



# AI: Destroyer or Liberator?

## Artificial Intelligence Policy Considerations in Education



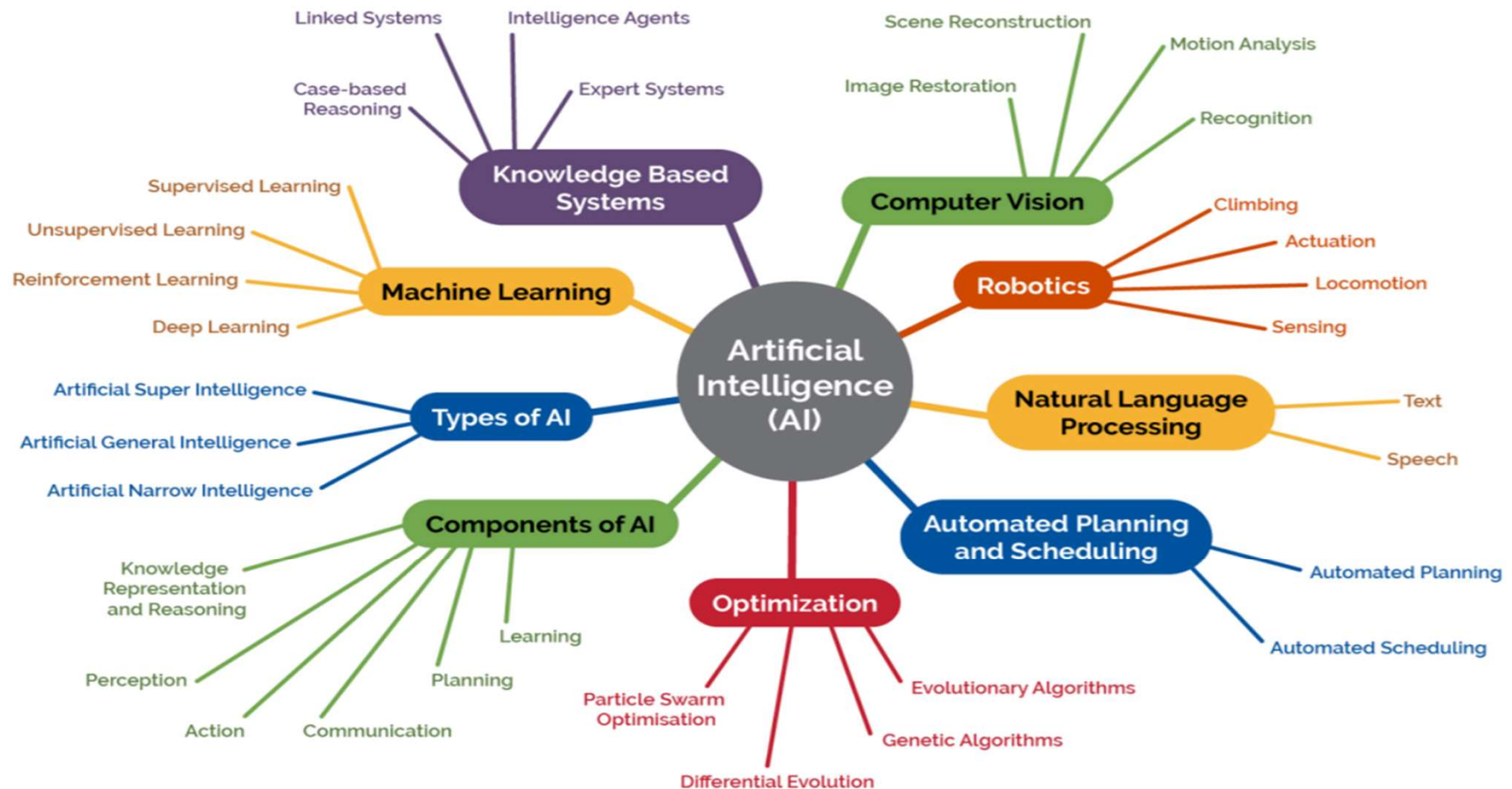
Endacott Society, Technology Studies, Nov 20 2024

*Kansas leads the world in the success of each student.*

# AI in Education Policy Rough Timeline

- November 30, 2022: ChatGPT released
- May 30, 2023: TeachAI invitations to participate
- November 28, 2023: TeachAI SEA Guidance released
- February 12, 2024: Kansas AI Workgroup Nominations





U.S. Department of Education. (2023). Artificial Intelligence and the Future of Teaching and Learning.



# Types of AI



**Reactive:** “Tools that respond to specific inputs or situations without learning from past experiences (e.g. Alexa, Roomba, chess-playing computer).”



**Predictive:** “Tools that analyze historical data and experiences to predict future events or behaviors (e.g. Netflix, credit-scoring systems).”



**Generative:** “Tools that generate new content or outputs, often creating something novel from learned patterns (e.g. ChatGPT, Stable Diffusion).”

[International Society for Technology in Education \(2023, July\). Bringing AI to School: Tips for school leaders.](#)



# Examples of Generative AI Tools



**Chatbots** (e.g. ChatGPT, HeyPi, & Bard)



**Media Creation** (e.g. MusicLM, Stable Diffusion, Firefly)



**Learning Content** (e.g. Course Creator, Lesson Plan AI, Khanmigo)



**Virtual Human Representations** (e.g. Syntheia, PlayHT)

[International Society for Technology in Education \(2023, July\). Bringing AI to School: Tips for school leaders.](#)



## AI is:

- Online and in-store shopping
- Robotic tractors, precision agriculture
- Warehouse Fulfillment
- Credit Card Fraud Protection
- Insurance Rates
- NASA images from space
- Text to Speech
- Foreign Language Translation
- Mapping and Navigation

**It is in all of our lives and industries.**

## AI is NOT:

- Alive
- Smarter than us
- Killer robots
- Only for geniuses
- Only for people in tech cities
- Always physical. It is inside our computer software and phone apps.

**And it is not going away.**



# Education with AI

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## Education with AI is:

- Personalized learning
- Differentiation in seconds
- Increased student persistence
- Handwriting conversion to digital
- Text to speech, speech to text
- Language translation

## Education with AI is NOT:

- Replacing teachers
- Able to solve every problem
- One more thing for busy teachers to take a lot of time with
- Another subject that is separate from other topics

## Potential Benefits of AI in Education

Content development and **differentiation**

**Assessment** design and timely, effective feedback

Tutoring and **personalized** learning assistance

Aiding **creativity, collaboration, and skill development**

Operational and administrative **efficiency**



**Plagiarism** and academic dishonesty

Diminished student and teacher agency and **accountability**

Compromised student **privacy** and unauthorized data collection

**Overreliance** and loss of critical thinking

Perpetuating **societal bias**

## Potential Risks of AI in Education

Teach AI

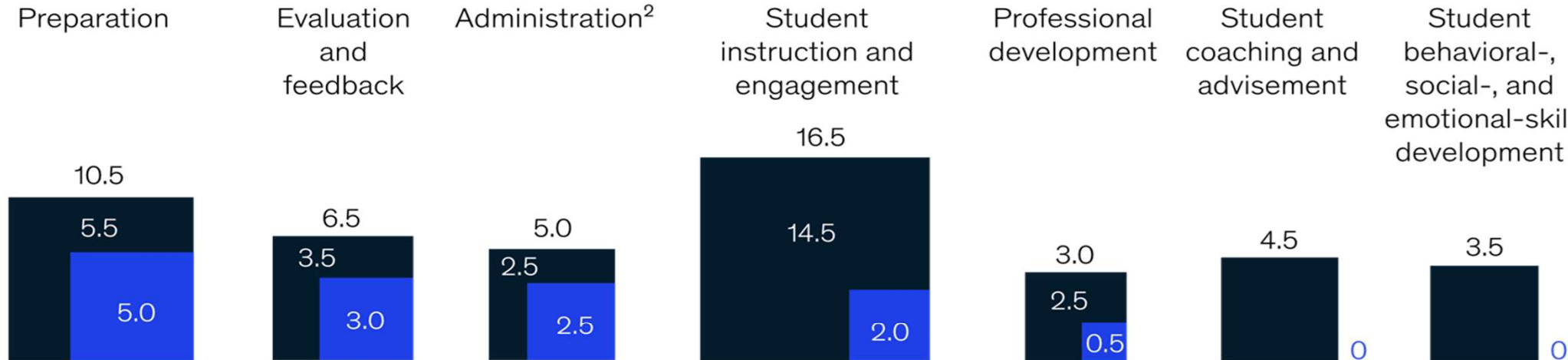




# Technology can help teachers reallocate 20 to 30 percent of their time toward activities that support student learning.

Potential for time reallocation, number of hours per week<sup>1</sup>

■ Reallocatable time ■ Other working time



<sup>1</sup>Figures may not sum, because of rounding. Average for respondents in Canada, Singapore, United Kingdom, and United States.

<sup>2</sup>Includes a small "other" category.

Source: McKinsey Global Teacher and Student Survey



# AI & Classroom Practice

- Learning WITH AI
  - Intelligent Tutoring
  - Automated Writing Evaluation
  - AI-Supported Reading and Language Learning
  - Smart Robots
  - Teachable Agents
  - Virtual and Augmented Reality
  - Learning Network Orchestrators
  - Tailored Assignments (to student interests)
- Learning ABOUT AI



# AI Uses For Teachers

- Lesson differentiation
- Document/text generation
  - Discussion prompts
  - Exam prep
- Graphic generation
- Grading/feedback
- Communication with parents and admin
- Icebreaker ideas



# AI Uses for Students

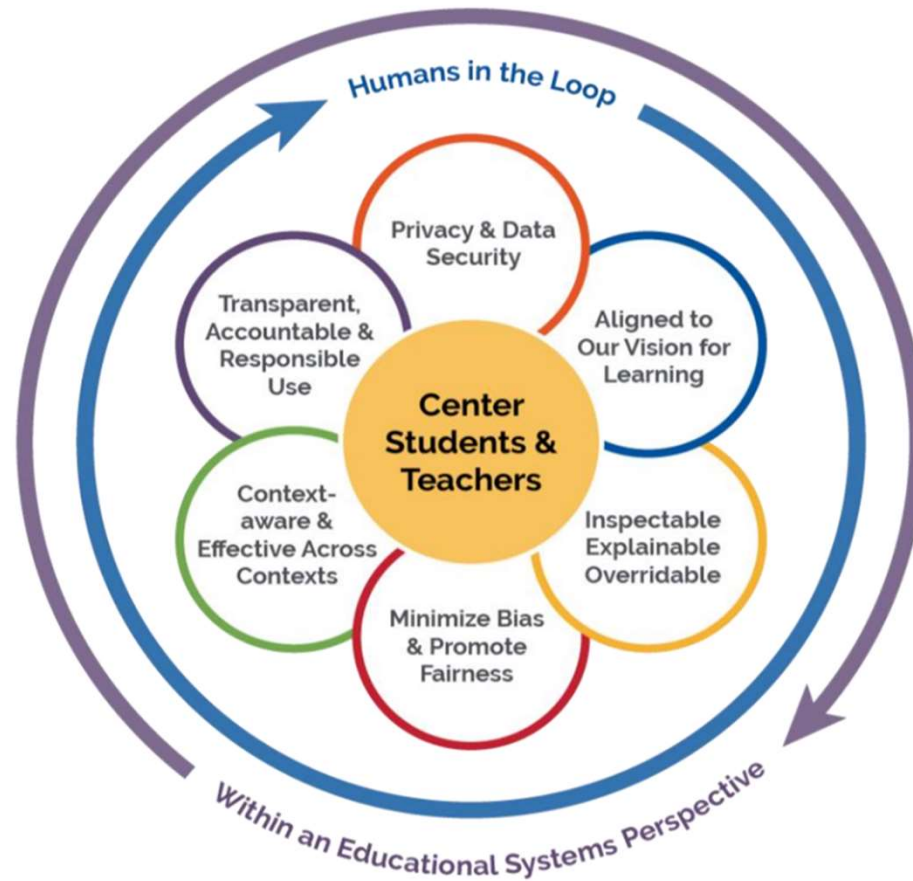
- Test preparation
- Evaluation of writing
- Real-time, rapid feedback
- Non-judgmental partner
- Expansion of ideas





Teach AI





U.S. Department of Education. (2023). Artificial Intelligence and the Future of Teaching and Learning.



# Regulations Relevant to the Use of AI in Education

- **FERPA** - AI systems must protect the privacy of student education records and comply with parental consent requirements. Data must remain within the direct control of the educational institution.
- **COPPA** - AI chatbots, personalized learning platforms, and other technologies collecting personal information and user data on children under 13 must require parental consent.
- **IDEA** - AI must not be implemented in a way that denies disabled students equal access to education opportunities.
- **CIPA** - Schools must ensure AI content filters align with CIPA protections against harmful content.
- **Section 504** - The section of the Rehabilitation Act applies to both physical and digital environments. Schools must ensure that their digital content and technologies are accessible to students with disabilities.



# AI Policy in Schools

AI policies should:

- Leverage existing policies already in place
- Promote equitable and inclusive access to AI
- Enhance a human-centered approach to pedagogy
- Respect ethical norms and standards, and
- Be geared to improving learning for every student, empowering educators, and strengthening learning management systems

Equity considerations are critical.





# Discussion and Q&A





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