

Artificial Intelligence – Introduction

Artificial intelligence, or AI, is a <u>type of technology</u> that uses what appears to be human-like intelligence to solve a problem. AI is a type of machine learning, which means, it isn't magic! AI can only learn how to solve problems through logic it has previously been exposed to. This means that AI can be used to generate information by analyzing its data source, identifying patterns in the data, and using those patterns to draw conclusions. While AI can be an amazingly helpful tool, it is also programmed by humans. As a result, it can produce the same biases that humans use, so it is crucial to always double-check the work produced by AI.

For educators, AI can provide a myriad amount of helpful tools and shortcuts. AI can personalize learning to individual students and enhance certain classroom activities. Moreover, students are already using AI, and it is helpful to understand the types of technology they are using. AI isn't going away, but it also can't replace teachers or solve every problem!

This Guide At a Glance

Types of Al

A brief overview of types of Al for educators.

Why Use AI?



Benefits of increasing
Al Literacy among
students

Understanding the benefits and risks



Explaining both pros and cons to using Al in the classroom

Al Tools for Educators



Useful tools for the classroom

Types of AI for Educators

Generative Al *creates* texts, images, code, and other types of media.

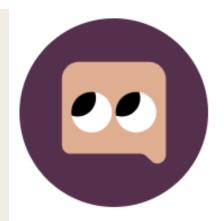




Predictive AI analyzes patterns and forecasts outcomes based on data.

Ex. PowerSchool

Intelligent tutors provide *personalized* learning to students. These often require subscriptions.



Ex. Khanmigo

Why Use AI?

Al Literacy in Students

What is Al Literacy?

Credit: TeachAl

With Al Literacy, students can use Al to personalize their learning, properly cite their Al usage, and be prepared for the workforce in a safe and ethical manner.

Al Literacy can **decrease the digital divide** among
students

Al Literacy: The knowledge, skills, and attitudes associated with how artificial intelligence works, including its principles, concepts, and applications, as well as how to use artificial intelligence, such as its limitations, implications, and ethical considerations.

Introduction into Artificial Intelligence in a classroom setting can provide students with the necessary foundation for ethically using AI. They will be better prepared for higher education and the workforce by being able to critically use AI. AI can also help them with creative uses, such as producing art, music, and other media. Being exposed to AI in the classroom can help decrease the digital divide. A digital divide occurs when some students have access to AI on personal devices and can learn on their own, while other students do not have access to these technologies. Increasing AI literacy for all students reduces inequities amongst students.

Teaching Artificial Intelligence

Teaching AI in the classroom allows students to critically think about *how* AI works. This can provide them with the critical reasoning necessary for using AI responsibly. Students learn about the concepts of mathematic reasoning, pattern recognition, algorithmic thinking, ethics, and data science when taught how AI tools work.

Benefits to Educators

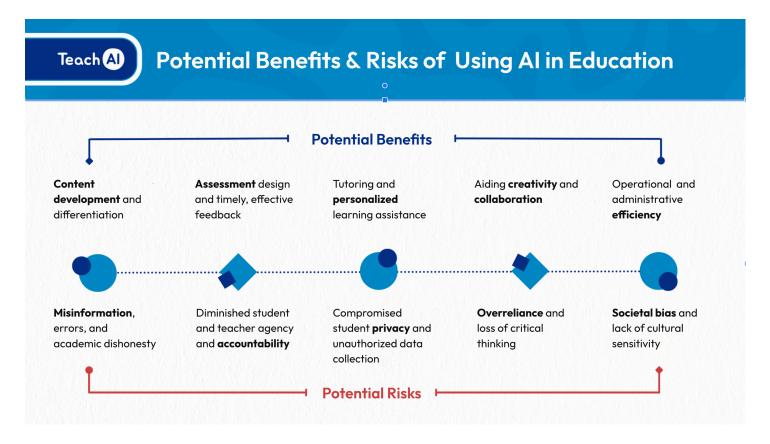
Artificial intelligence can also help educators save time. Tools powered by AI can help generate lesson plans and assessments, tailor to individualized students' needs, and even proofread text for errors. AI can be customized to create grade-appropriate curriculum. AI tools can also translate from English into many languages to ensure all students can access the materials.

Understanding the Benefits and Risks of Al

TeachAl provides a helpful overview of the potential benefits and risks of using Al in an education setting.

While AI can provide individualized assistance for students and teachers, it can also generate misinformation and perpetuate bias. Additionally, students can over rely on AI to critically think for them. Students can also misattribute AI's work as their own. These are valid concerns, so it is important to teach students about using AI tools appropriately.

Credit: TeachAl



Resources for Educators

Al Tools for Educators

This is a list of AI tools that are specifically designed to help educators! While this list is not exhaustive, it provides a general introduction to a few AI-powered resources.



Diffit creates grade-level activities in selected languages. Diffit will generate grade-level curriculum based on any text uploaded by PDF. These include vocabulary words and question prompts based on that text. It is particularly useful for differentiating instruction based on reading level. Diffit also generates texts on any topic to be used for quick reading, homework, or a brief worksheet.

Access: web.diffit.me

Curipod is primarily a presentation generator. It uses AI to generate slideshow presentations based on the lesson topic, grade level, and learning objectives. The presentations include traditional slides, but they can also be customized to include interactive polls, word clouds, drawings, Q&As, and more.



Access: Curipod.com



Eduaide is a tool for educators that has a broad scope. Eduaide, which is known as a "teacher's assistant," can generate specific grade-level content, translate materials into several languages, and build assessments. Eduaide can provide in-depth discussion questions

Access: Eduaide.ai

Magic School provides over 60 Al powered tools to assist teachers. Magic School includes content and assessment generators, and it can provide suggestions for behavioral interventions, project-based learning ideas, and professional email language. It also provides a tool to create rubrics for assessments. MagicSchool even offers a tool to make your assessments Al-resistant, so students cannot simply use a text generator to answer the prompt.



Access: MagicSchool.Al

★ conker

Conker.Al primarily serves as an assessment generator. Conker can quickly create engaging quizzes that are customizable with various types of questions. Additionally, Conker creates accessible materials, as all are read-aloud. The assessments are all standards-aligned.

Access: Conker.Al

PowerSchool uses AI to track metrics for students and predict outcomes. It can predict student mastery of a subject by evaluating assessments, forecast risk analysis to track if students are on-track to graduate, and create personalized content recommendations. These individualized tools can help educators monitor and predict student outcomes.



Access: PowerSchool.com

Additional Tools

While these tools are not specifically designed for educators, they offer additional helpful capabilities.







Canva

Canva is a graphic design tool that uses AI to enhance presentations, flyers, and other media. It can also be helpful for generating graphic organizers and other brainstorming methods.

Access: Canva.com

ChatGPT

ChatGPT is a wide-ranging text generator tool. It can be used to answer all kinds of questions and prompts. It also can generate lesson plans or explain concepts in a conversational manner.

Access chat.openai.com

Eleven Labs

Eleven Labs converts text to speech using a voice generator powered by AI. This is useful for reading texts aloud and creative projects.

Access ElevenLabs.io

Further Resources

This guide is certainly non-exhaustive! Here are a few more resources that elaborate on the benefits and risks of using AI in the classroom and more additional guides for educators using AI.

Open Al Guide

TeachAl Toolkit

MIT RAISE Resources

CommonSense.org Recommendations