

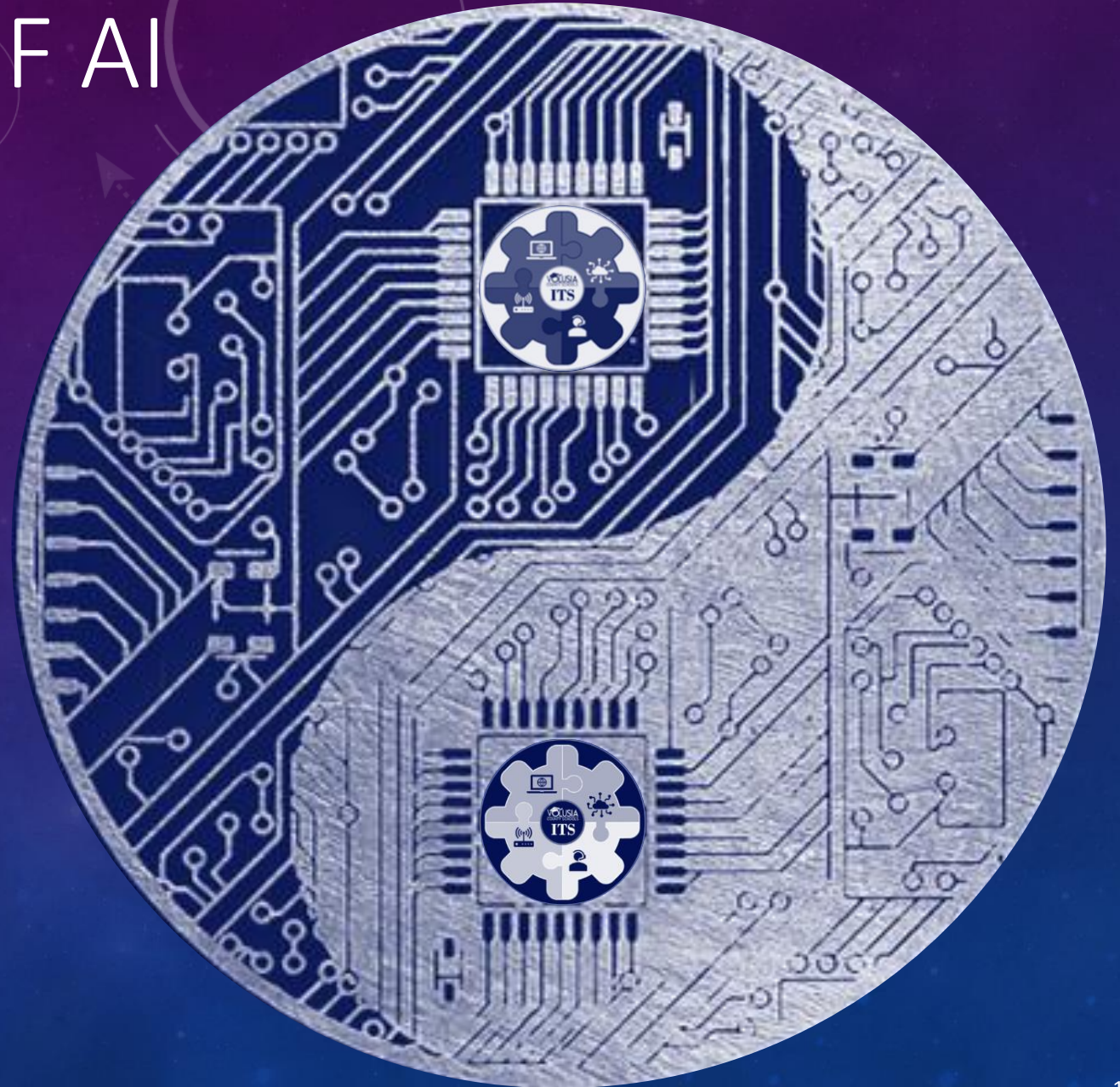
THE YIN AND YANG OF AI

DR. MATT KUHN

DR. MELISSA CARR

VOLUSIA COUNTY SCHOOLS

INFORMATION TECHNOLOGY SERVICES



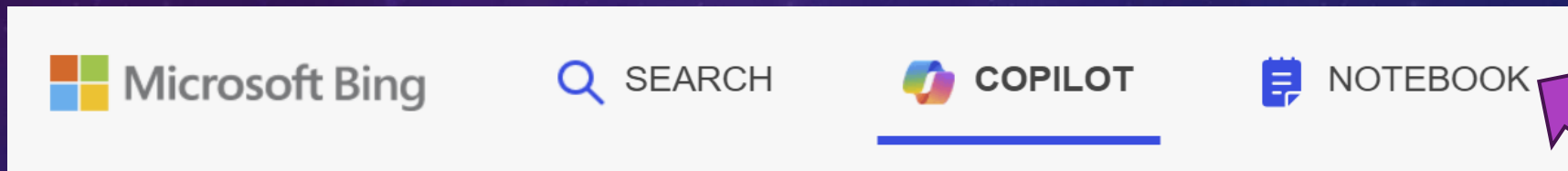
AGENDA

1. Experiencing AI
2. The evolution of AI
3. Volusia County School's journey so far
4. Triad discussions of AI essential questions and whole group share
5. AI benefits and risks
6. Preparing staff and students for an AI augmented world
7. Closing thoughts
8. Resources



AI EXPERIENCE

1. Practice what it's like to get feedback on an essay like a student. You can use an essay you have already or get an example [here](#) or with the QR code below.
2. Go to <https://www.bing.com/chat> and click on the Notebook icon.



3. Put in a prompt like “Give me feedback on how I could improve this compare and contrast essay.” Copy & paste the text of the essay after the prompt. Click on the arrow for a response.
4. Try out the other features to use the response.

Sample
Essays:



WE'VE BEEN USING MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE FOR A LONG TIME...

It looks like you're writing a letter.

Would you like help?

- Get help with writing the letter
- Just type the letter without help

Don't show me this tip again



JUNE 2, 2017 | 8 MIN READ

20 Years after Deep Blue: How AI Has Advanced Since Conquering Chess

IBM AI expert Murray Campbell reflects on the machine's long, bumpy road to victory over chess champ Garry Kasparov

BY LARRY GREENEMEIER



World Chess Champion Garry Kasparov (L) makes a move during his fourth game against the IBM Deep Blue chess computer. Credit: Stan Honda/Getty Images

THE VERGE BUSINESS | MAY 4, 2018 2:40 PM

Google May Have Finally Made a Truly Usable Voice Assistant

Google says it will include a new version of its speech-recognition software in some new phones, potentially transforming how people accomplish tasks.



Microsoft's Kinect for Xbox 360 Becomes Fastest-Selling Electronic Device in History

New motion-sensor controller hardware tops 10 million units sold since it launched Nov. 4 last year.

BY JOHN GAUDIOSI | MARCH 9, 2011 11:09AM



Home About Help Corporate Services

PERSONAL Jeeves is here!

May I Suggest:

- PERSONAL JEEVES
- ANSWER POINT
- MONEY
- TRAVEL
- HEALTH
- COMPUTERS
- ENTERTAINMENT
- HOME & FAMILY
- SHOPPING

ASK JEEVES FOR Kids!

WANT TO BUY A TOY? Jeeves can help!

Just Curious, Jeeves

Have a Question? Just type it in and click Ask!

Most Recent Questions About Business:

Where can I find the web site for the company British Telecom?

What are people asking RIGHT NOW? →

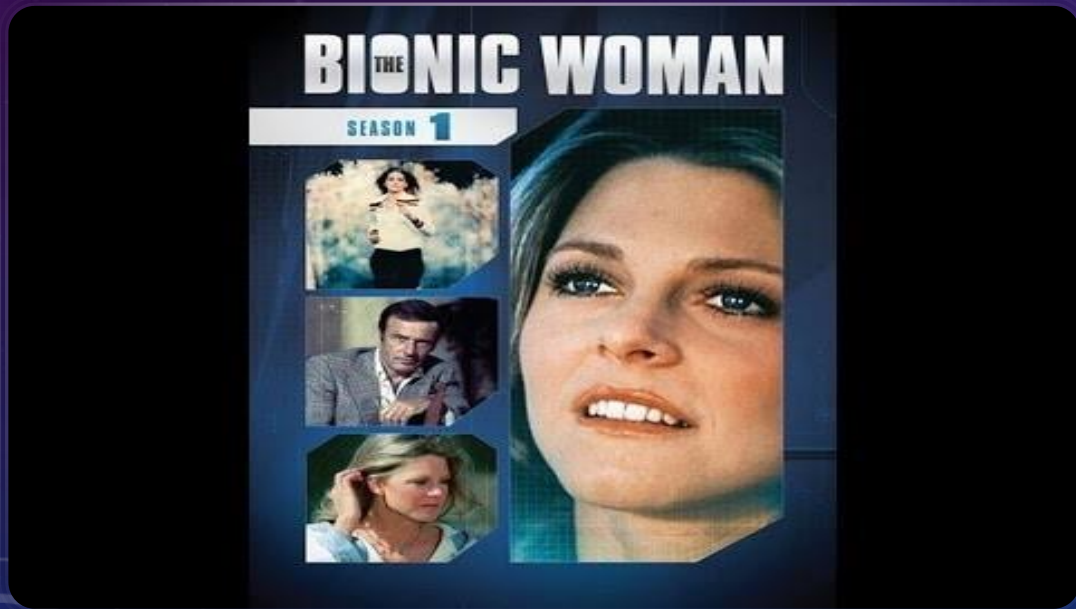
Make Jeeves Your Homepage Ask Jeeves U.K. Advertise On Jeeves Become an Affiliate Investor Relations



Boston Dynamics

OUR AI PHILOSOPHY

AI can be an augmentation to one's ability to learn, create, and analyze. It doesn't replace you; it adds to you.



PARADIGM SHIFT - CAN YOU TELL THE DIFFERENCE?



Copilot
Your everyday AI companion
with  Bing

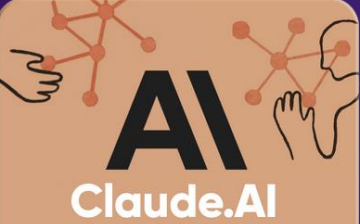


OpenAI
ChatGPT 4.0

"It replicates human-like intelligence by training machines and computer systems to do tasks that simulate some of what the human brain can do.



Gemini



AI
Claude.AI


It relies on systems that can actually learn, usually by analyzing vast quantities of data and searching out new patterns and relationships. These systems can actually improve over time, becoming more complex and accurate as they take in more information."



DALL-E 2



Fetchy



Khanmigo



AI is already here



OUR JOURNEY SO FAR...

1. Board Policy

- Do's & Don'ts for Staff
- Vision for Student Use

2. Code of Student Conduct

- Do's & Don'ts for Students

3. Resource Selection, Design, and Implementation

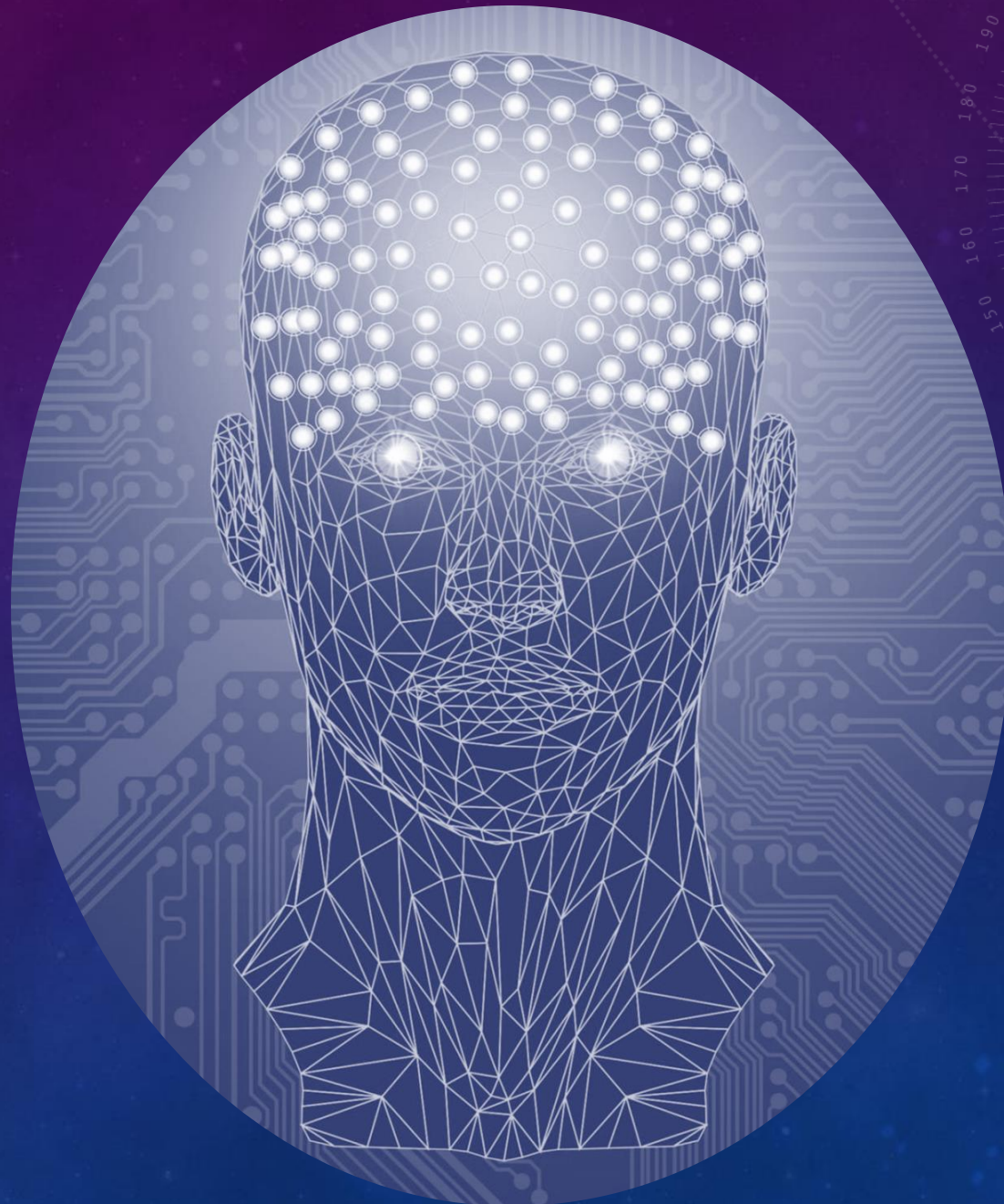
4. Principal and Teacher Training

5. Improved Student Outcomes



AI DISCUSSION

- Form groups of three
- Once your group has been formed, nominate a group leader
- The group leader will get a discussion question number from the session presenters



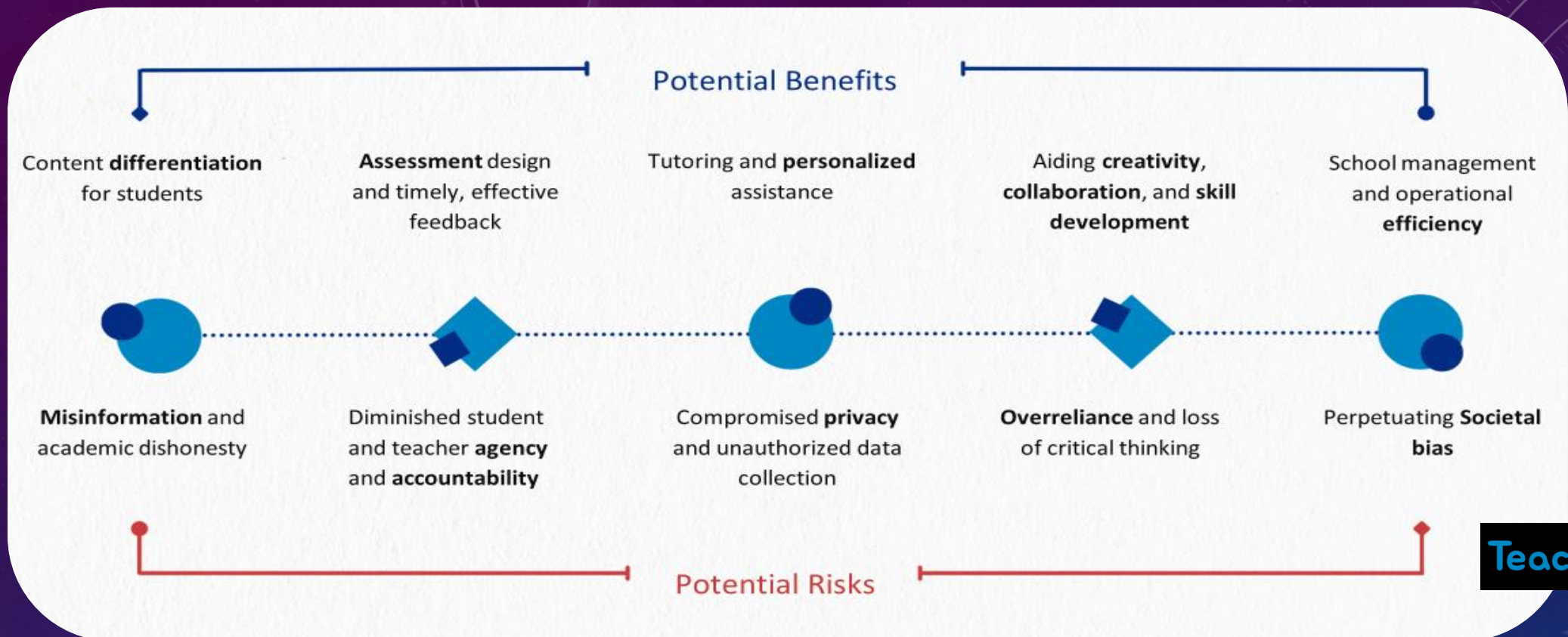
1. What are the boundaries of AI use for staff and students?

2. How do we fairly ensure equal access for our students?

3. What are the risks of AI in education, and how can we mitigate them?

4. What are the benefits of AI in education, and how do we leverage them?

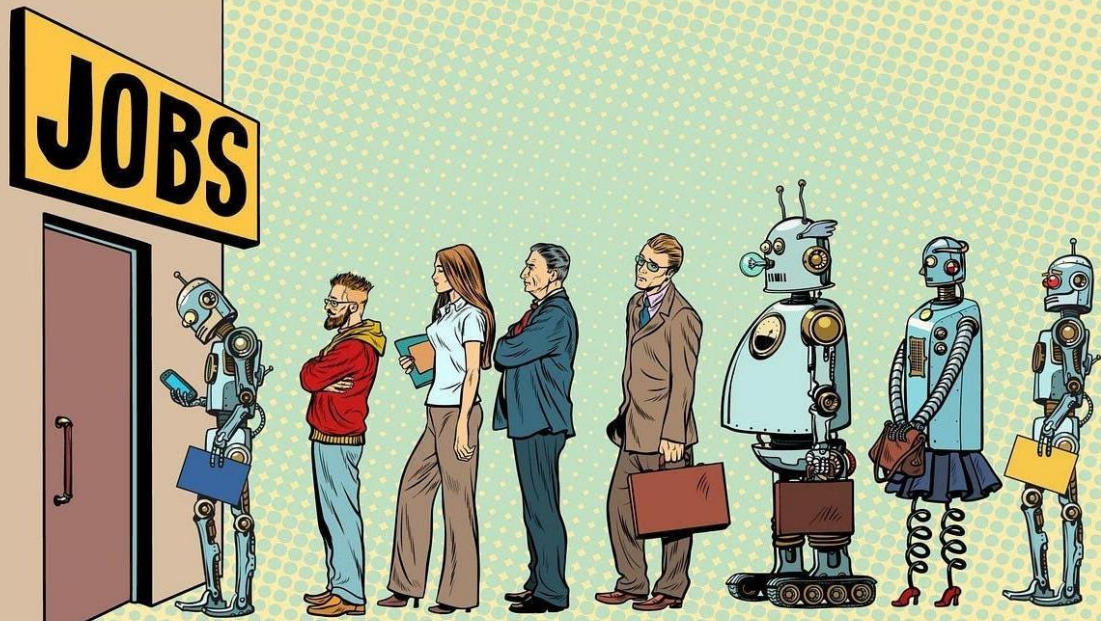




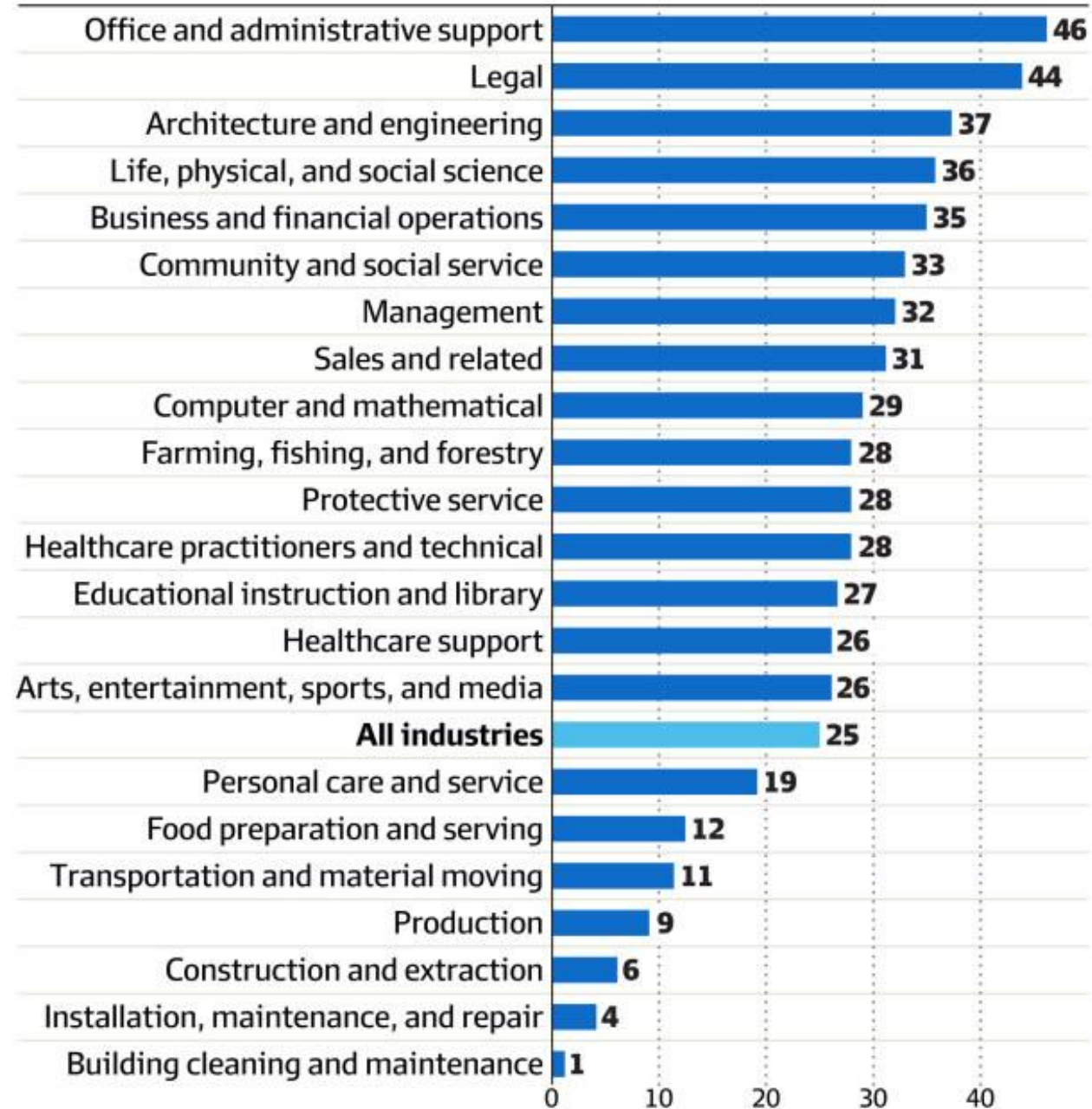
1. Like any new information, students should be taught to think skeptically of unfamiliar sources. They should learn to corroborate information with multiple trustworthy sources.
2. Important decisions should always involve a human with the final authority and responsibility for making decisions about the use of AI content, ensuring a “human is in the loop.”
3. Like other online systems, students should refrain from sharing personal identifying information with AI systems and report any suspicious AI behavior to a responsible adult.
4. AI should be thought of as a tool to critically build upon, not replace, one's academic work.
5. To reduce the effects of bias in AI tools, we need to teach students how to critically assess AI content.



ARE WE PREPARING STUDENTS FOR AN AI AUGMENTED WORLD?



Share of industry employment exposed to automation by AI, US (%)



Deepfakes spell trouble for leaders. Here's some advice

Last month, a high school principal was recorded muttering racist and antisemitic comments. Except he was framed—and generative AI is to blame.

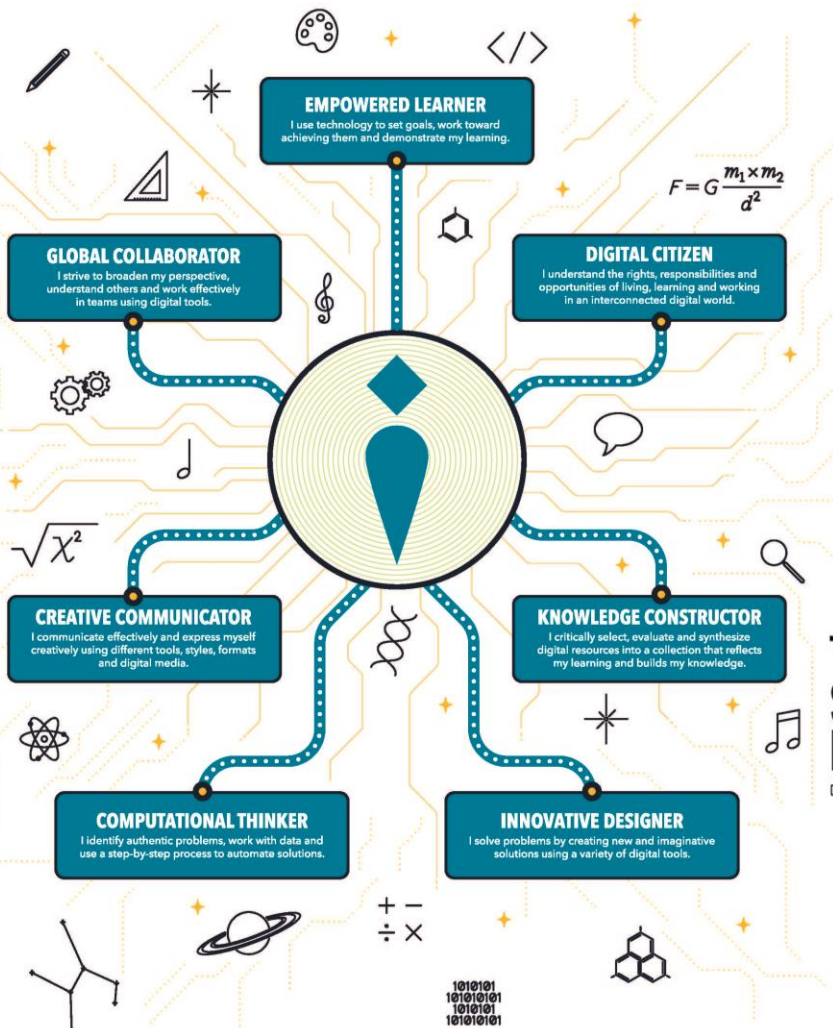
By *Micah Ward* May 14, 2024



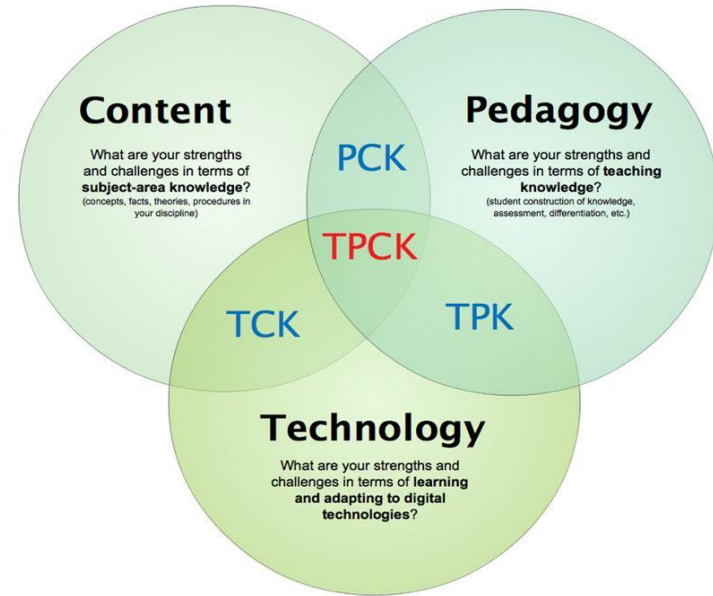
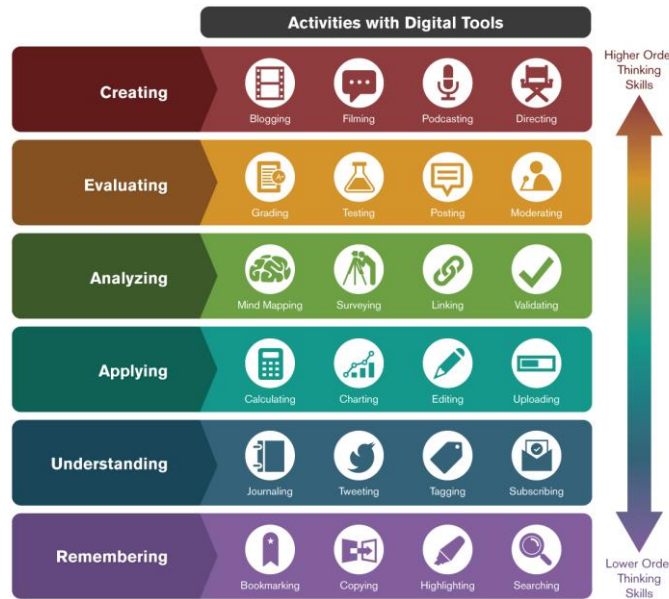
EDUCATIONAL TECHNOLOGY TAXONOMIES – HOW WILL ARTIFICIAL INTELLIGENCE INTEGRATE WITH THEM?



ISTE STANDARDS FOR STUDENTS

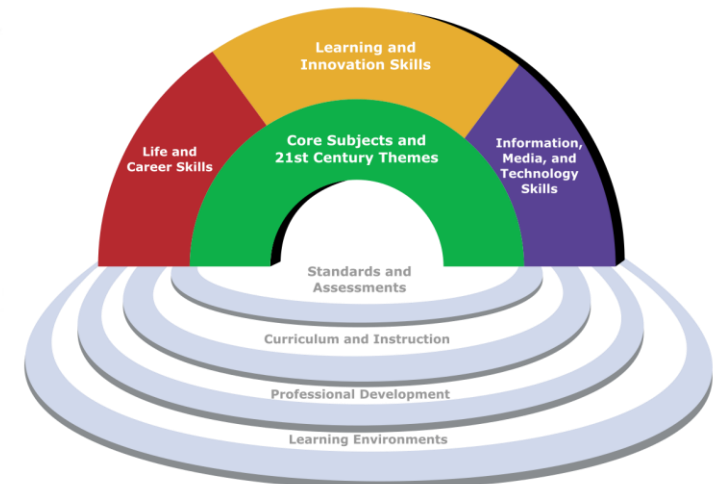
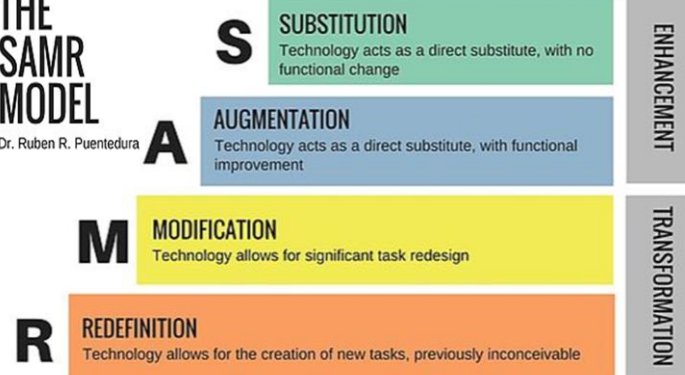


Bloom's Digital Taxonomy

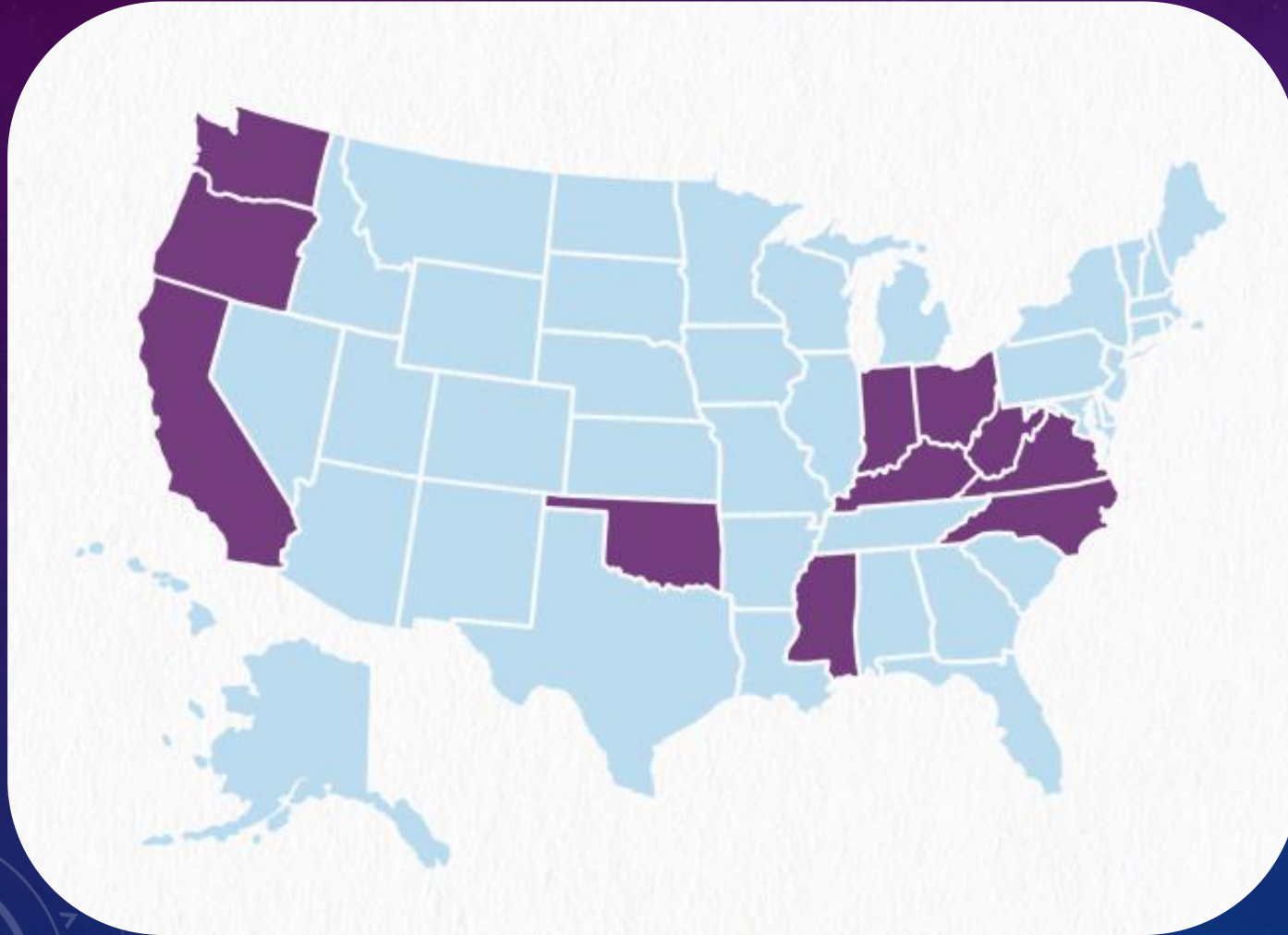


THE SAMR MODEL

Dr. Ruben R. Puentedura



PROVIDE GUIDANCE – WHICH STATES HAVE DONE SO?



As of April 2024, 11 states have provided AI guidance to their school districts.



EARLY GUIDANCE

- **Clear guidelines on AI use:** Go over the high points a [Staff and Student Use of Artificial Intelligence](#) policy with teachers.
- **Discussions on AI use:** Foster open discussions among teachers about AI use cases, challenges, and best practices.
- **Privacy and security:** Ensure teachers prioritize student data privacy and security when using AI tools.
- **AI literacy for teachers:** Encourage teachers to learn how AI works, its limitations, and potential biases. This empowers them to use AI effectively and critically.
- **Align AI with curriculum:** Emphasize that AI tools should supplement, not replace, core instruction. Maintain human decision-making.



WHY AI DETECTORS ARE PROBLEMATIC (AND WHAT TO DO INSTEAD)



✓ Have conversations w/students about appropriate use of AI

✓ Collect writing samples throughout the year to use as growth indicators

✓ Capture student reflections on the AI collaboration process

✓ Think of collaboration with AI as similar to working with a tutor

✓ Have students share about how much AI was used for idea generation and feedback and how it impacted the final writing



✗ High frequency of false positives

✗ A lot of unnecessary work for teachers












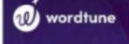








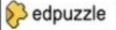




















✗ Lack of transparency about how they actually work

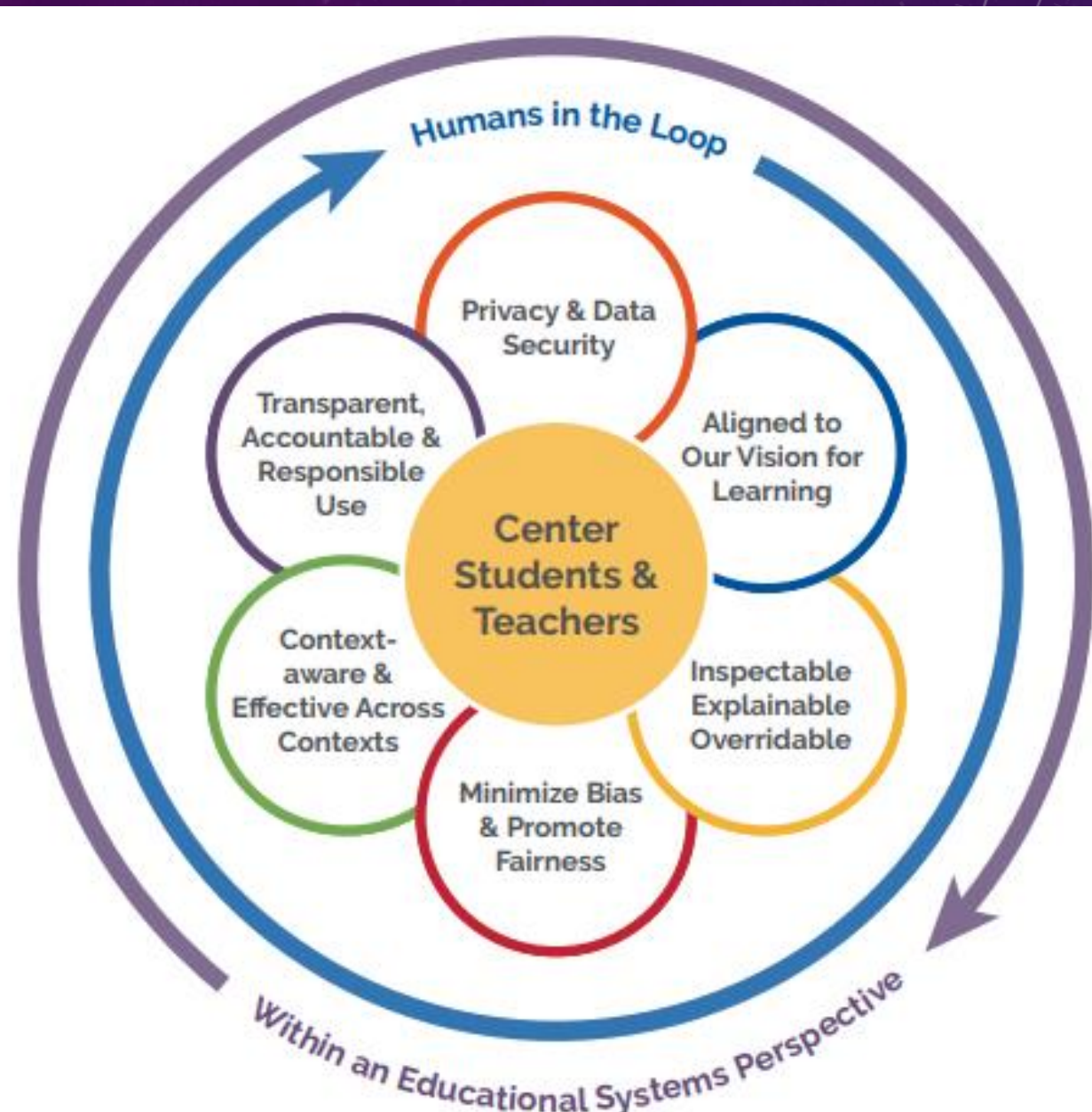
✗ Discrimination against non-native English speakers

✗ Promotes a false assumption that this is always bad

✗ Many institutions of higher learning are now turning these off

CHOOSE AI-ENHANCING TOOLS WISELY

Lesson Planning	    
Marking / Report Writing	    
Admin and organisation	    
Adaptive tools	    
Personalised Learning	    
Chat bots	   
Creativity	    
Research/ Academic writing	      



CLOSING THOUGHTS



“We have been thrust into the top four levels of Bloom’s taxonomy of educational objectives together, and it’s a pretty exciting place to be.”

- Stacie Marvin, Presidential Award Winner for Excellence in Mathematics and Science Teaching

“Artificial intelligence is not a substitute for human intelligence; it is a tool to amplify human creativity and ingenuity.”

– Fei-Fei Li, Co-Director of the Stanford Institute for Human-Centered Artificial Intelligence



RESOURCES



- [What Themes Are Emerging from State AI Guidance?](#)
- [6 Productivity Tools Every Teacher Should Know About](#)
- [How AI Could Save \(Not Destroy\) Education by Sal Khan | TED](#)
- [Bringing AI to School: Tips for School Leaders \(ISTE\)](#)
- [LA County Office of Education - Generative Artificial Intelligence in TK-12 Education Guidelines](#)

