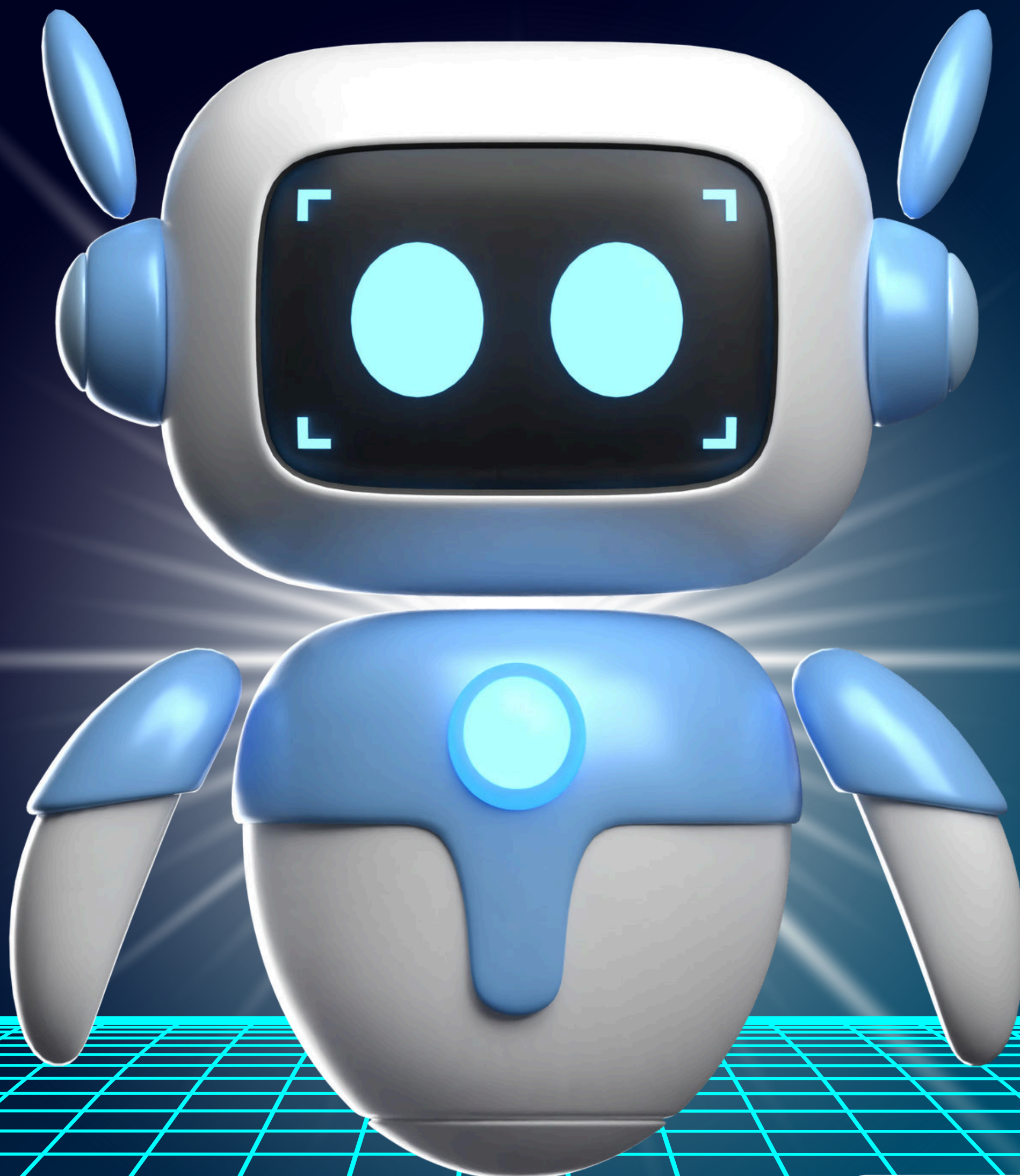


# AI RESOURCES FOR TEACHERS

AI Tools and Tips to Inspire  
and Simplify Teaching!



**By Med Kharbach, PhD**

# Introduction

The intersection of technology and education has been at the core of my research interests for nearly 15 years, a journey I've dedicated to EdTech blogging through Educators Technology, where I've explored a wide range of educational tools and platforms. However, since the advent of generative AI, my focus has shifted entirely to this transformative development—and for good reason.

I firmly believe in AI's immense potential to revolutionize education and am a strong advocate for its thoughtful integration into teaching practices. Much of my current research is dedicated to exploring innovative ways to leverage AI in teaching and learning. This work has already borne fruit, including my recent book, [ChatGPT for Teachers: Mastering the Skill of Crafting Effective Prompts](#). Additionally, I am putting the finishing touches on a new book focused on the use of AI in academic research, which I look forward to sharing soon.

This guide is a curated collection of posters and visuals I designed using Canva, originally created as illustrations for various posts shared on Educators Technology. While reviewing these materials, I realized they could serve as a valuable standalone resource for educators. With this in mind, I organized the content into two sections: AI Tools for Teachers which contains a selection of posters highlighting various AI tools that can help enhance your teaching, and AI Tips for Teachers, which offers actionable advice and strategies for effectively integrating AI into your teaching practices. This guide is designed to inspire and support you in your AI integration journey.

In the spirit of making AI knowledge accessible to all and empowering teachers to harness its potential, I've made this guide free for everyone. You can access, download, and use it however you see fit, whether for inspiration, lesson planning, or exploring innovative ways to integrate AI into your teaching. This guide is my way of supporting you in embracing AI as a transformative tool in your instruction.

*Med Kharbach, PhD*

**January 15, 2025**

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# **Part I**

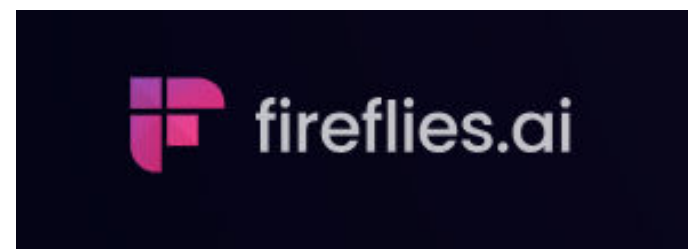
## **AI Tools for Teachers**



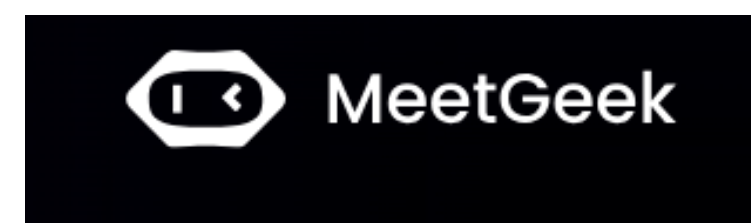
High-accuracy transcription with search functionality and document uploads. Offers human transcription for added precision.



Multi-language transcription with speaker labeling, timecode realignment, and customizable dictionaries. Supports document uploads and produces accurate, fluent transcriptions.



Transcribes meetings, analyzes conversations, and creates AI-generated summaries. Includes AI search for quick reviews and integrates with collaboration tools.



AI-powered meeting assistant that transcribes, records, and summarizes meetings. Integrates with Zoom, Teams, and Google Meet for searchable meeting notes.



# AI Transcription Tools for Teachers

[www.educatorstechnology.com](http://www.educatorstechnology.com)



Converts audio and video into accurate transcripts, offers subtitle creation, and supports automatic translations in 20 languages. Includes speaker recognition and editing features.



Professional-grade transcription with custom formatting, ADA compliance, and integrations with platforms like Zoom, Twitch, and YouTube for live captioning and translations.



Transcribes and analyzes audio/video, extracting key phrases and performing sentiment analysis. Integrates with Zoom, Vimeo, and Google Drive for automated workflows.



Real-time transcription with note-taking, slide capturing, and automatic summaries. Ideal for classrooms, with action items and highlights emailed to participants.



# Best AI Tools for Teachers

## In 2024

www.educatorstechnology.com



A teacher's AI workspace offering over 150 tools for lesson planning, content creation, assessments, and gamified learning.



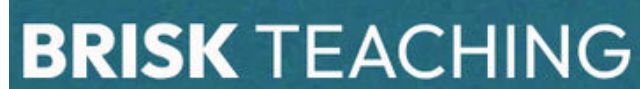
Tools for creating reading, writing, grammar, and vocabulary exercises with engaging activities.



Offers lesson plan, flashcard, and quiz generators from uploaded materials or online content



Text-to-speech tool with realistic voices, including celebrities, for reading on the go



Chrome extension for creating materials from YouTube and web content, grading assignments, and designing classroom activities.



Summarizes YouTube videos into key points, Q&A formats, or lists.



Turns text into visuals like flowcharts and mind maps without requiring prompts



A design platform with AI tools for creating visuals, presentations, and animations.



Transforms topics or documents into interactive lessons with just a few clicks.



Instantly generates grade-specific resources, editable and exportable as slides or PDFs.



Research assistant for finding papers, extracting data, and generating summaries in table formats



AI-powered meeting note taker that records, transcribes, and integrates with workflows



AI-generated lesson plans with slides, worksheets, games, and feedback tools, fully customizable.



An AI-powered workspace offering over 150 tools for lesson planning, assessments, content creation, interactive activities, and more to simplify teaching tasks.



Video platform with templates, avatars, and tools for creating tutorials or presentations



Summarizes research papers, synthesizes information, and provides audio overviews for multitasking



# tl;dv

Records meetings, generates clear transcripts, and summarizes key points. Offers real-time translation and integrates with Google Meet, Teams, Zoom, and more.

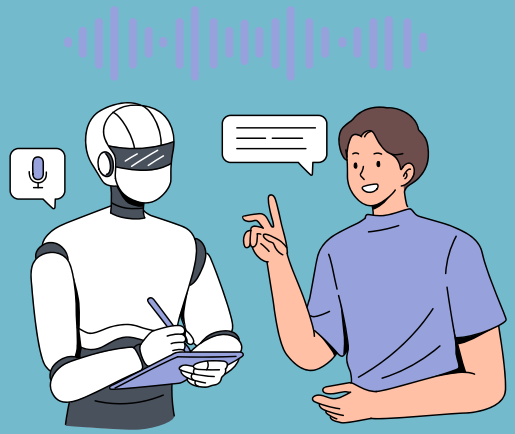
# FATHOM

Records, transcribes, and analyzes meetings, identifying key points and highlights. It integrates with Slack, Google Docs, and supports 28 languages.

# fireflies.ai

Transcribes and summarizes meetings, offering AI search to find key information quickly. Works with Google Meet, Teams, Zoom, and more.

# AI Meeting Assistants for Teachers



[www.educatorstechnology.com](http://www.educatorstechnology.com)

# Otter.ai

Otter offers real-time transcription, action item tracking, and speaker identification. It integrates with Zoom, Google Meet, Teams, and is available as a mobile app.

# zoom

Zoom AI Companion drafts emails, summarizes meetings, and provides smart recordings. It requires a paid Zoom subscription.

# Equal Time

Provides real-time feedback on speaking times, gender balance, and participant engagement. Auto-generates transcripts, action items, and meeting summaries.



## Google Translate

A free tool supporting 103 languages with contextual translations, audio and image translations, and automatic language detection. Includes a conversation mode for mobile.

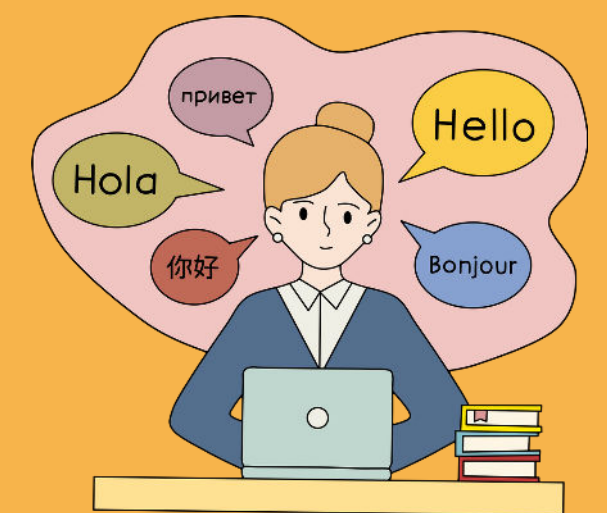


Uses neural networks for highly accurate translations in 35 languages. Features text-to-speech, alternative translations, document translation with formatting, and tone adjustments.



Microsoft Translator translates text in 60 languages with real-time, audio, and offline support. Includes conversation mode and photo translation through the mobile app.

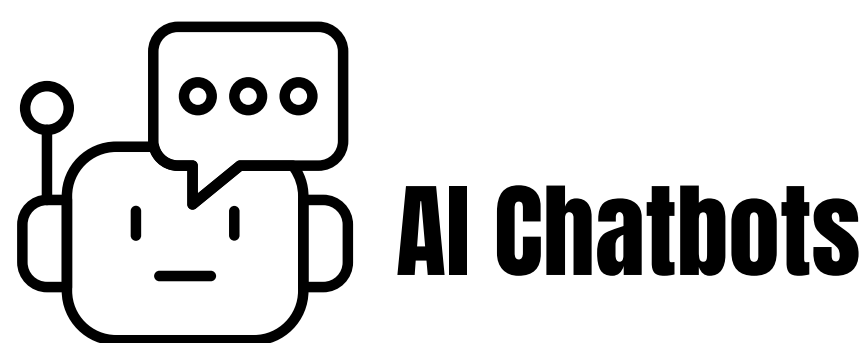
# AI Translators for Teachers



[www.educatorstechnology.com](http://www.educatorstechnology.com)



Amazon Translate specializes in large volumes of user-generated content with deep learning techniques for natural-sounding translations in over 5000 language combinations.



Chatbots such as ChatGPT and Claude provide multi-language support, offering translations with context to bridge language barriers for personal, academic, and business use.

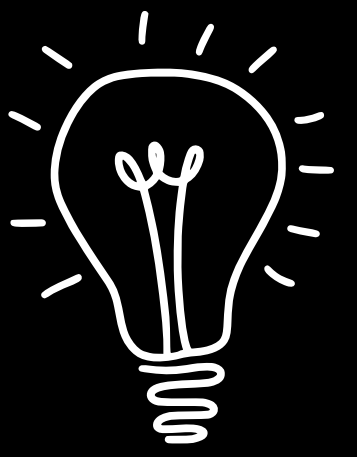


Supports over 100 languages for text, website, and conversation translation. Features voice recognition, autocomplete, and an instant camera tool for image translations. Offers offline translation in 4 languages.





# AI Academic Research Tools

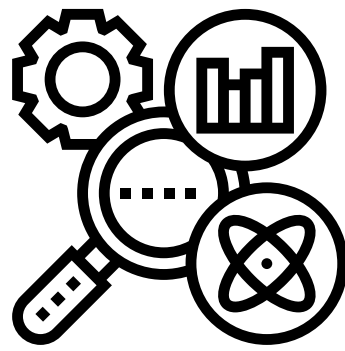


www.educatorstechnology.com



Synthesizes insights from academic papers based on research questions.

Provides 'Study Snapshot' summaries, advanced filters, and paper quality indicators to help streamline literature reviews.



Ideal for literature reviews, Elicit synthesizes insights from relevant papers with customizable filters. Includes a 'List of Concepts' to explore related research across papers and offers a library to save and organize papers.



Offers multiple AI model choices (GPT-4o, Claude-3, Sonar Large). Provides cited responses, file analysis, and integration with visualization tools like DALL-E and Playground AI.



AI-powered search engine with filters for journals, authors, and publication types. Features TLDR summaries, AI recommendations, and citation analysis to help you quickly find relevant research.



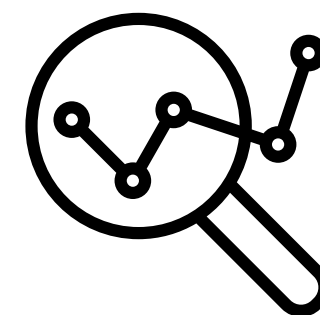
AI-powered search engine with filters for journals, authors, and publication types. Features TLDR summaries, AI recommendations, and citation analysis to help you quickly find relevant research.



Customizable research feeds based on topics or journals, with a 'Similar Papers' feature and options for exporting to Zotero or Mendeley. Features a Q&A bot, Ask GPT, for real-time interaction with academic papers.



Analyzes how papers are cited—whether they support, contrast, or mention other research. Includes citation context, reference checking, collection management, and citation network visualizations.



Citation-based tool that maps connections between papers using "seed papers." Visualizes connections through customizable graphs and helps build and organize research networks.



# AI Tools to Chat with PDFs

www.educatorstechnology.com

 **NotebookLM**

NotebookLM allows you to upload PDFs and interact by asking questions, generating summaries, and extracting key points. Also generates podcasts hosted by two AI agents that summarize and discuss the document content, perfect for multitasking or on-the-go learning.

 **Elicit**

Elicit lets you upload multiple PDFs and synthesize insights across them. You can extract key points, compare information, organize findings, and generate comprehensive summaries, making it a powerful tool for literature reviews and research synthesis.

 **ChatPDF**

Enables you to upload PDFs, ask questions, and interact with the content. It generates quick summaries, offers preloaded questions, documents into folders for easy navigation.

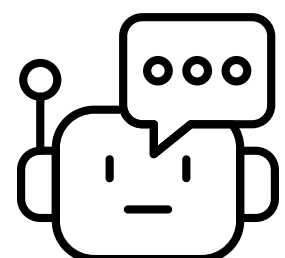


 **ChatDOC**

Allows for instant summaries, key insight extraction, and generating explanations from PDFs. It features an OCR tool to read image-based PDFs and offers a chat interface for easy interaction.

 **SCISPAC**E

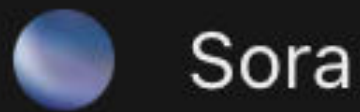
SciSpace offers a comprehensive range of features for researchers, including PDF chat, summarization, and question-answering capabilities. You can upload PDFs, get summaries, and ask questions with citations.

 **AI Chatbots**

chatbots such as ChatGPT & Claude allow you to upload PDFs and interact with the content by asking questions, extracting key information, generating summaries, and even providing citations.

 **SciSummary**

Upload a document or PDF, and it will summarize the content. You can also use its chat feature to ask questions, generate explanations of figures and tables, and request further clarifications.



- Developed by OpenAI, available to pro users via ChatGPT.
- Combines video generation and editing, including overlays, transitions, and captions.



- Generates videos with AI avatars and supports over 140 languages.
- Features include voice cloning, AI avatars, auto captions, translations, and platform embedding.



- Offers AI tools like video generation from prompts, text-to-speech, auto subtitles, and multi-language translation.



- Provides customizable templates and digital avatars.
- Allows easy sharing and embedding of videos.

# AI Text to Video Tools for Teachers

[www.educatorstechnology.com](http://www.educatorstechnology.com)



- Focused on script-to-video functionality.
- Offers stock footage, customizable layouts, AI voiceovers, and social sharing tools.



Includes AI text-to-video generation and features like voice dubbing, auto subtitles, and clip repurposing.



Primarily a video editing tool with extensive pre-made templates, transitions, and multimedia effects.



- Simplifies video editing with text-based tools and regenerative AI for noise removal.
- Offers green screen effects, animation, and auto clip generation.



- Intuitive video editor with mobile and desktop versions.
- Features include retouching, quality enhancement, audio improvements, and captioning.



- Generates videos from text, URLs, or documents.
- Includes over 150 avatars, 80 AI voices, and multi-language translation tools.



# ChatGPT Search For Teachers

www.educatorstechnology.com

## What is ChatGPT Search?

ChatGPT Search is an AI-powered tool that provides real-time, web-based information with summarized answers, sources, visuals, and videos directly within the ChatGPT interface.

## Ways to Use ChatGPT Search in Teaching

1

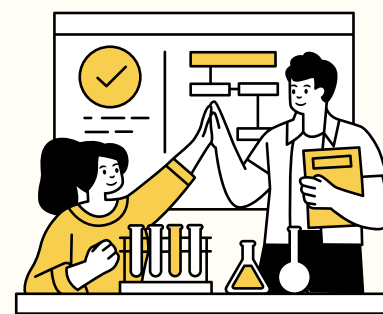
### Faster and Efficient Lesson Planning



Access up-to-date, verified information quickly to create or adapt lesson plans with relevant links, visuals, and videos.

2

### Create Teaching Resources



Find worksheets, activity ideas, slides, and strategies to inspire and enhance your teaching materials.

3

### Enhance Professional Development



Quickly summarize articles and trends to stay informed and grow professionally without hours of searching.

4

### Create Interactive Learning Experiences

The conversational nature of ChatGPT Search brings lessons to life. During class discussions or debates, teachers can use it to pull instant evidence, statistics, and multimedia examples, keeping learning engaging, relevant, and grounded in real-time information.



5

### ChatGPT Search as a Research Assistant



Simplify research for teachers and students by gathering resources, primary sources, and current events efficiently.

6

### Enhance Critical Thinking Skills



Encourage students to ask follow-up questions, challenge answers, and cross-check information to think critically.

7







### Promote Research Skills



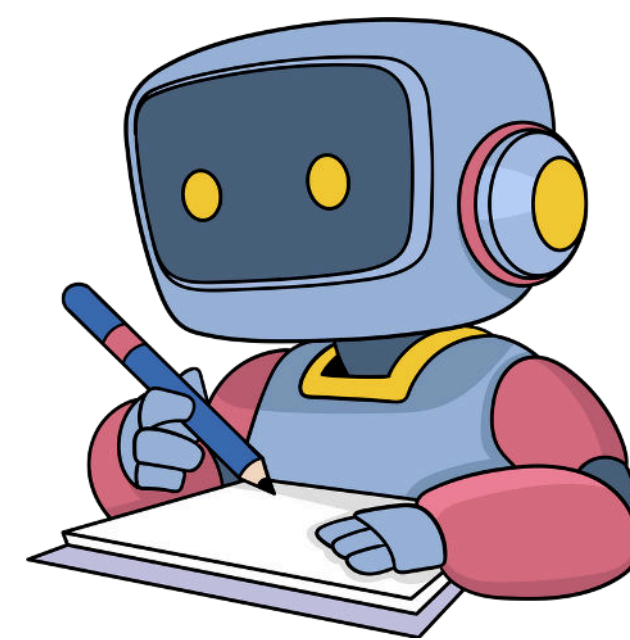
Teach students key research skills: focused queries, source evaluation, synthesis, and proper citation.

# AI Detectors for Teachers

www.educatorstechnology.com

| AI Checkers  | Test Results   | Features  | Pricing  |
|--|--|---|--|
|    | 100% AI for AI text,<br>100% human for human-written text. | AI content detection, URL scanning, document upload, image scan, readability score, integrations.   | Free limited scans.<br>\$18 to \$49/month [4 plans].           |
|  | 100% AI for AI text,<br>100% human for human-written text. | AI content detection, plagiarism checker, grammar/fact checker, Chrome extension, reliability tool. | Free limited scans. Pay As You Go, Pro: \$12.95+.              |
|  | 100% AI for AI text,<br>100% human for human-written text. | Document upload, AI content detection, rewriter tool, plagiarism checker, text summarizer, grader.  | 5 free weekly uses.<br>Essentials: \$16/month                  |
|  | 100% AI for AI text,<br>98% human for human-written text.  | Probability score breakdown, multilingual, document upload, writing feedback, downloadable reports. | Limited free plan .<br>\$8.33 to \$24.99/month                 |
|  | 100% AI for AI text,<br>90% human for human-written text.  | AI-human refinement detection, paraphraser, paragraph feedback, multilingual support.               | Free   |
|  | High accuracy [detailed reports in paid].                  | AI detection, plagiarism checker, OCR for images, text comparison, collaborative tools, Chrome ext. | Free limited scan.<br>\$7.99 to \$13.99/month [various plans]. |

# AI Writing Tools for Teachers



www.educatorstechnology.com

## What Are AI Writing Tools?



AI writing tools are software powered by artificial intelligence that assist users in generating, editing, and enhancing written content. These tools can help with tasks like drafting text, summarizing information, rephrasing content, checking grammar, and even creating structured documents.

## Benefits of AI Writing Tools?

- Generate essays, lesson plans, and reports quickly.
- Condense long articles, documents, or emails into key points.
- Paraphrase text for clarity, conciseness, or style.
- Improve grammar, punctuation, and sentence structure.
- Expand ideas into detailed paragraphs or full articles.
- Write and translate content in multiple languages.

## ChatGPT



ChatGPT is a versatile AI chatbot offering text generation, document analysis, audio typing, and AI-powered web search.

## Claude



Claude excels in academic tasks like summarizing papers, generating abstracts, and critical analysis. With a larger context window, it supports extended conversations and detailed research tasks.

## Gemini

Gemini, Google's AI chatbot, delivers text summarization, data analysis, image generation, and audio processing. Seamlessly integrated into Gmail, Docs, and Search, Gemini continues to evolve with advanced multimodal capabilities.

## Copilot



Microsoft's AI assistant boosts productivity with features like drafting, summarizing, and answering questions. It enhances web browsing through Edge integration and offers free and premium plans for educators and students.

## Writesonic



WriteSonic is an AI writing assistant offering 100+ templates, a Sonic Editor, paraphrasing tools, article summarization, and support for 25+ languages. It's perfect for generating and refining high-quality content.

## Rytr



Rytr generates content quickly with features like ready-made templates, custom writing tones, grammar checking, text rewording, and plagiarism detection. Supports 40+ languages and offers both free and paid plans.

# ChatGPT Alternatives for Teachers



Claude does a great job in complex reasoning and produces human-like text, ideal for educators and researchers. It has a large context window for handling extensive inputs but lacks internet access and third-party integrations.



Gemini, by Google, shines with AI-powered web search and seamless integration with Google apps like Docs and Gmail. It delivers concise answers with links, offers image generation, and provides suggested searches for deeper exploration.



Microsoft Copilot integrates Bing-powered web search with cited sources, works seamlessly in Edge and Bing, and offers premium integration with Word, Excel, and PowerPoint. It's perfect for verified research and productivity tasks.



Perplexity combines AI search and organization with tools like Search Focus for specific content, Writing Mode for offline tasks, and Collections for sharing research. Its AI Profile customizes results, making it a great tool for ongoing projects.



Eduaide Chat is another great alternative to ChatGPT, designed specifically for educators. You can use it to create lesson plans, get help with teaching strategies, and more



MagicSchool has this AI instructional coach called Raina to use to generate lesson plans, explain complex concepts, and more.



# 9

# AI TEXT TO SPEECH TOOLS FOR TEACHERS

[www.educatorstechnology.com](http://www.educatorstechnology.com)

## ElevenLabs

Offers a vast collection of human-like voices in over 30 languages. Key features include voice changing, AI dubbing, sound effects, and voice isolation, with a free plan available for exploration.

## Speechify

Converts text to speech using realistic voices. It works on web, mobile, and as a Chrome extension, reading content from PDFs, web pages, and photos.

## NaturalReader

Supports over 90 languages and offers voice cloning to make your voice speak in multiple languages. It reads text from files, emails, Kindle books, and web pages.

## LOVO

Turns text into voiceovers with customizable voices in over 100 languages and accents. It allows exporting files in WAV, MP3, and MP4 formats.



Reads aloud text from websites, documents, and eBooks. It supports multiple platforms with natural-sounding AI voices.

## descript

Combines text-to-speech with audio and video editing, offering realistic voiceovers and overdubs creation.

## RESEMBLE.AI

Provides advanced voice cloning and custom AI voice generation in multiple languages and emotions.

## MURF.AI

Offers lifelike voiceovers for videos, presentations, and podcasts. It provides over 120 voices in 20+ languages, with options for pitch, tone, and speed customization.

## SYNTHESYS

Turns text into voiceovers using AI, with a library of over 300 voices. Supports multilingual output and flexible audio downloads.

# Top AI Google Workspace Tools for Teachers



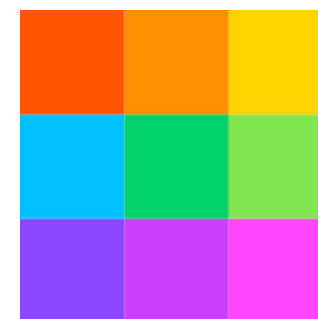
## GPT for Sheets, Docs, Forms, and Slides

Automate tasks, generate content, and create teaching materials with AI across Google Workspace.



## SlidesAI

Effortlessly generate polished, professional presentations from text in seconds.



## Smallpdf

Manage PDFs seamlessly: compress, merge, e-sign, convert, and summarize documents.



## AI Voice Generator

Convert text into lifelike audio in 60+ languages to enhance accessibility and engagement.



## Mindomo

Create collaborative mind maps, outlines, and Gantt charts, turning text into visuals instantly.



## Plus AI for Google Slides

Generate, edit, and translate presentations and documents with AI-powered tools.



## AI for Google Sheets

Streamline data analysis, content generation, and translations directly within Google Sheets.



## AI for Google Sheets

Turn Google Forms into secure, proctored assessments with timers, tracking, and detailed analytics.



## GPT Quiz Generator

Quickly create engaging, tailored quizzes from text, images, PDFs, or handwritten content.



## GPT for Slides

Generate up to 20 AI-powered slides with visuals and multi-language support in one click.



## Slide Translato

Translate Google Slides and Forms into 250+ languages while preserving formatting.

# 9

# AI Text to Image Tools for Teachers

Midjourney

High-quality images from detailed prompts; subscription starts at \$10/month.



Generate visuals in styles like photo, painting, or 3D. Available as a Canva add-on with adjustable aspect ratios.



Integrated with ChatGPT. Features image editing and creating variations of existing images.



Variety of artistic styles like Anime, Renaissance, and Pop Art.

FREEP!K

Offers Classic, Flux Fast, and Mystic models. Customize artistic styles, lighting, and aspect ratios.



Provides tools for consistent characters and style reference. Includes prompt generator.



Easy-to-use generator with extensive customization options.

NightCafe

Offers multiple creation methods like Stable Diffusion and Style Transfer.



Convert words into images or enhance uploaded photos.

# AI Presentation Makers for Teachers



Transform your lessons into interactive slides with AI.



Generate presentations directly from online content and videos.



Create slide decks with images from URLs, files, or videos.



Turn detailed lesson resources into interactive slides.



Generate slide outlines with ideas and check-in questions.



Quickly generate editable Google Slides presentations.



Create customized presentations with various styles and tones.



Design visually appealing slides effortlessly.



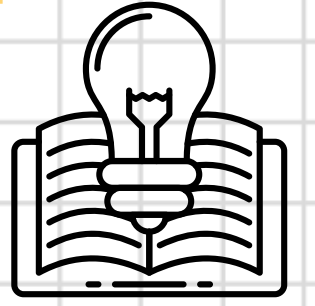
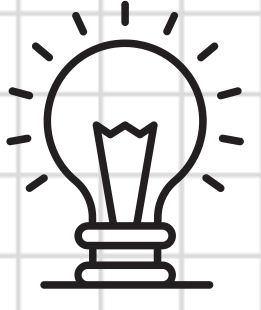
Convert YouTube videos, PDFs, and more into PowerPoint presentations.



# Top AI Chrome Extensions for Teachers

|  |  |
|--|--|
|  <b>MagicSchool</b>     | Access 50+ AI tools for teachers to create lesson plans, rubrics, quizzes, and feedback with ease.                                   |
|  <b>Quizizz</b>         | Generate quizzes and assignments from any webpage, Google Docs, or Slides, and create comprehension questions from reading passages. |
|  <b>Brisk Teaching</b>  | Use AI for lesson plans, feedback, quizzes, and more. Seamlessly integrates with Google Docs, Forms, and Slides.                     |
|  <b>Grammarly</b>      | Enhance your writing with AI-powered suggestions for grammar, clarity, style, and brainstorming.                                     |
|  <b>AnswerAI</b>      | Highlight any question to get quick, step-by-step answers, write emails, solve math problems, and more.                              |
|  <b>Copyleaks</b>     | Detect AI-generated content with instant reports by pasting text into the extension.   |
|  <b>Scribbl</b>       | Record, transcribe, and summarize Google Meet meetings in real-time, with notes saved automatically to Google Docs.                  |
|  <b>Perplexity</b>    | An AI search engine providing instant answers, page summaries, cited sources, and follow-up questions.                               |
|  <b>NaturalReader</b> | Convert text from webpages, PDFs, eBooks, and emails into natural-sounding AI voices   |
|  <b>Monica</b>        | Your AI assistant for writing, translating, summarizing, creating images, and chatting with multiple AI models.                      |
|  <b>Eightyfy</b>      | Summarize YouTube videos with timestamps, insights, multilingual support, and transcript generation.                                 |
|  <b>Merlin</b>        | Chat with websites, videos, and documents. Features include GPT-4, custom chatbots, 70+ AI tools, and multilingual support.          |
|  <b>Text Blaze</b>    | Save time with reusable text templates, inserted anywhere via keyboard shortcuts.  |

# Best AI Lesson Plan Generators



Leverage the power of AI to easily create engaging lesson plans and interactive instructional activities

## Eduaide

Features over 150 AI tools for lesson planning, gamification, and administrative tasks, including tools like Lesson Seed and Unit Plan for streamlined workflows.



## Brisk Teaching

A Chrome extension that turns online resources into lesson materials, with features like debates, character chats, and real-world math tasks.

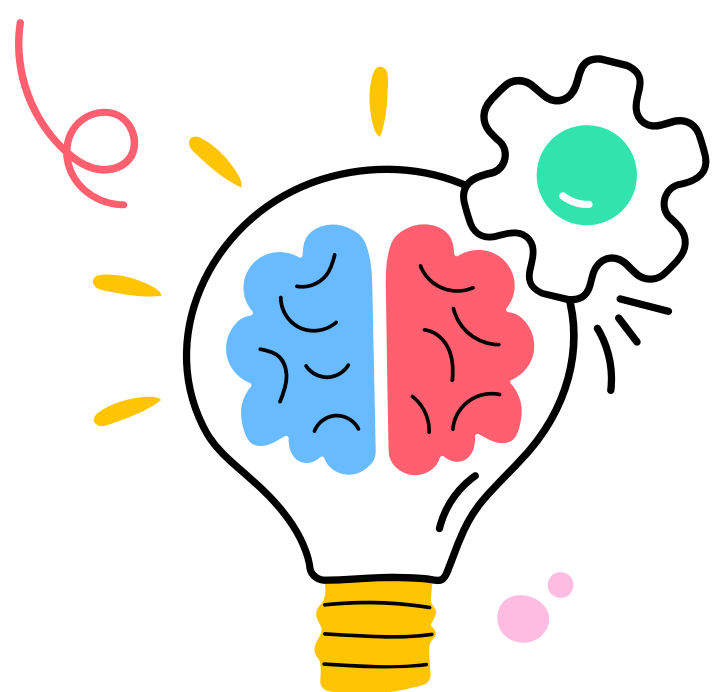
## Curipod

Converts topics or documents into interactive lessons and provides performance reports to tailor learning activities.



## Almanack

Generates lesson plans with slides, worksheets, and rubrics, along with tools for report card comments and classroom activities.



## MagicSchool

Offers 60+ AI tools, including lesson plan generators and Raina, a chatbot designed to assist teachers with instructional needs.



# AI Tools for Creating Flashcards

## Quizlet

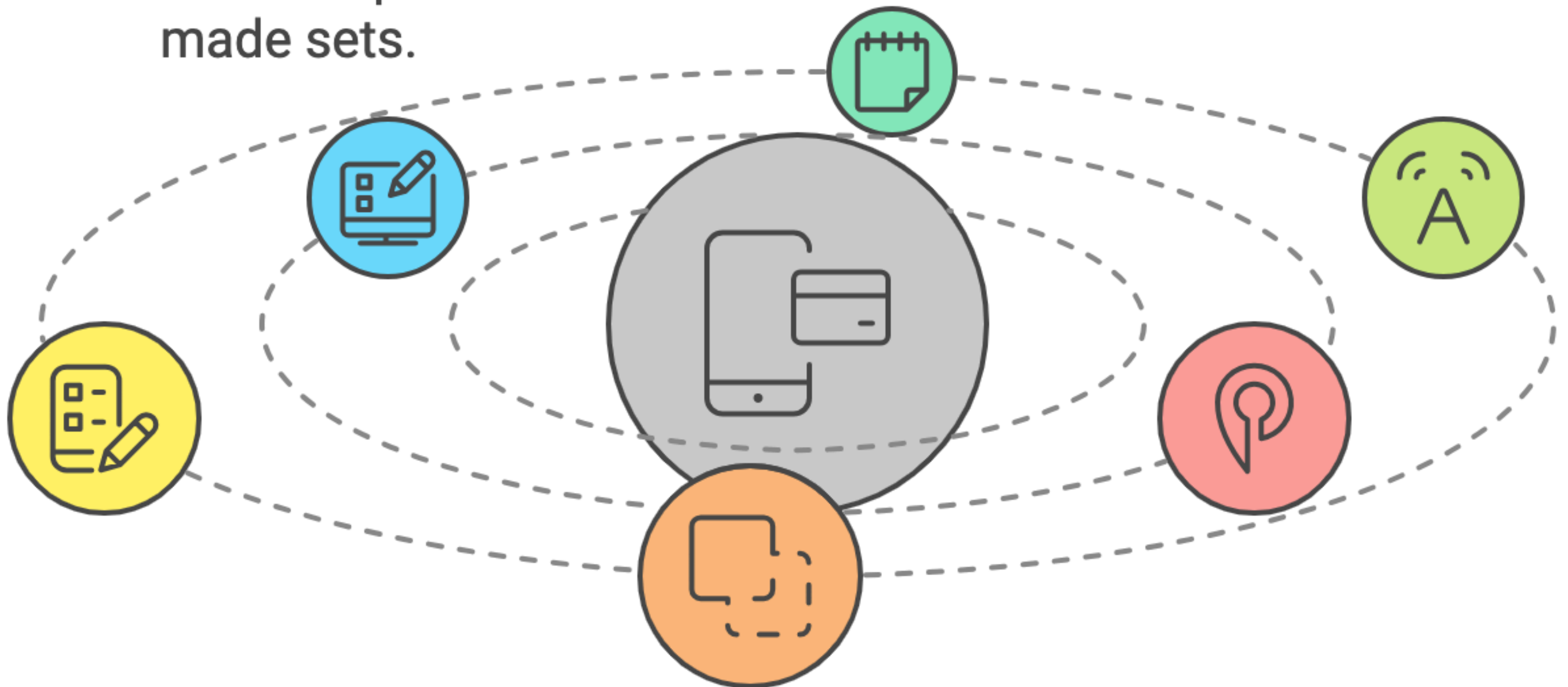
Create and customize flashcards, or use millions of pre-made sets.

## RemNote

Instantly turn notes into flashcards with spaced repetition.

## Revisely

Convert notes and PDFs into customizable flashcards.



## Study Fetch

Create flashcards from PDFs, videos, and notes with AI recaps.

## Jamworks

Generate flashcards from recorded lectures with AI tutoring.

## Kahoot

Turn notes into interactive flashcards with multimedia options.




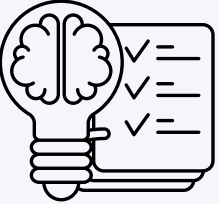





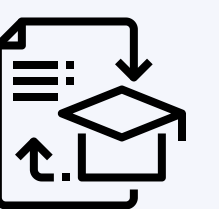
# **Part II**

## **AI Tips for Teachers**



# 10 AI Prompts to Enhance Your Lesson Planning

[www.educatorstechnology.com](http://www.educatorstechnology.com)

| Instructional Goal   | Sample Prompt  |
|--|--|
|  <b>Create a lesson outline</b>                | "Act as an experienced high school teacher and draft a detailed lesson outline on [topic]. Include learning objectives, warm-up activities, key discussion points, interactive tasks, and a closing reflection or assessment." |
|  <b>Suggest differentiated activities</b>     | "Provide differentiated instruction activities for a lesson on [topic]. Include one activity each for visual, auditory, and kinesthetic learners."   |
|  <b>Align with curriculum standards</b>       | "Analyze this lesson plan and suggest how it aligns with Common Core standards. Highlight any gaps and provide modifications to better align with the standards."  |
|  <b>Plan transitions and time allocations</b> | "Structure a 60-minute lesson on [topic] with time allocations, transitions between activities, and strategies to maintain student engagement."  |
|  <b>Design formative assessments</b>          | "Based on this lesson plan for [topic], suggest five formative assessment strategies to gauge student understanding during the lesson."  |
|  <b>Simplify for substitute teachers</b>      | "Simplify this lesson plan on [topic] for a substitute teacher. Provide clear instructions, key objectives, and essential activities to ensure the lesson runs smoothly."  |
|  <b>Accommodate diverse learning needs</b>    | "Suggest modifications to a lesson on [topic] to support students with dyslexia and ADHD. Include visual aids, step-by-step instructions, and opportunities for hands-on learning."  |
|  <b>Create engaging homework assignments</b>  | "Using this lesson plan on [topic], generate a homework assignment with two multiple-choice questions, one short-answer question, and a creative task for students to apply their learning."                                   |
|  <b>Incorporate real-time updates</b>         | "Search the web for recent developments on [topic] and incorporate the latest research or news into a 45-minute lesson plan that includes discussion and interactive activities."  |
|  <b>Include cross-curricular connections</b>  | "Suggest cross-curricular activities for a lesson on [topic], integrating themes from math, science, history, and language arts."  |

# Ways to Navigate AI Challenges in the Classroom



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## Set Clear Policies and Expectations



- Define acceptable AI use and include examples in your syllabus.
- Clearly explain key terms like plagiarism in the context of AI tools.
- Discuss policies in class and ensure they are accessible online.

---

## Promote Transparency and Dialogue



- Foster open discussions about AI tools and their implications.
- Share the rationale behind AI policies to emphasize learning goals.
- Set guidelines for acknowledging and citing AI tool usage.

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## Foster Intrinsic Motivation



- Design assignments that connect to student interests and real-world applications.
- Use scaffolding to break tasks into manageable steps with opportunities for revision.
- Encourage reflection on learning and emphasize creativity in projects.

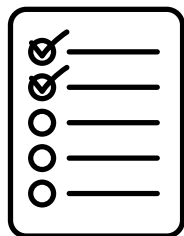
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## Ensure Inclusive Teaching



- Use varied assessment methods to ensure equity and accessibility.
- Avoid relying solely on handwritten or oral assessments that may disadvantage certain students.
- Create environments where all students can showcase their abilities effectively.

1

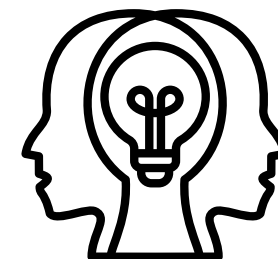


### Creating Lesson Outlines

AI generates detailed lesson outlines with objectives, activities, and assessments tailored to your needs.

2

### Differentiated Instruction



Create activities for varied learning styles and skill levels to engage all students.

# 10

3



### Curriculum Alignment

AI aligns lesson plans with standards like Common Core for seamless compliance.

4

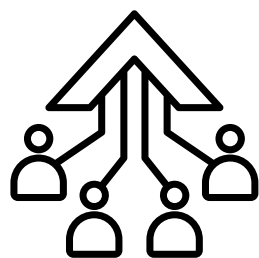
### Real-Time Updates



Incorporate the latest news and research to keep lessons current and engaging.

# AI Tips

5



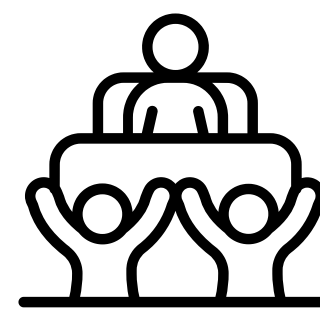
### Cross-Curricular Integration

Connect lessons with other subjects to enrich learning and show interdisciplinary links.

# for Creating

6

### Classroom Management

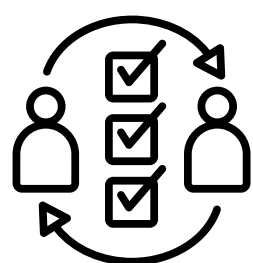


Structure lessons with clear timelines and transitions to minimize disruptions

# Engaging

7

### Formative Assessment



AI creates quizzes and activities to assess understanding and guide instruction.

# Lesson

8

### Emergency Lesson Plans



Quickly generate simplified plans for substitute teachers or unexpected absences.

# Plans

9

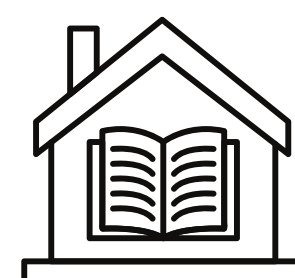
### Inclusive Education



Design lessons with tailored accommodations for students with diverse needs.

10

### Homework Design



AI crafts engaging, relevant homework to reinforce classroom learning.

# What Can I Do as a Teacher to Reduce the Risk of AI Misuse?

www.educatorstechnology.com

## 1



**Help students understand the risks of using AI and the value of self-expression.**

Discuss how skills like collaboration, pitching, and debate improve communication when AI is unavailable.

## 2

**Design assessments that AI tools like ChatGPT cannot easily answer**

- Ask students to write about personal experiences and connect them to the text or reflect on their learning journey.
- Require students to critique ChatGPT's default response to a question.
- Have students cite real, primary sources to support specific claims or analyze recent events.



## 3

**Incorporate interactive, real-time assessments**



- Assess students through live peer discussions and use peer assessment tools like Peerceptiv.
- Shift lectures to be take-home while requiring assignments to be completed in class.

## 4

**Encourage iterative work and critical thinking**



Require students to produce multiple drafts, refining their work through peer or educator feedback to reinforce the learning process.

## 5

**Assign creative outputs in challenging mediums**



Ask students to create PowerPoint presentations, visual displays, videos, or audio recordings that are harder for AI to replicate.

## 6

**Set clear expectations about AI detection tools**

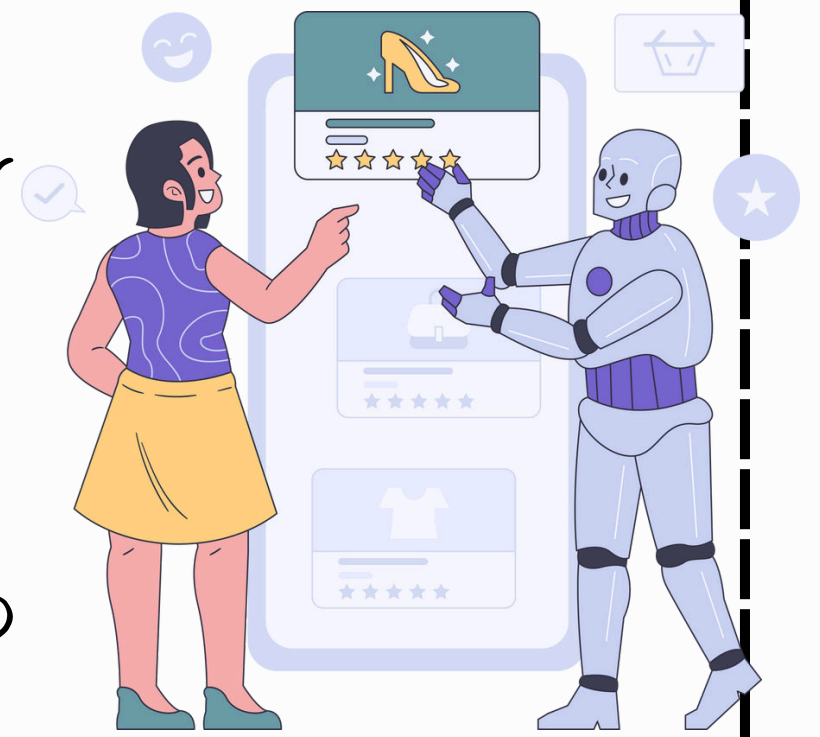


Inform students that you will use AI detectors like GPTZero to check submitted work, deterring misuse.

# Critical AI Literacy

## What is Critical AI literacy?

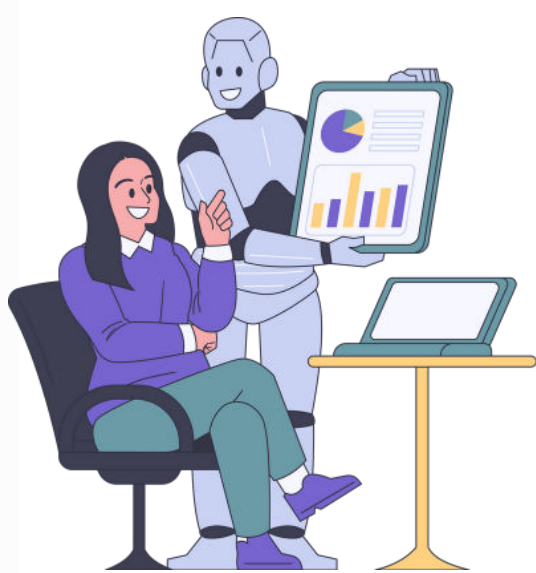
The ability to evaluate, interpret, and responsibly engage with AI tools and their outputs. It involves understanding how AI systems function, recognizing their limitations and biases, and making informed decisions about when and how to use them.



## Critical AI Literacy Components

### Judging Credibility

Determining the trustworthiness of AI-generated content



### Assessing AI Outputs

Evaluating the accuracy and reliability of AI results



### Ethical Awareness

Ensuring responsible and ethical use of AI technologies

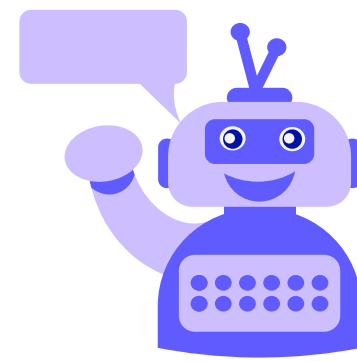


### Understanding AI Bias

Recognizing and addressing societal biases in AI algorithms

# 10 AI Study Assistants for Students

1



## AI Chatbots

Tools like ChatGPT, Claude, Gemini, Perplexity, and Copilot provide instant answers, explain concepts, and assist with writing, proofreading, and editing, offering real-time support for personalized learning.

2

## Turbolearn

A robust note-taking tool allowing students to create notes from audio, video, or PDFs, and engage in AI-powered chats for real-time answers. Features include flashcards, quizzes, and multimedia integration.

3



## Elicit

An AI-powered academic search engine that answers research questions by sourcing relevant papers. Elicit helps explore academic literature and organize findings in tables and summaries.

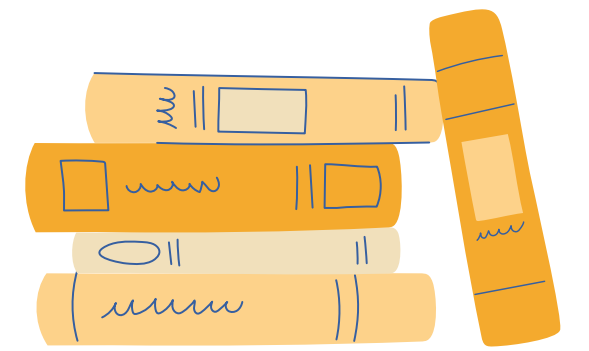
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## Fireflies

Automatically transcribes meeting notes and generates summaries across platforms like Google Meet, Zoom, and Teams. It enables collaboration, commenting, and integration with apps like Slack and Notion.

5



## RemNote

A study assistant creating flashcards with spaced repetition. It allows students to organize notes in different styles, annotate PDFs, and integrate references directly into notes.

6



## Annotate.tv

A tool for taking notes on YouTube videos, generating transcripts, and capturing key ideas. Features include smart search and sharing options with platforms like Evernote and Notion.

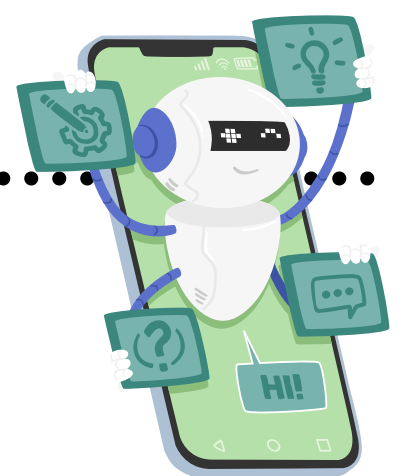
7



## JotBot

An AI assistant that aids with writing by providing autocomplete, finding citations, and generating drafts. It also offers a chatbot for document clarification and summary generation.

8



## NoteGPT

Summarizes various types of content, including videos and PDFs, while generating mind maps and offering an AI assistant for document interactions. Chrome extension available for web and video summaries.

9

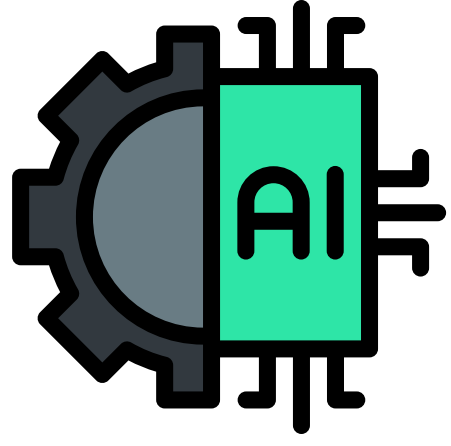
## Revisely

Offers AI-powered flashcards, quiz generation, and notes summaries.

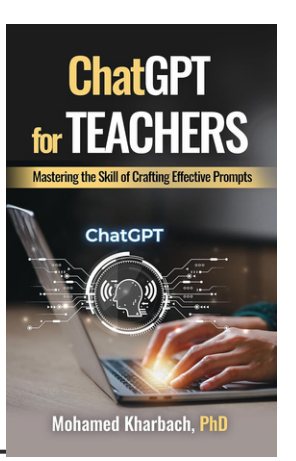
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## Jamworks

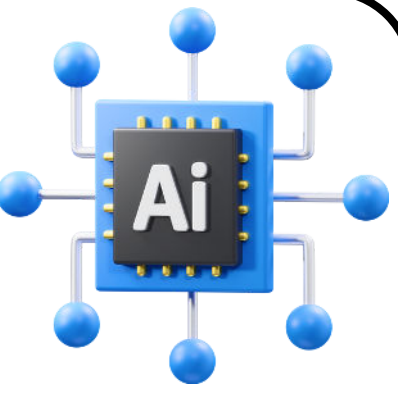
Records lectures, generates notes and summaries, and handles complex equations.



# AI Vocabulary for Teachers

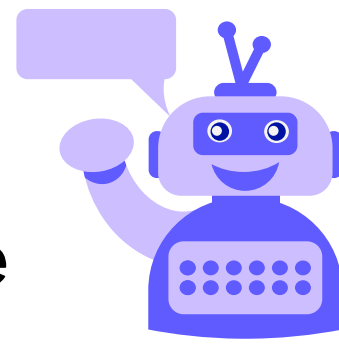


## Artificial Intelligence



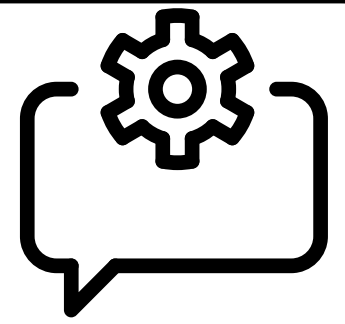
AI is a field of computer science focused on creating machines capable of tasks that usually require human intelligence, such as problem-solving, understanding language, and recognizing patterns.

## Artificial General Intelligence



AGI refers to AI systems that can learn, reason, and adapt to different tasks, exhibiting a level of intelligence similar to human cognition.

## Chain-of-Thought Prompting



A method where AI models are guided to break down their thought process step-by-step, improving their reasoning and problem-solving abilities.

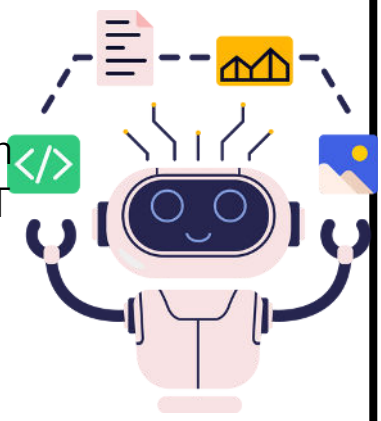
## Popular AI Acronyms

1. **AI** – Artificial Intelligence
2. **AGI** – Artificial General Intelligence
3. **ML** – Machine Learning
4. **DL** – Deep Learning
5. **NLP** – Natural Language Processing
6. **CV** – Computer Vision
7. **LLM** – Large Language Model
8. **RL** – Reinforcement Learning
9. **RLHF** – Reinforcement Learning from Human Feedback
10. **GAN** – Generative Adversarial Network
11. **CoT** – Chain-of-Thought (Prompting)
12. **GPT** – Generative Pre-trained Transformer
13. **RNN** – Recurrent Neural Network
14. **CNN** – Convolutional Neural Network
15. **BERT** – Bidirectional Encoder Representations from Transformers
16. **LSTM** – Long Short-Term Memory
17. **AIoT** – Artificial Intelligence of Things
18. **ASR** – Automatic Speech Recognition
19. **API** – Application Programming Interface
20. **OCR** – Optical Character Recognition

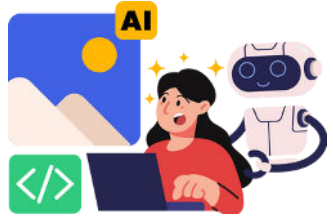
[www.educatorstechnology.com](http://www.educatorstechnology.com)

## GPT

A type of large language model using transformer architecture, pre-trained on massive text datasets. GPT models can generate human-like text, answer questions, and produce diverse content based on the input prompt.



## Context Window



The range of data a model considers when making predictions. A larger context window helps the model generate more accurate results.

## Prompt Engineering



Crafting prompts to guide AI models in generating desired responses. It involves designing clear, structured instructions to obtain accurate and relevant outputs from a large language model.

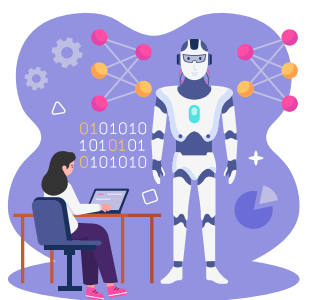
## Prompt

A natural language request or input given to an AI model to generate a response. Prompts can be questions, instructions, or examples that shape how the AI responds.



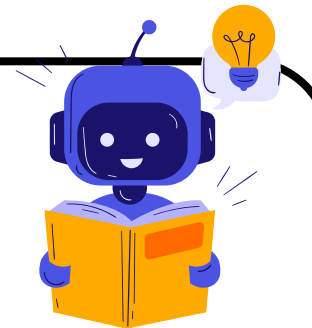
## Deep Learning

A branch of machine learning that uses neural networks to learn from large amounts of data, enabling AI to handle complex tasks like image recognition and natural language processing.



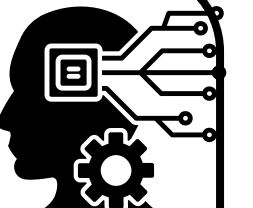
## Machine Learning

A subset of AI where models learn patterns from data to make predictions or decisions. The more data they process, the more accurate their predictions become, enhancing applications like recommendation systems and personalized learning.



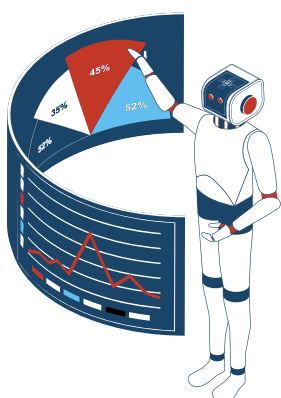
## Large Language Model

Advanced AI models trained on vast amounts of text data, utilizing neural networks (like transformers) to understand and generate human-like text. LLMs can perform complex language tasks due to their extensive training.



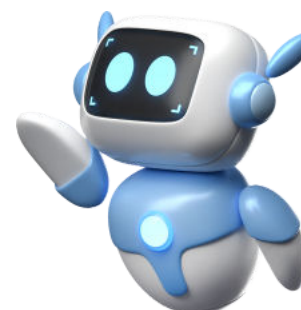
## Fine Tuning

The process of adapting a pre-trained model to excel in specific tasks by additional training on a smaller, targeted dataset.



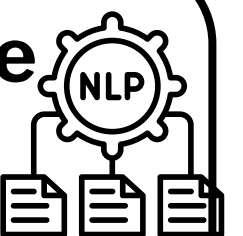
## Generative AI

AI capable of creating new content such as text, images, or audio. It powers applications like chatbots, text generation, and image recognition.



## Natural Language Processing

A branch of AI focused on enabling computers to understand, interpret, and generate human language. NLP combines computational linguistics, machine learning, and deep learning to process text and speech.



# AI Do's and Don'ts for Teachers

## Do's

## &

## Don'ts

- ✓ **Embrace AI for creative projects:** Use AI tools to generate ideas for lessons, projects, and activities.
- ✓ **Learn prompting:** Understand how to effectively communicate with AI for better results and responses.
- ✓ **Use AI as an assistant:** Let AI help you manage tasks, but keep the human touch in teaching.
- ✓ **Always fact-check AI outputs:** Ensure information provided by AI is accurate and reliable.

- ✗ **Don't substitute AI for teacher-student interaction:** AI can assist, but human connection is key.
- ✗ **Don't allow AI to replace critical and creative thinking:** Encourage students to question and verify AI-generated answers.
- ✗ **Don't neglect ethics in AI use:** Teach students the ethical implications of AI in learning.
- ✗ **Don't ignore digital literacy:** Ensure students understand how AI works and its limitations.



# The 7 Principles of Responsible AI Use in Education

## Purpose

Align AI use with educational goals, promoting equity, inclusivity, and well-being while addressing diverse learning needs.



## Compliance

Policies must adhere to existing laws and regulations, particularly around data security, privacy, and ethical considerations.

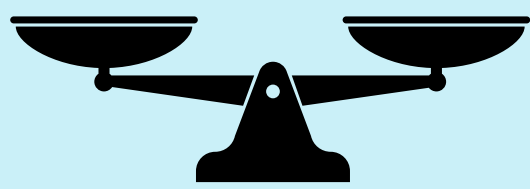
## Knowledge

Promote AI literacy by teaching students and educators how AI works, its limitations, and ethical implications.



## Balance

Leverage AI's benefits while mitigating risks. Clear guidance on responsible AI use should prioritize well-being and improved outcomes.



## Integrity

Address academic integrity by setting clear boundaries for AI use. Schools can adopt varying levels of AI allowance—permissive, moderate, or restrictive—based on assignment requirements

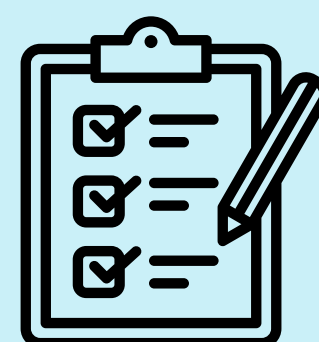


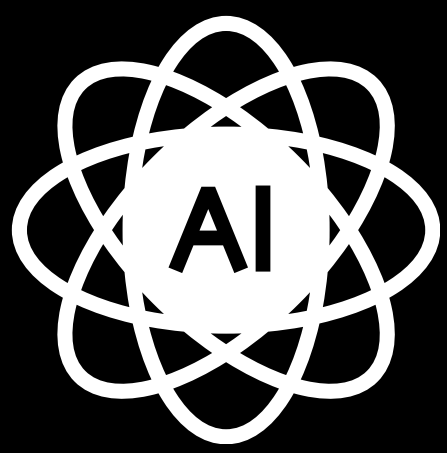
## Evaluation

Continuously review AI policies to adapt to evolving technology and legal requirements. Stakeholder feedback is critical for refining AI practices.

## Agency

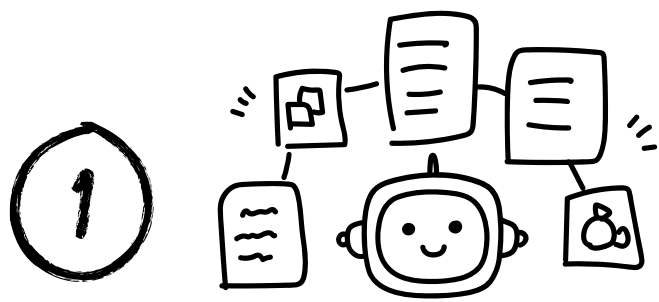
Preserve human decision-making. AI should augment educators' efforts, not replace them.





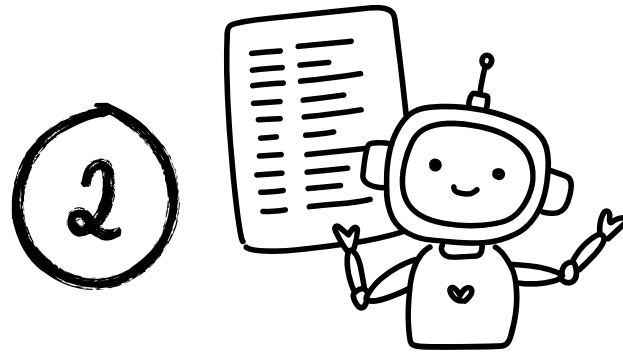
# AI Benefits for Students

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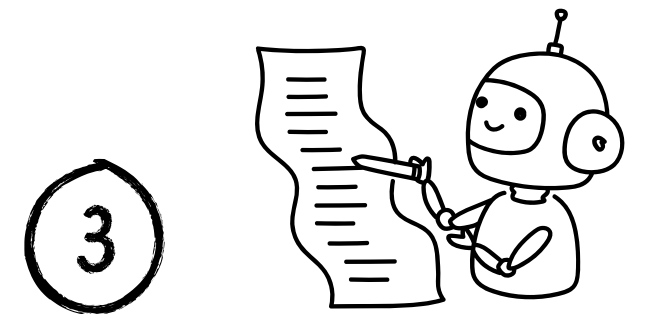
## AI Study Assistants

- 24/7 support for personalized learning.
- Tools like ChatGPT and Claude help explain concepts, solve problems, and brainstorm ideas.



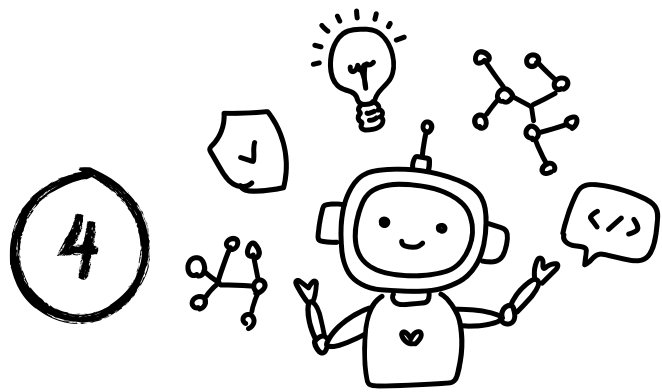
## Customized Feedback

- AI tools provide tailored feedback on assignments.
- Role-assignment techniques allow students to receive feedback from perspectives like teachers or peers.



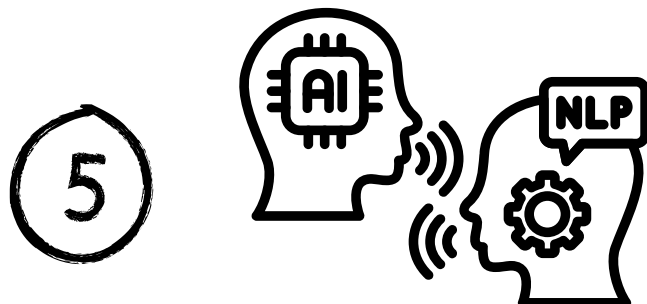
## Language Learning

- AI tools like Grammarly improve grammar and writing mechanics.
- Platforms like Quizlet personalize vocabulary learning, while chatbots simulate real-life conversations for speaking practice.



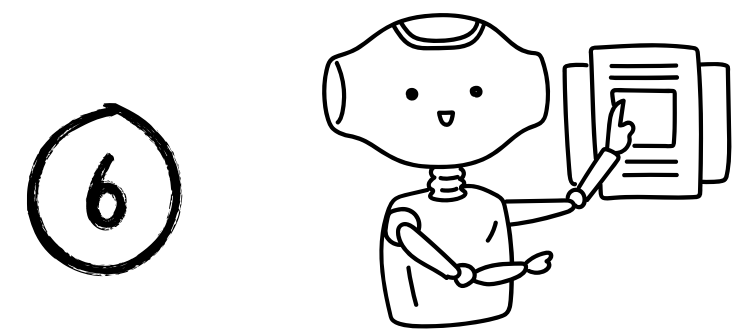
## Writing Assignments

- AI assists with brainstorming, organizing ideas, and editing drafts.
- Tools like ChatGPT enhance clarity, coherence, and argumentation in writing.



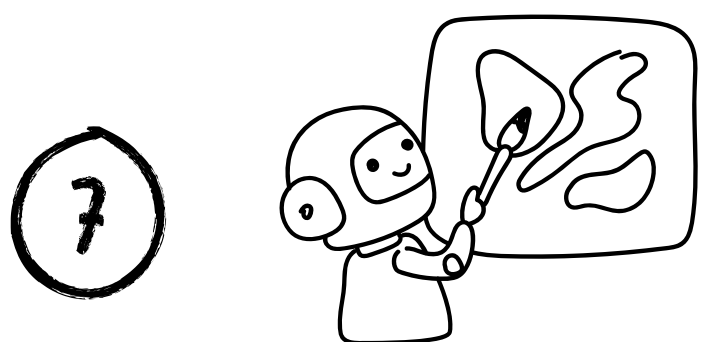
## Research Projects

- AI tools streamline literature reviews (e.g., Elicit, Scite) and summarize content (e.g., ChatPDF, Eightify).
- Tools like Otter.ai generate transcripts and insights from multimedia sources.



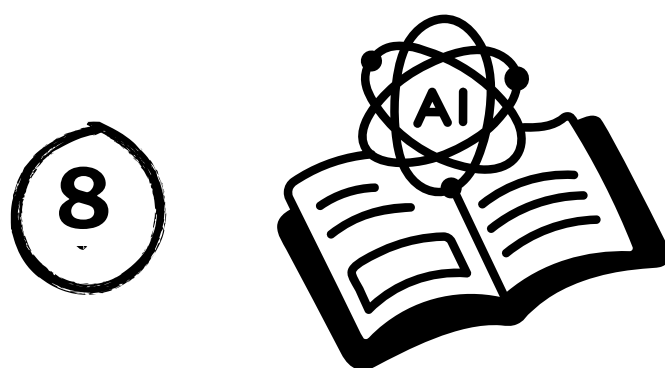
## Help for Students with Special Needs

- Text-to-speech tools (e.g., Speechify) support dyslexic learners, while speech-to-text tools aid in note-taking.
- Tools like Be My Eyes and Ava enhance accessibility for visually and hearing-impaired students.



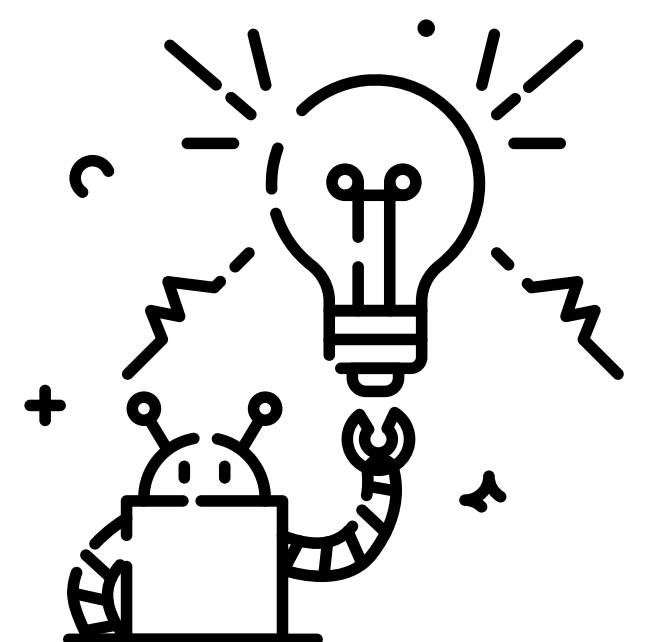
## Content Creation

- Platforms like Canva, Capcut, and Synthesia simplify the creation of presentations, videos, and animations.
- Text-to-image tools like Midjourney and DALL-E enable students to create compelling visuals and illustrations.

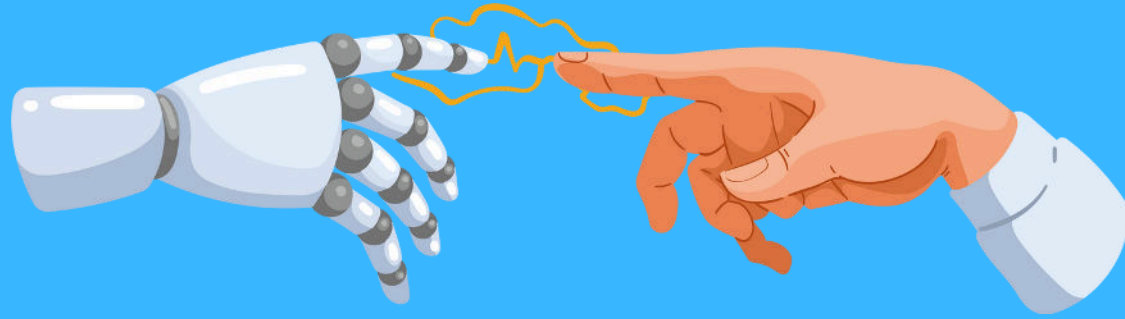


## Problem-Solving Skills

- Tools like Photomath teach step-by-step problem-solving in math.
- ChatGPT helps students break down challenges, brainstorm solutions, and explore diverse approaches.



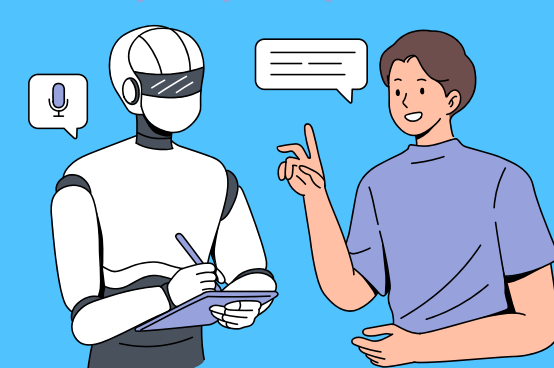
# Top TED Talks on AI



- **How AI Could Save (Not Destroy) Education** by Sal Khan: Explores AI's potential to revolutionize education, including the role of AI tutors and teaching assistants.
- **How Will AI Change The World?** by TED-Ed: Presents a balanced view of AI's impact and raises critical questions about its future.
- **How We Can Build AI to Help Humans, Not Hurt Us** by Margaret Mitchell: Discusses AI's biases and the need for clear goals to ensure AI benefits humanity.
- **Can We Build AI Without Losing Control Over It?** by Sam Harris: Addresses ethical concerns and control issues related to superintelligent AI.
- **How to Get Empowered, Not Overpowered**, by AI by Max Tegmark: Highlights steps to ensure AI enhances, rather than harms, humanity.
- **Will AI Replace Musicians?** by Oak Felder: Explores AI's role in music, showcasing the difference between AI-generated and live performances.
- **How AI is Learning What it Means to Be Human** by Walter De Brouwer: Discusses developing AGI through modeling human experiences.
- **War, AI, and The New Global Arms Race** by Alexandr Wang: Examines the role of AI in modern warfare and its implications for national security.
- **How AI Can Help Shatter Barriers to Equality** by Jamila Gordon: Shows how AI can aid refugees and those from disadvantaged backgrounds in finding employment.
- **Why AI Will Spark Exponential Economic Growth** by Cathie Wood: Discusses how AI, along with other innovations, could significantly boost global GDP.
- **The Danger of AI is Weirder Than You Think** by Janelle Shane: Highlights AI's peculiarities and the risks of its overly literal problem-solving.
- **The Incredible Creativity of Deepfakes – and The Worrying Future of AI** by Tom Graham: Explores the potential and risks of AI-generated media, including deepfakes.
- **How AI Can Save Our Humanity** by Kai-Fu Lee: Explores AI's transformative role while emphasizing the importance of compassion and creativity.
- **How AI Can Enhance Our Memory, Work, and Social Lives** by Tom Gruber: Advocates for AI that collaborates with humans to augment cognitive functions.
- **How AI Can Bring On a Second Industrial Revolution** by Kevin Kelly: Predicts AI's impact on daily life and key trends to harness its potential.
- **For Future AI, The Prompt Is You** by Rajeev Ronanki: Highlights the role of human imagination in shaping AI and introduces principles for integrating AI into organizations.
- **The Evolution of AI – and How It Will Impact Human Creativity** by Reid Hoffman and Kevin Scott: Discusses AI's evolution and its effect on human creativity and ethical considerations.
- **How We Can Bring AI Personalities to Life** by Mariana Lin: Shares insights into designing AI personalities and advocates for creativity in AI development.
- **How Does Artificial Intelligence Learn?** by Briana Brownell: Explores the methods AI uses to learn and its role in various fields.



# AI Quotes for Teachers



1. "Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks." Stephen Hawking
2. "What all of us have to do is to make sure we are using AI in a way that is for the benefit of humanity, not to the detriment of humanity." Tim Cook
3. "AI will probably most likely lead to the end of the world, but in the meantime, there'll be great companies." Sam Altman
4. "Software is eating the world, but AI is going to eat software." Jensen Huang
5. "AI might be a powerful technology, but things won't get better simply by adding AI." Vivienne Ming
6. "And nowadays, the idea of AI is not really science fiction anymore - it's just science fact." Lisa Joy
7. "AI as a tool in music-making is fine, but it's always going to be the humanity in music that makes people want to listen to it." Jacob Collier
8. "Automation is no longer just a problem for those working in manufacturing. Physical labor was replaced by robots; mental labor is going to be replaced by AI and software." Andrew Yang
9. "We can build a much brighter future where humans are relieved of menial work using AI capabilities." Andrew Ng
10. "If our era is the next Industrial Revolution, as many claim, AI is surely one of its driving forces." Fei-Fei Li
11. "Building advanced AI is like launching a rocket. The first challenge is to maximize acceleration, but once it starts picking up speed, you also need to focus on steering." Jaan Tallinn
12. "I often tell my students not to be misled by the name 'artificial intelligence' - there is nothing artificial about it. AI is made by humans, intended to behave by humans, and, ultimately, to impact humans' lives and human society." Fei-Fei Li

# About the author



Med Kharbach, PhD, is the editor of [www.educatorstechnology.com](http://www.educatorstechnology.com). A seasoned educator with over 13 years of classroom experience, Med earned his doctorate in Educational Studies from Mount Saint Vincent University in Halifax, Canada. His scholarly work includes numerous publications in prestigious peer-reviewed journals, alongside co-authoring several impactful book chapters. Med's latest work is a book titled [ChaGPT for Teachers: Mastering the Skill of Crafting Effective Prompts](#). Currently, Med's research is passionately focused on exploring the integration and implications of AI in education. Med is currently working on a book on the use of AI in academic research.

Connect with Med on:

