EdTech
Enhancing Digital Literacy

AI Teacher Assistants CoPilot, Khanmigo

Enhancing Lesson Planning and Instructional Design with AI

October 9, 2024

Webinar Description

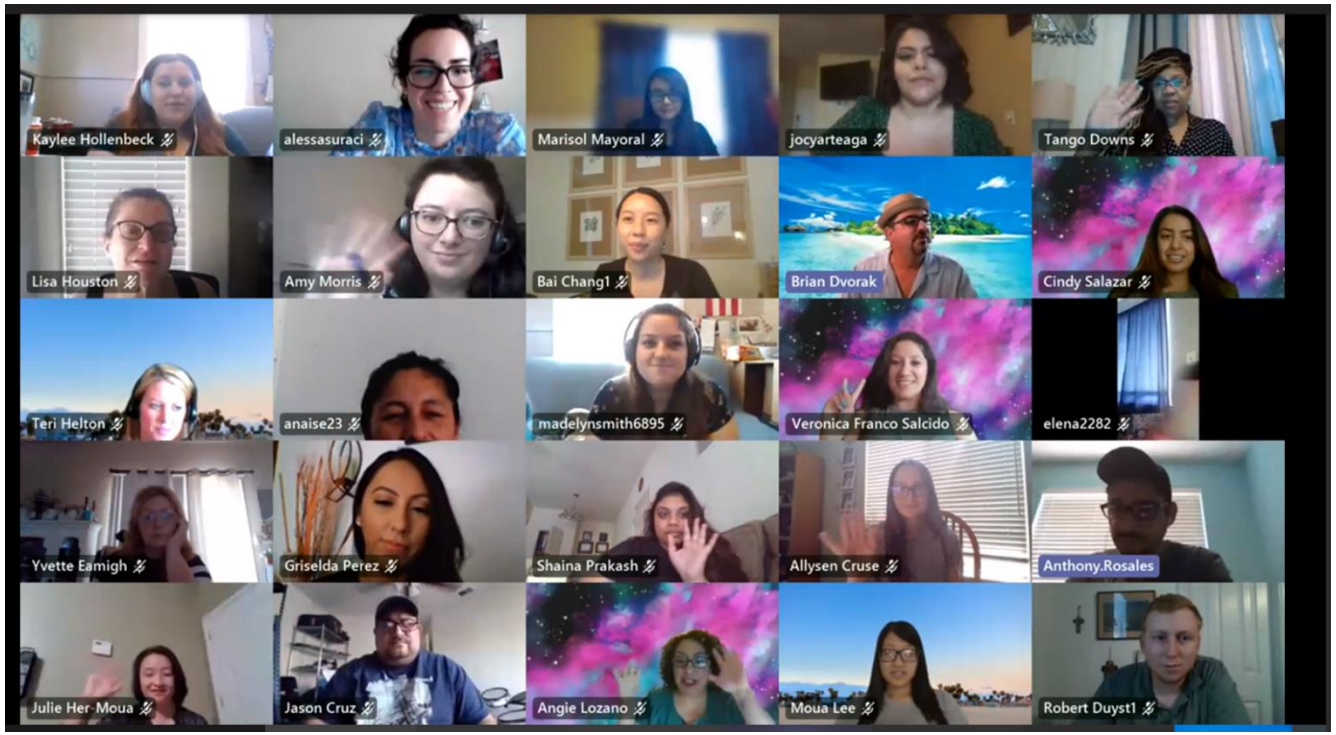
For our next Ed Tech Webinar educators will explore how to use generative AI as a teacher assistant for lesson planning, designing student tasks, and creating lesson resources. Participants will have the opportunity to learn and practice with Microsoft CoPilot and Khan Academy's Khanmigo.

Streamline your lesson planning process and generate dynamic class activities incorporating personalized learning strategies to support diverse learners. Develop tasks to enhance student engagement while providing instruction at the depth and rigor of grade-level standards.

We will use AI tools to generate a variety of instructional resources; including rubrics, graphic organizers, and visuals that can help communicate content clearly to students. The session will also include a Q&A to ensure all your questions are addressed.

Welcome and Norms

- Mute mic when not speaking
- Use the Chat area to ask questions or get help
- **Say Hello in our Chat Now:**
  - **How have you been using AI?**
- Engage in the content and prompts



This Session is being Recorded

Who is Fresno EdTech?

- Brian Dvorak
- Matthew Schwartz
- Dr. Molly O'Neill

Cyber Safety Week - October 14-18

- [Cyber Safety Week - October 14-18, 2024 | Post Display (fresnounified.org)]
- During the week of October 14-18, 2024, all students, K-12, will participate in the district's Cyber-Safety Week. The requirement is that all students receive at least one cyber-safety or digital citizenship lesson during this week or sometime during the month.

Educational Technology Website
go.fresnou.org/edtech

Educational Technology

Latest Posts

EVENTS

2025 FUSD EdTech Conference

Brian Dvorak
Oct 4 2024

The EdTech Team is excited to announce the location and date of our in-person Educational Technology Conference! 🎉 The one-day conference will take place at **McLane High School on Saturday, February 22, 2025**, and will be focused on digital tools in service of instruction and learning. The sessions will be appropriate for teachers at all

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STUDENT DIGITAL LITERACY
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Webinar Series - Resources

Fresno Unified School District

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Links to Previous Recordings and Resources

Check back here to find Video Recordings of all of our Webinars and the related Resources.

Session Title	Resources
Adobe Express - Sept 12th	Video Recording | Other Resources

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Agenda

- New AI Language in AUP
- AI Awareness
- Overviews and Hands-on Practice
  - Khanmigo
  - CoPilot
- Student Applications and AI Instructional Resources
- Q&A and Closure

New AI Language in AUP

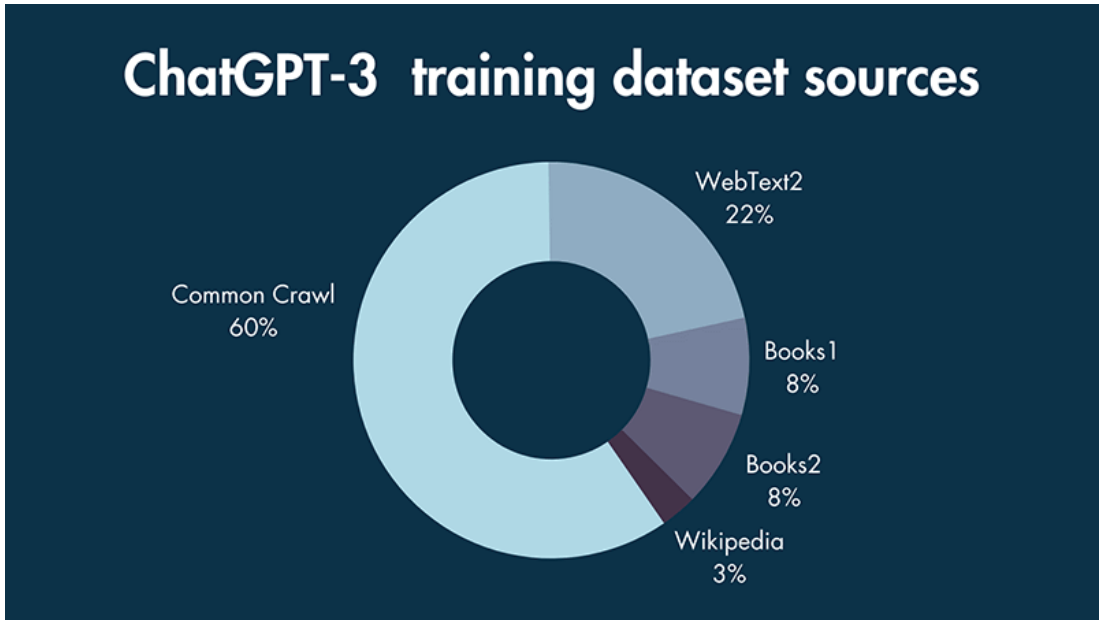
New AI Language in AUP

The use of Artificial Intelligence (AI) technology in our educational environment is intended to enhance learning experiences and foster innovation. Artificial Intelligence (AI) technology is defined as and includes, but is not limited to, Large Language Models (LLM), Machine Learning (ML), and Natural Language Processing (NLP) Platforms. All learners are expected to utilize AI resources responsibly and ethically. This includes respecting the privacy of individuals, being mindful of the accuracy and reliability of AI-generated information, and refraining from using AI for malicious or inappropriate purposes.

- Learners will follow all guidelines set by teachers and school site staff regarding the use of AI as part of planning, instruction, and learning.
- Learners must abide by the AI platform's terms of service (TOS) and federal and state student data privacy laws, and teachers and staff must solicit parental consent when necessary.
- Learners are prohibited from using any AI system to access, create, or display harmful, deceptive, or inappropriate matter that is threatening, obscene, disruptive, or sexually explicit or that could be construed as harassment or disparagement of others based on their sex, or perceived race, color, ancestry, national origin, age, religious creed, marital status, pregnancy, physical or mental disability, medical condition, genetic information, military and veteran status, sex, sexual orientation, gender, gender identity, or association with a person or group with one or more of these actual or perceived characteristics or interact with the AI in a manner that supports any of the above.
- Learners shall not share confidential information or personally identifiable information with an AI system of themselves, students, staff members, or others. Personally identifiable information includes, but is not limited to, a person's name, address, email address, telephone number, Social Security number, or other personally identifiable information.
- Learners will not employ AI systems to make high-stakes decisions that significantly impact people's lives without proper human oversight, transparency, or the ability to appeal.
- Learners will not allow AI systems to run unchecked and make decisions that could jeopardize safety in dangerous industrial settings, vehicles, infrastructure, etc.

Is OpenAI, ChatGPT reliable?

- ChatGPT finds it's information from Datasets
- The largest dataset is Common Crawl
- The smallest dataset is Wikipedia
- Is it looking at reliable fact-based sources or opinion?



Best Practices for Using Generative AI

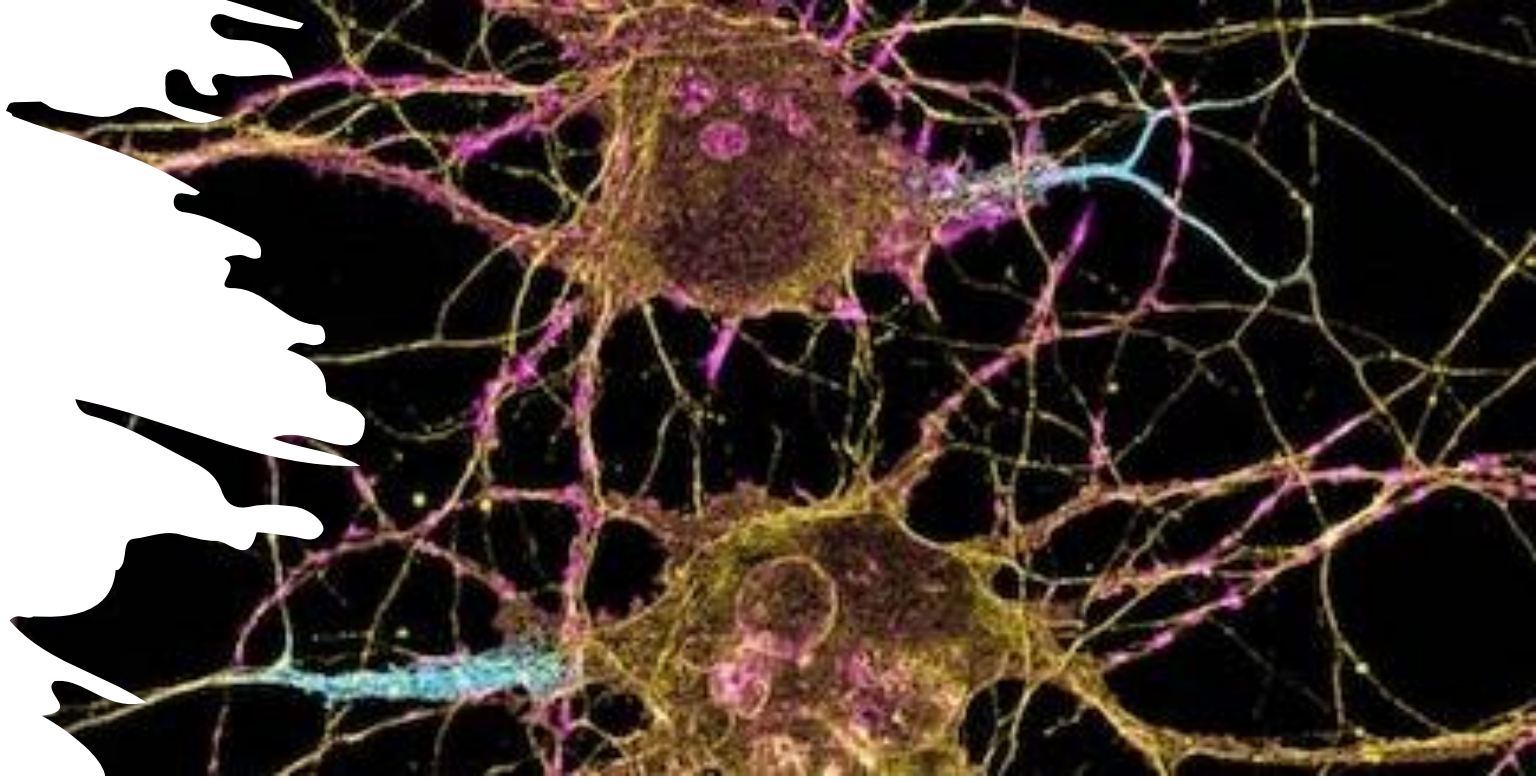
- **Check for Bias and Accuracy** – AI might occasionally produce biased or incorrect content. Always double-check before sharing with students.
- **Use the Copilot Approach** – Use AI for initial work, but make sure to add your final touch and context. Use AI as a thinking partner.
- **Protect Privacy** – Don't include personal student details like names or addresses.

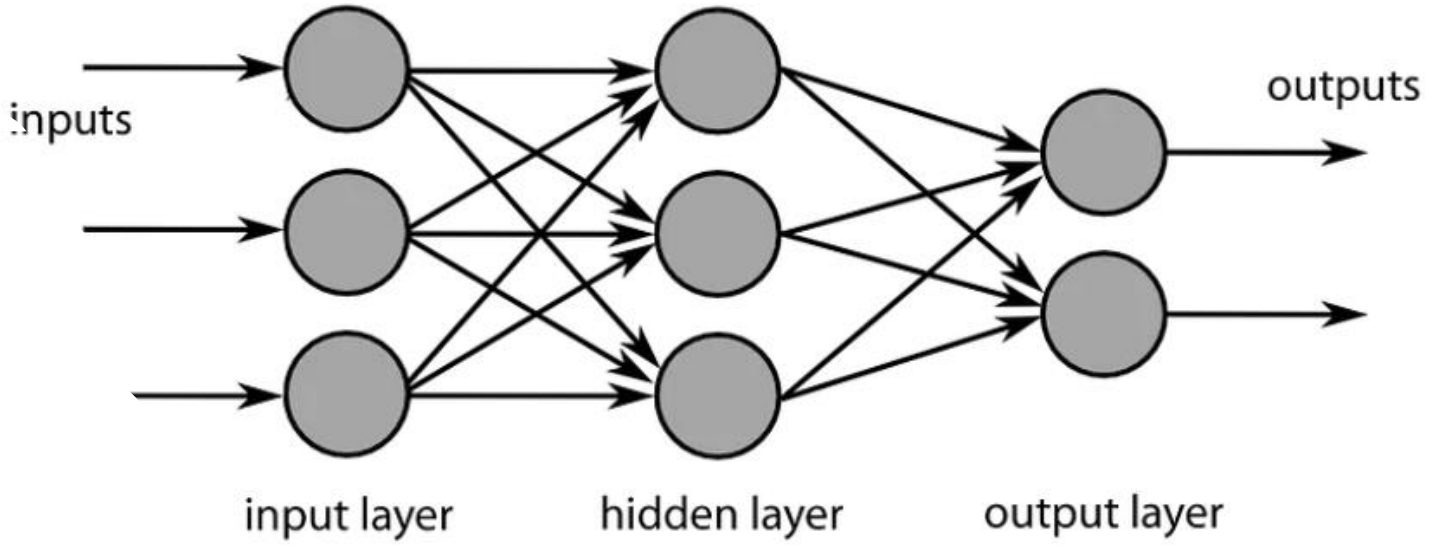
AI Awareness

How does this work?

Neural Networks

- AI is modeled after our brains!
- Connections between two neurons in the brain represents AI's connections between data sets
- Programmers use math instead of biological signals
- Connections strengthen with practice
- Deep Learning is MANY neural networks

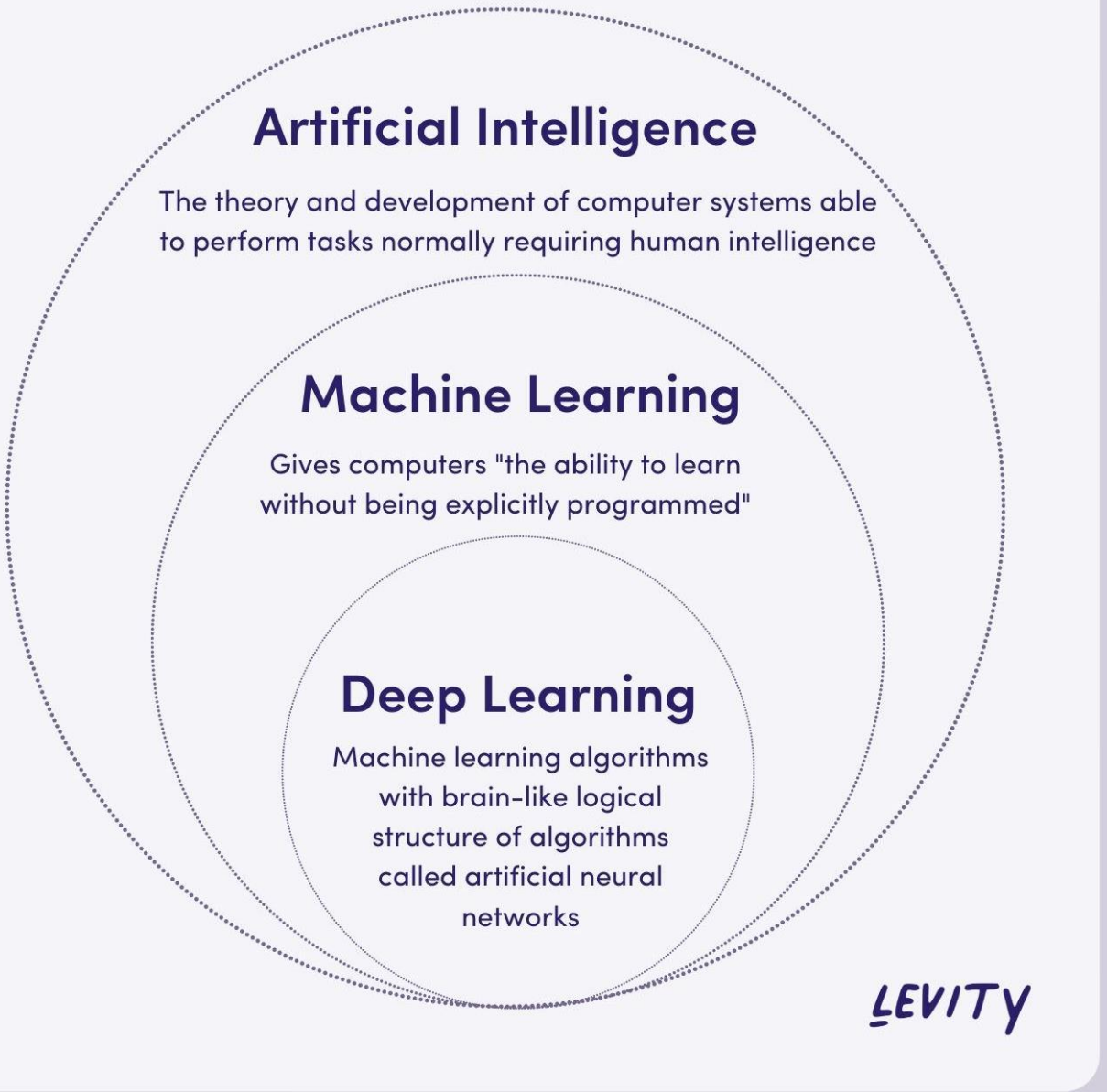




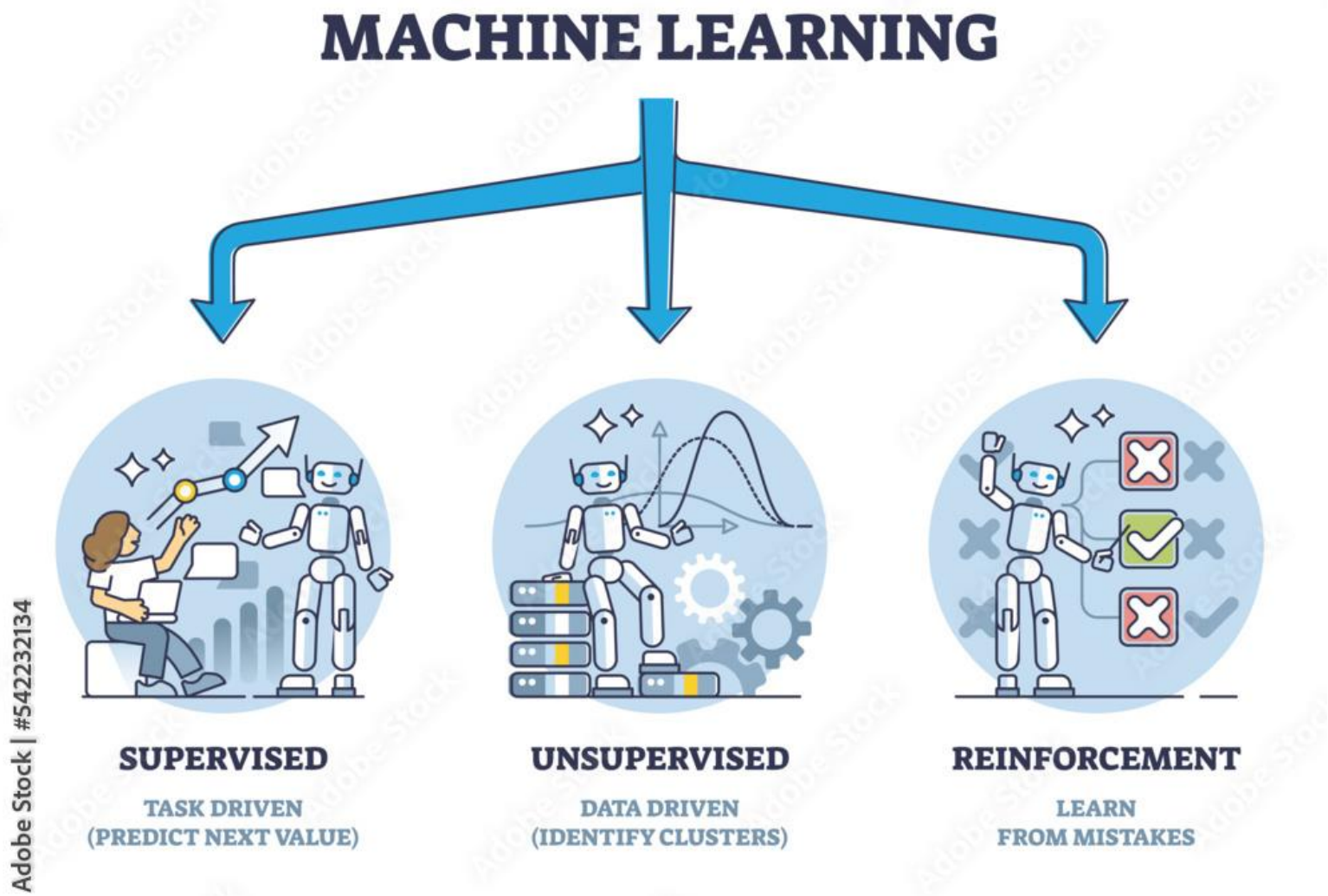
1. A diagram of a small artificial neural network. (Image Source)

Artificial Intelligence is Powered by Machine Learning

- "In *machine learning*, AI developers don't program explicit rules for solving a problem. Instead, a program receives a dataset of examples, analyzes patterns in the dataset, and figures out its own rules from that data" (Ganelin, Kleiman, 2023).

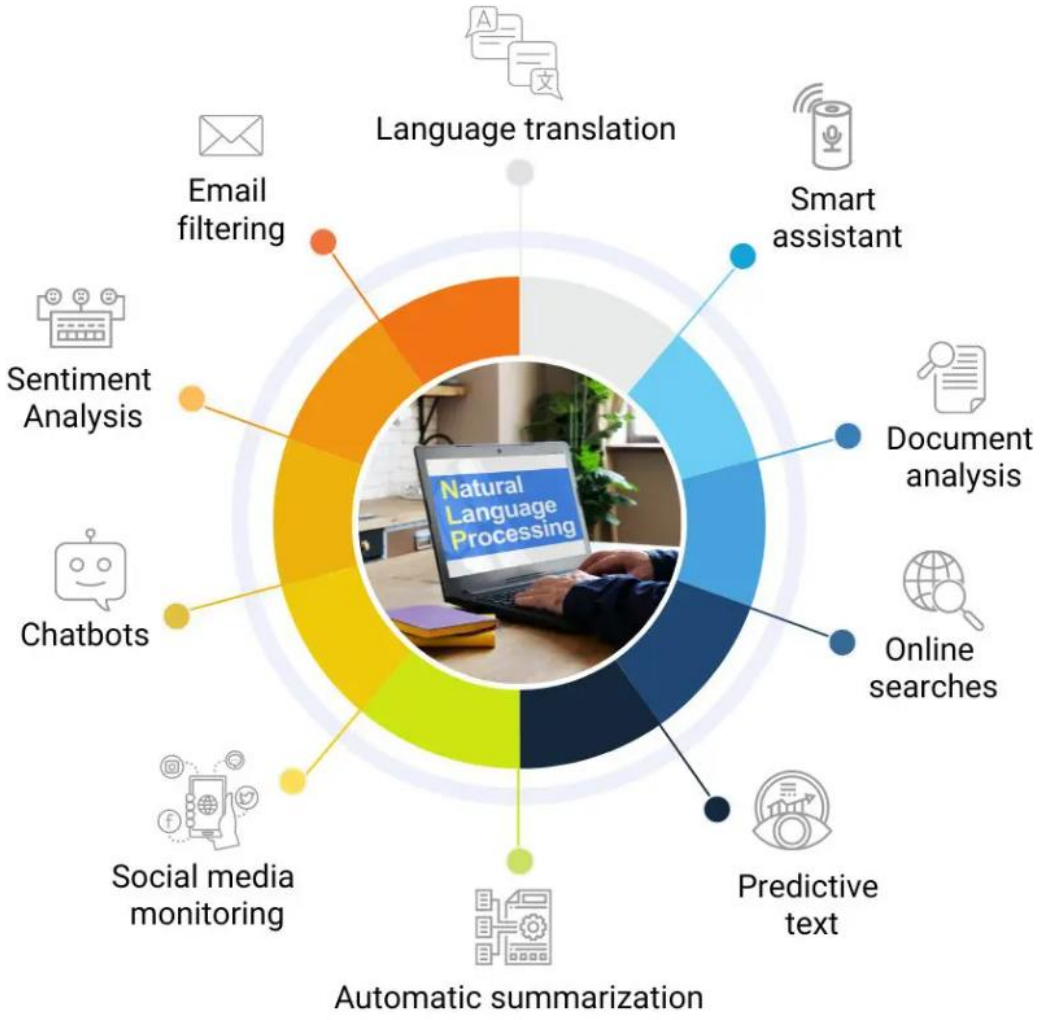


Types of Machine Learning

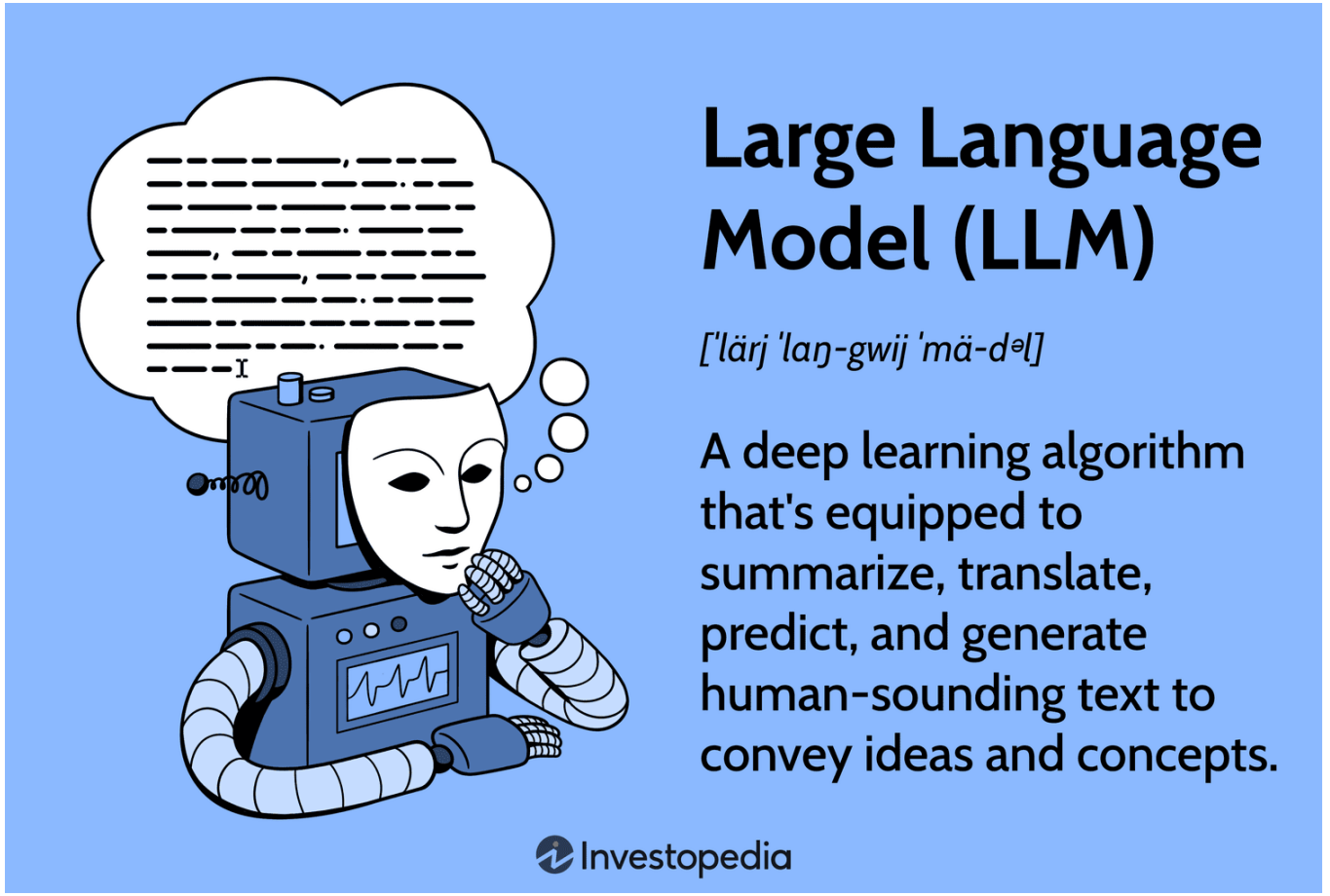


Natural Language Processing

- Allows computers to communicate with human language

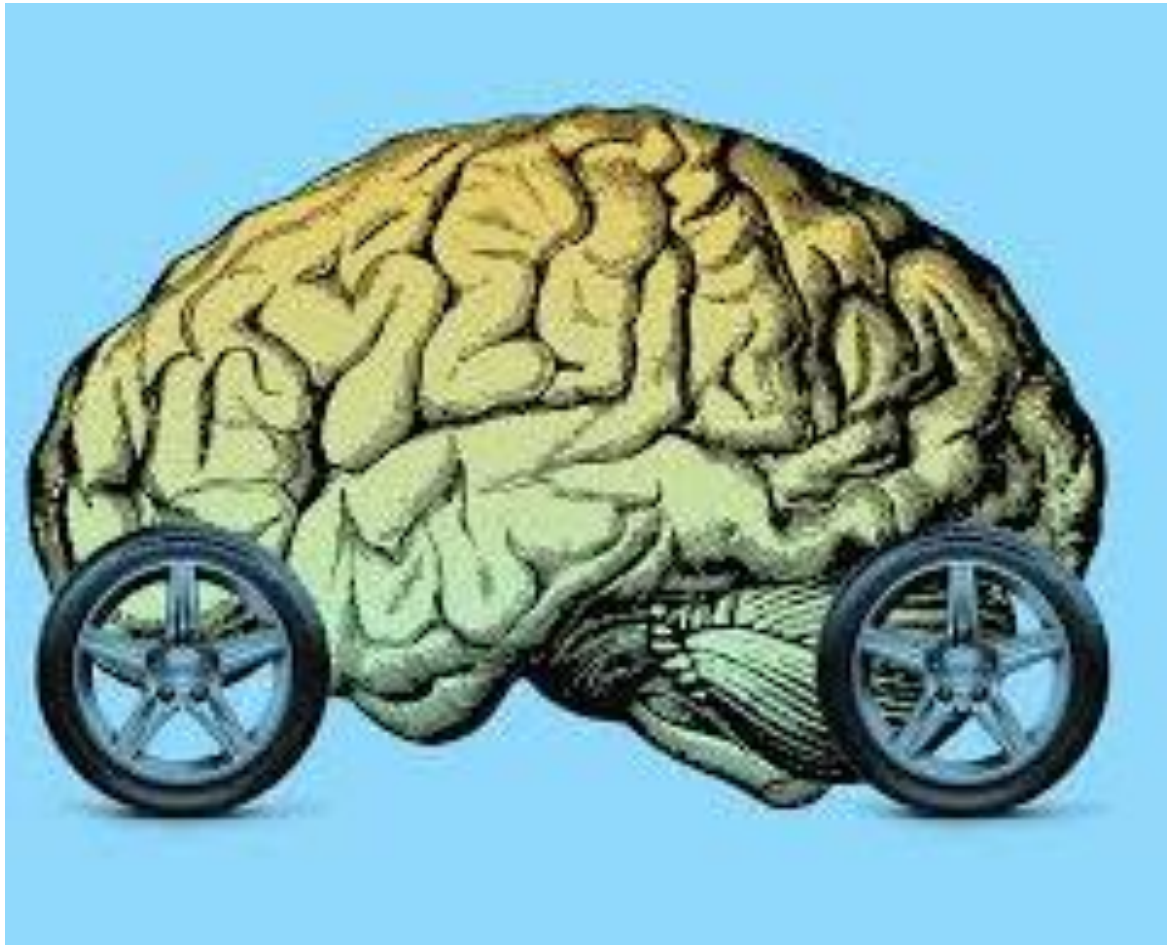


Large Language Models



The Driverless Dillema Radiolab Podcast

AI and Ethical Implications



Potential Benefits & Risks of Using AI in Education

Potential Benefits

Content development and differentiation

Assessment design and timely, effective feedback

Tutoring and **personalized** learning assistance

Aiding **creativity** and **collaboration**

Operational and administrative **efficiency**

Misinformation, errors, and academic dishonesty

Diminished student and teacher agency and **accountability**

Compromised student **privacy** and unauthorized data collection

Overreliance and loss of critical thinking

Societal bias and lack of cultural sensitivity

Potential Risks

Intro to Overviews and Hands-on Practice

- Our Process to Explore Khanmigo and Copilot…
  - We’ll start with a short overview with demos and examples of each application
  - Followed by Hands-on Practice
    - Criteria for Success for Hands-on Practice

“Matt will get us started and then I’ll be sharing CoPilot next. Let's do this!”

Overview of Khanmigo

Khanmigo is your always-available lesson plan helper.

For teachers

Knock something off your to-do list in minutes.

For learners

Prep for tests without breaking a sweat.

For parents

On-demand help makes homework time a breeze.

Khanmigo Pricing and Versions

For Teachers

Get started — it's free

- Generate standards-aligned, differentiated lesson planning tied to our content library.
- Get an on-demand summary of student work to assess progress and identify areas for support.
- Create learning objectives, rubrics, and even exit tickets.
- Refresh your content knowledge in various subject areas.
- Access your Khanmigo chat history.

Sign up for free today and start checking items off your to-do list.

Sign up for free

For you

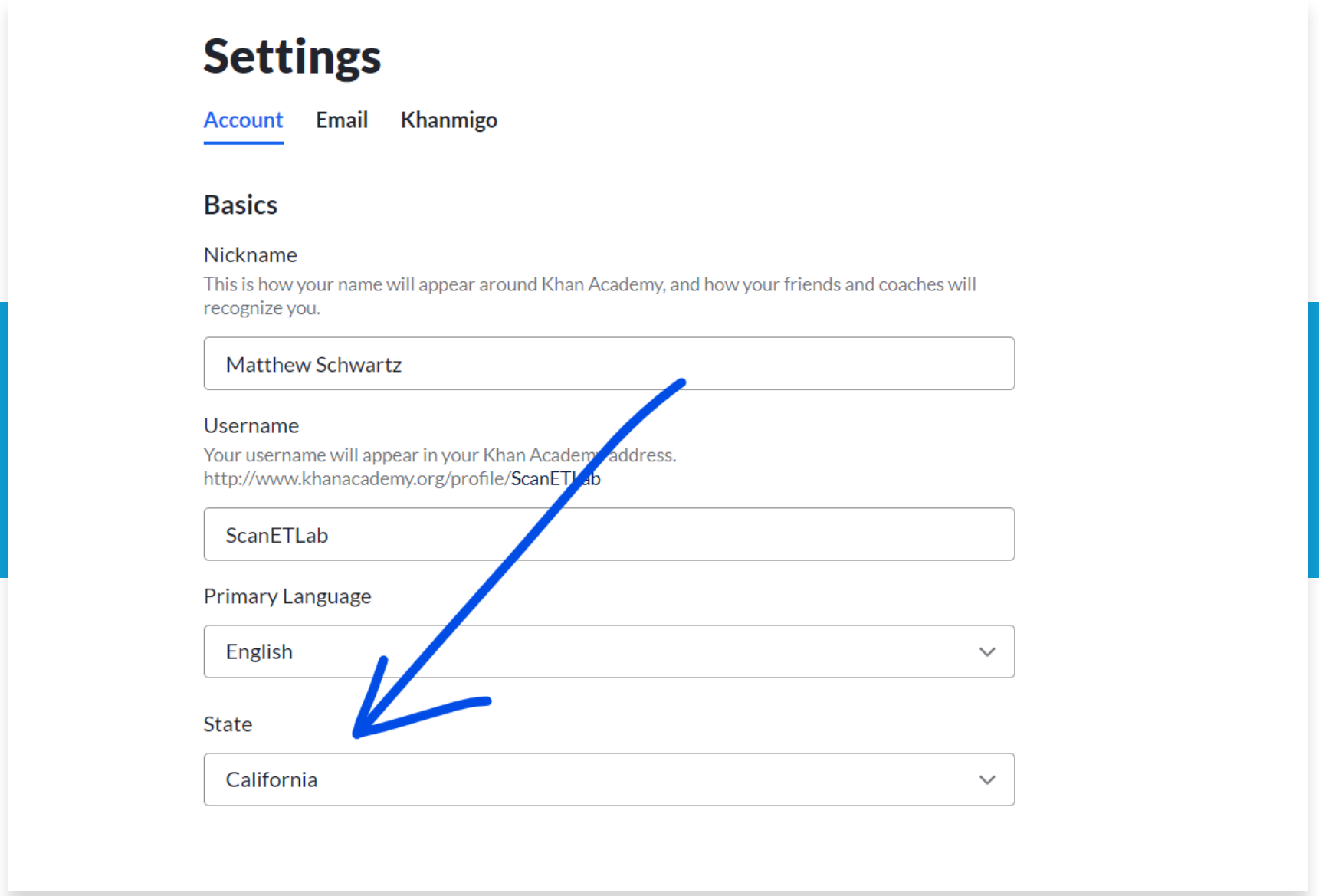
$4/month

$44/year Save $4 w/ annual

For families

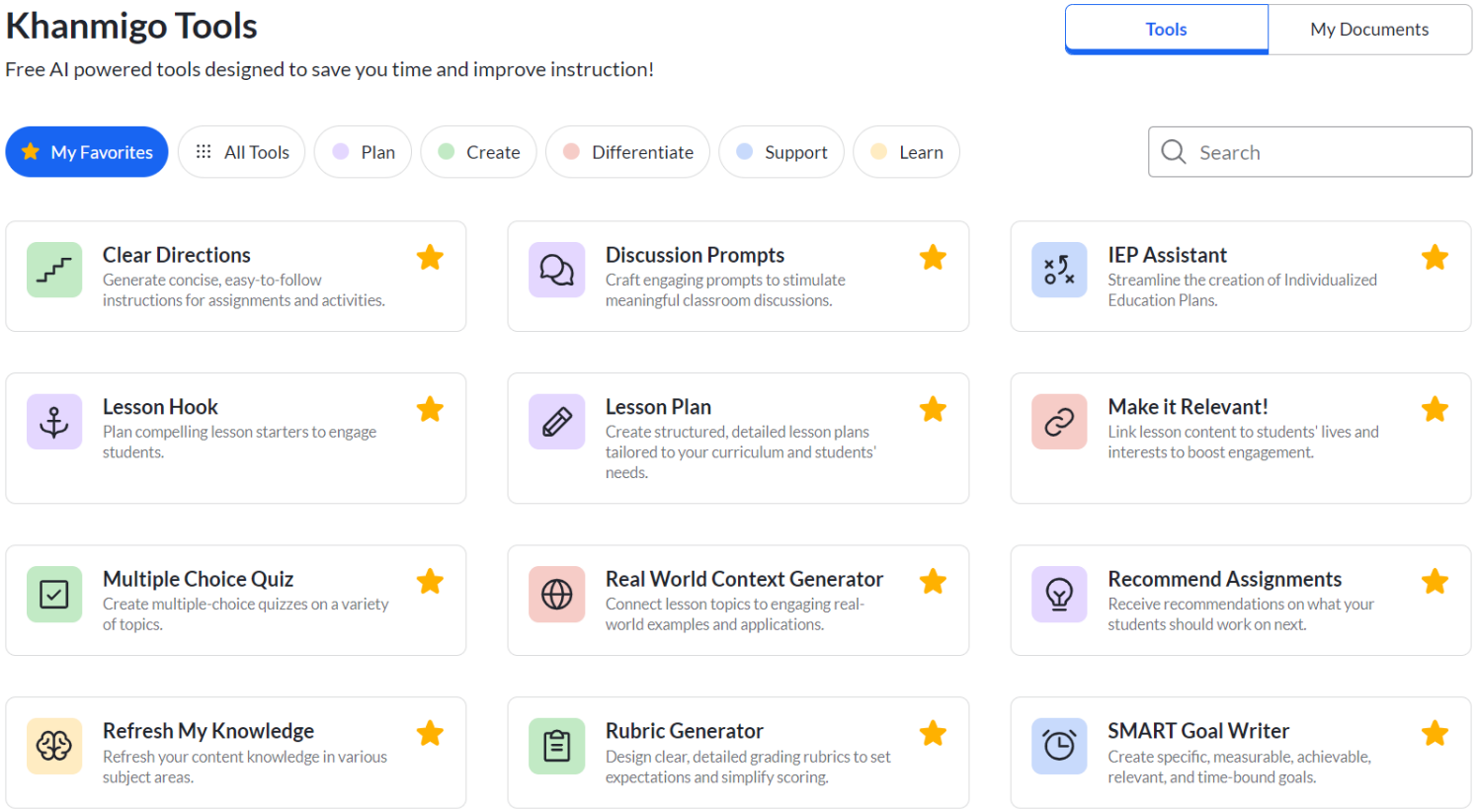
$4/month

$44/year Save $4 w/ annual



Select your State in your Profile

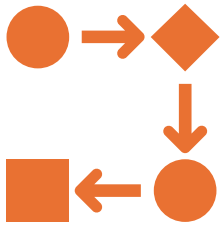
Let's take a look at Khanmigo Tools



Hands-On Practice Khanmigo

1. Navigation and Familiarity – Login and Access Khanmigo Tools
2. Practical Application – use at least one tool, related to your classroom or an upcoming lesson
3. User Experience: Note any challenges or questions, any features that were helpful or user-friendly.
4. Collaboration and Sharing: Be prepared to share one insight or tip; how could these tools be integrated into your teaching practice?

Khanmigo Discussion



Ease of Use: How intuitive were the tools? Were there any difficulties in navigating or using them?

Impact on Teaching: How do you think these tools could impact your teaching and student engagement?

Suggestions for Improvement: Any ideas on how the tools could be improved or better supported?

Khanmigo Resources

Meet Khanmigo: Khan Academy's AI-powered teaching assistant & tutor

Criterion	Yes	Almost	No
Understanding of Place Value	The student correctly identifies and uses place value in all problems.	The student mostly identifies and uses place value correctly, with minor errors.	The student makes significant errors in identifying or using place value.
Accuracy in Computation	The student performs all computations accurately.	The student performs most computations accurately, with minor errors.	The student makes significant errors in computation.
Application of Strategies	The student applies appropriate strategies to solve problems.	The student applies strategies, but they are not always appropriate or fully correct.	The student does not apply appropriate strategies or uses incorrect strategies.
Explanation of Reasoning	The student clearly explains their reasoning and the steps they took to solve the problem.	The student explains their reasoning, but the explanation is somewhat unclear or incomplete.	The student does not explain their reasoning or the explanation is unclear.

Khanmigo Created Rubric Example

Meet Khanmigo

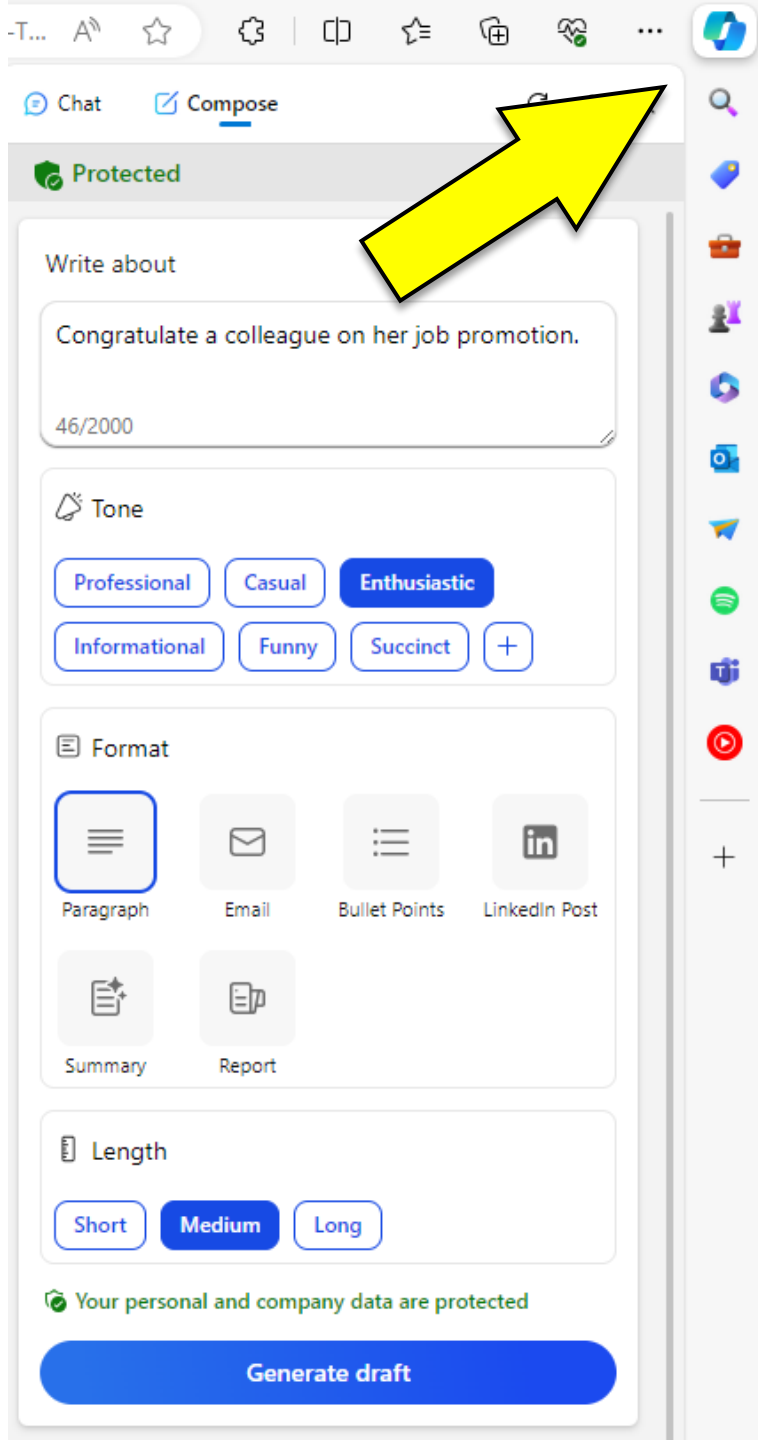
Teaching ELA with Khanmigo

Sal Khan TED Talk– How AI Could Save (Not Destroy) Education

Microsoft CoPilot

How to Access Copilot

- **Website:** copilot.microsoft.com
- **Microsoft 365:** office.com
- **Edge Browser:** Look for the Copilot logo in the upper right corner (Chat with Copilot while viewing any web page)



Microsoft Copilot Demo Time

Enhancing a Lesson with AI

Instructions: Consider an upcoming lesson. Create an activity, task, assessment, CFS, etc., to enhance your lesson.

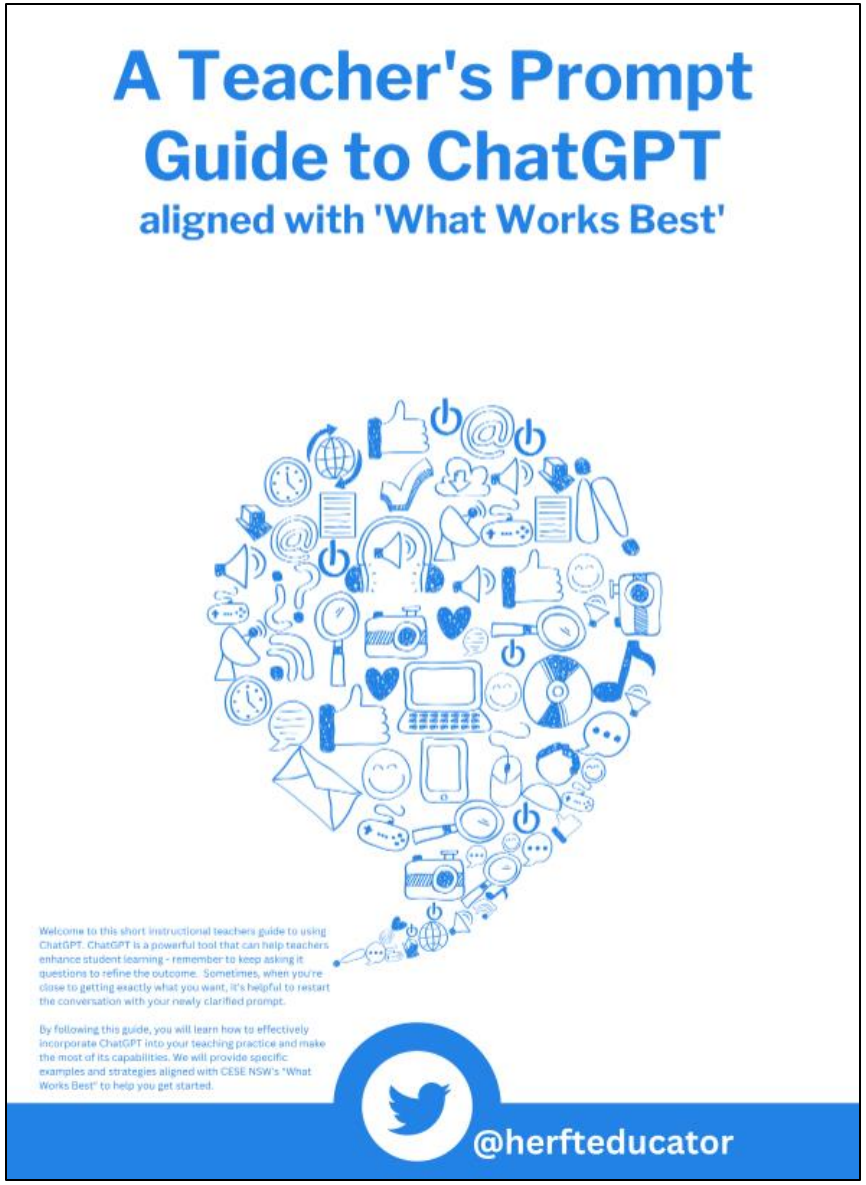
- Add Collaborative Tasks
- Include Real-World Task
- Create a Choice Board of Activities
- Create a reflection activity
- Other

Sample Questions for Co-Pilot

- Provide some structures and norms for my [**grade level**] students to work on a group project in both face-to-face and digital spaces.
- Provide some [**real-world tasks/ collaborative tasks/ independent task**] to help [**grade level**] students learn the CA [**insert specific standards**]
- Provide 3 differentiated activities for teaching [**concept**] to a mixed-ability [**grade level**] class. Include one activity each for visual, auditory, and kinesthetic learners.

More Prompt Ideas for Teachers

[A Teacher's Prompt Guide to ChatGPT aligned with 'What Works Best' (wordpress.com)]



Share Out

How was the Copilot Experience?

Opportunities for Students to Use AI

- Student Applications
  - Adobe Express
  - Canva
  - Padlet
- Instructional Resources
  - Code.org
    - AI for Oceans - Code.org
  - Khan Academy
    - How AI works | Code.org | Computing | Khan Academy

Please Complete the Feedback Form

- Your feedback informs what types of trainings we may offer
- Your feedback can help us improve our training
- We will send a follow-up form
- We would love to visit your classroom and see how you're using AI

Tech Training Evalutation Form - 2025

Questions and Answers

- Please post questions in the chat or raise your hand
- Remember; if you need time to formulate a question, you are free to contact us anytime, including after this presentation