

# The Future of AI in Education

with







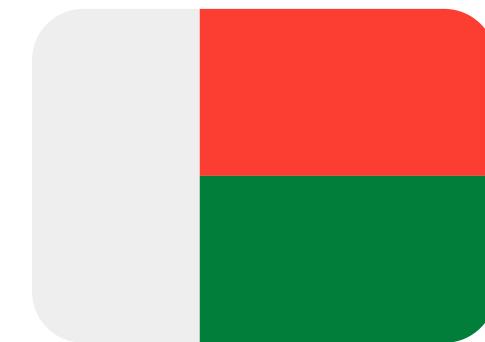
Grade 1 Teacher



Curriculum Coordinator



Curriculum Coordinator



Curriculum Coordinator



Grade 5

# Cindy Blackburn



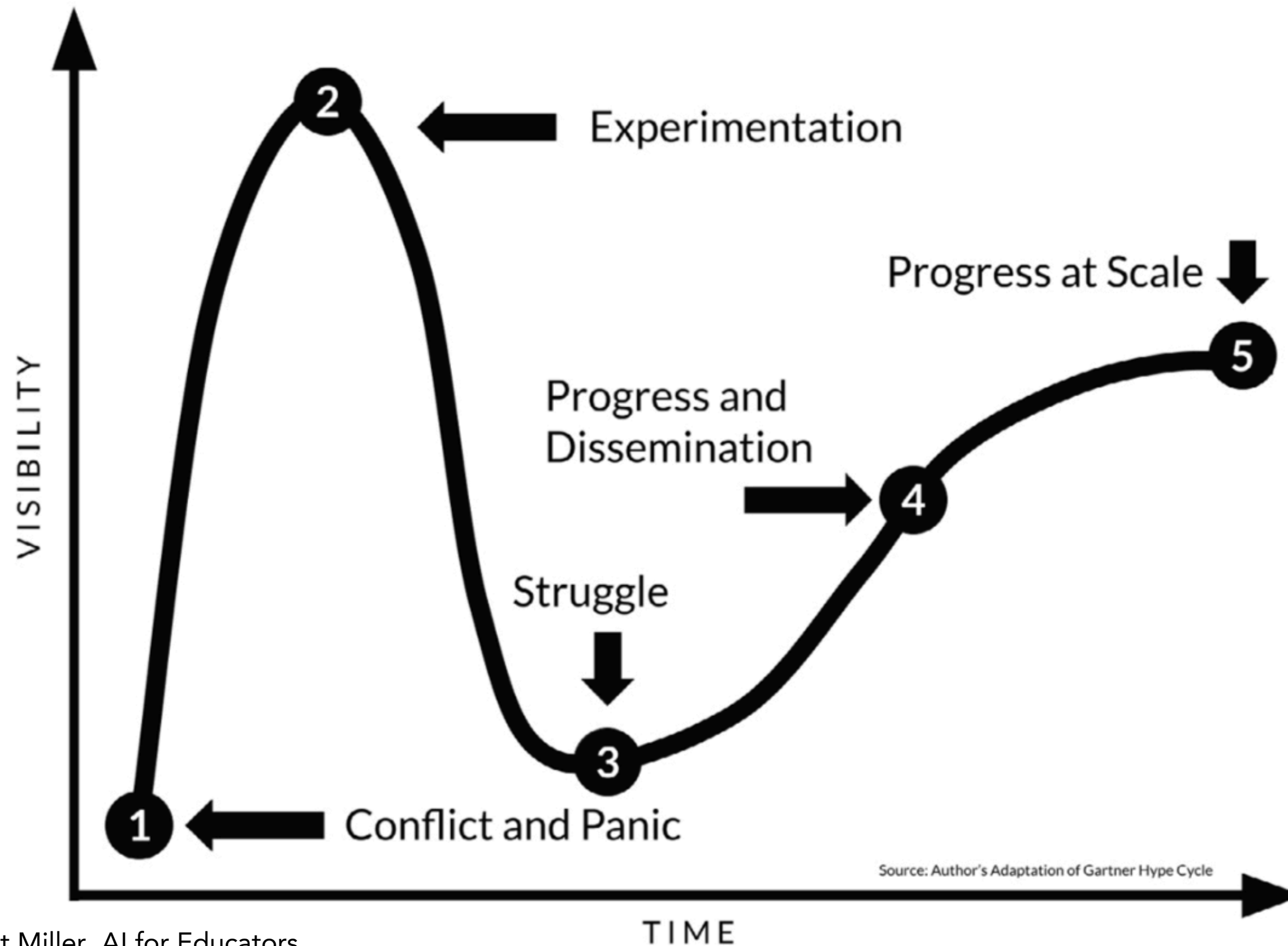
Director of Learning  
& Engagement



International  
Education Consultant



# Educator & AI Hype Cycle

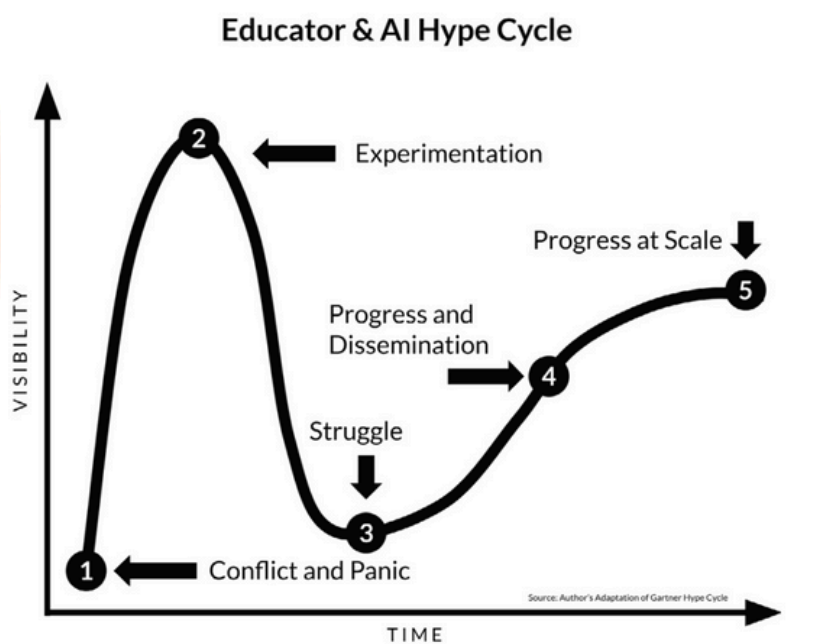


**where are you from 1-5**





2023= the year of panic





**2024= the year of integration**





# 2024= the year of integration


policy → norms/stances

"By making policies accessible and engaging the entire learning community—students, parents, and educators—schools have fostered a shared understanding of AI's role in education."




(NAIS, 2024)

## AI at Wesleyan

The student may **ONLY** use artificial intelligence (AI) on an assignment or activity with teacher permission. Citation is required. Unauthorized use of AI assistance on an assignment or activity is a violation of the Wesleyan Honor Code. The student may utilize AI to study class material independent of a specific assignment or activity without citation.



CITING AI

Never Allowed	 The student uses AI to complete the entire assignment or activity with no original thought. Honor Code Violation
	 The student passes off work from AI sources as his/her own original product. Honor Code Violation
Allowed at the Teacher's Discretion	 <b>Transformation</b> The student uses AI to interact with real-world scenarios.
	 <b>Evaluation</b> The student analyzes or debates with AI to grow his/her understanding.
	 <b>Collaboration</b> The student collaborates with AI to develop a product.
	 <b>Enhancement</b> The student consults AI to improve an original product.
	 <b>Generation</b> The student uses AI to build background, check answers, or research.
Always Allowed	 The student utilizes AI to study class material independent of a specific assignment or activity without citation.

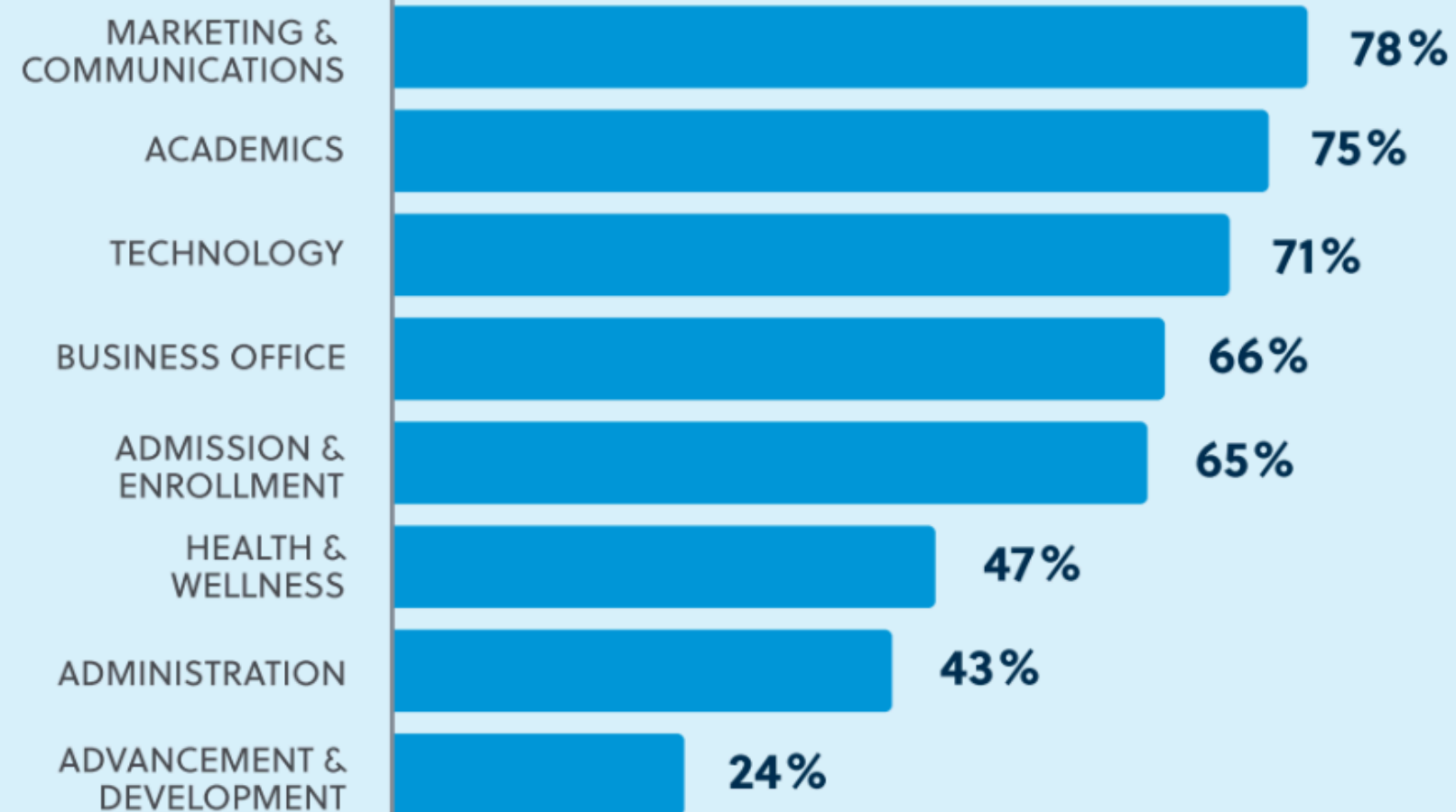




# Artificial Intelligence in K-12 Private and Independent Schools Report

Exploring the impact of AI in education

FEATURING INSIGHTS AND DATA FROM 700+ INDEPENDENT  
SCHOOL LEADERS AND EDUCATORS ACROSS THE GLOBE



**"A survey revealed that 59% of K-12 private and independent schools are actively exploring AI applications within their educational frameworks."**

**2024= the year of integration**

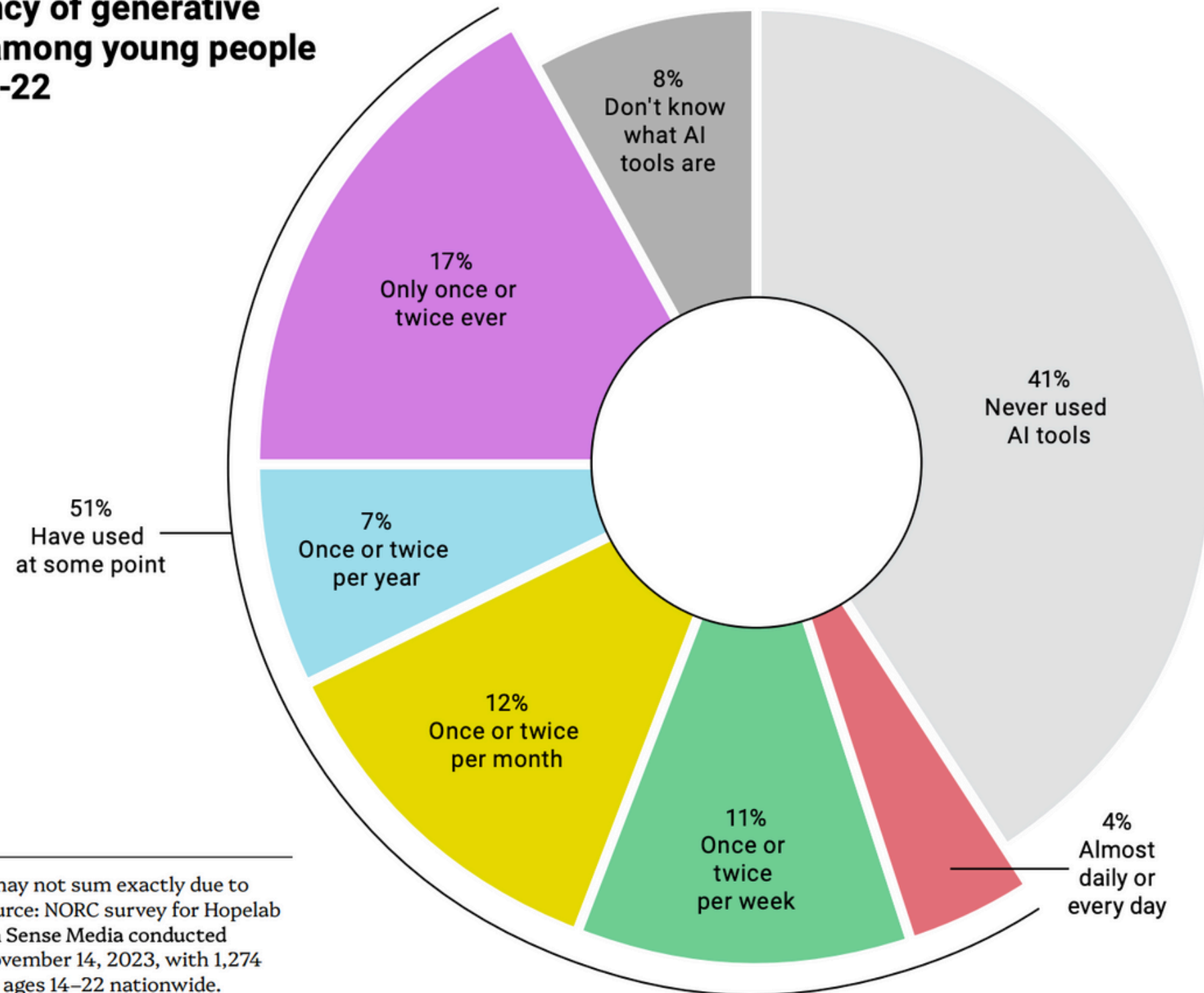
**(ATLIS, 2024)**



# 2024= the year of integration

student use has increased

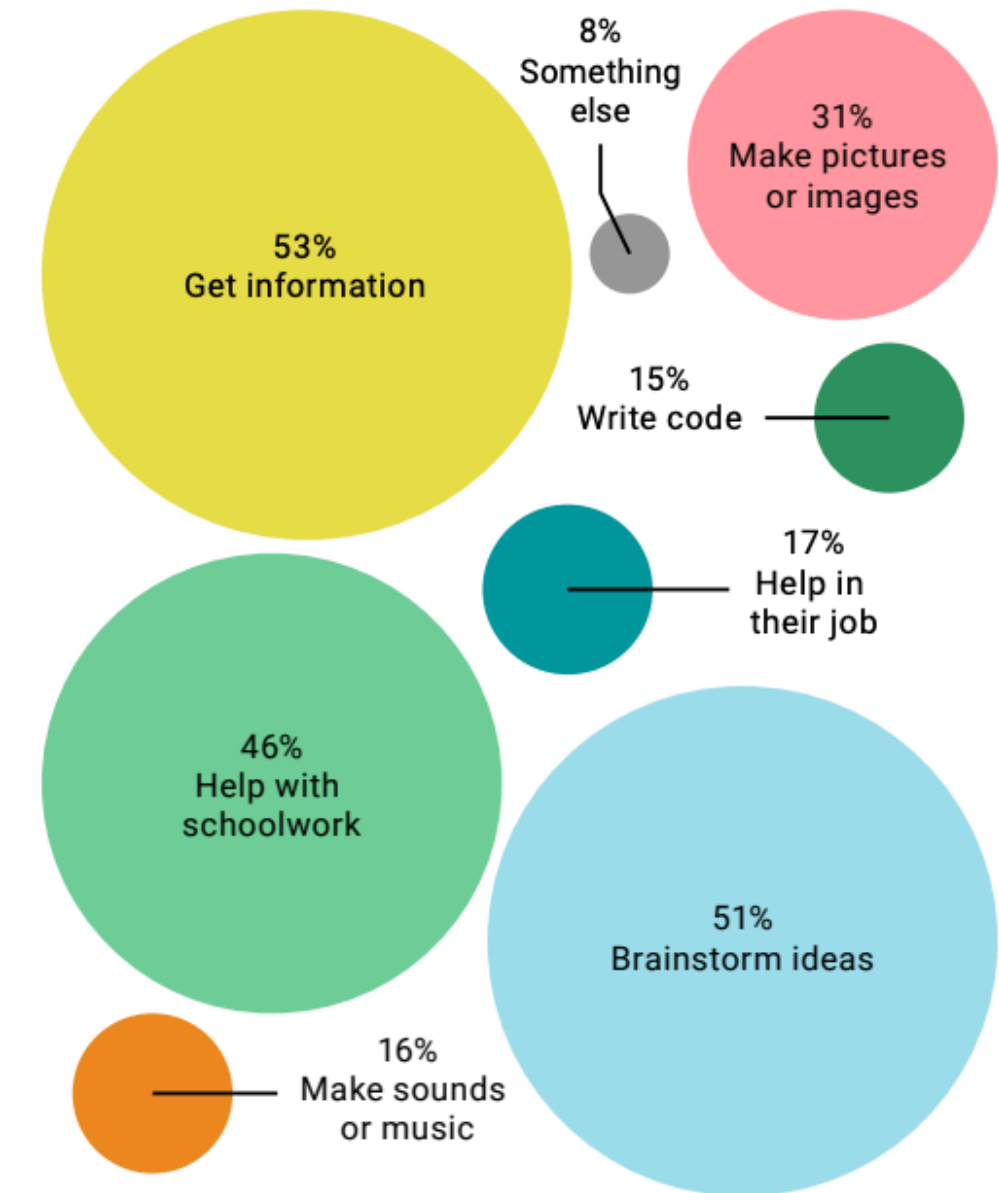
## Frequency of generative AI use among young people ages 14-22



Note: Items may not sum exactly due to rounding. Source: NORC survey for Hopelab and Common Sense Media conducted October 4-November 14, 2023, with 1,274 young people ages 14-22 nationwide.

## Finding information and inspiration are key uses

% of generative AI users ages 14-22 who have used it for the following reasons



Source: NORC survey for Hopelab and Common Sense Media conducted October 4-November 14, 2023, with 632 young people ages 14-22 nationwide who reported using generative AI.



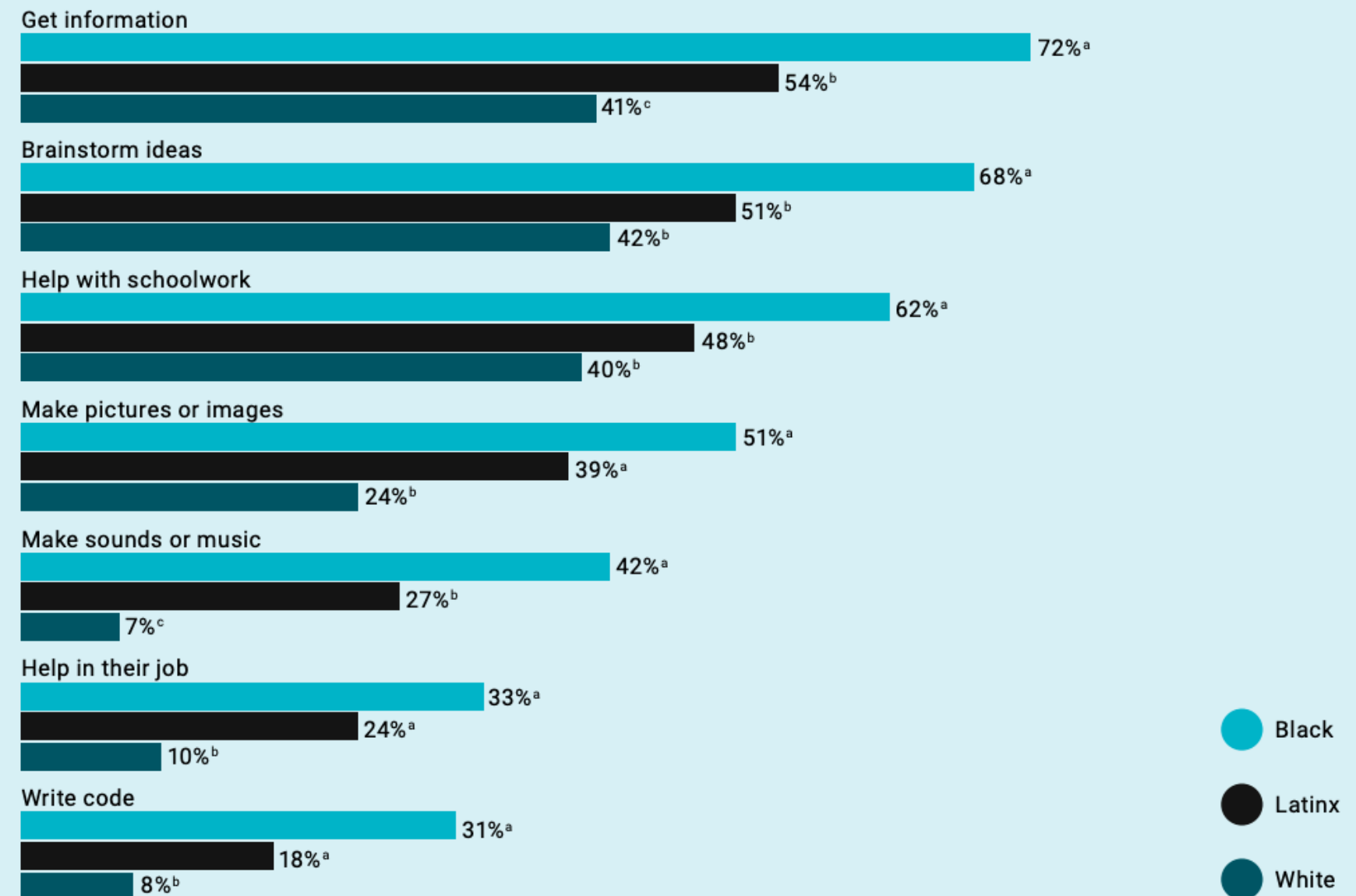
2024= the year of integration

but even more exciting...  
student use has increased **equity**

KEY FINDING 2:

The most commonly reported uses of generative AI are for **getting information** (53%) and **brainstorming** (51%). Among those who used generative AI, Black and Latinx young people are significantly more likely to use it for most activities.

% of generative AI users who have used it for the following reasons by race/ethnicity



Note: Items may not sum exactly due to rounding. Items with different superscripts differ significantly across bars within each category ( $p < .05$ ). Source: NORC survey for Hopelab and Common Sense Media conducted October 4–November 14, 2023. Responses represent 573 young people who reported using generative AI, including 158 Black young people, 190 Latinx young people, and 225 white young people ages 14–22 nationwide.



A close-up photograph of a person's hand holding a small, white, disassembled robotic arm component. The component has a cylindrical body and a small motor at the end. The background is a plain, light-colored surface.

## **AI literacy**

**"a set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace."**

**Long and Magerko, (2020)**

**every teacher is a literacy teacher**



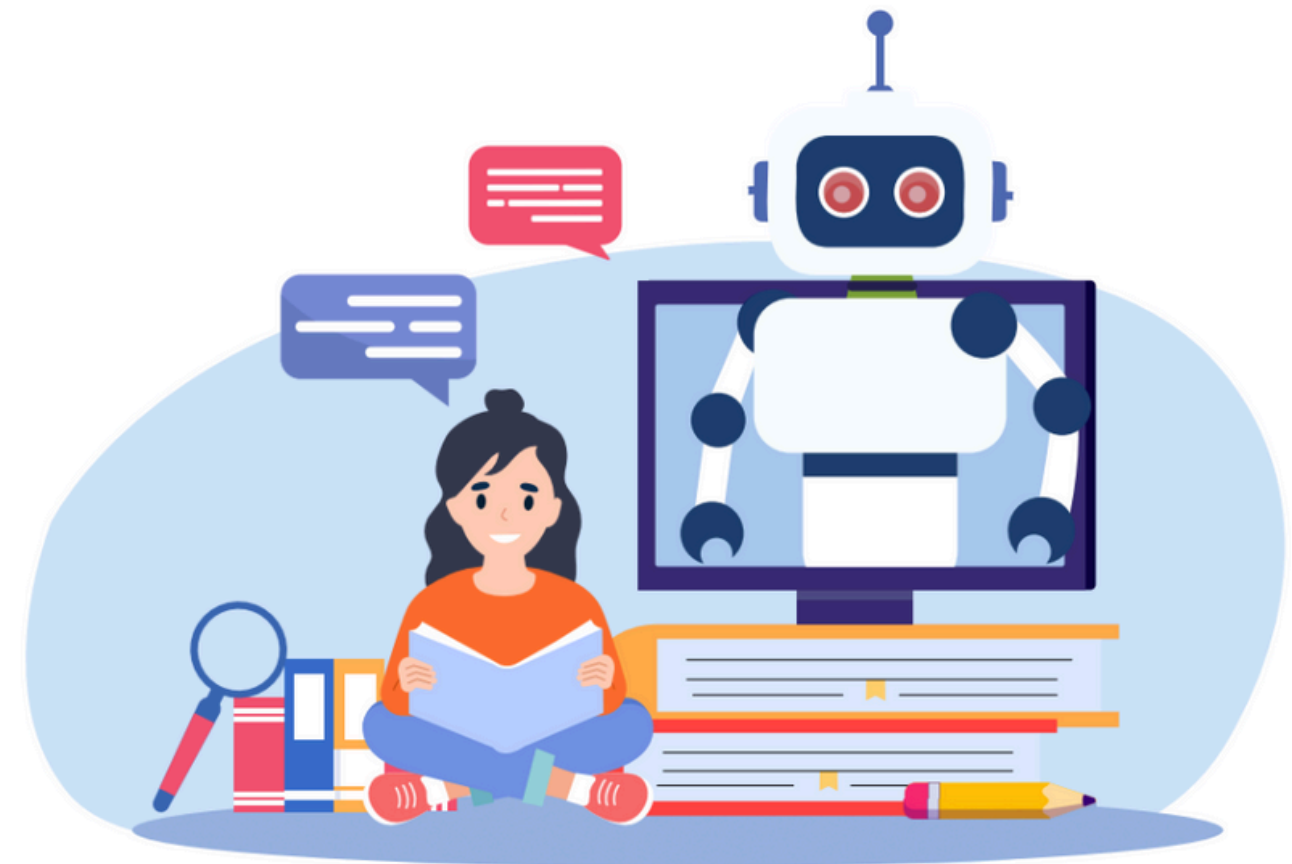
# 2024= the year of integration

into curriculum and learning

By 2022,  
only  
**15 countries**  
had included AI  
learning objectives  
in their national  
curricula

"By mid-2024, 60% of districts had introduced professional development programs for AI literacy."  
(RAND Corporation, 2024)

## AI competency framework for students



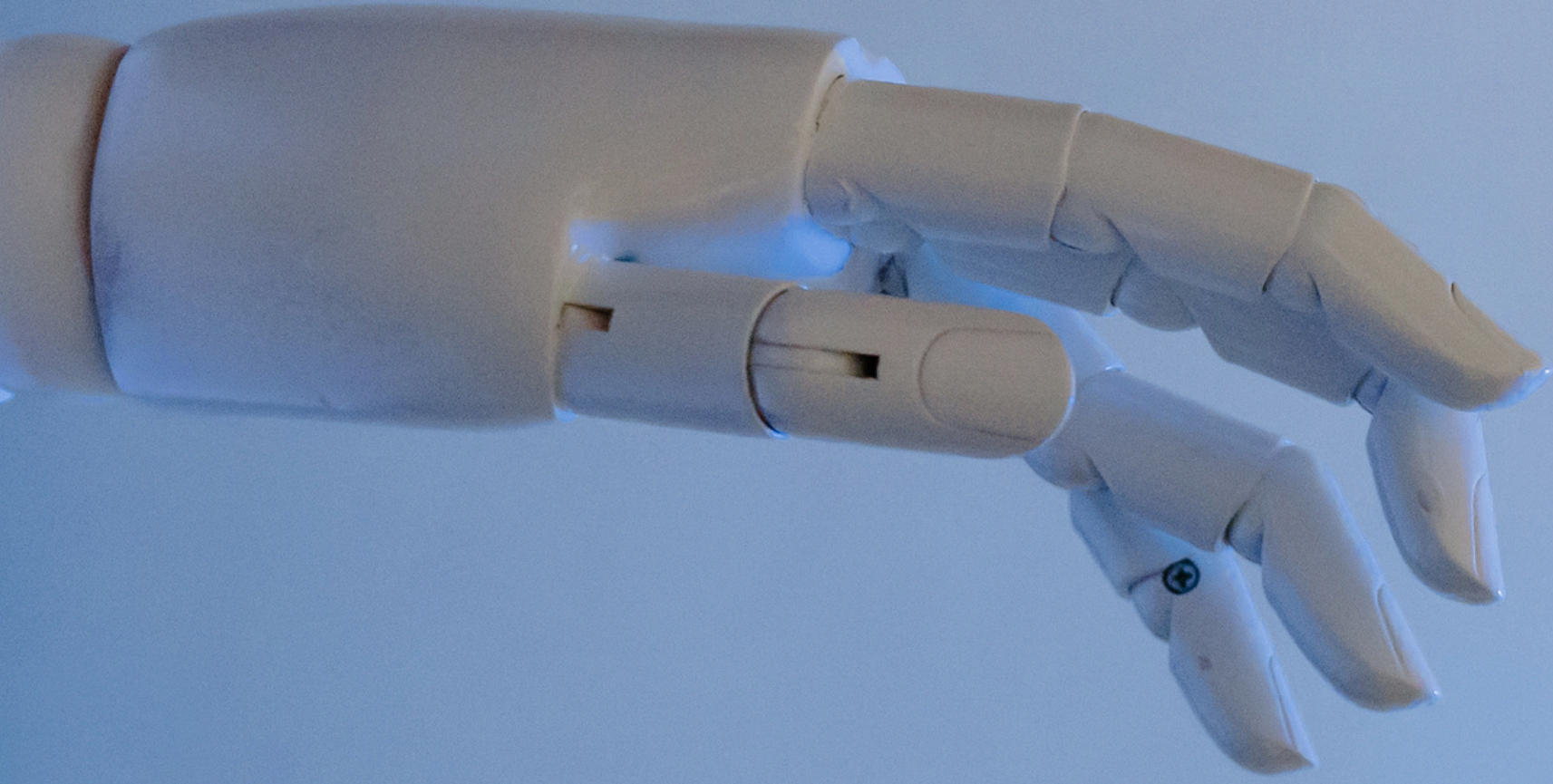


## 2024= the year of integration

**Table 1. AI competency framework for students**

Competency aspects	Progression levels		
	Understand	Apply	Create
• Human-centred mindset	• Human agency	• Human accountability	• Citizenship in the era of AI
• Ethics of AI	• Embodied ethics	• Safe and responsible use	• Ethics by design
• AI techniques and applications	• AI foundations	• Application skills	• Creating AI tools
• AI system design	• Problem scoping	• Architecture design	• Iteration and feedback loops





**our approach has  
gotten better, but  
so has the AI**





"the free version of ChatGPT 3.5 had a hallucinatory rate of 80% on medical citations," which "GPT-4 dropped to 20%" (Mollick, 2024)



Tell me about the current war in Ukraine.



I'm afraid I don't have real-time information. My training only includes knowledge up until January 2022, and I can't provide updates on current events. For the latest information on the situation in Ukraine, I recommend checking reliable news sources or official statements from relevant authorities. If there's anything else I can help you with or discuss, feel free to let me know!



Midjourney 2022 vs. 2023 for prompt, " black and white picture of an otter wearing a hat." from Cointelligence



## 8 Strategies for ChatGPT-Proofing Assessments



**01**

Get  
specific



**02**

Make it  
multimodal



**03**

Make it  
personal



**04**

Focus on  
the process



**05**

Reduce  
cognitive load



**06**

Focus on  
curation



**07**

Make it live!



**08**

Work with it

**published October 2023**





**Make it multimodal**





## Video

### Evolution by Natural Selection:

#### An explanation for biodiversity?

In your video project, **explore a mix of scientific evidence** like fossils, genetics, and body structures to dive into evolution and biodiversity. **Share your thoughts on how reliable this evidence is**, and explain **how it supports or challenges the idea of evolution**. Link these ideas together to show their connection to biodiversity, and **wrap up your video with a clear, creative conclusion drawn from your findings**.



**remember, you are using the worst version of AI you will ever use.**

**HUSTLE** Create AI-Generated Presentations with Canva

Share

Canva

AI GENERATED PRESENTATIONS

Watch on YouTube



**2025... the year of agents**





# what is an AI agent?

**ai agent**

=

**ai model + tool + memory**



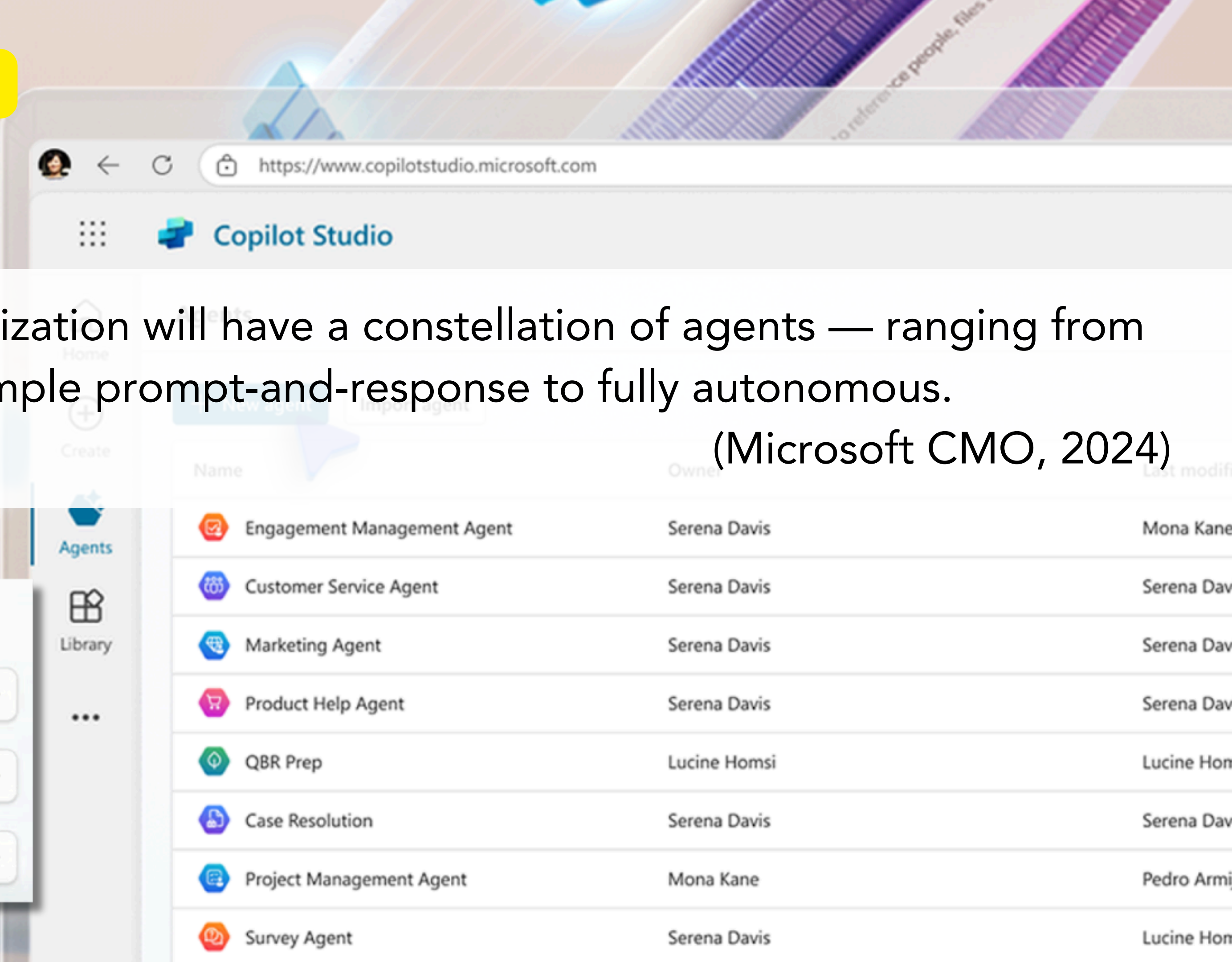
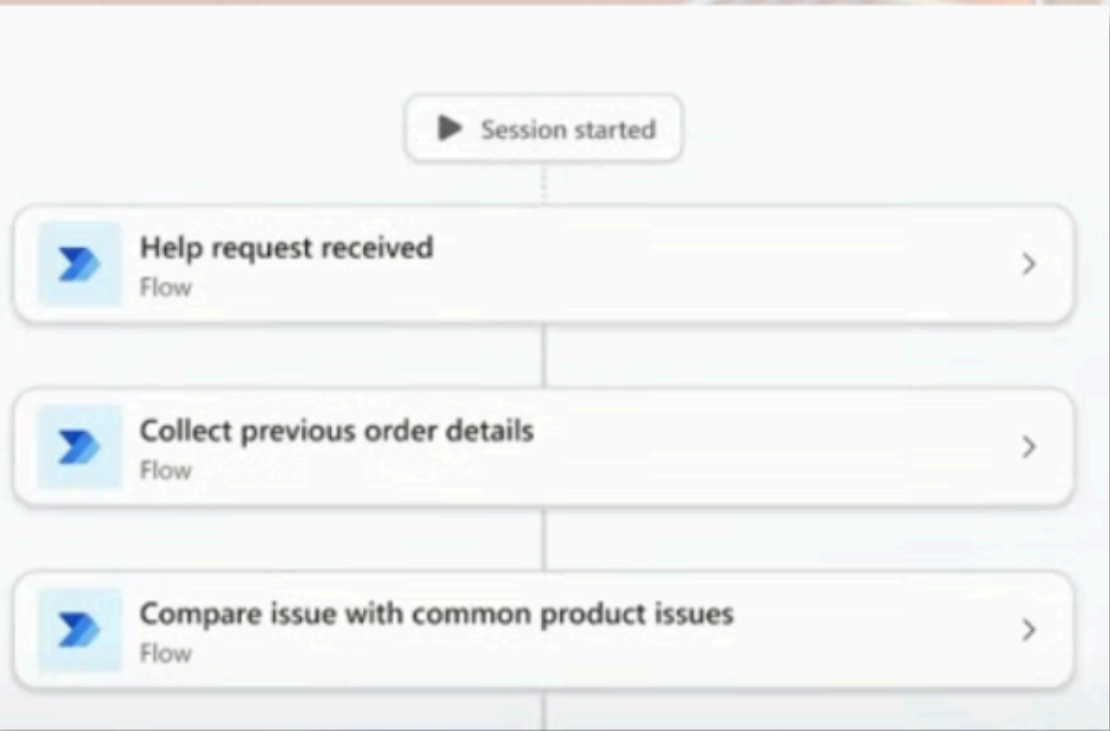


# where it's going...

(short term)

Every organization will have a constellation of agents — ranging from simple prompt-and-response to fully autonomous.

(Microsoft CMO, 2024)





# where it's going...

(short term)

“When a model “stops to think,” it isn’t just generating learned patterns or spitting out predictions based on past data. It’s generating a range of possibilities, considering potential outcomes and making a decision based on reasoning. ”

Model ⓘ

**GPT-4o**  
Great for most tasks ✓

**GPT-4o with canvas** BETA  
Collaborate on writing and code

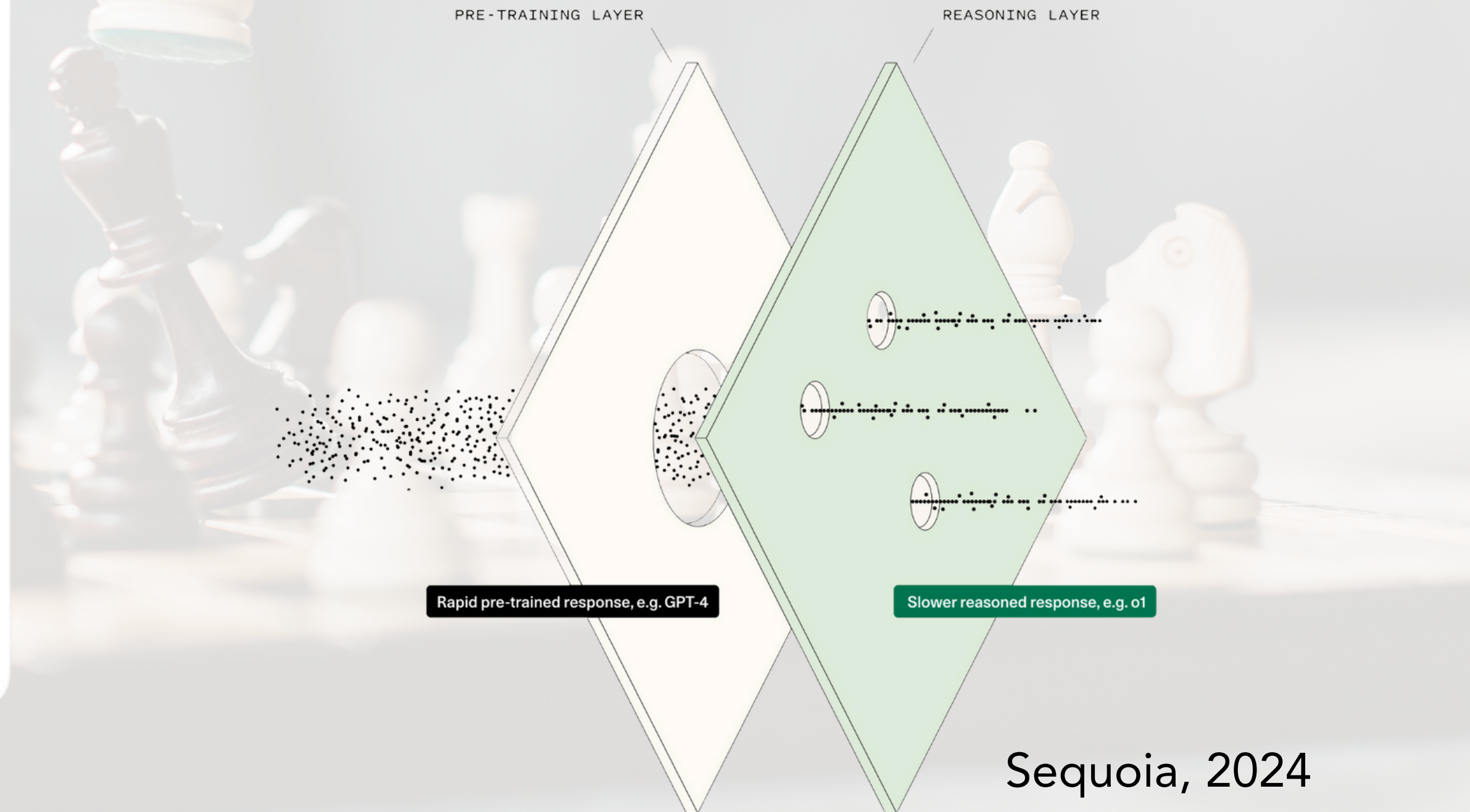
**o1-preview**  
Uses advanced reasoning

**o1-mini**  
Faster at reasoning

More models >

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🔄 Temporary chat 🔌

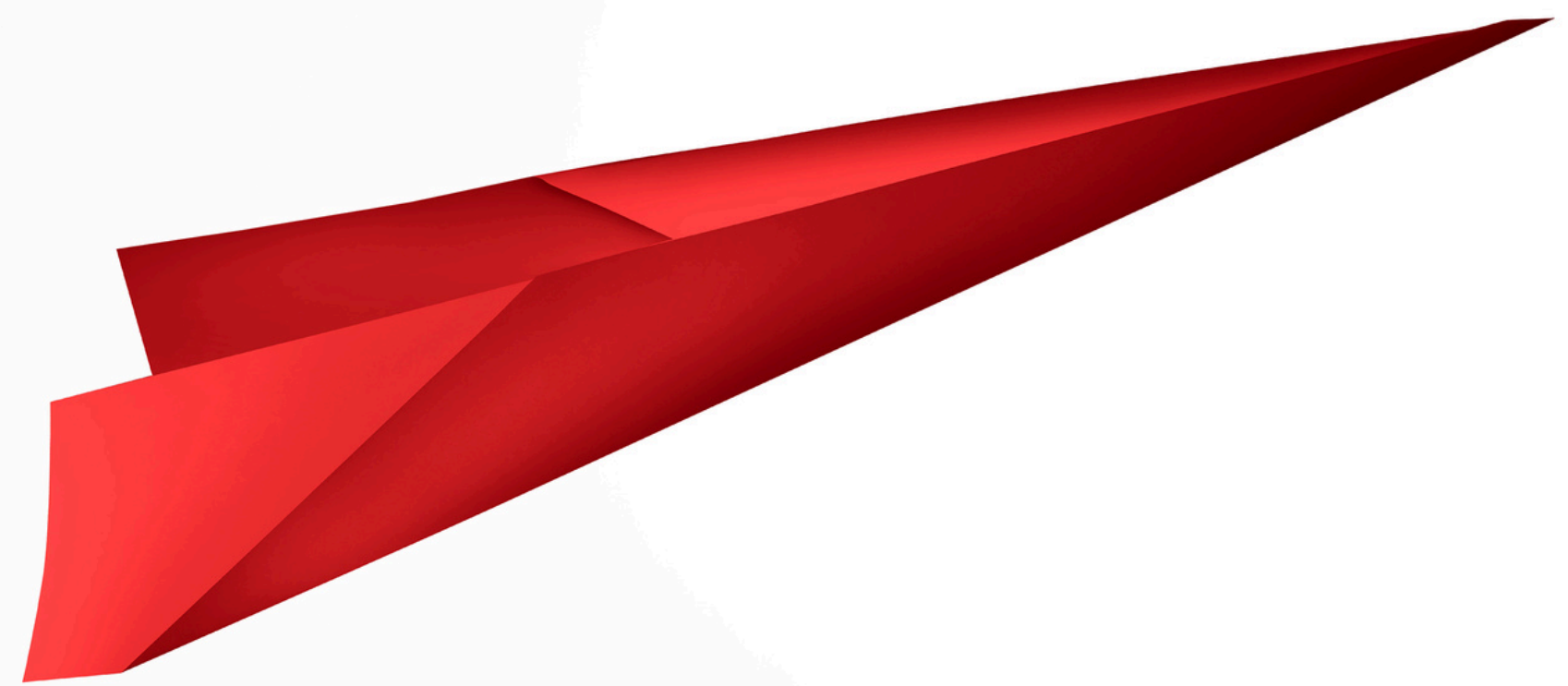
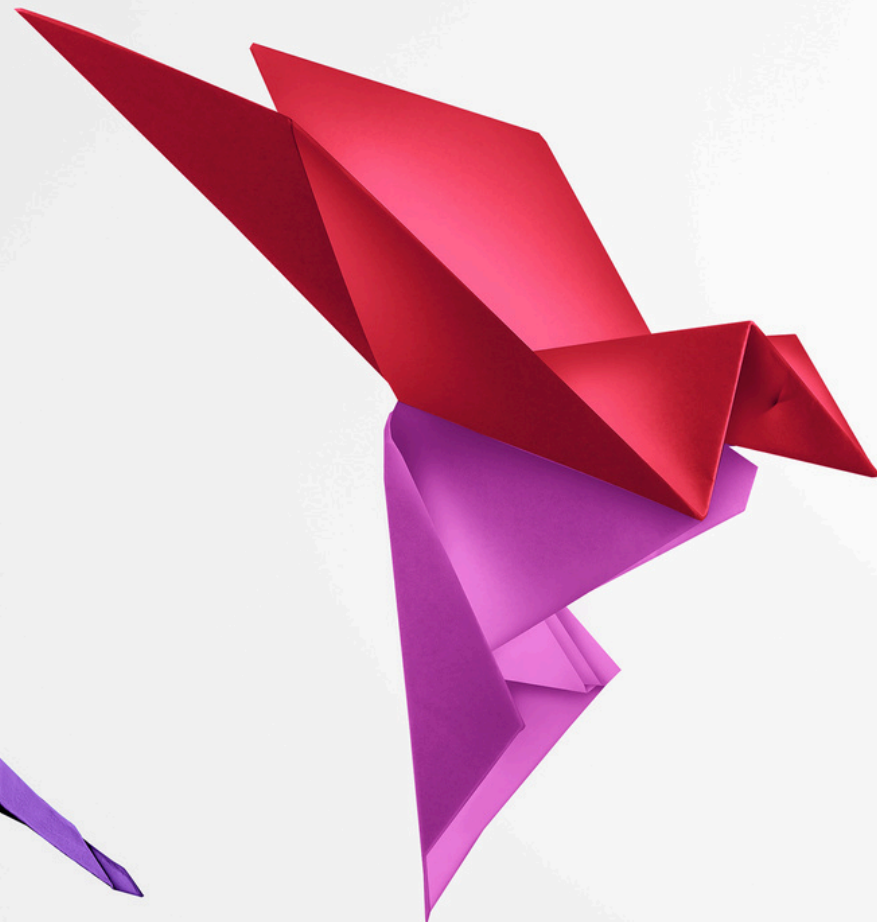
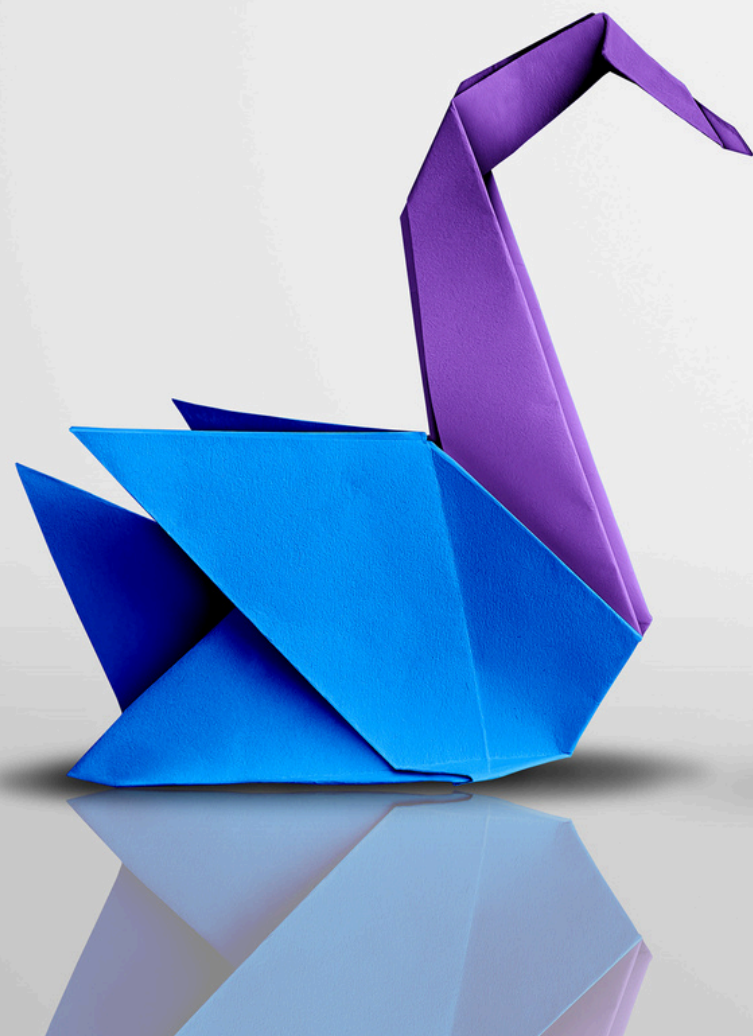






**ex: Synthesize all of the research on forming successful classes and create the most equitable groups.**





**AI and Teaching**





# toddle

- made by teachers
- too many disconnected teaching tools



# one tool for everything teachers do.

**Intuitive** | **Comprehensive** | **Powerful**



Curriculum  
planning



Deep analytics  
& insights



Assessments  
and feedback



Progress reports &  
student portfolios



Service learning  
& project based  
learning



Family  
communication  
and attendance

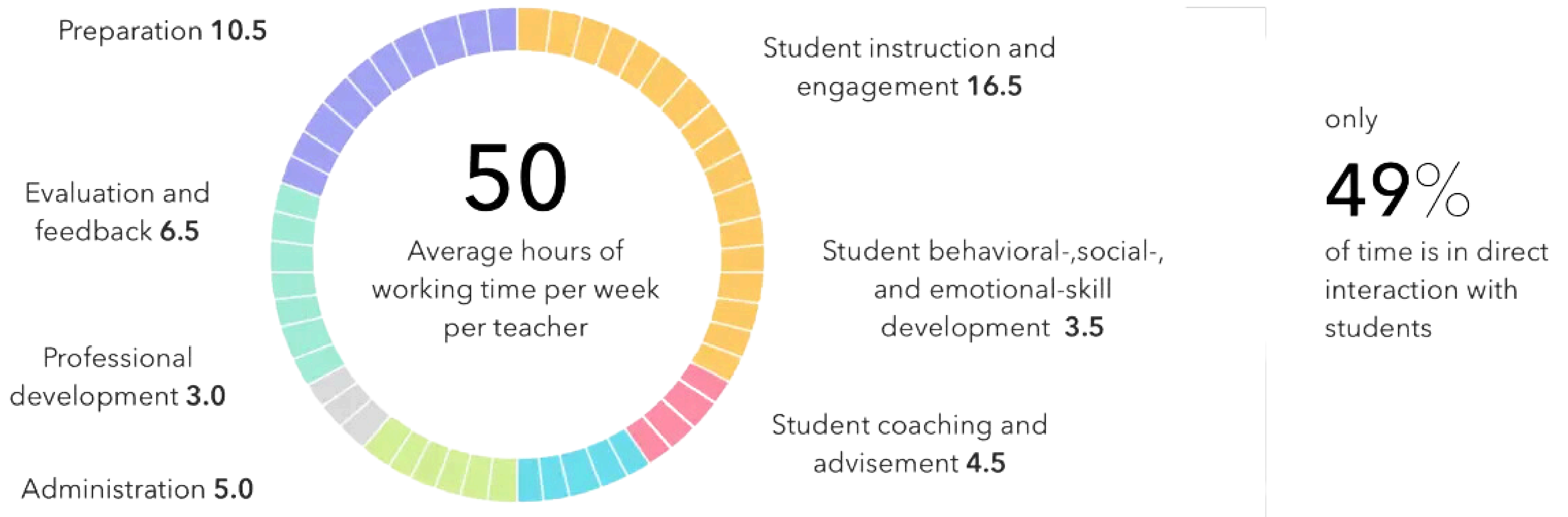


Streamlined  
accreditation (NAIS,  
MSACS, WASC, KHDA  
and more)



## when AI emerged...

Teachers work about **50 hours a week**, spending less than half of the time in direct interaction with students.





# AI helps you work faster... and better.



what we know so far...

“Half of participants were given access to the chatbot ChatGPT-3.5, developed by the company OpenAI, for the second assignment. Those users **finished tasks 11 minutes faster** than the control group, while their **average quality evaluations increased by 18 percent.**”

(Winn, 2023)

“Using ChatGPT is helping employees work more efficiently, the survey showed. **One in four said it helps save 10 hours a week**, while 4% of workers who use the tool say it saves them more than 20 hours per week. Only 7% of weekly ChatGPT users say the tool isn’t saving them anytime per week.

Since starting to use ChatGPT at work and saving time by doing so, **78% of workers say their work-life balance has improved**, while 52% say their mental health has. Fifty-one percent also say they have more time to spend with friends and family. “

(Chao, 2023)





## **Toddle's Big Hairy Audacious Goal:**

At Toddle, our big hairy audacious goal is to give each teacher 10 additional hours every week while helping you elevate your practices.



**where we started...**

## **Advanced AI embedded in all your workflows**



**Lesson Planning**



**Report Cards**



**Worksheets**



**Writing assistant**



**if you build it (well), they will come...**

**60,000+**

Learning  
Experiences  
created



**80,000+**

Progress Report  
Comments  
written



**46,000+**

Hours saved





## **initial assumptions**

- adoption and upskilling would be challenging
- teachers would enjoy a “magical” experience





## **initial assumptions**

- adoption and upskilling would be challenging
- teachers would enjoy a “magical” experience



## **what we learnt**

- thanks to GPT, teachers were super ready for AI
- teachers needed more control, more transparency



# lesson planning v1

Assign

Suggestion library

🔍 Search using keywords, for e.g. research, experiments

🚗 Drive inquiry in the unit

Launch inquiry

5

✦ Brainstorm ideas to tune into the unit

Dive into inquiry

11

✦ Brainstorm ideas to identify students' prior understanding related to the unit's central idea

Differentiation

5

✦ Create a provocation table to pique student interest about a specific line of inquiry

Reflect and take action

5

✦ Create a collaborative process for forming and refining students' questions related to the unit

Integrate PYP elements

3

✦ Brainstorm ideas to create an enabling learning environment for the unit

Key and related concepts

3

Dive into inquiry

✦ Generate ideas for student-friendly research questions and methods to explore a specific line of inquiry

✦ Brainstorm activities to support learners in co-constructing success criteria for the unit

✦ Curate resources to guide research into specific questions

Subject standards

8

Learner profile attributes

3

Approaches to learning

2

Toddle AI, your teaching assistant

Students will define the terms "community" and "culture" and discuss what makes their community unique.

Activities:

1. Opening Discussion (10 min):

• Ask students to describe their community. Write their answers on the board.

• Introduce the idea that communities can exist anywhere in the world, and people have different cultures.

2. Interactive Activity (15 min):

• Classroom Map of the World: Create a large map of the world on the board or use a digital map. Have students place a sticker or flag on where they think their ancestors came from. This will spark a discussion about diversity in their classroom.

3. Group Work (15 min):

• In small groups, students will create a "Culture Collage" using magazines or printouts. They can include things like food, clothes, music, etc., from their own community and share with the class.

4. Homework:

• Ask students to talk to their family about one tradition or custom that is unique to their family. They will share this tomorrow.

➡ Add to assessment

📄 Copy

🔄 Regenerate

Cancel

Select

🔍 Type your question here or browse ideas in the suggestion library

➡











# lesson planning v2



# Hey, I'm Toddle AI. I'm here to help!


I can help you generate ideas or create detailed learning experiences. You can select a task from the list of suggestions or just type in the chat box.

My class just finished researching a civilisation of their choice and presenting it to the class, in groups. I want students to now work individually on a writing prompt using their research in a creative way, and showcasing their individual understanding on the topic.

Grade*	Grade 5
Associated unit	 Ancient Civilizations
Transdisciplinary theme	How we express ourselves 
Central idea	Learning about past societies enables peo... 
Approaches to learning skills	2 selected 
Subject standards	2 selected 
Lines of inquiry	Select 
Concepts	Select 
Learner profile attributes	Select 

 Attach

文\_A English (American)

 Suggestion library





# progress reports

- Effective verbal communication: Expressing thoughts clearly and articulately.

Comment

Throughout this term, Alex has demonstrated progress in comprehending texts and frequently cites evidence from the text when answering questions. He expresses his ideas and opinions with clarity, which helps him communicate effectively when working independently and as part of a team. Alex is developing his skills as an active listener and is learning

Writing



<

t

Progress reports

Comment setup

Comment bank

Voice and output structure

Voice and output structure

Define Toddle AI's voice and output structure for progress report comments

+ Create new

Encouraging and supportive

Professional & Objective

Positive & Growth-Oriented

Encouraging and supportive

Created by Toddle

The Encouraging & Supportive voice and tone is designed to uplift students by acknowledging their effort and progress, while motivating them to keep moving forward. This tone emphasizes positive reinforcement, focusing on the student's strengths and areas of improvement without being overly critical. It helps build confidence, fosters a growth mindset, and provides constructive feedback in a nurturing way. Here's an expanded guide on this tone:

Key Characteristics:

1. Positive Language: Use words that highlight success, effort, and progress, avoiding negative or discouraging phrases.

2. Acknowledgment of Growth: Recognize the student's achievements, no matter how small, to reinforce the value of persistence.

3. Motivational and Forward-Looking: Encourage the student by focusing on what they have achieved and what they can still achieve, emphasizing their potential.

4. Constructive Feedback Framed Positively: When addressing areas of improvement, frame it in a way that suggests future success is possible through continued effort.

5. Warm and Empathetic: Use language that shows understanding and care, ensuring the student feels supported throughout their learning journey.

When to Use:

When you want to highlight a student's consistent effort and improvement.

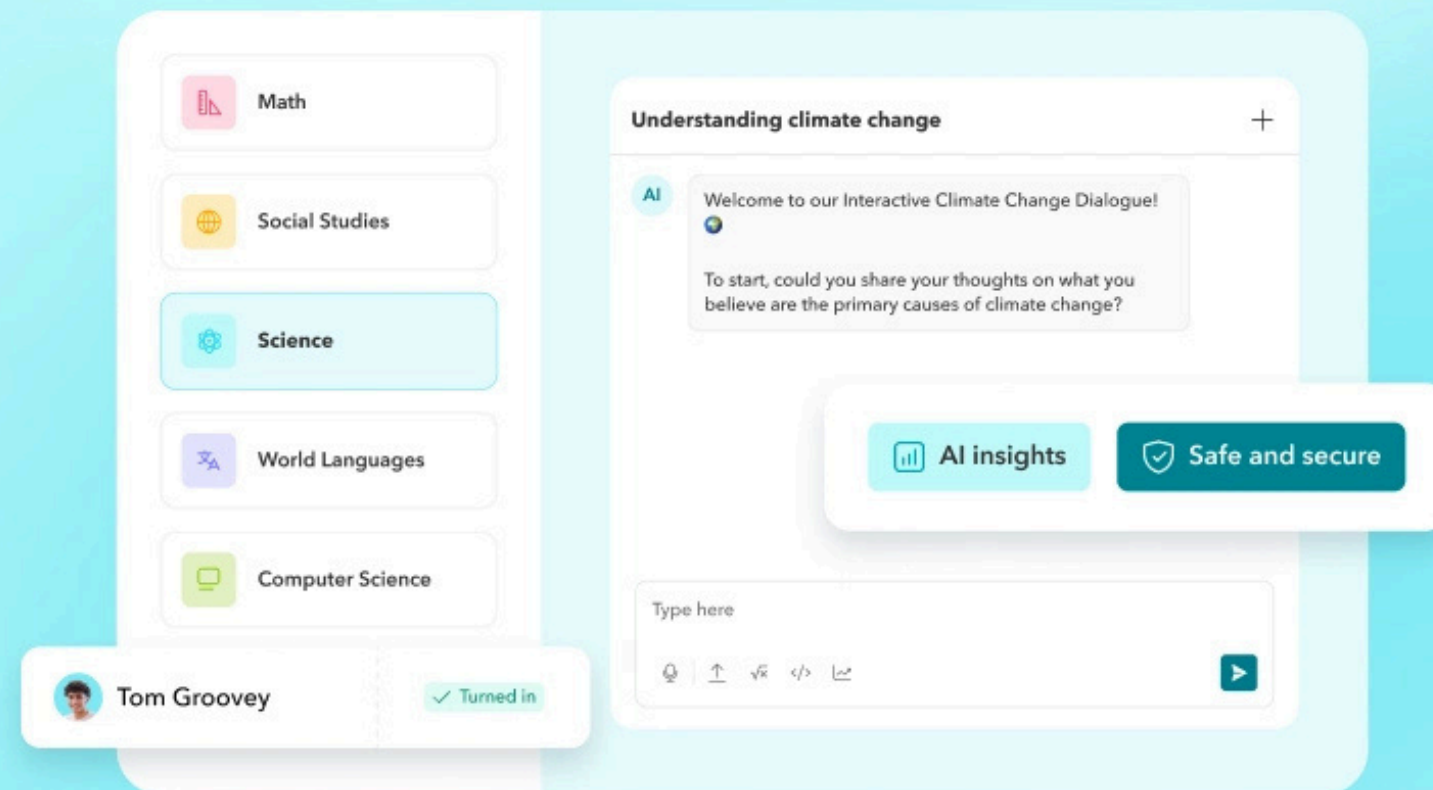
To motivate students who may be struggling but are putting in effort.



**our newest offering:**

and the thinking that's behind it

# Introducing AI Tutors *on* Toddle

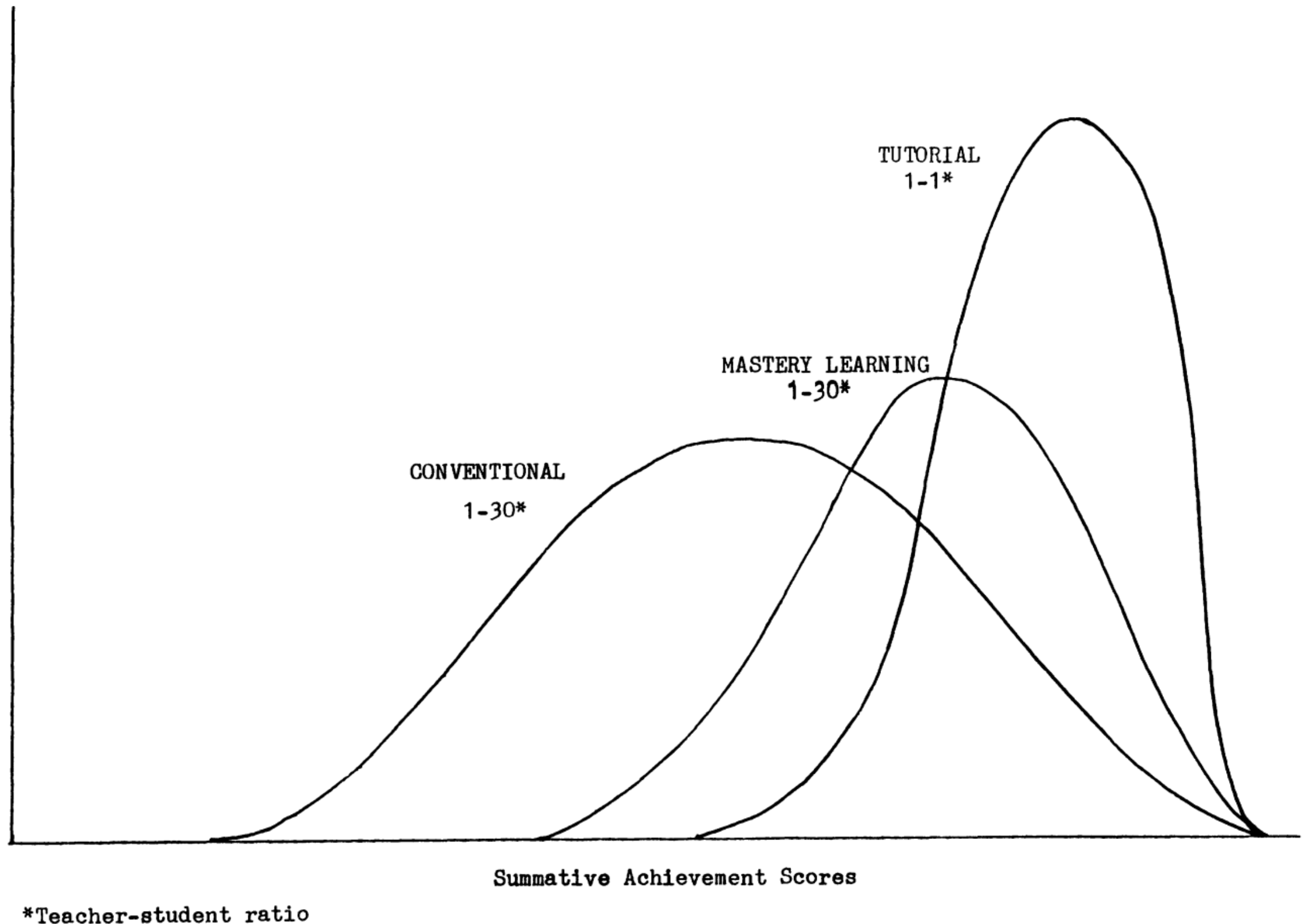




# The 2 Sigma Problem

**FIGURE 1.** Achievement distribution for students under conventional, mastery learning, and tutorial instruction.

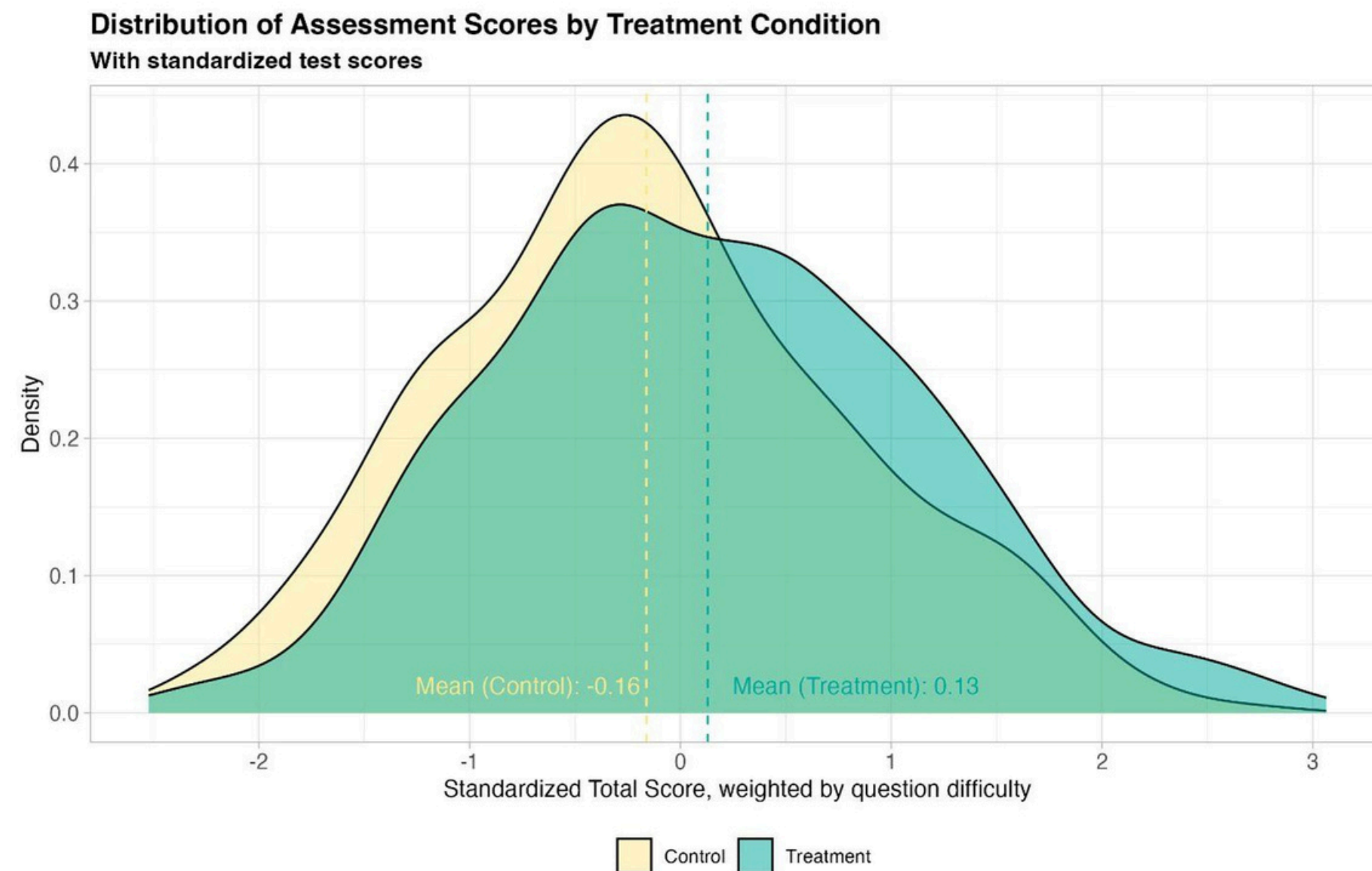
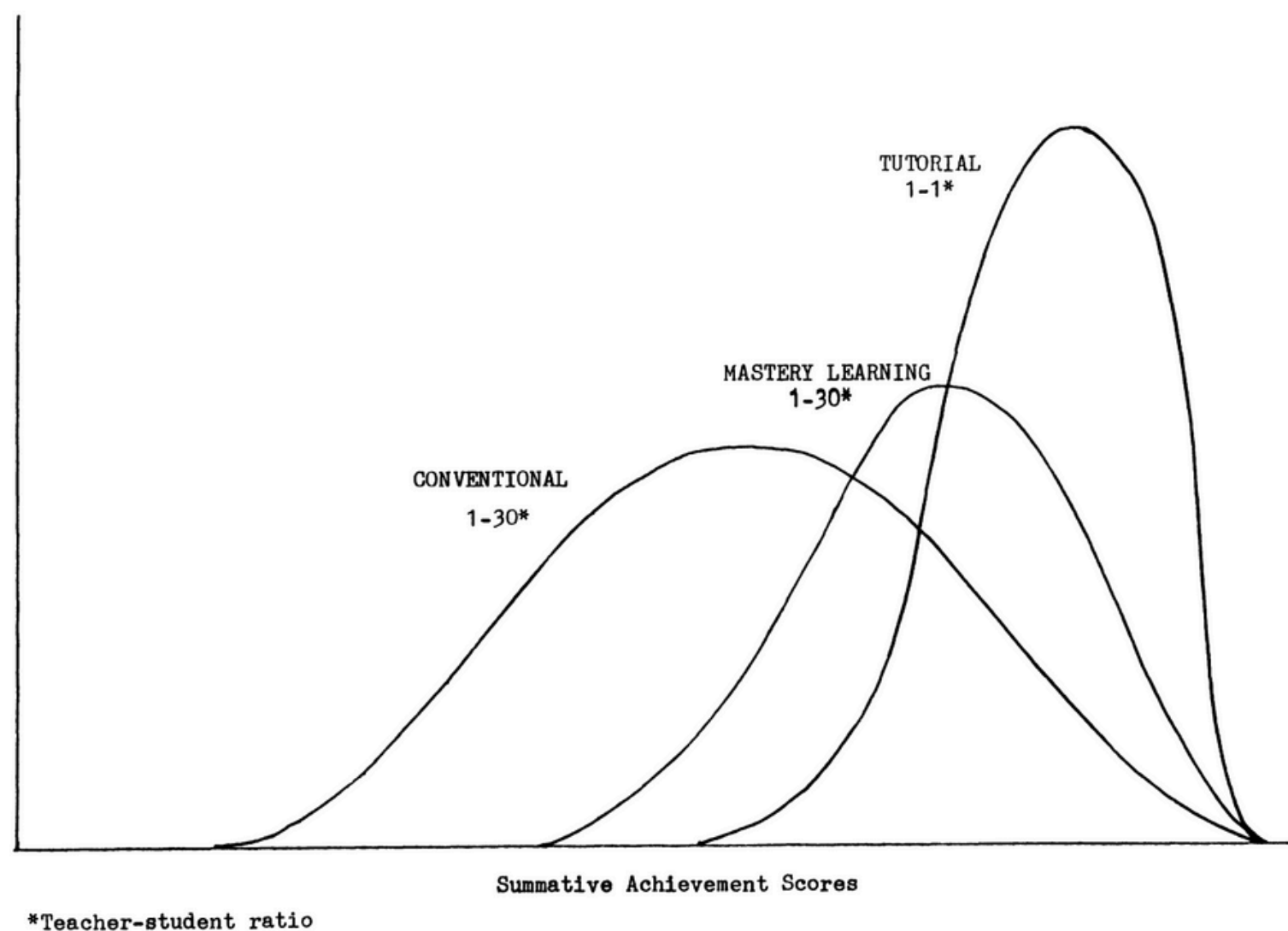
"about 90% of the tutored students ... attained the level of summative achievement reached by only the highest 20%"  
Bloom, 1984





# The 2 Sigma Problem= a reality for all

**FIGURE 1.** Achievement distribution for students under conventional, mastery learning, and tutorial instruction.



Six weeks of after-school teacher-led AI tutoring increased test scores by .3 SD, equivalent to 2 years of typical learning gains, outperforming 80% of other educational interventions.

Ethan Mollick, 2025





**Ethan Mollick**



**Author**

23h ...

Associate Professor at The Wharton School. Author of Co-Intelligence

And since it isn't clear to everyone who doesn't read the blog post - the fact that this is teacher-led is likely very important. We know that independent use of AI as a tutor can harm learning in some circumstances, because it gives the illusion of learning.



**the goal:**

**Deliver personalised learning to students**



**the goal:**

**Deliver personalised learning to students  
while keeping teachers in the driving seat**



# let's take a look

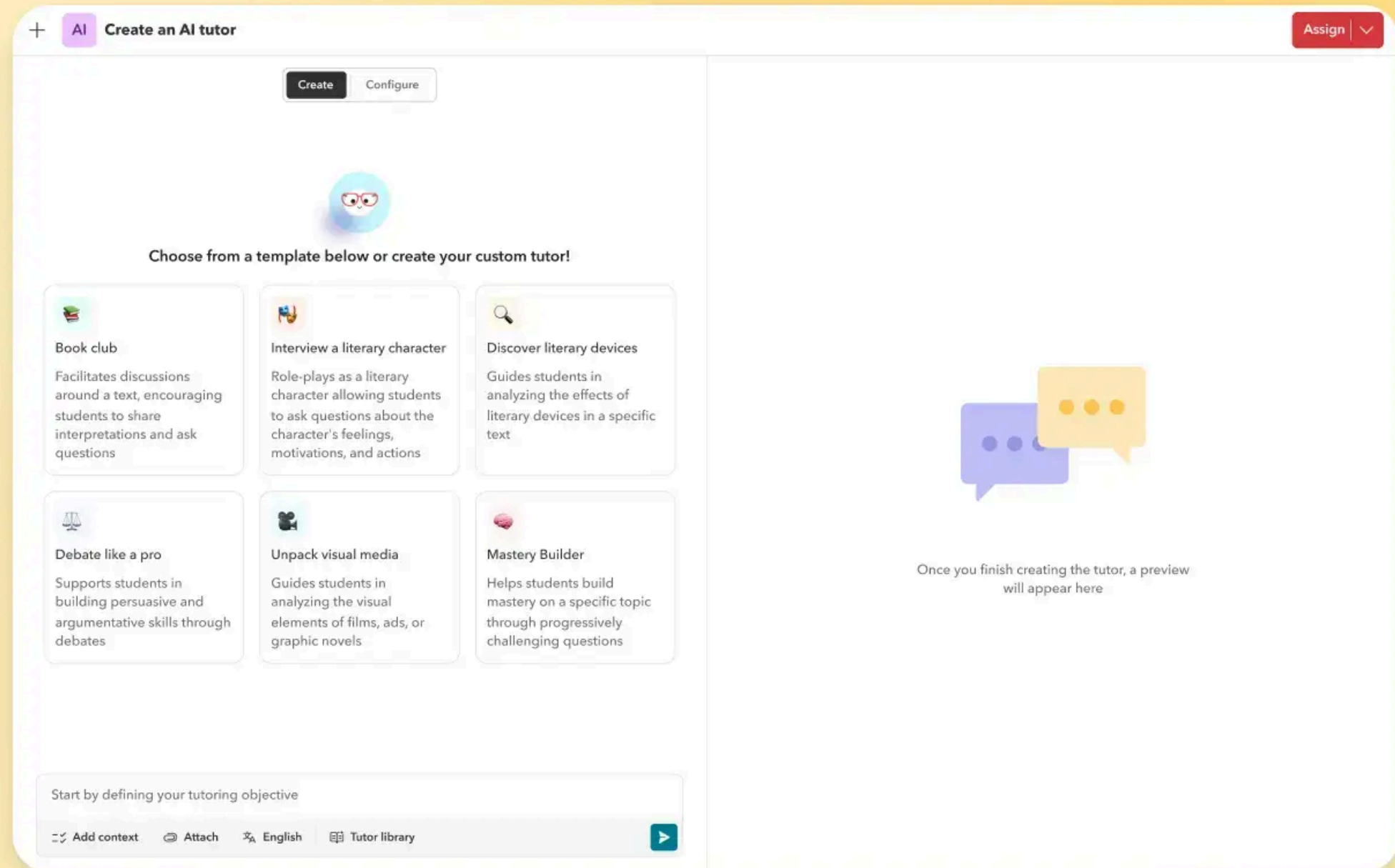
1. define your tutoring objective

2. configure the tutor

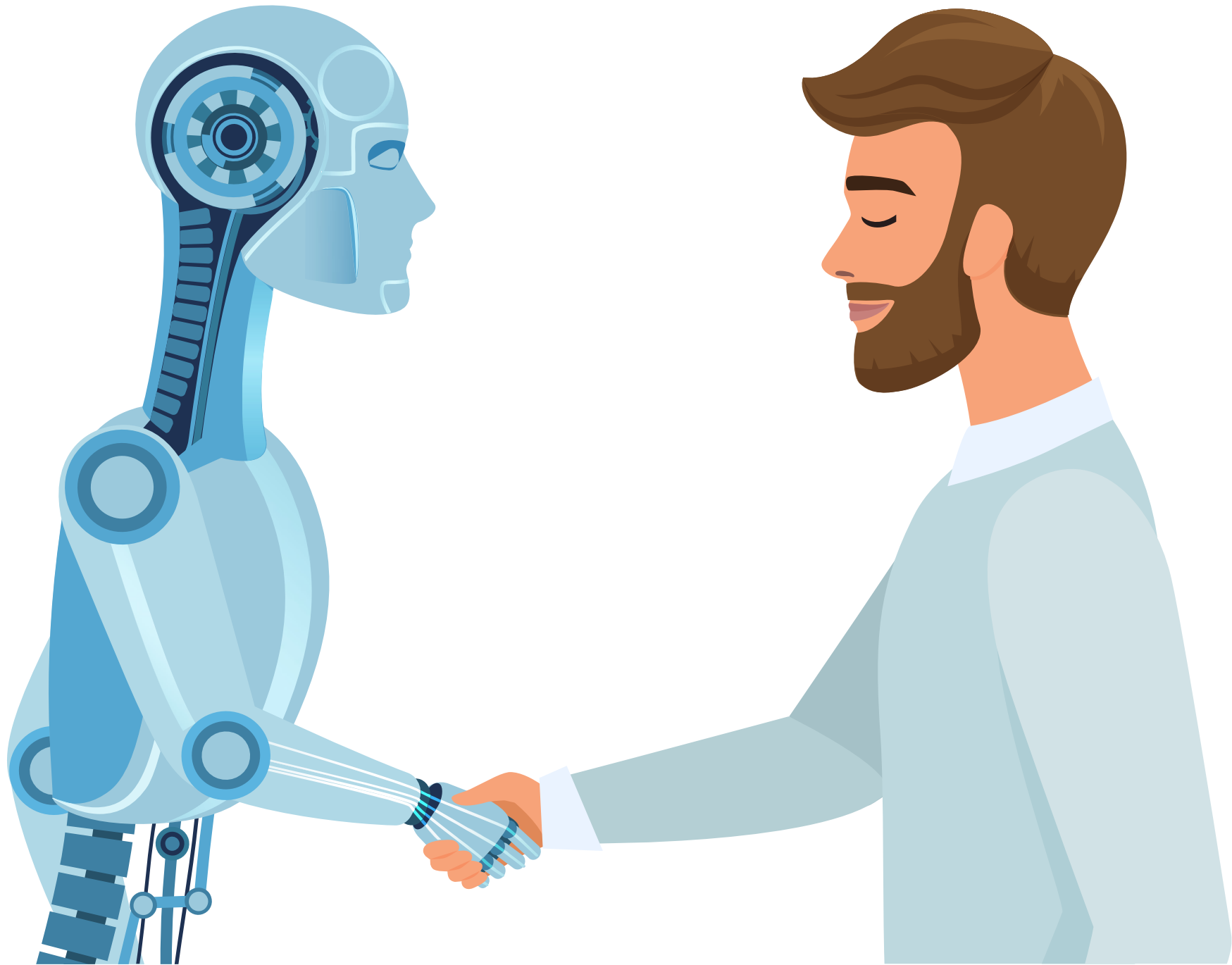
3. play with it as if you were a student

4. each students gets personalised help

5. get AI powered feedback



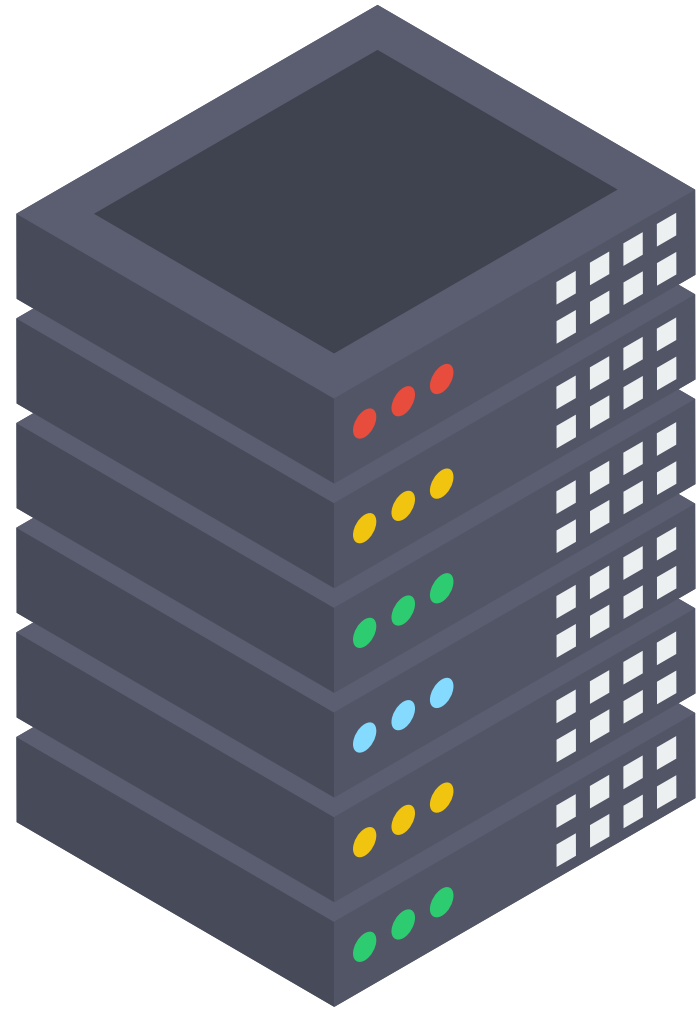
**not designed to replace, but to augment**



- used strategically across a unit
- another way to gather data about students' capability and interests
- quicker pattern recognition



**a walled garden...**



Hosted on secure servers-  
student and teacher data is not  
used to train future models



All PII is anonymized  
before being sent to  
any LLM

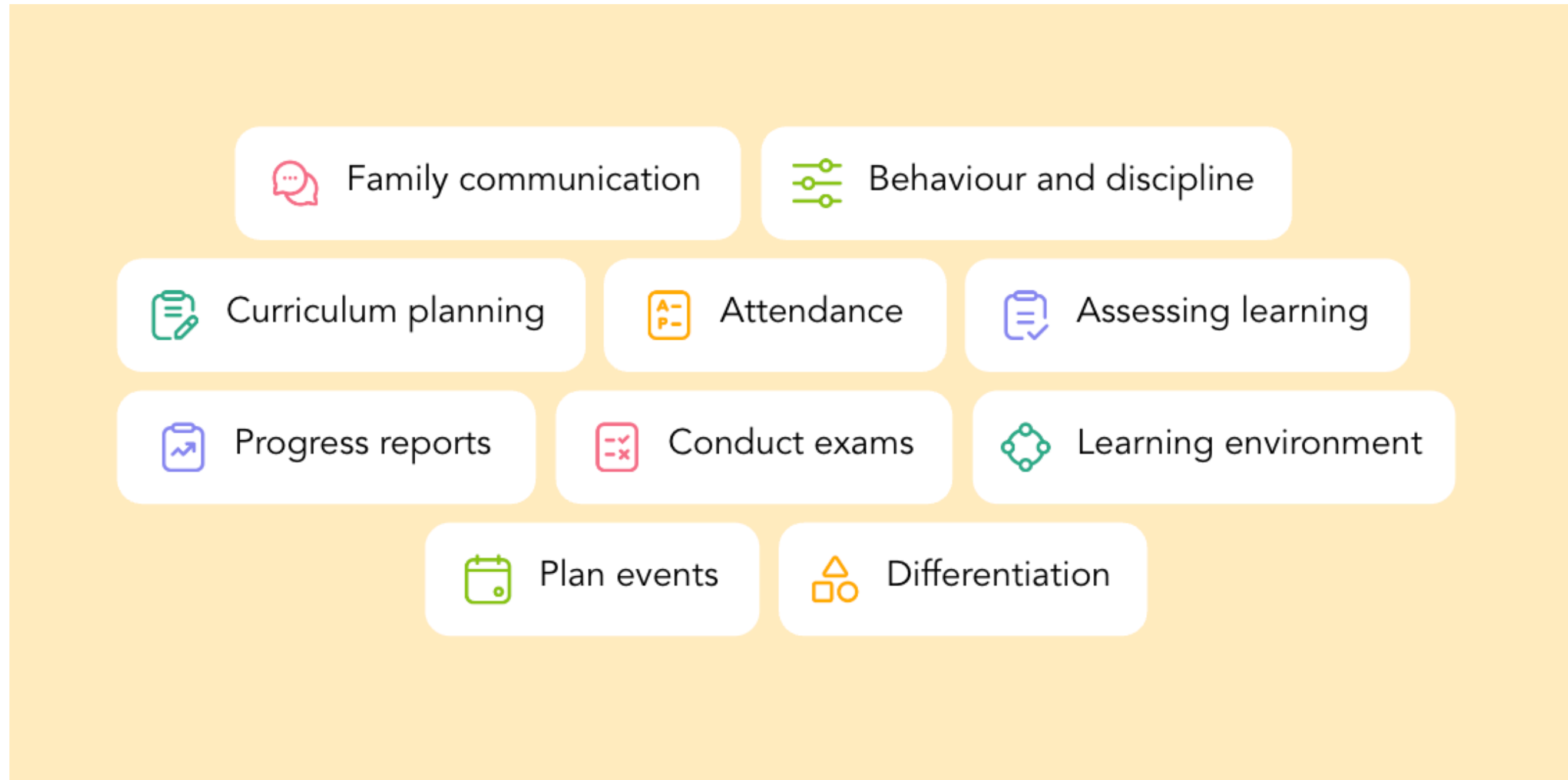




**dreaming of the future...**



**an ai agent for every need**



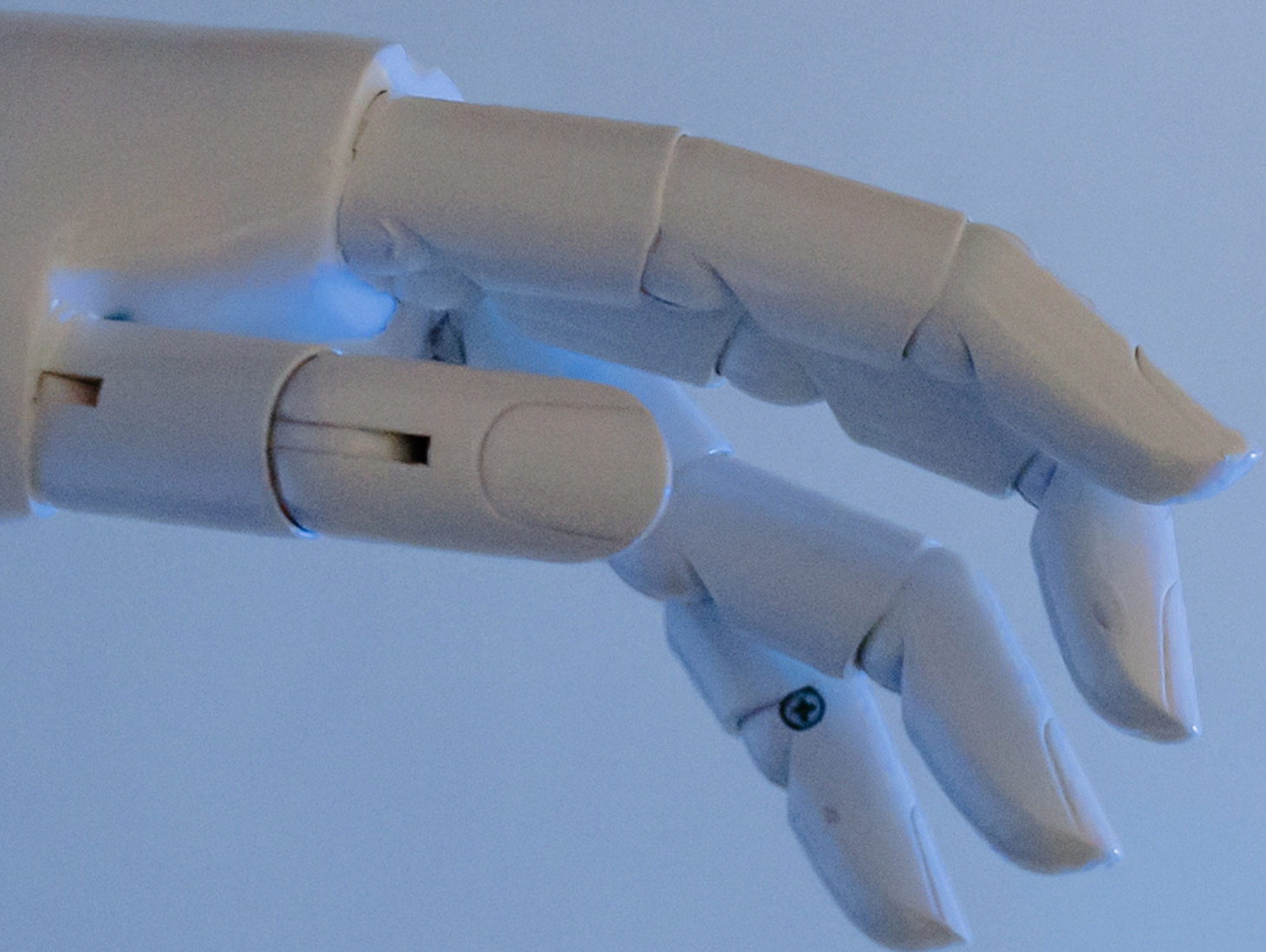
**and they all talk to eachother**



# toddle

- made by teachers
- too many disconnected teaching tools





**what questions might you have?**