CSBA AI TASKFORCE

Guidance: AI Tools Used by Educators

AI Tools for teaching, learning and administrative tasks

Overview

The potential benefits and risks of artificial intelligence (AI) use in education have been widely discussed and continue to be actively debated.

Board members in particular, as well as local educational agency (LEA) administrators and school leaders, have essential roles in establishing policies and guidelines that encourage appropriate and safe use of AI in teaching, learning and administrative tasks. Board members can also play an important role in setting a positive tone regarding the adoption of current and emerging technologies, thus helping to set the tone for the effective and ethical use of AI tools by teachers, staff and students.

To assist board members in evaluating current and proposed AI policies, general information about typical AI tools already widely used by educators, administrators, and staff are included within this document. By becoming more familiar with the range of AI tools that exist now and staying current on how various AI tools are evolving and new tools that are being developed, board members can be more informed to help guide the future of K-12 education.

How to use this document

This resource was developed by CSBA's AI Taskforce and aims to provide a foundation for governance teams when discussing and deliberating AI in education. This resource contains introductory information and links about a few of the AI tools most widely used by teachers (and students). Many more AI tools exist, and new custom-designed and specialized AI applications are being developed specifically for and/or by educators every day. Development and adoption of these tools is moving at a rapid pace. Board members may find it helpful to familiarize themselves and stay connected with these technological developments. The list included in this resource is a sample of relevant and useful resources for that purpose.

Following the list of tools is a summary table comparing key features/capabilities of commonly used AI tools in education. This document concludes with resources for the use of AI by teachers and in education, in general.

Introduction

A number of generative AI tools have been specifically developed or adapted for use in education, with new applications, innovative uses and training/professional development opportunities becoming available almost daily.

The following AI-related tools and offerings provide a glimpse into the potential of AI to:

- Support and enhance teaching and learning,
- Support teachers on education-related administrative tasks.
- In some cases, transform traditional roles, teaching and learning models, and processes associated with schooling and education.

The AI tools included here do not imply an endorsement by CSBA, but rather are provided as a general introduction to, and illustrations of the kinds of uses and potential risks associated with the adoption and use of AI in educational settings.

CSBA's AI Taskforce has compiled a set of AI scenarios for board members, which include real-world situations that may be encountered by board members, superintendents and LEA technology leaders. LEAs can use this resource to help address new and emerging issues related to AI, and boards can use it when assessing whether their policies in a given area permit, prohibit or require further analysis for a specific use of AI. The AI scenarios highlight the importance of active and proactive governance related to AI use by identifying real-life examples across a range of policy areas. Board members may find it helpful to evaluate current technology-related policies through scenarios as well.

The following are a few currently available and widely used AI tools and related resources for teachers, both for classroom use and for managing/streamlining administrative functions. As a reminder, CSBA does not endorse any of the tools or resources or the claims made in their marketing materials.

AI Tools for Teachers

Google

- Google Workspace for Education
  - » Gemini — AI-powered assistant available across Google Workspace for Education
  - » Google — Generative AI for educators https://grow.google/ai-for-educators/

Khan Academy

- Khanmigo — AI teaching and learning assistant available free for teachers
  - » Khan Academy also provides free online training/orientation for teachers, as well as lesson plans by grade level and curriculum.
- Khanmigo Writing Coach is expected to be available soon.
- Khan Academy Districts — Offers school and district reporting and instructional tools.

Microsoft

- Microsoft Education: AI for education
  - » Copilot, Microsoft's AI chatbot, is integrated into Microsoft 365 applications and provides real-time assistance to users.

eKadence Learning Foundation

- eKadence is a complete AI-infused learning solution and ecosystem, providing both teaching and learning and administrative solutions. It includes an AI chatbot, Skrappy, that is available to aid users.

OpenAI

- ChatGPT Edu is an open-source AI tool widely used by educators and students to support teaching and learning. Teachers have used ChatGPT to create and customize lesson plans, analyze student assignments and provide personalized feedback, and generate test questions and reduce administrative tasks.
- Teaching with AI: A guide for teachers using ChatGPT: https://openai.com/index/teaching-with-ai/

Apple

- Apple Intelligence is a free AI system that includes an array of features like GenMoji, Image Playground and ChatGPT integration.
- Apple Intelligence: 5 Tools for Educators: https://education.apple.com/resource/250013434
- Apple Education Community is a community of practice (COP) for educators who use Apple technologies, offering tutorials, resources and space for educators to connect and learn from each other.

Meta

- Meta AI is an open-source AI tool capable of complex reasoning, following instructions, visualizing ideas and solving nuanced problems.
- Meta Virtual Reality (VR) content library for educators includes examples of VR applications and content that can be used with Meta VR devices.

Table: Comparison of selected AI tools used in K-12 education

The following table provides a comparison of selected AI large language model (LLM) tools currently in wide use in education.

Each selected AI application is evaluated on the following characteristics and dimensions: cost, purpose, language understanding, text generation, content filtering, integration with other technology platforms, accessibility, training data, technical support, security, privacy and regulatory compliance.

These dimensions are representative of typical considerations when any new technology adoption is contemplated.

FEATURE	META AI	CHATGPT EDU	MICROSOFT COPILOT
Cost	Free (basic), paid (advanced)	Free (basic), paid (advanced)	Included with Microsoft 365 subscription (edu discount available)
Tone and purpose	General conversational AI	Designed specifically for educational settings	Focuses on productivity and learning
Language understanding	Advanced natural language processing	Advanced natural language processing	Advanced natural language processing
Text generation	Can generate text based on prompts	Can generate text based on prompts	Can generate text based on prompts
Content filtering	Available	Available	Available
Integration	Can be integrated with various platforms	Can be integrated with various platforms	Seamlessly integrates with Microsoft tools (e.g., Word, PowerPoint)
Accessibility	Available online	Available online	Available online, with Microsoft app
Training data	Large dataset, including educational resources	Large dataset, including educational resources	Large dataset, including educational resources
Support	Online resources, community support	Online resources, community support	Microsoft support team, online resources
Data security	End-to-end encryption, secure data centers	End-to-end encryption, secure data centers	Enterprise-grade security, encryption, and access controls
Data privacy	Compliant with CDPR, CCPA; anonymizes user data	Compliant with CDPR, CCPA; anonymizes user data	Compliant with CDPR, CCPA; transparent data usage policies
FERPA compliance	Not explicitly FERPA-compliant; recommends using institutional controls	Designed to meet FERPA requirements; offers institutional controls	Compliant with FERPA; provides institutional controls; data storage in US data centers
K-12 sustainability	To be determined based on organizational requirements	To be determined based on organizational requirements	To be determined based on organizational requirements

Regarding data security, data privacy and Family Educational Rights and Privacy Act (FERPA) compliance, it is strongly advised that LEAs conduct their own assessments to confirm that tools under consideration meet the LEA's technical and security specifications and comply with relevant regulatory requirements. These AI tools have implemented various security and privacy measures; however, it is essential for LEAs to conduct their own assessments.

Comparing Selected AI Tools across Educational Settings

This section highlights some common uses of LLM AI tools, e.g., Meta AI, ChatGPT Edu and Microsoft Copilot, across various educational settings like K-12, special needs, language learning and STEM.

Key observations

- Meta AI stands out for its use of augmented reality (AR) and VR, helping in K-12, language learning and STEM, particularly in providing immersive learning experiences.
- ChatGPT Edu is particularly strong in personalized learning and natural language queries, offering specialized support in reading, writing and conversational skills, while also helping students with academic writing and research.
- Microsoft Copilot greatly enhances the use of productivity tools, with a focus on coding, academic writing and task automation for both students and educators. Its integration with the Microsoft ecosystem makes it particularly useful for selected specialized tasks in higher education and STEM.

Each tool offers unique features and strengths in different educational contexts. A combination of AI technologies could be used to best address the needs of specific learners, educational settings or institutions.

Table: Comparison by use case — K-12

USE CASE	META AI	CHATGPT EDU	MICROSOFT COPILOT
K-12			
Engages students with interactive Q&A and feedback		X	
Helps with comprehension and subject reinforcement		X	
AI-powered assistance in tasks like research papers			X
Tutor-like support for homework, reading, writing		X	
Interactive learning apps using artificial reality/ virtual reality tech	X		
Facilitates personalized learning	X	X	X
Real-time assessments and personalized content	X		
Lesson planning and curriculum suggestions for teachers			X

Table: Comparison by use Sase — Special needs

USE CASE	META AI	CHATGPT EDU	MICROSOFT COPILOT
SPECIAL NEEDS			
Uses AI to create accessible tools (e.g., text-to-speech) Speech-to-text and voice-driven interfaces for students with disabilities	X		X
Special tools for ADHD, dyslexia, etc., such as pacing assistance		X	
Adaptive learning environments for varying disabilities Virtual assistants and personalized learning paths	X		X
Helps with reading/writing difficulties via simplified language		X	
Creates custom teaching strategies for diverse learners			X
Encourages self-expression through conversational AI		X	
Incorporates emotional learning via VR for emotional support	X		

Table: Comparison by use case – Language learning

USE CASE	META AI	CHATGPT EDU	MICROSOFT COPILOT
LANGUAGE LEARNING			
Speech recognition and translation for multilingual students	X		X
Language practice via conversational AI Encourages fluency through conversational practice		X	
Grammar and sentence correction Pronunciation analysis and feedback	X	X	
Suggests language-learning content and exercises Assists in learning through immersive digital content			X
Assists in learning through immersive digital content			X
Customizable virtual language environments (AR/VR)	X		

Table: Comparison by use case — STEM

USE CASE	META AI	CHATGPT EDU	MICROSOFT COPILOT
STEM			
Interactive explanations for complex STEM concepts using simplified language		X	
AI assistance in coding, STEM research, computational tasks (e.g., algorithm development), and problem solving			X
Virtual lab simulations and AI tools for hypothesis testing and experiments	X		
STEM tutoring and mentoring		X	
Data-driven insights for hands-on learning (e.g., robotics)	X		

Note: This comparative summary was compiled in part with the assistance of ChatGPT Edu and then verified by a human.

Please note that while these AI tools have implemented various security and privacy measures, it's essential for LEAs to conduct their own assessments regarding data privacy, security and compliance with relevant regulations.

Resources

The following are resources on using AI in education to inform deliberations about AI-related policies and practices.

CSBA's AI Taskforce Webpages

- This repository includes resources and news, scenarios and LEA resolutions, promising practices and policies, and a series of webinars.

TeachAI

- Foundational Policy Ideas for AI in Education

University of San Diego

- 39 Examples of Artificial Intelligence in Education

The World Economic Forum

- 5 key policy ideas to integrate AI in education

Education Week

- "19 Ways to Use ChatGPT in Your Classroom"

For additional artificial intelligence guidance and resources, visit CSBA's AI Taskforce webpages at www.csba.org/AI.