AI Educated

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This presentation designed to provide educators with practical knowledge about artificial intelligence (AI) and to expand your knowledge and explore real world implementation of AI in education.
On a scale of 1 to 10 (10 being the highest), what is your level of understanding of AI and its impact and use in education?
Agenda

• AI Fundamentals
• AI Relevance in Education
• AI as an Instructional and Assessment Tool
• Teacher and AI Collaboration
• Generative AI for Education
• Personalized learning with customized courses and materials with AI
• Helping teachers fill gaps in education with AI
• Assistive AI Technology
• Advanced tutoring and Chat Bots with AI
• Ethics and Student use of AI
• Administrative Benefits of AI
• AI Resources
Of the topics listed in the agenda, which one interests you the most? You can also list one that is not on the list that you hope to learn more about.
AI Fundamentals
What is AI?
How AI Works
AI Technologies
What is AI?

- Artificial Intelligence (AI) as the simulation of human intelligence in machines.
- AI systems can perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and understanding natural language.
AI technologies that are relevant in education:

- **Machine Learning:** Machine learning enables AI systems to learn from data and improve their performance over time.

- **Natural Language Processing (NLP):** NLP allows AI to understand and interact with human language, making it useful for chatbots and language-related applications.

- **Computer Vision:** Computer vision enables AI to interpret and understand visual information, which can be applied in areas like image recognition.
How AI Works

The basic working principles of AI:

- **Data Collection:** AI systems collect and analyze vast amounts of data.
- **Data Training:** AI learns from this data to identify patterns and make predictions.
- **Decision-Making:** AI systems use their learned knowledge to make decisions or provide recommendations.
- **Iteration:** AI systems continuously improve through feedback and more data.
Relevance to Education

AI in the education sector:

- **Personalization**: AI can tailor learning experiences to individual student needs.
- **Efficiency**: It can streamline administrative tasks and enhance decision-making.
- **Data-Driven Insights**: AI helps educators gain valuable insights into student performance.
AI serves as both an instructional and assessment tool by providing personalized, adaptive learning content and assessing student progress through data analysis and feedback.
AI as an Instructional and Assessment Tool
Example: Eduaide.ai

AI-Assisted Lesson Planning.
Take back your time. Master your craft. Start teaching with Eduaide today.

Create your free account today!
Teacher and AI Collaboration

AI and teachers are increasingly collaborating in education to enhance the learning experience. AI in education envisions a collaborative partnership between machines and educators to enhance student learning. Current AI tools focus on skills and testing but aim to address learning gaps, improve efficiency, and personalize education. This collaboration aims to reduce teacher administrative burdens, allowing more time for essential human skills. It's crucial to expose students to AI for future readiness.

- Education Copilot and other “teacher assistants”
  - **Education Copilot**, **Teacherbot**, and **Eduaide.AI**
Do you have any experience working with or leveraging AI in an educational environment? Cite and example if you do!
AI and Teacher Collaboration
Example: Microsoft Presentation Translator

Presentation Translator for PowerPoint

DOWNLOAD THE APP ☝️
Generative AI for Education

1. Chat Gpt
2. Google Bard
3. Bing Chat
4. DALL-E
Generative AI for Education

- Chat GPT, Google Bard and Microsoft Bing Chat
  - Bard and Bing Chat
- DALL-E, Midjourney, and other art generators
  - Midjourney, OpenAI’s DALL-E, Adobe Firefly
- Hello History, Character AI, and other persona chatbots
  - Hello History, Character.AI
Have you used any Generative AI Tools in your classroom or for professional growth? State how if you’d like!
Example: Canva Design and Image Generator

Inspiring teachers and engaging students

Create and personalize lesson plans, infographics, posters, video, and more. 100% free for teachers and students at eligible schools.

Teachers  Get verified
Schools  Contact Us
Students  Resources
Advanced tutoring with AI refers to a sophisticated educational approach that incorporates artificial intelligence to provide personalized and adaptive support to students. This involves AI systems analyzing a student’s performance, learning styles, and areas of improvement. Based on this data, AI-powered tutors can offer tailored instruction, practice exercises, and feedback in real-time. These AI tutors can adapt their teaching methods and pace to suit individual student needs, helping them grasp difficult concepts, identify gaps in knowledge, and enhance their learning outcomes. Advanced tutoring with AI aims to provide a more effective and personalized learning experience, supplementing traditional classroom instruction or online courses.
Helping teachers fill gaps in education with AI - Bing Chat

Helping teachers fill gaps in education with AI is a topic that explores how artificial intelligence can enhance the quality and effectiveness of teaching and learning. AI can help teachers in various ways, such as:

- Providing personalized learning experiences for students based on their needs, interests, and abilities. AI can analyze student data and adapt the learning materials accordingly, offering more individualized and differentiated instruction.

- Boosting productivity and efficiency by automating or streamlining some of the clerical tasks that teachers have, such as grading, feedback, communication, and attendance. AI can save teachers time and energy that can be spent on more meaningful interactions with students.

- Creating and supplementing content for teaching and learning. AI can help teachers curate a range of educational resources, generate new content, or enhance existing content with interactive features, such as chatbots, simulations, or games.

AI can also help students in various ways, such as:

- Developing skills and values that are essential for the future, such as critical thinking, problem-solving, creativity, collaboration, and empathy. AI can provide students with engaging and challenging learning opportunities that foster these skills and values.

- Supporting self-directed and lifelong learning. AI can help students monitor their own progress, set their own goals, and access relevant resources at any time and place. AI can also provide students with personalized feedback and guidance that can motivate them and improve their learning.
AI Accessibility: What Are AI Assistive Technology Examples?

[https://www.handtalk.me/en/blog/ai-accessibility/](https://www.handtalk.me/en/blog/ai-accessibility/)

What are AI assistive technology examples?

- Language caption and translation
- Image recognition
- Facial recognition
- Summarizing information
- Lip reading
- User navigation
AI Pin

Patented Directional Voice Recognition
Good translation from clear voice pick-up

AI Translation Earbuds

Beyond touch, beyond screens.
Apple Vision Pro - Spatial Computing
Advanced tutoring with AI is a new and rapidly developing field that uses artificial intelligence to provide students with personalized, one-on-one instruction. AI tutors can be used to supplement traditional classroom instruction, or to provide students with access to tutoring in subjects or at levels that are not available at their school.

AI tutors are able to provide advanced tutoring in a number of ways. First, they can access and process vast amounts of information, much more than any human tutor could. This allows them to provide students with a comprehensive understanding of a topic, and to answer their questions in a comprehensive and informative way.

Second, AI tutors can tailor their instruction to the individual needs of each student. They can track a student’s progress over time and identify areas where they need additional support. They can then provide the student with targeted instruction and practice in those areas.

Third, AI tutors can be used to create engaging and interactive learning experiences. They can use simulations, games, and other activities to help students learn and practice new skills.

Some of the specific benefits of advanced tutoring with AI include:
How (and why) to add captions to your YouTube videos

BY THE YOUTUBE TEAM

NOV 06, 2023 — 4 MINUTE READ

A new era for AI and Google Workspace

March 16, 2020

Student AI Tools

Copilot in Teams

Transform your work with the power of AI
Which of the tools mentioned excite you? Are there other you have used that have not been highlighted? Please share!
Ethics and Student use of AI
Students are well aware that technologies such as ChatGPT exist and are already experimenting with them on their own, but they need guidance about how to use them responsibly.

- Houman Harouni - Harvard Professor

Stop pretending that it doesn’t exist:
Ethical Considerations in AI Education:

- There are ethical challenges AI in education, such as data privacy, *algorithmic bias*, and the need for transparency.
- Responsible AI implementation requires addressing these concerns to protect students and uphold ethical standards.
Guidance must be provided to promote ethical AI use among students, emphasizing the importance of understanding the technology’s impact and potential risks.

The role of educators in teaching responsible AI practices and digital citizenship must be highlighted often.
Students use AI to complete assignments, raising questions about academic integrity.

Educators and institutions must navigate these challenges while fostering responsible AI usage.

Educators are using AI to create lessons
Administrative Benefits of AI

Administrators in education can benefit from AI in several ways:

Efficient Task Automation: AI can automate routine administrative tasks, such as data entry, scheduling, and document management. This allows administrators to focus on more strategic and complex responsibilities.

Data Analysis and Insights: AI can analyze large datasets to provide valuable insights into student performance, attendance patterns, and resource allocation. Administrators can use these insights to make data-driven decisions.

Improved Decision-Making: AI can assist in decision-making processes by providing predictive analytics and suggesting solutions based on data. This helps administrators make informed choices to enhance the educational experience.

Enhanced Communication: AI-powered chatbots and virtual assistants can handle inquiries from students, parents, and staff, improving communication and streamlining administrative support.

Resource Allocation: AI can optimize resource allocation, helping administrators allocate budgets, staff, and classroom resources more efficiently.

Personalized Professional Development: AI can recommend personalized professional development opportunities for educators, aligning training with their individual needs and goals.

Administrative Support: AI chatbots can help with administrative tasks, answering common questions, providing information, and guiding users to appropriate resources.

Enhanced Security: AI can bolster security measures, protecting student data, and the institution's digital infrastructure from threats.

Streamlined Reporting: AI can automate report generation, reducing the time and effort required for creating, formatting, and distributing reports to stakeholders.

Cost Savings: While there may be initial costs in implementing AI systems, the long-term benefits in terms of time and resource savings can be substantial.
Have you used any Generative AI Tools to help with administrative tasks, emails or documentation? State how if you’d like!
AI for School and District Leaders

- [https://blog.linclearning.com/ai-for-school-and-district-leaders](https://blog.linclearning.com/ai-for-school-and-district-leaders)
AI Resources

- From admissions to teaching to grading, AI is infiltrating higher education
  - [https://hechingerreport.org/from-admissions-to-teaching-to-grading-ai-is-infiltrating-higher-education/](https://hechingerreport.org/from-admissions-to-teaching-to-grading-ai-is-infiltrating-higher-education/)
- How Is AI Used In Education — Real World Examples Of Today And A Peek Into The Future
- Beyond ChatGPT: The Other AI Tools Teachers Are Using
- Office of Educational Technology and AI
  - [https://tech.ed.gov/ai/](https://tech.ed.gov/ai/)
- 15 AI in Education Examples to Know
- Educating in a World of Artificial Intelligence
- AI Accessibility: What Are AI Assistive Technology Examples?
  - [https://www.handtalk.me/en/blog/ai-accessibility/](https://www.handtalk.me/en/blog/ai-accessibility/)
- AI for School and District Leaders
  - [https://blog.linclearning.com/ai-for-school-and-district-leaders](https://blog.linclearning.com/ai-for-school-and-district-leaders)
THANK YOU!
Questions?
Connect with me!