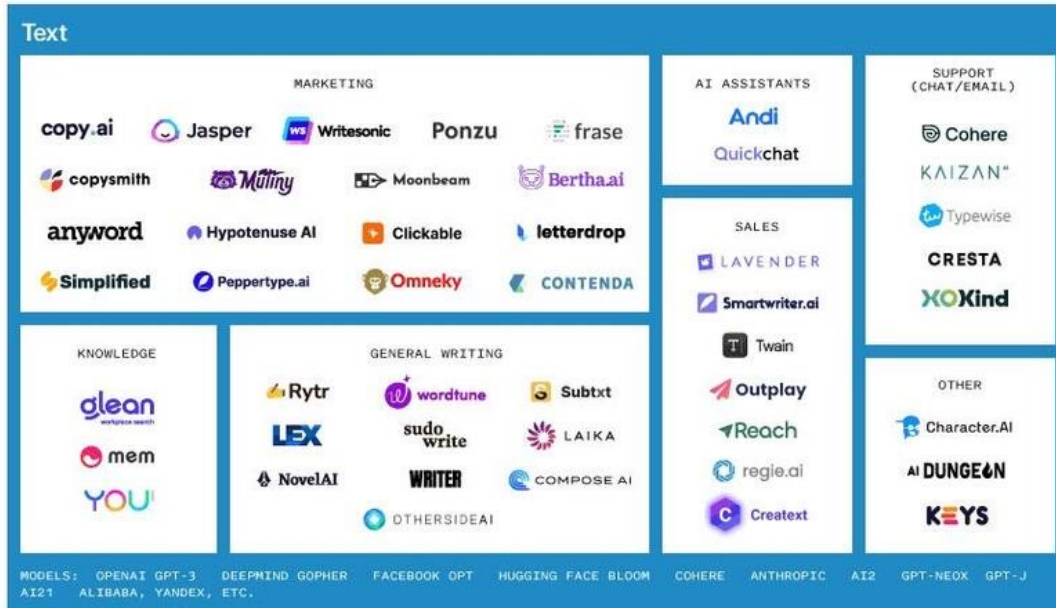


Google Bard ([bard.google.com](https://bard.google.com))

# Quick Demo

# The Generative AI Application Landscape v2

A work in progress





# Generative AI Media

# DALL·E 2

DALL·E 2 is an AI system that can create realistic images and art from a description in natural language.

[Try DALL·E ↗](#)

[Follow on Instagram ↗](#)

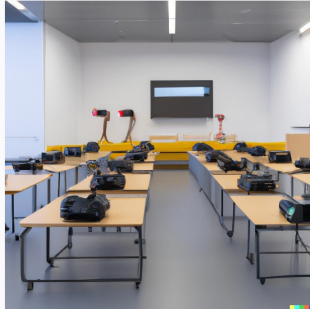
 **DALL-E** History Collections

Edit the detailed description

[Surprise me](#) [Upload](#) →

futuristic classroom with VR headsets for students

**Generate**



### Image

IMAGE GENERATION

MidJourney, OpenArt, Craiyon, Playground, Wombo AI, PhotoRoom, Rosebud AI, Alpaca, Lexica, Nyx gallery, ImageSpace, KREA, Artbreeder

CONSUMER/SOCIAL: MidJourney

MEDIA/ADVERTISING: SALT, THE CULTURE DAO

DESIGN: Diagram, Uizard, Vizcom, Aragon, Poly, Maket, Interior AI, CALA

MODELS: OPENAI DALL-E 2, STABLE DIFFUSION, CRAIYON

### Code

CODE GENERATION: GitHub Copilot, Replit GhostWriter, Tabnine, Mutable AI

TEXT TO SQL: AI2SQL, Seek

WEB APP BUILDERS: Debuild, Enzyme, Durable

DOCUMENTATION: Mintify, Stenography

OTHER: excel/ormulabot

MODELS: OPENAI GPT-3, TABNINE, CODEGEEEX

### Speech

VOICE SYNTHESIS: RESEMBLE.AI, Broadn, Wellsaid, Coqui, Podcast AI, Descript Overdub, Fliki, Listnr, Replica, VOICEMOD

MODELS: OPENAI

### Other

MUSIC: SPLASH, Mubert, Aiva Technologies, Endel, Boomy, Harmonai, SONIFY

GAMING: AI DUNGEON

RPA: Adept, mayā

AI CHARACTERS/AVATARS: Character.AI, inworld, The Simulation, OASIS

BIOLOGY/CHEMISTRY: Cradle

VERTICAL APPS: Harvey

MODELS: OPENAI JUKEBOX

### 3D

3D MODELS/SCENES: mirage, CSM

MODELS: DREAMFUSION, NVIDIA GET3D, NDM, APPLE ML

### Video

EDITING/GENERATION: runway, Fliki, Dübverse, Opus

PERSONALIZED VIDEOS: tavus, synthesia, Hour One, Rephrase AI, Colossyan, Movio

MODELS: MICROSOFT X-CLIP, META MAKE-A-VIDEO

# Generative AI for Education Use-Cases

## Generative AI Use-Cases for K-12 Benefits



People Augmentation



Knowledge Augmentation



Experience Augmentation

# K-12 Responses to Generative AI



 **GPT-4 Feedback (Prompt – Summarize In One Sentence)**

Anderson Community Schools are cautiously exploring the use of ChatGPT in their K-12 education system, carefully considering potential risks and benefits, while seeking to implement appropriate measures to prevent misuse and ensure a positive impact on teaching and learning.

**Full Article**

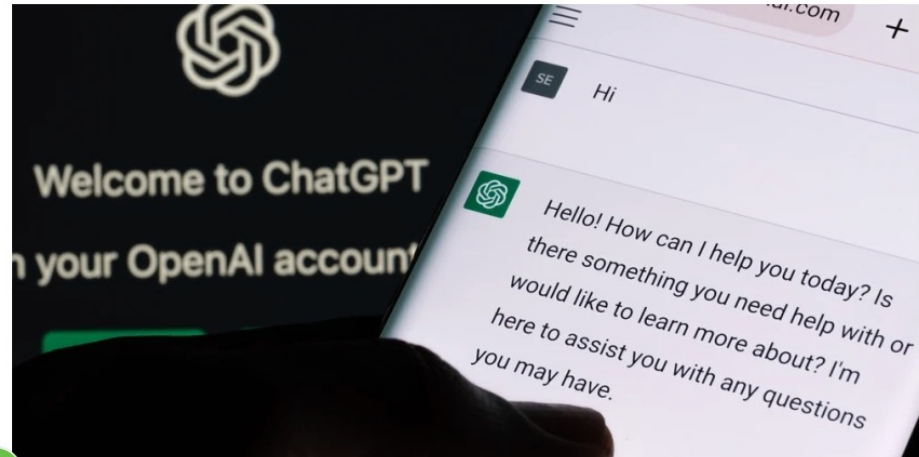
<https://www.govtech.com/education/k-12/anderson-community-schools-approach-chatgpt-with-caution>

K-12 EDUCATION

**Anderson Community Schools Approach ChatGPT with Caution**

School officials at a district in Indiana see the potential for ChatGPT to enable better research or laziness among students, or both. Like many, they're waiting to see how other organizations adjust.

March 20, 2023 • Andy Knight, The Herald Bulletin, Anderson, Ind.







HIGHER EDUCATION

## Will AI Chatbots Raise Digital Equity Concerns for Students?

Some ed-tech experts say the need to close the digital divide will only grow more urgent as Internet-based artificial intelligence tools become commonplace in schools and universities.

March 08, 2023 • Brandon Paykamian



### GPT-4 Feedback (Prompt – Summarize Key Concerns In Article And Provide Actionable Steps T Respond Based On Article)

#### Key concerns from the article:

1. Limited access to AI chatbots may exacerbate digital equity issues, putting students without access at a disadvantage.
2. Potential language barriers and cultural differences may hinder chatbot effectiveness for non-native English speakers or diverse student populations.

#### Actionable takeaways:

1. Advocate for equal access to AI chatbot technology by incorporating it into publicly-funded educational institutions and programs.
2. Develop multilingual and culturally-sensitive AI chatbots to better serve diverse student populations and reduce language barriers.
3. Monitor the impact of AI chatbots on digital equity and adjust strategies accordingly to ensure inclusive benefits for all students.

#### Full Article

<https://www.govtech.com/education/higher-ed/will-ai-chatbots-raise-digital-equity-concerns-for-students>



K-12 EDUCATION

## How Are Georgia Schools Handling ChatGPT?

Educators acknowledge that writing is thinking, and therefore remains an indispensable skill, and college admissions staff may rely on unscripted interviews, short videos and proctored writing samples in lieu of essays.

February 10, 2023 • Vanessa McCray, The Atlanta Journal-Constitution



### GPT-4 Feedback (Prompt – Summarize Article)

- Georgia schools are approaching ChatGPT with caution, with some districts blocking it on school computers, while universities like UGA and Georgia Tech encourage faculty to set clear guidelines on its use in class. Educators are adapting assignments to be more nuanced or integrate ChatGPT in meaningful ways, focusing on writing processes and students' unique voices.

• =

### Full Article

<https://www.govtech.com/education/k-12/how-are-georgia-schools-handling-chatgpt>



HIGHER EDUCATION

## Fear About ChatGPT Among Educators Giving Way to Optimism

While it's too soon to say what the lasting impact of ChatGPT will be, many educators see its transformative potential as an inevitability, something to be embraced and experimented with rather than fought.

April 06, 2023 • Will Douglas Heaven, MIT Technology Review



### **GPT-4 Feedback (Prompt Summarize In One Sentence)**

Educators are increasingly optimistic about ChatGPT's potential to enhance teaching and learning, despite initial concerns about misuse in education.

#### Full Article

<https://www.govtech.com/education/higher-ed/fear-about-chatgpt-among-educators-giving-way-to-optimism>

# What To Consider Along The Way

# Initial Items To Consider Along The Way

1. Policy & Disclosure
2. Emerging Risks
3. Evolving Ethics
4. Emerging Regulations

# Policy & Disclosure

## Example General Approaches to Policies At District Level

- **The San Francisco Unified School District (SFUSD)** has implemented a policy that requires teachers to obtain permission from the district before using generative AI solutions in the classroom. The SFUSD policy states that "teachers who wish to use generative AI solutions in the classroom must first obtain permission from the district's Technology Department. The Technology Department will review the proposed use of the generative AI solution to ensure that it is aligned with the district's educational goals and that it does not pose any potential risks to students."
- **The New York City Department of Education (NYCDOE)** has created a set of guidelines for the use of generative AI solutions in the classroom. The NYCDOE guidelines state that "generative AI solutions can be a valuable tool for instruction, but they should be used with caution. Teachers should be aware of the potential risks of generative AI solutions, such as the creation of harmful or misleading content. Additionally, teachers should teach students how to critically evaluate the content generated by generative AI solutions."
- **The University of Washington** has created a set of guidelines for the use of generative AI solutions in the classroom and in research. The University of Washington guidelines state that "generative AI solutions can be a valuable tool for instruction and research, but they should be used with caution. Students and researchers should be aware of the potential risks of generative AI solutions, such as the creation of harmful or misleading content. Additionally, students and researchers should teach others how to critically evaluate the content generated by generative AI solutions."

## Example Internal Guidance/Policy Frameworks

1. Do not upload sensitive non-public or internal data to generative AI services without explicit authorization.
2. Obtain approval from the organization before using official email accounts to sign up for generative AI services.
3. Refrain from uploading any personal data to generative AI services to safeguard privacy.
4. Exercise caution and avoid blindly relying on the output of these models, as results from generative AI may be misleading or inaccurate.
5. Exercise prudence and refrain from using public generative AI tools to make decisions that have legal, ethical, or financial implications for the organization.
6. Prioritize data security and privacy by using generative AI tools in a manner that minimizes the risk of compromising sensitive information.
7. Keep in mind that publicly available versions of these tools often lack contractual protections, such as legal privileges and immunities.
8. Understand that datasets uploaded to these tools may be accessed by unauthorized parties for various purposes, emphasizing the need for data protection measures.
9. Stay vigilant as generative AI tools can be exploited by cybercriminals for running scams and creating convincing phishing emails. Carefully review emails to identify any potential threats.
10. Clearly indicate the utilization of generative AI in documents and ensure human review for quality control. If AI played a role in the creation process, include a note such as "Assisted by AI" to transparently disclose its involvement.



## **Example AI Disclosure**

Promotional and marketing content, including any materials and/or messaging used to market our district functions, such as job opportunities, updates, newsletters, student events, etc., may be augmented or created with the support of generative artificial intelligence (AI) with a human-in-the-loop. Any other non-marketing uses of generative AI will provide disclosure related to their specific use at the point of use.

## **Potential Uses Against Educational Institutions**

POLITICS

## The Next Big Political Scandal Could Be Faked

Imagine a convincing AI “Joe Biden” talking about ballot harvesting, or hacked voting machines.

By John Hendrickson

Disinformation/Misinformation



## We are less than a year away from a cyber attack credited to ChatGPT

Jonathan Jackson, director of sales engineering APJ at BlackBerry Cybersecurity, on how AI can be used both to launch and fight cyber attacks

🔖 Add bookmark

**Tags:** [Artificial Intelligence](#) [AI](#) [ChatGPT](#) [Blackberry Security](#) [Cyber Attack](#) [Phishing](#) [Social Engineering](#) [Malware](#) [APT](#)



Jonathan Jackson

🕒 02/13/2023



*Jonathan Jackson, director of sales engineering APJ at BlackBerry Cybersecurity, writes about why cyber attacks linked to artificial intelligence are inevitable.*

ChatGPT has answers for almost everything, but there is one answer

# Cyber Attacks / Social Engineering

# The Evolving Ethics Landscape

## Ethical Considerations

**1. Bias:** Generative AI is only as unbiased as the data it is trained on. Therefore, it is crucial to ensure that the data used to train these models is representative and unbiased. Otherwise, the generative AI models may produce biased or discriminatory outcomes that could disproportionately affect certain groups.

**2. Privacy:** Generative AI models may require access to sensitive data in order to operate effectively. Government agencies must ensure that this data is protected and used in accordance with applicable laws and regulations. Citizens should also be informed about how their data is being used and have the right to opt-out of any data collection.

**3. Transparency:** Generative AI models can be opaque and difficult to understand. It is important that government agencies provide clear explanations of how these models operate and how they make decisions. This will help citizens to understand and trust the outcomes generated by these models.

**4. Accountability:** Generative AI models may generate outcomes that have significant impacts on citizens' lives. Therefore, it is crucial that government agencies are held accountable for the decisions made by these models. There should be clear lines of responsibility for any decisions made based on the outcomes generated by generative AI models.

**5. Human oversight:** Generative AI should not replace human judgment and decision-making entirely. It is important that government agencies ensure that human oversight is in place to review and validate the outcomes generated by these models. This will help to prevent the potential for errors or unintended consequences.

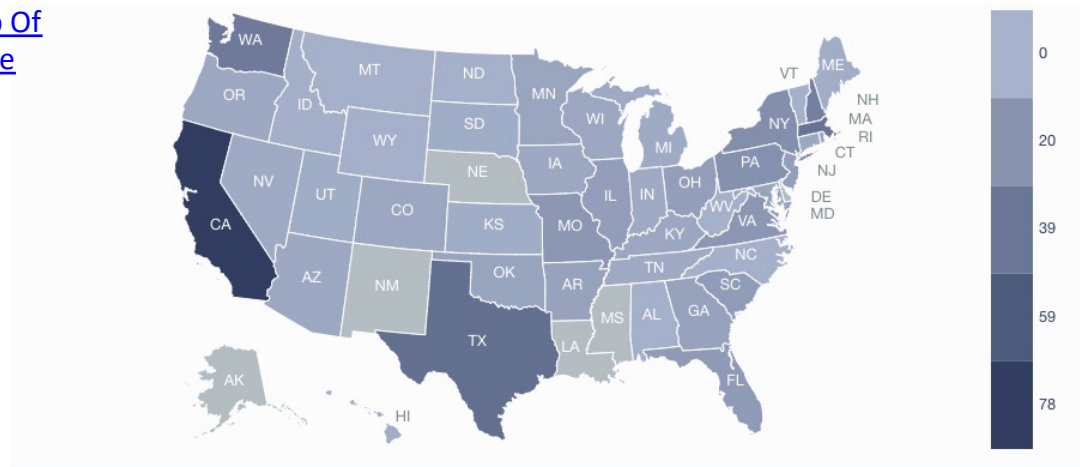
**6. Safety:** Generative AI models that are used in critical applications, such as emergency response, must be designed and tested to ensure that they are safe and reliable. Government agencies must ensure that these models do not create unintended risks or harm to citizens.

# Emerging Regulations

## The Regulations Are Coming

- [\(Illinois\) H.B. 3563 — An Act Establishing the DOIT — AI Task Force](#)
- [\(California\) SB-721 California Interagency AI Working Group.](#)
- [\(California\) SB-313 Department of Technology: Office of Artificial Intelligence: state agency public interface: use of AI.](#)
- [\(Massachusetts\) S.31: An Act Drafted With The Help Of Chatgpt To Regulate Generative Artificial Intelligence Models Like Chatgpt \(PDF\)](#)

## Legislators Talking About Generative AI





# Where To Start

## Where to Start – From ChatGPT

1. **AI Policy Framework:** Develop a comprehensive AI policy framework. This should include guidelines for acceptable use, mechanisms for accountability, and systems for monitoring and evaluating the impacts of AI on student learning.
2. **Ethics and Equity:** Ensure that AI use aligns with ethical principles and promotes equity in education. AI applications should not discriminate or bias against students based on their socio-economic background, race, gender, or disabilities.
3. **Privacy and Data Security:** Comply with all relevant data privacy laws and guidelines, such as FERPA in the U.S. Manage the storage and use of student data securely.
4. **Transparency:** Be transparent about what AI tools are being used, why, and the benefits and risks involved. This transparency should extend to parents and students, not just educators and administrators.
5. **Teacher and Student Training:** Provide adequate training for teachers to use AI tools effectively and ethically. Students should also be taught digital literacy and critical thinking skills to navigate AI tools and understand their capabilities and limitations.

# Links

**ChatGPT (Generative AI Chatbot)**

<https://chat.openai.com>

**DALL-E (Image Creation)**

<https://labs.openai.com/>

**Center for Digital Education**

<https://www.govtech.com/education>

**Center for Digital Government**

<https://www.govtech.com/cdg>