



# Education in an **AI** World: Embracing the Future with Purpose and Intention

Thomas Diesch  
&  
Danika Cottingham

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# About us



**DANIKA COTTINGHAM**

(she/her)


Secondary humanities educator for 16 years in a variety of settings, gravitates to leadership roles in professional development and digital learning environments, comfortable in the role of early-adopter (sometimes innovator), and frequent experimenter with digital tools and technologies.



**THOMAS DIESCH**

(he/him)

BC-based high school science educator, curriculum designer, and leader in blended learning and AI-integrated assessment. He's passionate about place-based education, authentic inquiry, and creating learning experiences that connect students to both community and ecosystem.



**WHERE  
DIFFERENT  
WATERS MEET  
AND ARE  
TRANSFORMED**

# Goals today

01

## AI Moment or Movement

- Where are we?
- How did we get here?
- Where are we going?



02

## Redefining Learning

- Diverse Learning
- Equitable Supports
- Lifelong Learning Skills



03

## Practical Strategies

- Educator benefits
- Student Benefits
- Ethical Integration





PAST

PRESENT

FUTURE

PAST

Part 1:

# AI Moment or Movement

# History of AI in Education

**1957**

Linguist Noam Chomsky publishes *Syntactic Structures*, developing a theory of language and describing grammatical rules for parsing and generating natural language sentences.

**1964**

Joseph Weizenbaum created ELIZA, an early natural language processing program that simulates conversation.

**1967**

The first Intelligent Tutoring System (ITS) called "SAINT" (Student-Aligned Instruction) was developed at Stanford University aimed at teaching basic subjects like math and language.

**1985**

Judea Pearl introduced Bayesian networks causal analysis, which laid the foundation for statistical techniques to represent uncertainty and influence content generation in education.

**2011**

IBM's Watson defeats human champions on Jeopardy!, demonstrating NLP advancements, which have since been integrated into educational virtual assistants.

**2008**

The emergence of MOOCs (Massive Open Online Courses) made accessible online learning possible with the help of AI-driven adaptive learning platforms.

**1998**

ALEKS (Assessment and Learning in Knowledge Spaces), an intelligent assessment tool for personalized mathematics education was introduced.

**1997**

IBM's Deep Blue defeated world chess champion Garry Kasparov, showcasing the power of AI in educational games and simulations.

**2013**

Coursera and Udacity introduced online courses with AI-powered assessment and feedback.

**2014**

Introduction of generative adversarial networks (GANs), machine learning system that could create convincing images, audio and videos of real people.

**2015-16**

Carnegie Learning's AI tutoring system, "Mika," achieved similar learning outcomes to human tutors. Chatbots like Duolingo's AI-powered virtual tutor and Microsoft's Xiaoice were introduced.

**2022-23**

Researchers from Runway Research, Stability AI & CompVis LMU released Stable Diffusion, an AI system that can generate images from texts like Dall-E. OpenAI released ChatGPT to the public. Many other generative AI tools were also released.



## Rapid and constant state of flux

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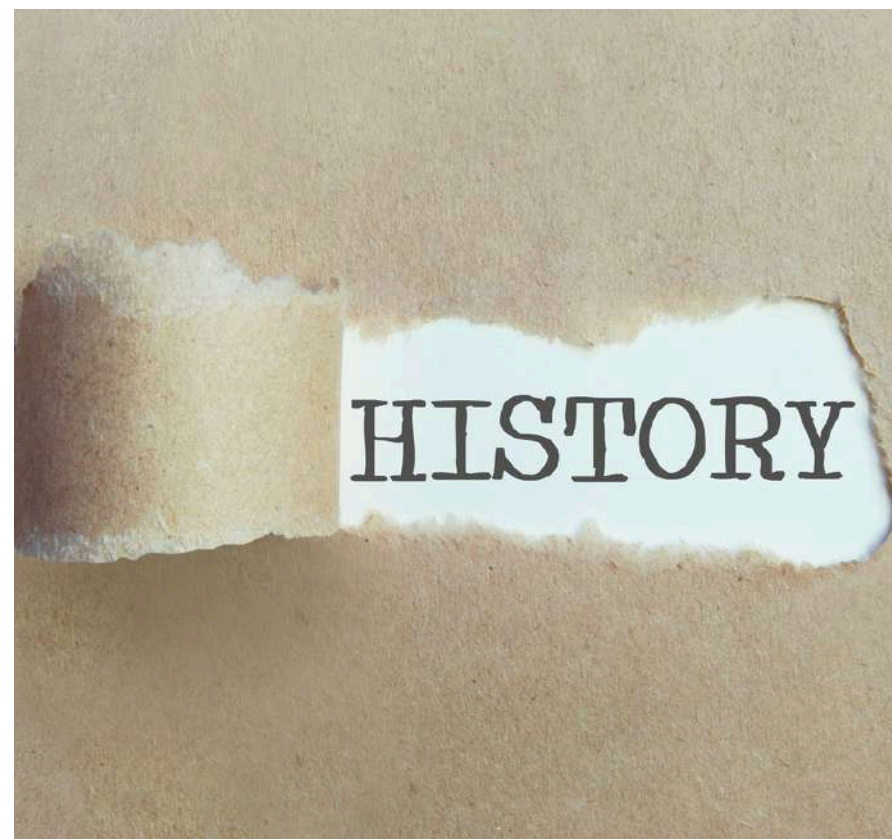
Accelerated change, reshaped roles, and challenges to redefine what it means to teach and learn



## Where we came from

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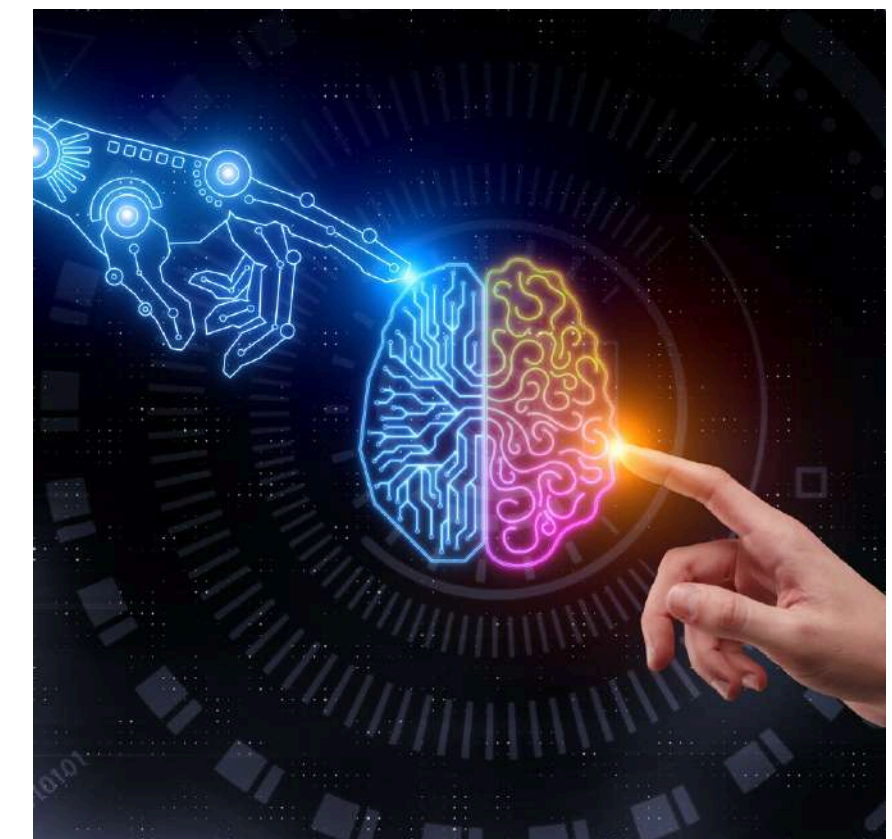
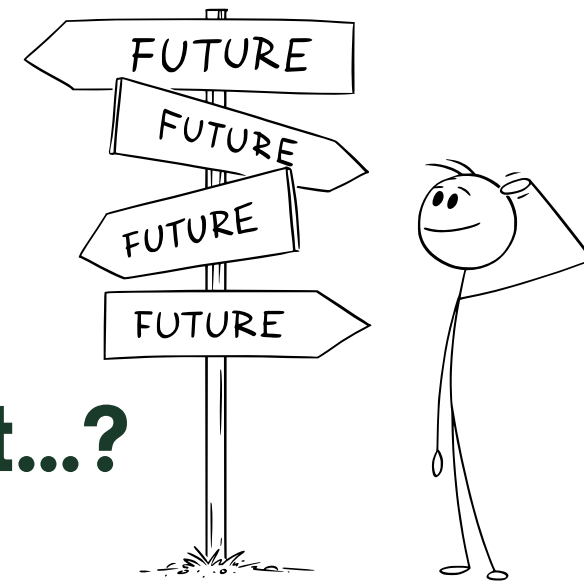
Education once centered on human expertise, fixed knowledge, and predictable pathways.

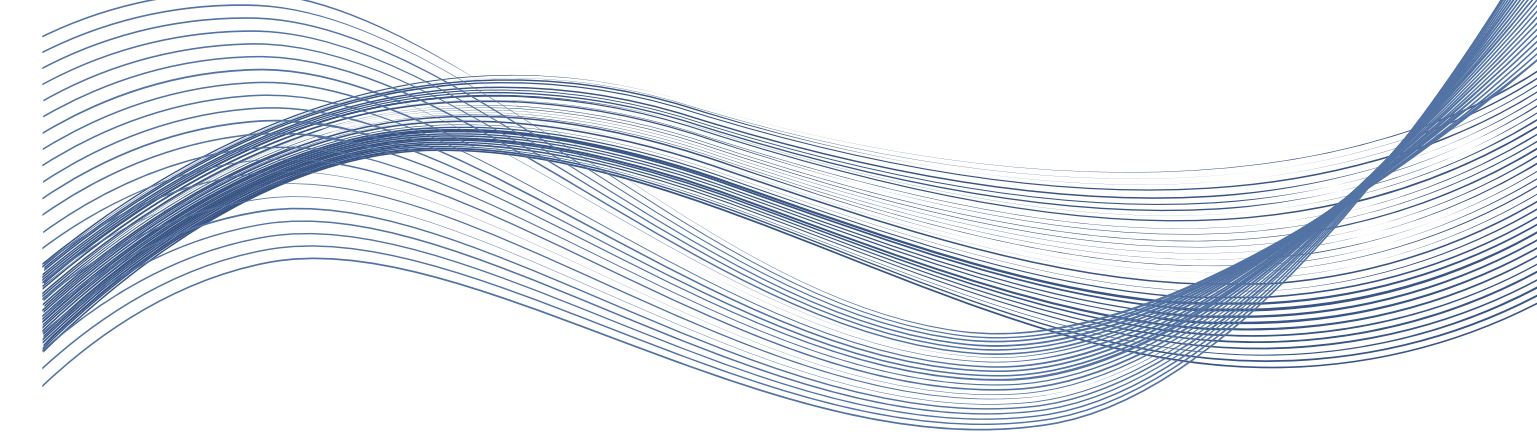


## What is next...?

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Is this just another educational trend—an AI moment—or a fundamental shift—a true AI movement?





# Preparing our Students...

**\$391 billion+**

Approximate Global A.I. market valued

**83%**

2025 companies claiming that A.I. is a top priority when hiring

**97 million people**

...will be necessary to fill the work demands of the surging industry by 2025.







## Rapid and constant state of flux

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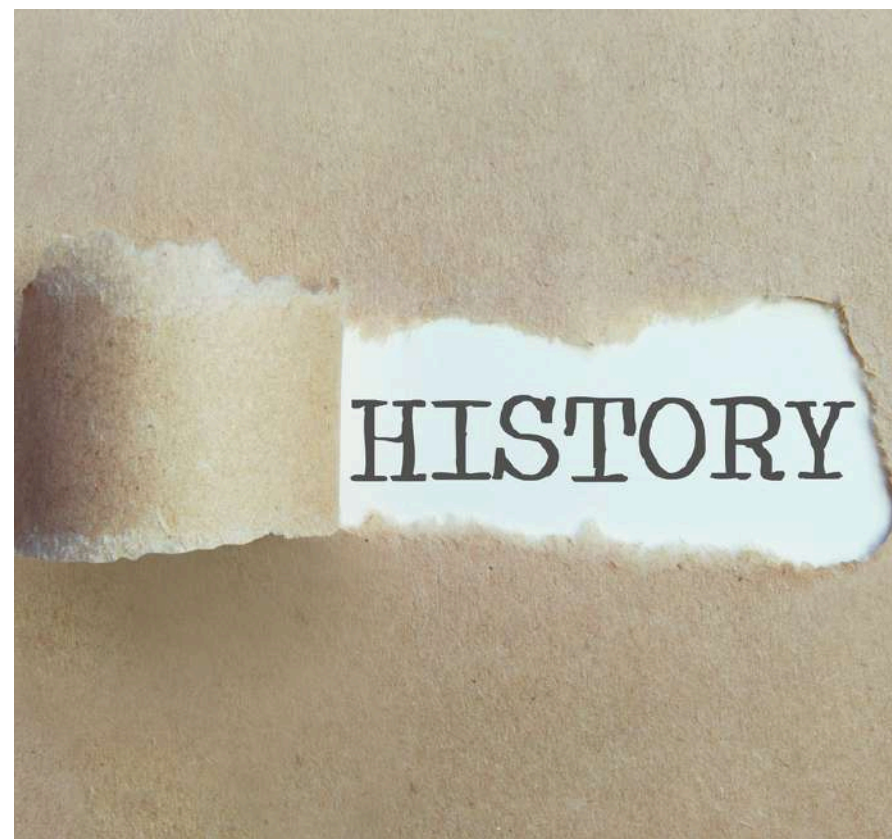
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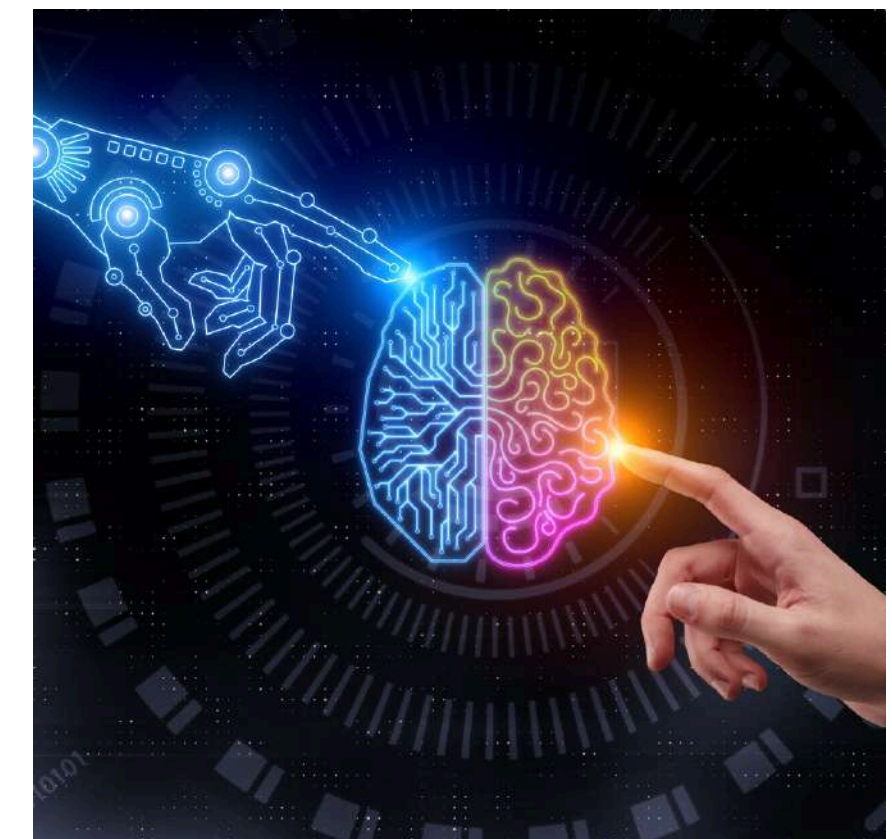
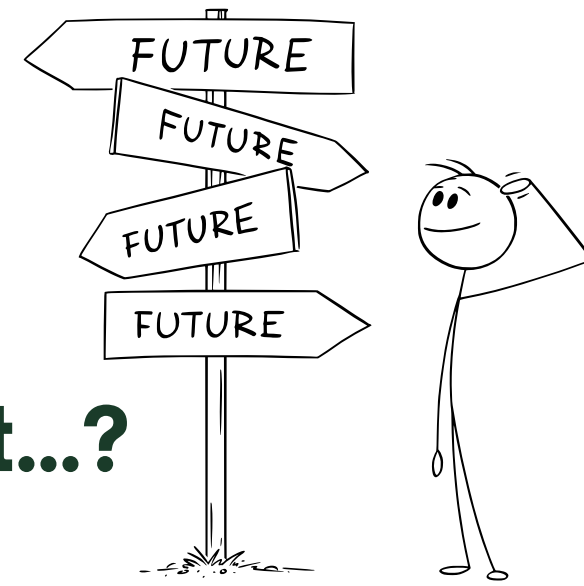
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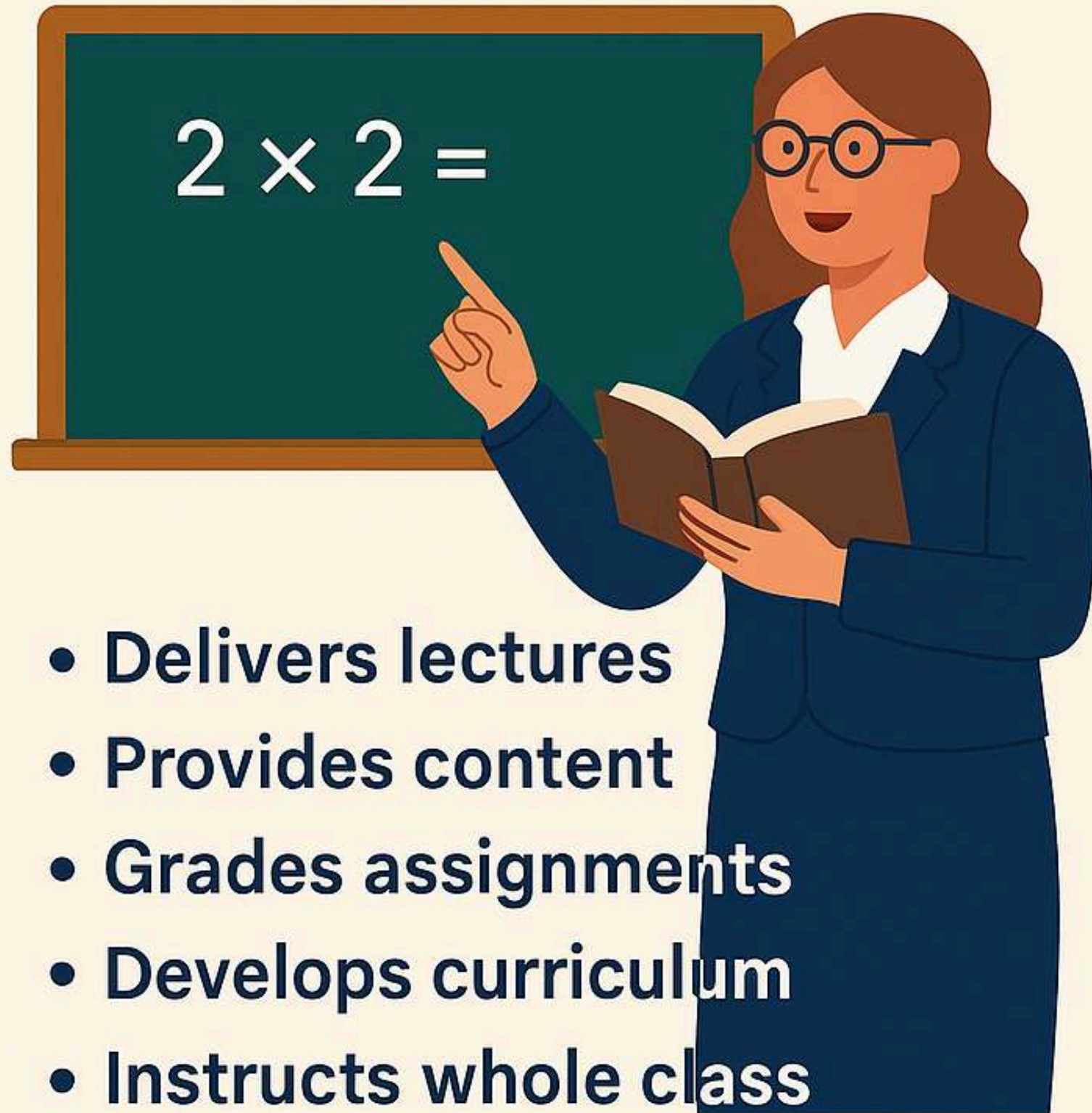
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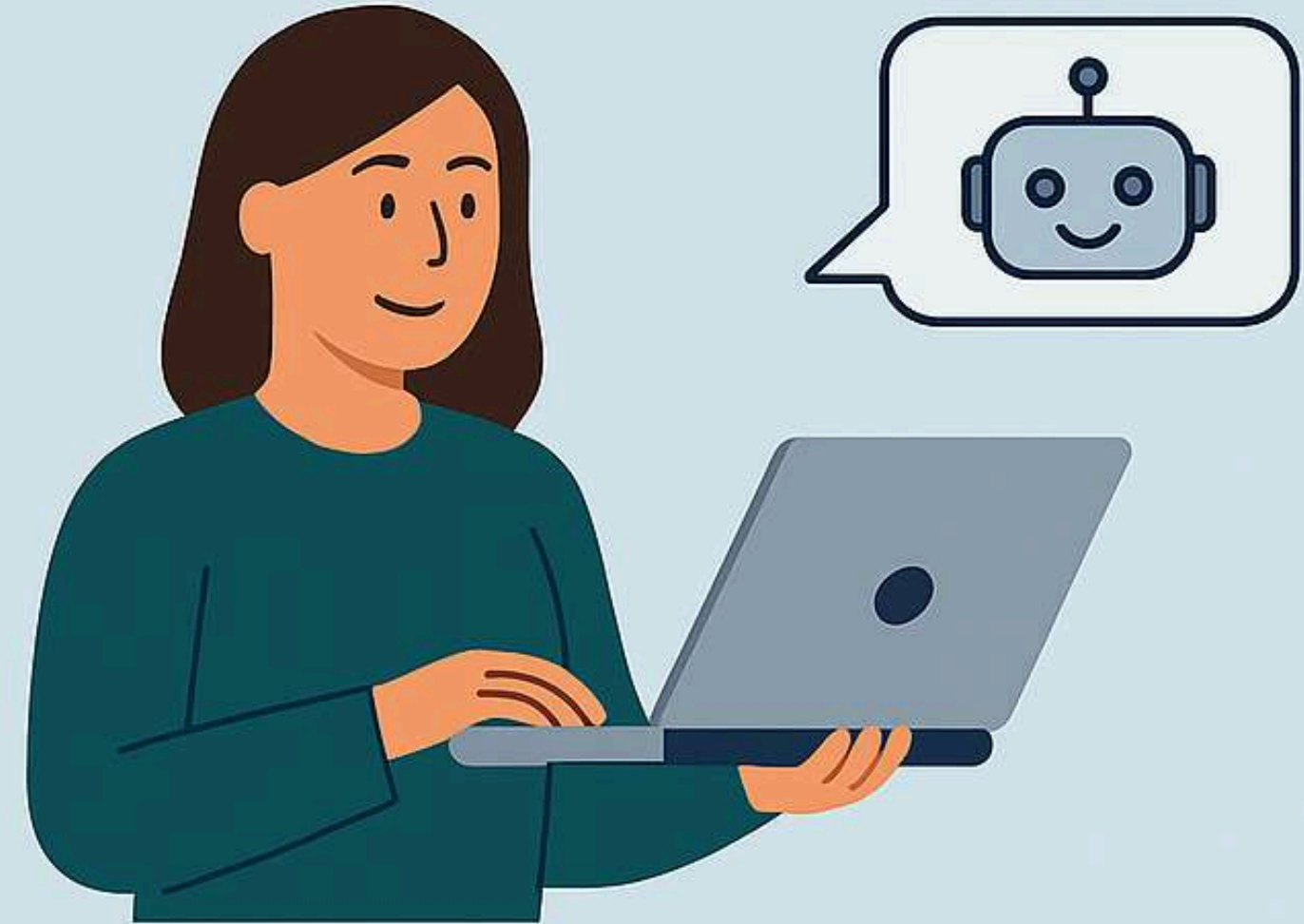


# HISTORICAL TEACHER



- Delivers lectures
- Provides content
- Grades assignments
- Develops curriculum
- Instructs whole class

# AI-ENHANCED EDUCATOR



- Facilitates learning
- Guides students
- Provides feedback
- Supportlizes instruction



## Rapid and constant state of flux

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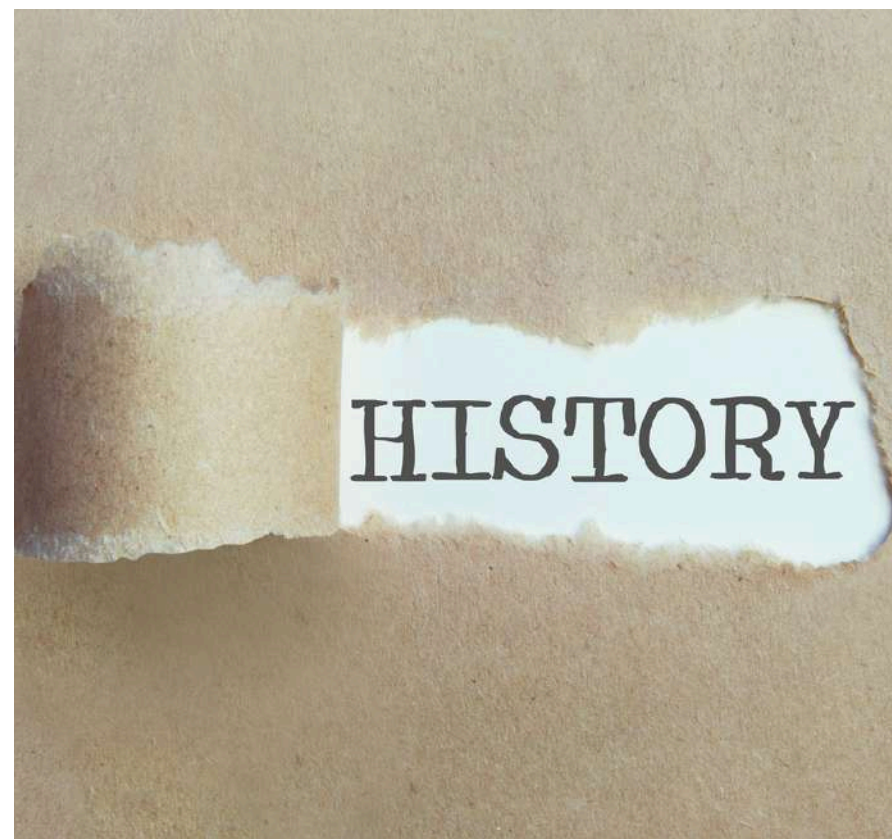
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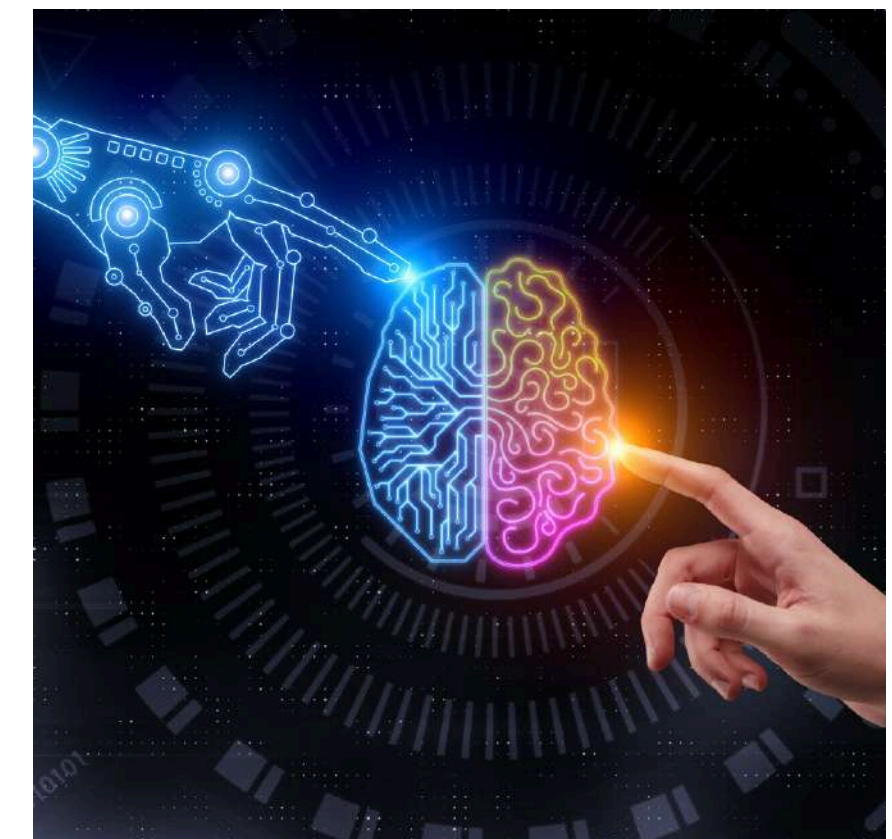
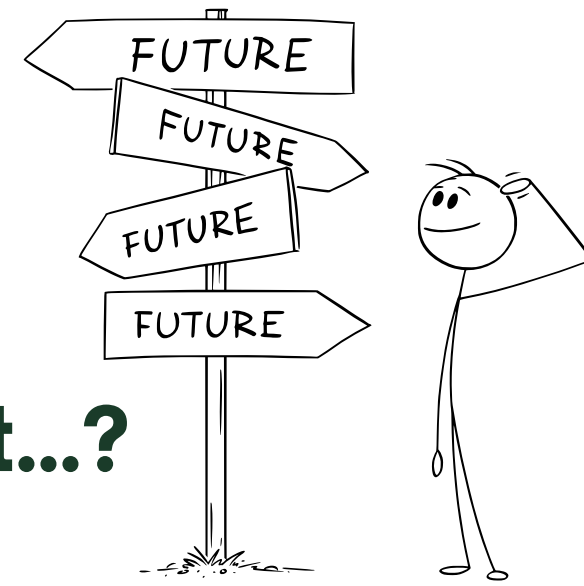
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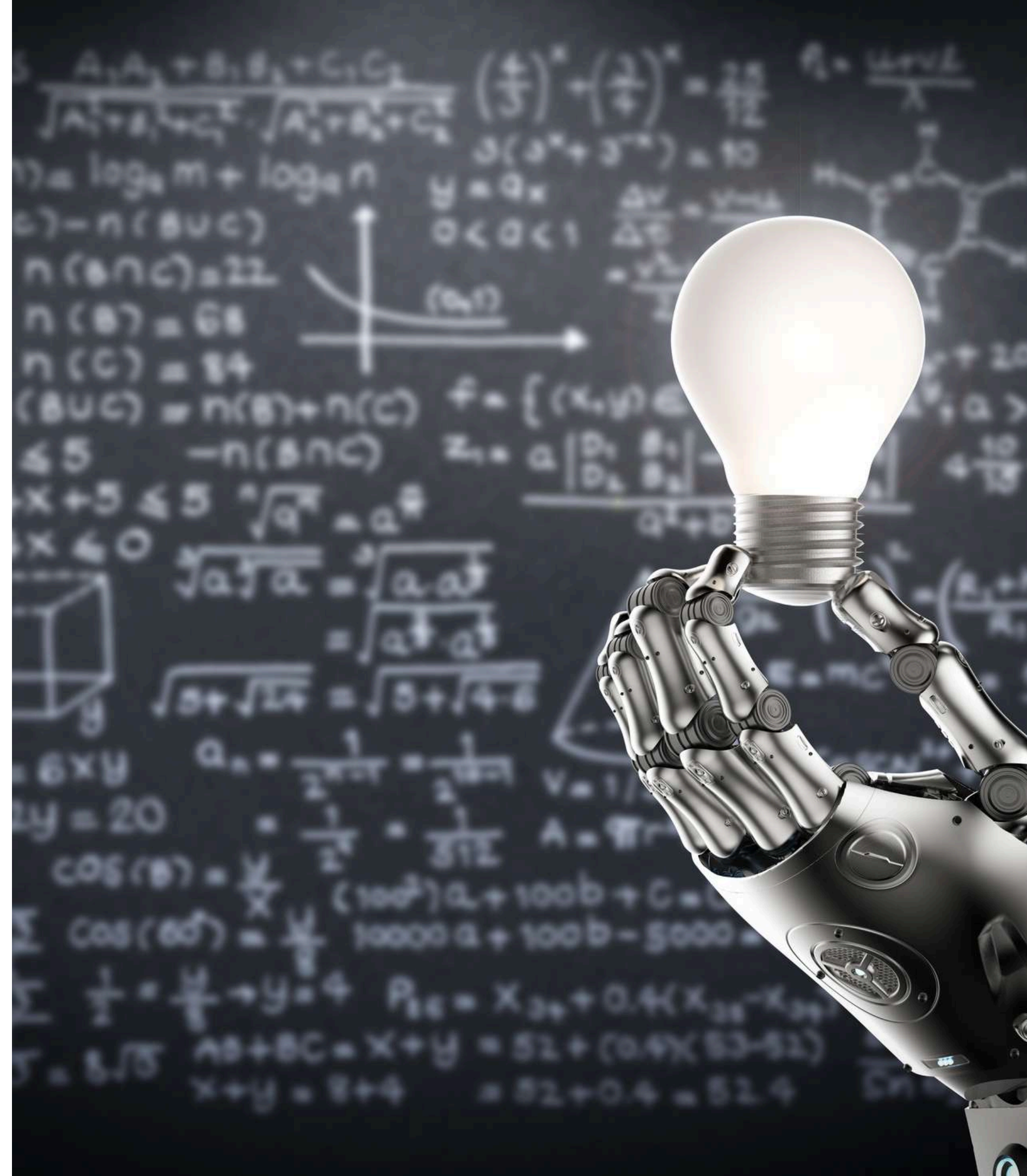
Part 2:

# Redefining Learning

# Redefining Learning

## AI for Diverse Needs

- Personalized & differentiated learning for diverse learners.
- Equitable supports (e.g., language learners, neurodiverse students, adult learners).
- AI-driven tools supporting inclusion (adaptive technologies, intelligent tutoring, translation apps, etc.).



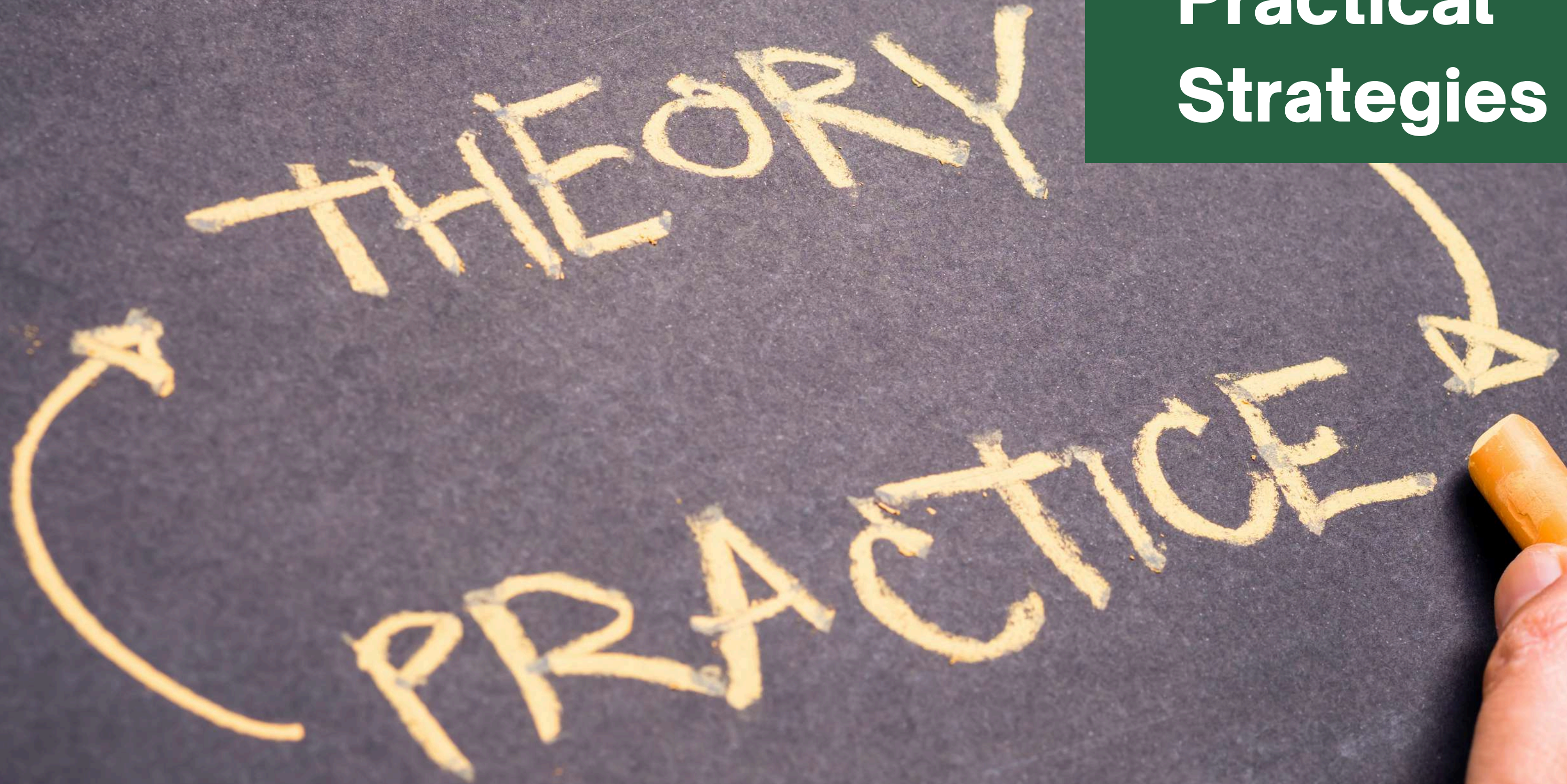
# AI for Lifelong Learning Skills

- Skills for lifelong learning in an AI-driven era:
  - Critical thinking, adaptability, digital literacy, creativity, collaboration.
- AI as a catalyst for lifelong learning.



Part 3:

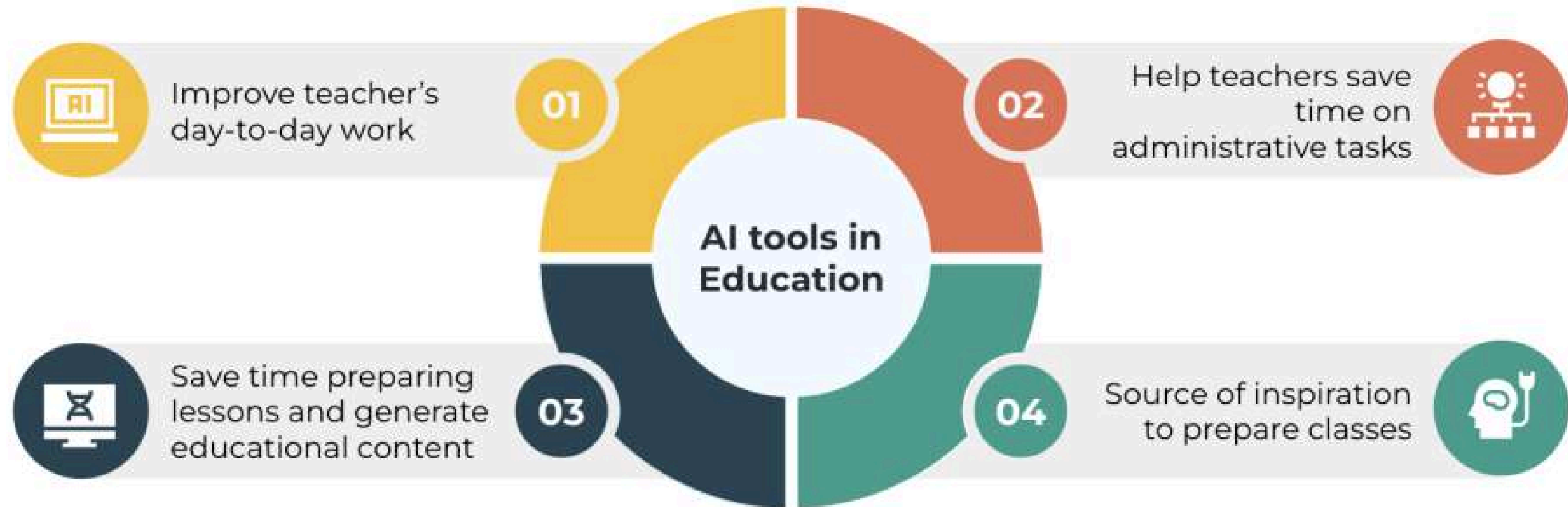
# Practical Strategies





# Main benefits of AI tools in Education

AI tools are helping teachers to prepare classes

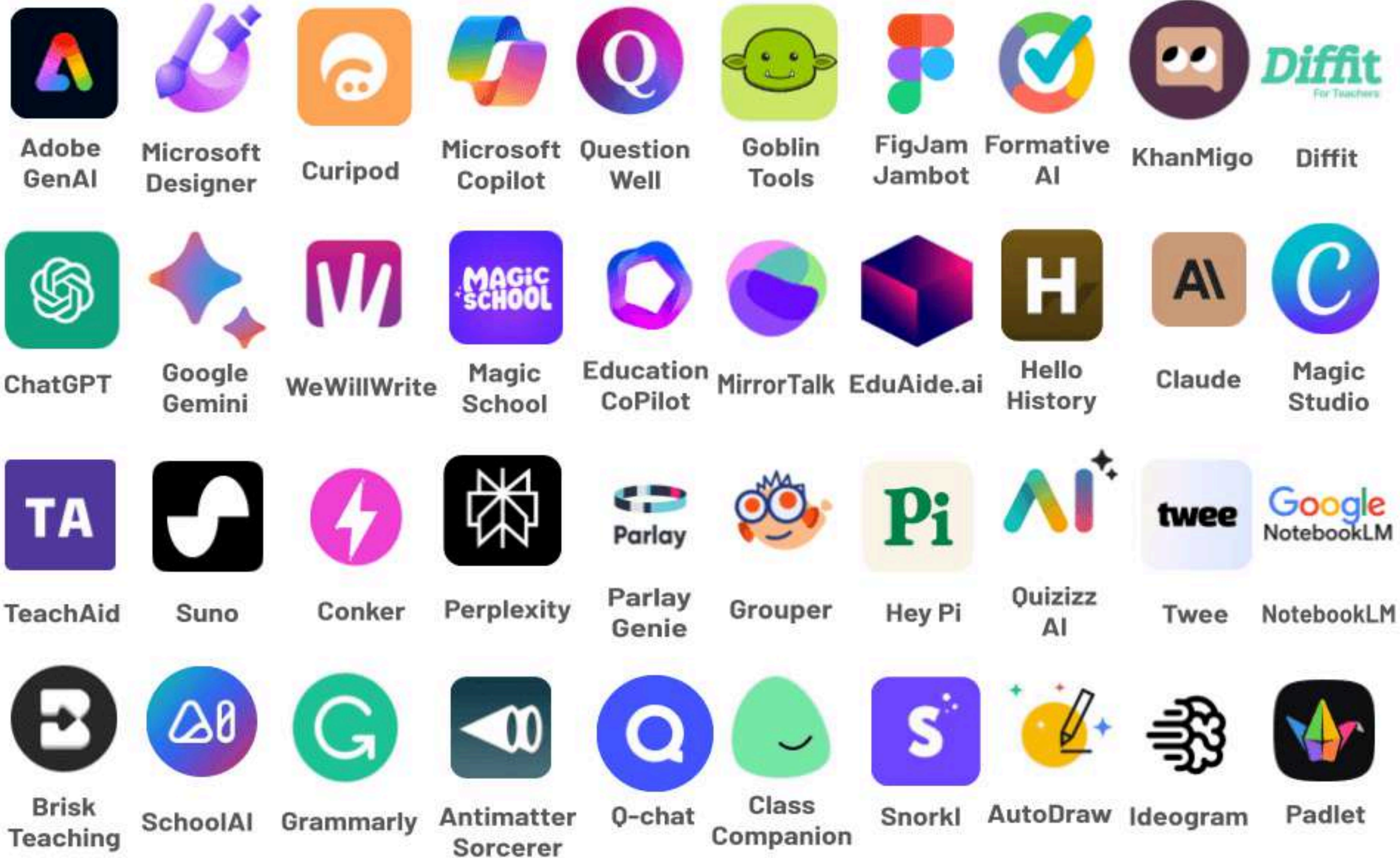


Source: **Slidesgo** AI in Education Survey

# 40 AI tools for teachers



**DITCH THAT  
TEXTBOOK**



For the full list of tools and descriptions visit [DitchThatTextbook.com/ai-tools](https://DitchThatTextbook.com/ai-tools)

# ABElevate

*An empathetic, understanding, and knowledgeable AI designed to elevate teaching practice in Adult Basic Education in British Columbia. ABElevate supports educators with thoughtful guidance, clear insights, and reliable resources aligned to BC's education policies.*



**[bit.ly/abelevate](https://bit.ly/abelevate)**



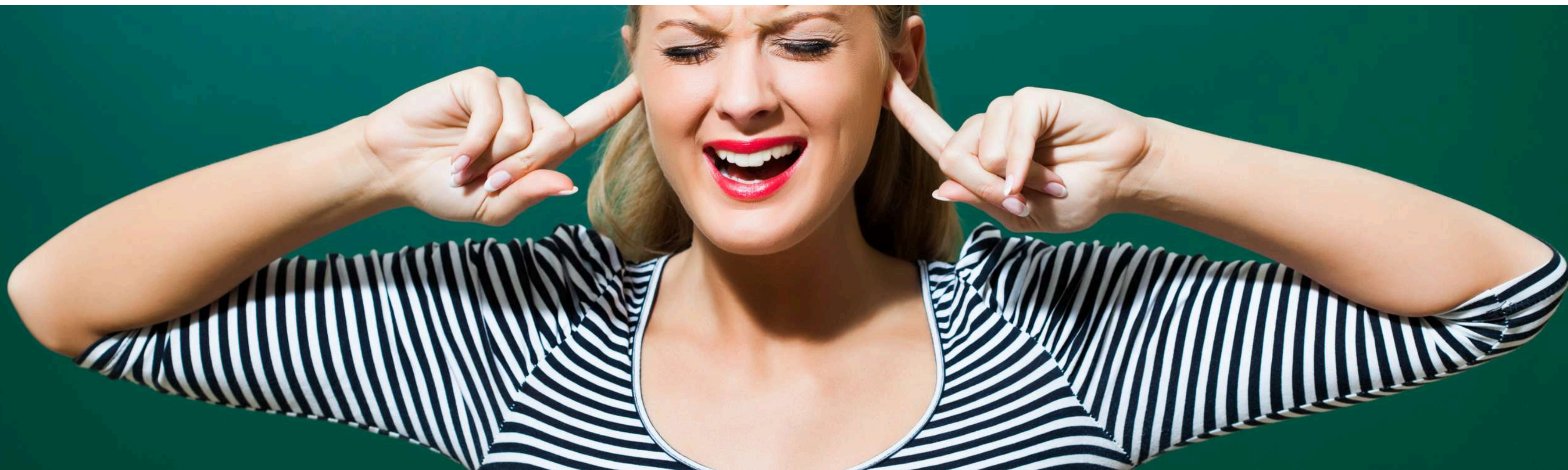


**[bit.ly/ABESidekick](https://bit.ly/ABESidekick)**



# I don't wanna!

It's okay to feel ambivalence, grief, even resistance. We're not here to overcome those feelings - we're here to process them into clarity, curiosity, and co-responsibility.





BREAK

THE

BIAS



Find me on  
LinkedIn 

**Many Thanks!**

