
Teaching in the Age of AI: What Educators Need to Know

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Who is in the room?

1. Have you used any AI tools (chatGPT, Claude, MagicSchool, etc.) in your work or personal life? If so, how have you used them.
2. Who has never used an AI chatbot (chatGPT)?
3. On a scale of 1 - 10, how comfortable are you in discussing AI with students?
4. Who is here from a class AA school? A, B, C?

Today

Start of the Age of AI

Challenges with student usage of AI

What is AI Literacy? (GAMES & Curriculum)

AI Classroom Policy and Examples

If you feel like you are drinking from a firehose, please tell me to **slow down**. This presentation is for you, raise your hand, **ask questions**

November 2022 - The Dawn of the “Age of AI”

In November of 2022, **OpenAI** released an AI-powered chatbot (**chatGPT**) to the public



This is a **NEW TECHNOLOGY**, it is different than anything that has come before it

It is **NOT** a Google Search

Approach this new technology with an **open mind**, this will provide the best setting for **learning**

Chatbot Functionality

Chatbots are meant to be “chatte
with. Approach them **conversatio**

You ask a question (**prompt**)

You receive and **output**

The **better the prompt**, the better
output

Chatbots will produce **inaccurate**
misleading information

1. Preheat oven to 375°F (190°C).
2. For the crust:
 - In a food processor, pulse flour, salt, and minced garlic.
 - Add cold butter and pulse until mixture resembles coarse crumbs.
 - Slowly add ice water until dough comes together.
 - Form into a disk, wrap in plastic, and refrigerate for 30 minutes.
3. While the dough chills, prepare the vegetables:
 - Toss broccoli florets and halved tomatoes with 1 tbsp olive oil, salt, and pepper.
 - Roast in the oven for 15-20 minutes until slightly charred.
 - In a pan, caramelize sliced onions with 1 tbsp olive oil and minced garlic over low heat for about 15-20 minutes.
4. Roll out the chilled dough and place in a 9-inch tart pan. Prick the bottom with a fork.
5. Layer the caramelized onions on the bottom of the tart shell, followed by the roasted broccoli and tomatoes.

Can you predict the next word in the sentence?

1. My favorite food to eat for lunch as a kid was macaroni and . **CHEESE**
2. It is raining cats and . **DOGS**
3. You can lead a horse to water but you can't make it . **DRINK**
4. I like coffee with cream and . **SUGAR**
5. I like to eat sandwiches with jelly and . **SUNBUTTER**
6. The team that is going to win the Brawl of the Wild this year is .



Students Using GenAI - Current Reality

Students are **already using GenAI** tools to explore, play around, and do their homework

Students will use these tools in their **future** - job, personal, school, etc.

GenAI tools will continue to **proliferate** to all aspects of our digital lives (AI google search results, Amazon reviews, email summaries, etc.)

Students Using GenAI - Challenges

#1 concern from teachers: **Plagiarism**

Rightfully so, GenAI can do **almost all homework** (especially good at tasks with clear directions and structure)

AI DETECTORS DO NOT WORK WELL! We cannot (currently) authenticate content as human or AI generated... Link to [study](#)

My CS students estimated that **50+%** of classmates are using AI to do their homework (majority ELA)

What tools should students use? There are challenges with students using AI including: data privacy, bias, “safe AI”, and more...

“Where do I start?” - AI Literacy

AI literacy refers to the knowledge, skills, and understanding needed to effectively and responsibly engage with artificial intelligence technologies.

1. Basic understanding of AI concepts and applications
2. Ability to critically evaluate AI tools and AI generated content
3. Understanding of ethical and unethical usage of AI technologies

Much like Digital Literacy, AI Literacy aims to prepare students to succeed in an increasingly digital and AI driven world.

In the “**storm**” of emerging AI technologies, AI Literacy is my “**liferaft**”

AI Literacy Does Not Require Students to Use AI Tools

I am personally **very hesitant** to give my students open access to a LLM chatbot, like chatGPT.

Fortunately, there are ways to teach about AI Literacy without giving students a chatbot

Let's practice building our **AI Literacy together!**

IS IT
AI?



How does the game work?

You will be show a piece of content (image, video)

You decide, did AI or humans create this content?





!









AK!

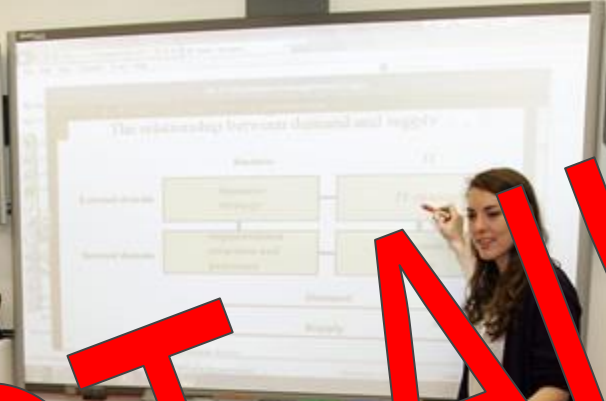
NOT A!



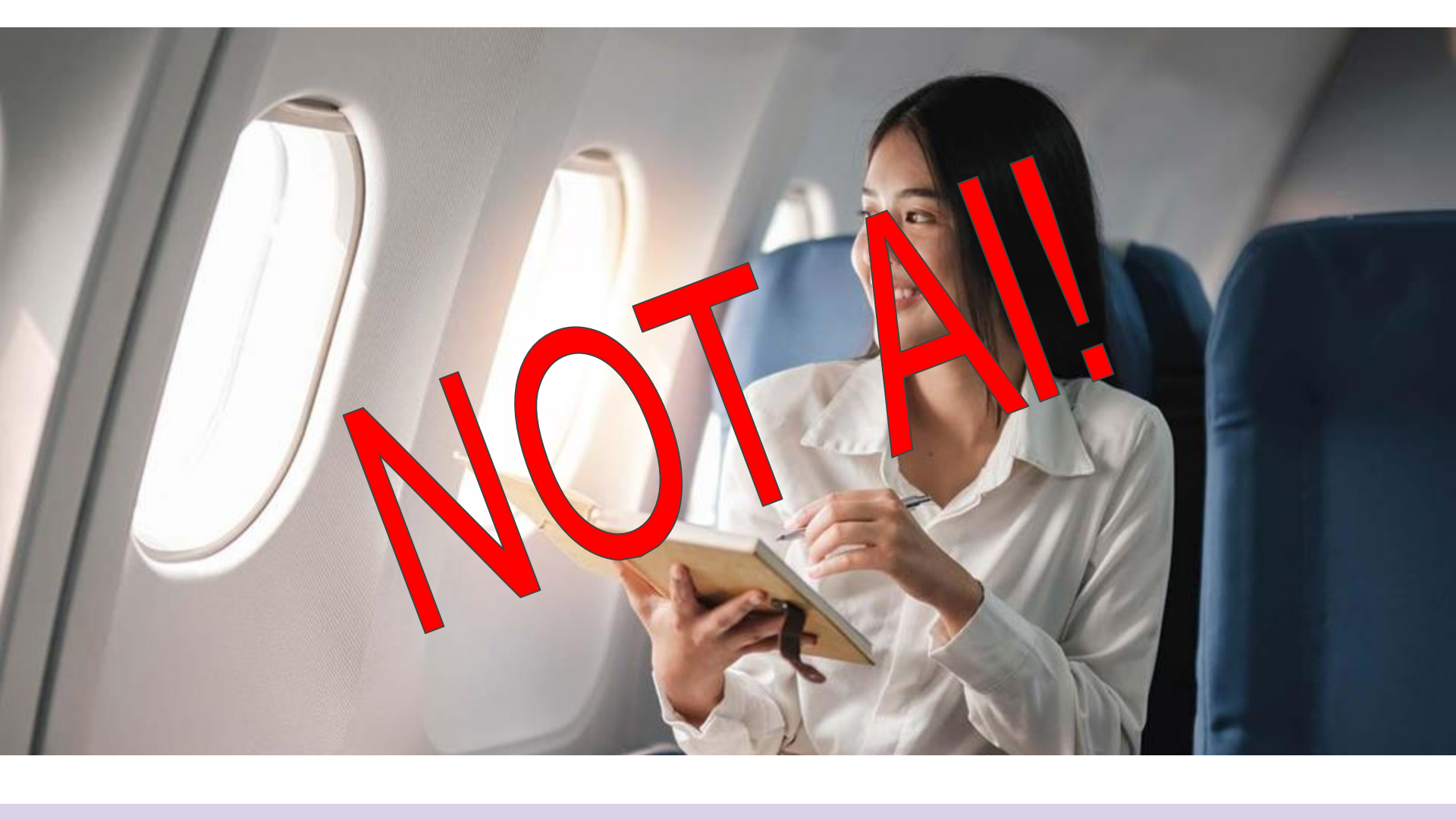




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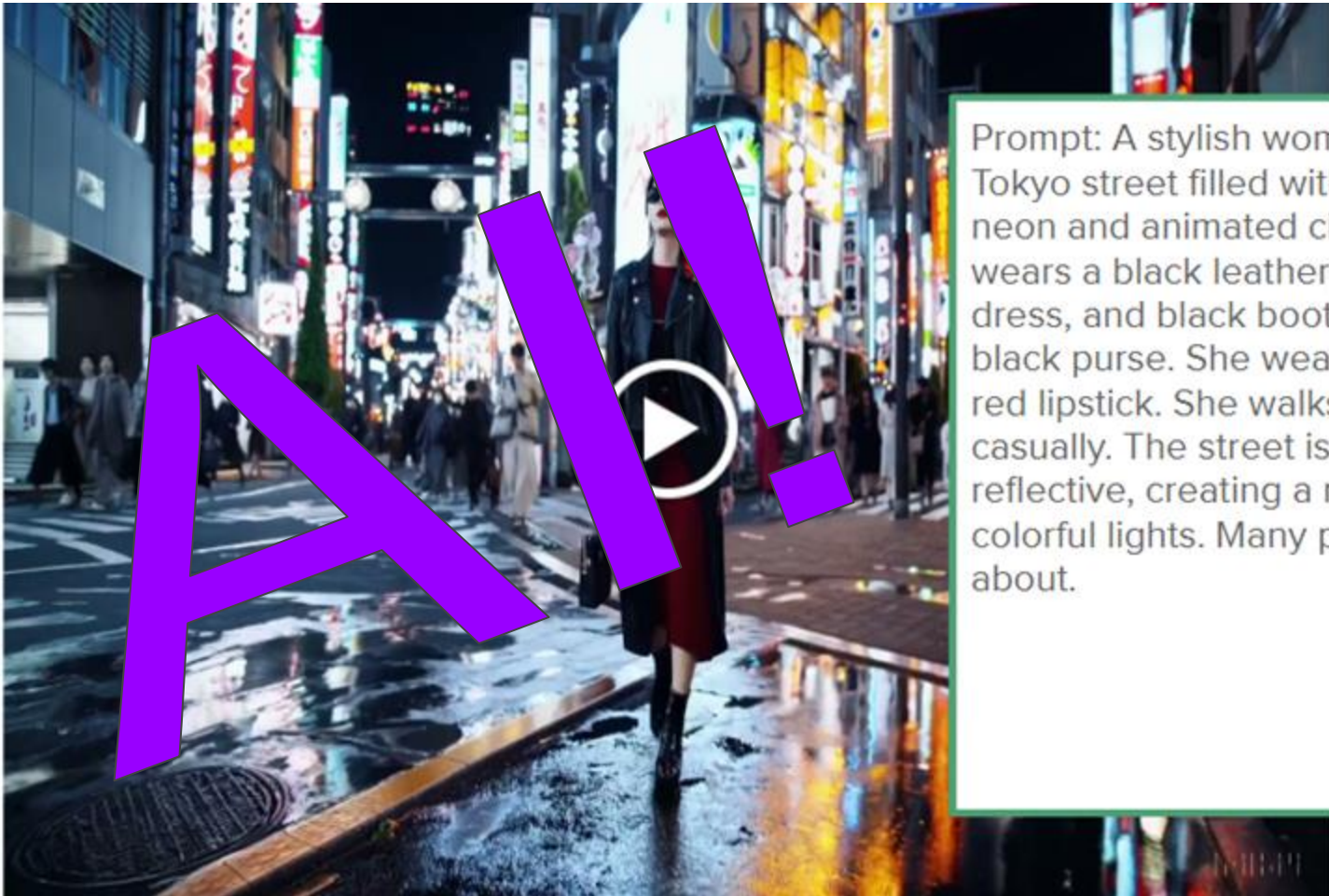


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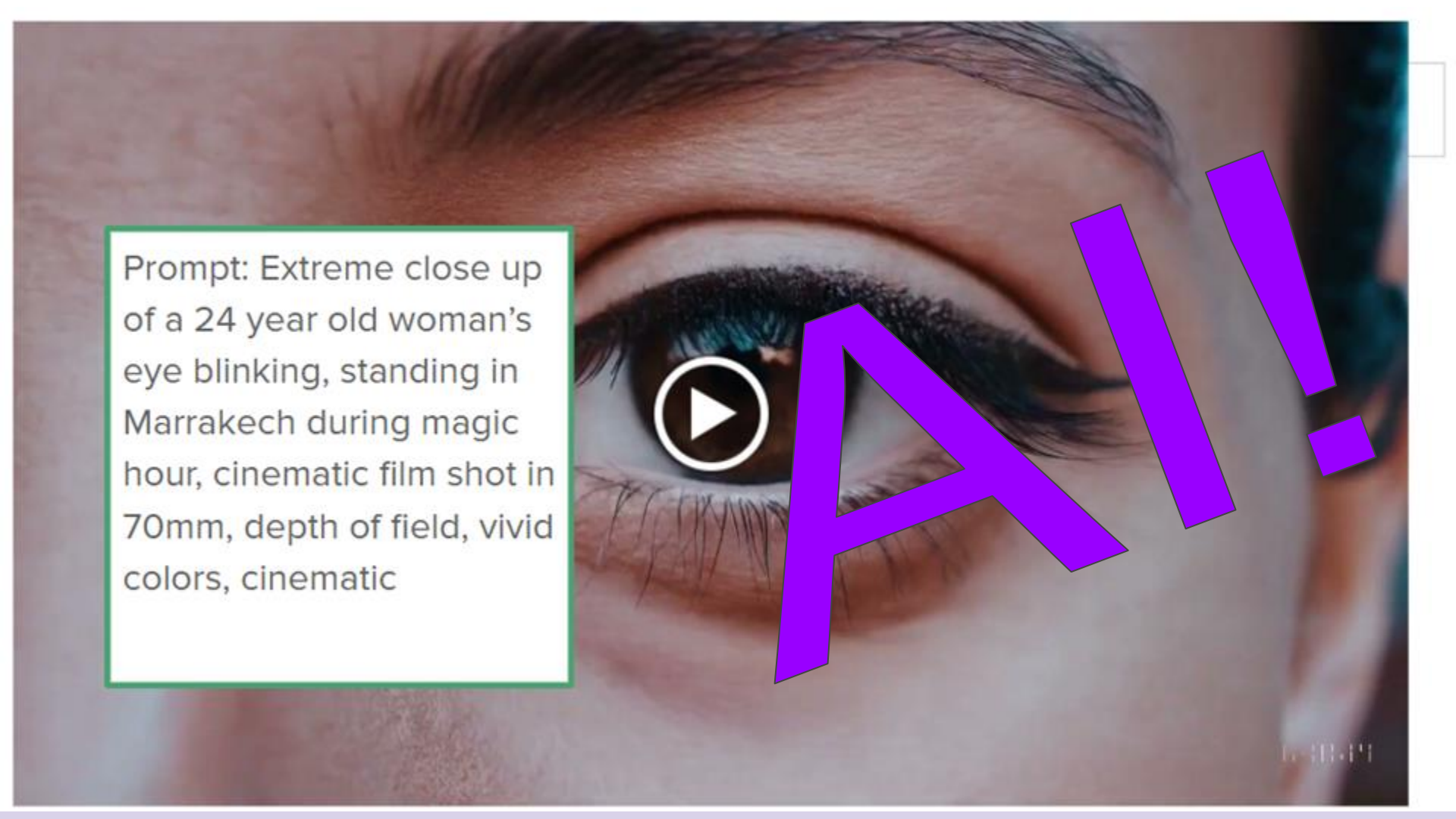
AI!





Prompt: A stylish woman walks down a Tokyo street filled with warm glowing neon and animated city signage. She wears a black leather jacket, a long red dress, and black boots, and carries a black purse. She wears sunglasses and red lipstick. She walks confidently and casually. The street is damp and reflective, creating a mirror effect of the colorful lights. Many pedestrians walk about.



A close-up photograph of a woman's eye, looking directly at the camera. The eye is dark with long, dark eyelashes. A white play button icon is overlaid on the pupil. The background is blurred, showing skin tones and some indistinct shapes.

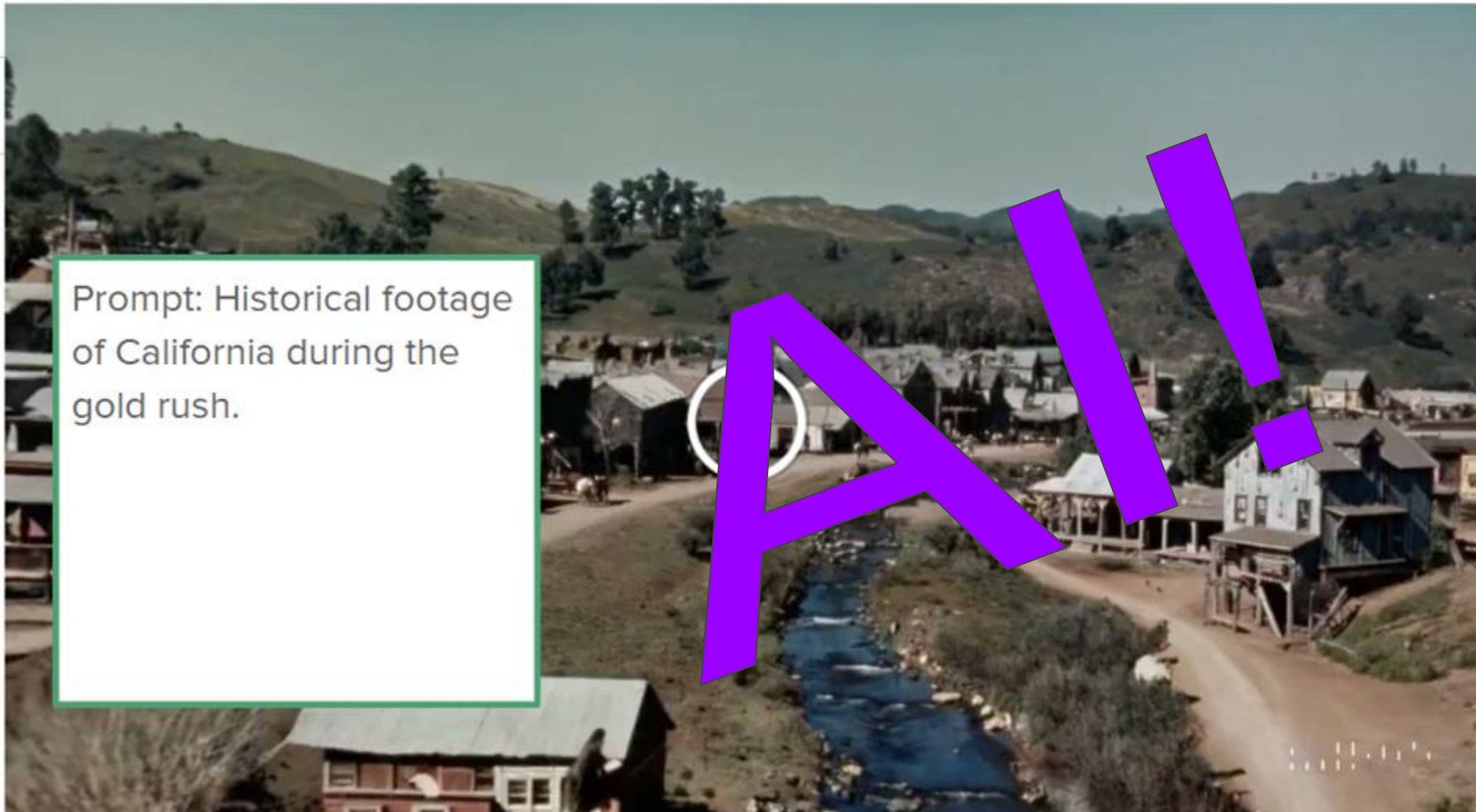
Prompt: Extreme close up of a 24 year old woman's eye blinking, standing in Marrakech during magic hour, cinematic film shot in 70mm, depth of field, vivid colors, cinematic

AI!



Prompt: Historical footage of California during the gold rush.

AI!



Current Reality - AI Gen Image/Video

It is **very challenging** or **impossible** to identify if a video or image is real.

In my experience, students are **good** at identifying AI generated content. They are more familiar with it than teachers

→ Sounds like...me!

A company called ElevenLabs uses **AI** to learn a user's **unique voiceprint**. The technology uses this information to **create a synthetic copy of a user's voice**. These voice clones can be made to say anything, and are almost indistinguishable from the original.



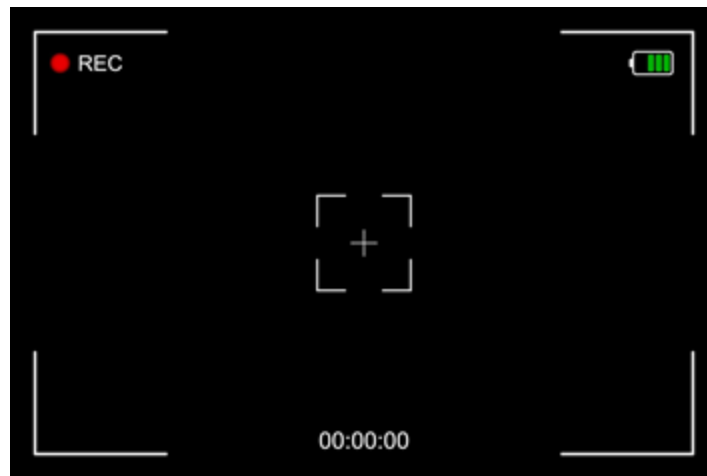
Who could **benefit** from this technology and who could be **harmed** by it?

What is one **question** you have about this technology?



Action!

The first TikToks were **capped at 15 seconds**. Then TikTok upped the limit to **60 seconds, then 3 minutes, now 10 minutes**. Longer videos mean **exponentially more data** for the AI-based algorithm to analyze.



You're in charge. What would you set as the **maximum video length on TikTok and why?**



→ *Deepfaking democracy*

South Korea's recently elected president used **deepfakes** in his campaign: **AI-generated videos of him speaking that appear 100% real**. His avatar was created using 20 hours of video and made him **appear friendlier than usual**, answering questions about his personality type and favorite karaoke songs.

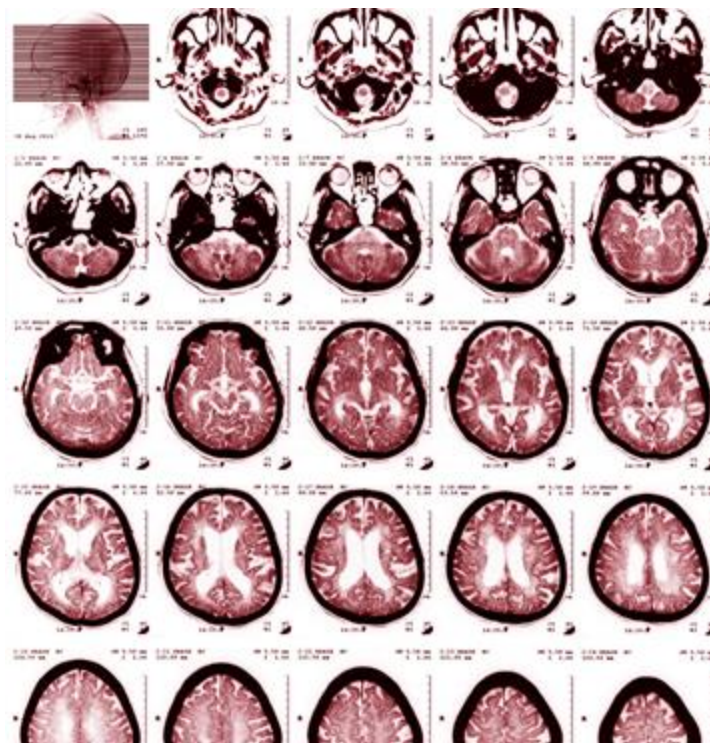


Should politicians be **allowed to use deepfakes** when running for office and **why or why not?**



→ *A little of this, a little of that*

It's common for **people with depression** to **try many different medications** before finding the best one. A new AI uses **brain scans** of people with depression to **predict** how well they will **respond to different medications**.



What **questions** would you ask to **figure out** whether this technology is **safe** and **reliable**?



AI Snapshots

Developed by non-profit aiEDU

Download their FREE slidedeck of AI Snapshots [HERE](#)

More teaching resources available on their website!

I created a video demo for teachers at my school - [HERE](#)

Policy to Guide Student AI Usage

Assignments are accompanied by a Stoplight (or some other note) which signals the Acceptable Usage of AI for the assignment.

- **Red:** No AI at all
- **Yellow:** Limitations to AI usage (teacher decides)
- **Green:** No limitations BUT students must be transparent about usage

Students currently **do not know what is acceptable usage of AI**. Encouraging responsible AI usage will build **AI Literacy skills** rather than allow cheating



Student AI Usage in My Classroom

I am currently experimenting with allowing my 11th/12th CS students to use AI to write **code for computer programs**.

Students have been given a **Green Light** to use as much AI as they would like - They must disclose and document their AI usage

Students are using a **chatbot** that I customized to my classroom LINK

We are in the “Wild West” of AI and Education. I am **gathering data** to inform my teaching practice

More info on this? Attend my next session (Friday 10 - 11am)

Continued Learning - AI Classroom Usage Examples

Want to learn more about what acceptable AI usage looks like in your classroom? Check out this [The AI Assessment Scale](#)

Want to Learn More About AI?

Step 1: Practice! Bring AI to the table. Try these:

- Brainstorming lesson ideas
- Generating sample student work
- Modifying lessons/differentiation
- Create multiple versions of assessments

There is not “playbook” for using AI. However, you can Ask the AI to help you accomplish your task.

If at first you do not succeed, try try again

Want to stay up to date on AI?

Co-Intelligence by Ethan Mollick

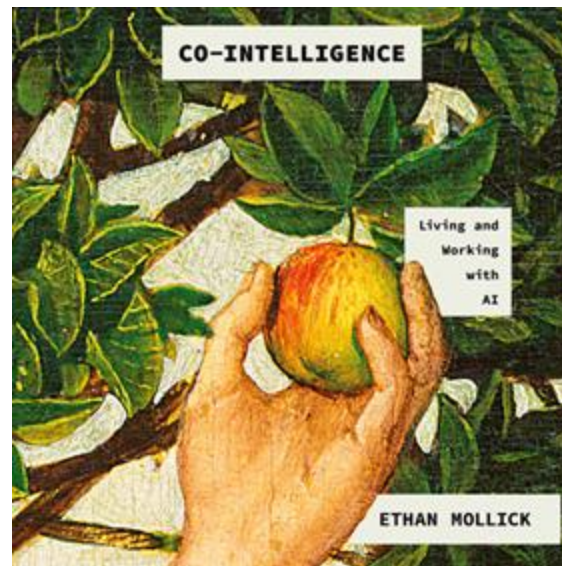
- 10/10 recommend. Quick read and very informational.

AI for Humans podcast

- Entertaining technology podcast that dives into advancements in GenAI

LinkedIn

- Lots of helpful people to follow, I am happy to give you recommendations :)



Tools that I use or recommend

Free Text Generation:

[Claude](#)

[ChatGPT](#)

Free Image Generation:

[Flux](#)

[Ideogram](#)

Free Song Generation:

[Suno](#)

[Udio](#)

Teacher Specific:

[Playlab AI](#) (You build your own app - Sign up for a PLC with them)

[Brisk teaching](#)

[MagicSchool AI](#)

Note: Many of these sites have a free and paid version. Play around with the free version - most of the time you shouldn't have to pay for a good product!

AI Related Resources

aiEDU's [AI Snapshots](#) (5-10 min bell ringers - little to no prep)

[AI for Education's Uncovering Deepfakes](#) - discussion guide

AI for Education - [Prompt Library](#)

[Policy Guidance for Districts](#) - TeachAI

MTDA - [Planning Guide for AI in Montana Schools](#)

[District Policy Slidedeck](#)

[Classroom Structure for Responsible Student Usage of AI](#)

Thank you! Any Questions?

What is one thing that you still want to learn about AI? What did I miss?



Feel free to reach out to me with any AI related questions that you have!

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