toddle

Built by Teachers: The State of AI Tutors in 2026

What 100,000+ AI Tutors reveal about what is becoming possible for learning.



We've always known what great education looks like. Now, for the first time in decades, it feels possible to bring more of it to every child.

In 1984, Benjamin Bloom showed just how much better children learn with one-to-one tutoring. Long before that, John Dewey (1938) argued that children learn most deeply through experience: by doing, questioning, and working things out for themselves.

We agreed with all of it. Then we walked into classrooms with 25 learners, 25 different needs and one hour in which to reach them.

That hour is starting to change with AI Tutors. Across thousands of schools around the world, teachers are using AI Tutors to reach learners in ways never possible before. This report shows what that looks like in practice.

In one primary classroom, 24 lines of inquiry unfolded at once, from black markets to the economics of Lionel Messi. Year 4 learners travelled back to 1787 to question a convict preparing to board the First Fleet. Another teacher turned a physics unit into a mission to design maglev transport on Mars. A student with dyslexia felt, for the first time, that she belonged in the learning rather than being singled out for extra help. An Egyptian student realised he could interview an Islamic scholar in Arabic, validating his mother tongue and building a connection his teacher could not otherwise have made.

The findings draw on 100,000+ AI Tutors built on Toddle, 1,345 submissions to Toddle's AI Tutor Awards 2026, and surveys and interviews with hundreds of educators using AI Tutors in their classrooms.

Across different ages, subjects and countries, the same thread kept appearing: **in a teacher's hands, AI Tutors are doing what no teacher could do alone.**

What are teacher-built AI Tutors?

Unlike a general-purpose chatbot or a ready-made AI tutor such as Khanmigo, Toddle's AI Tutors are designed by teachers for a particular class, topic, learning goal, or student need. Every tutor featured in this report began with a teacher deciding what role it should play, what knowledge and context it should draw on, and how it should guide students through the learning.

That might mean taking on the role of a historical figure, adjusting the challenge as a student progresses, or pushing back on an unsupported argument. The defining difference is that the teacher has designed the conversation and the learning purpose behind it.

Adoption across school stages and subjects

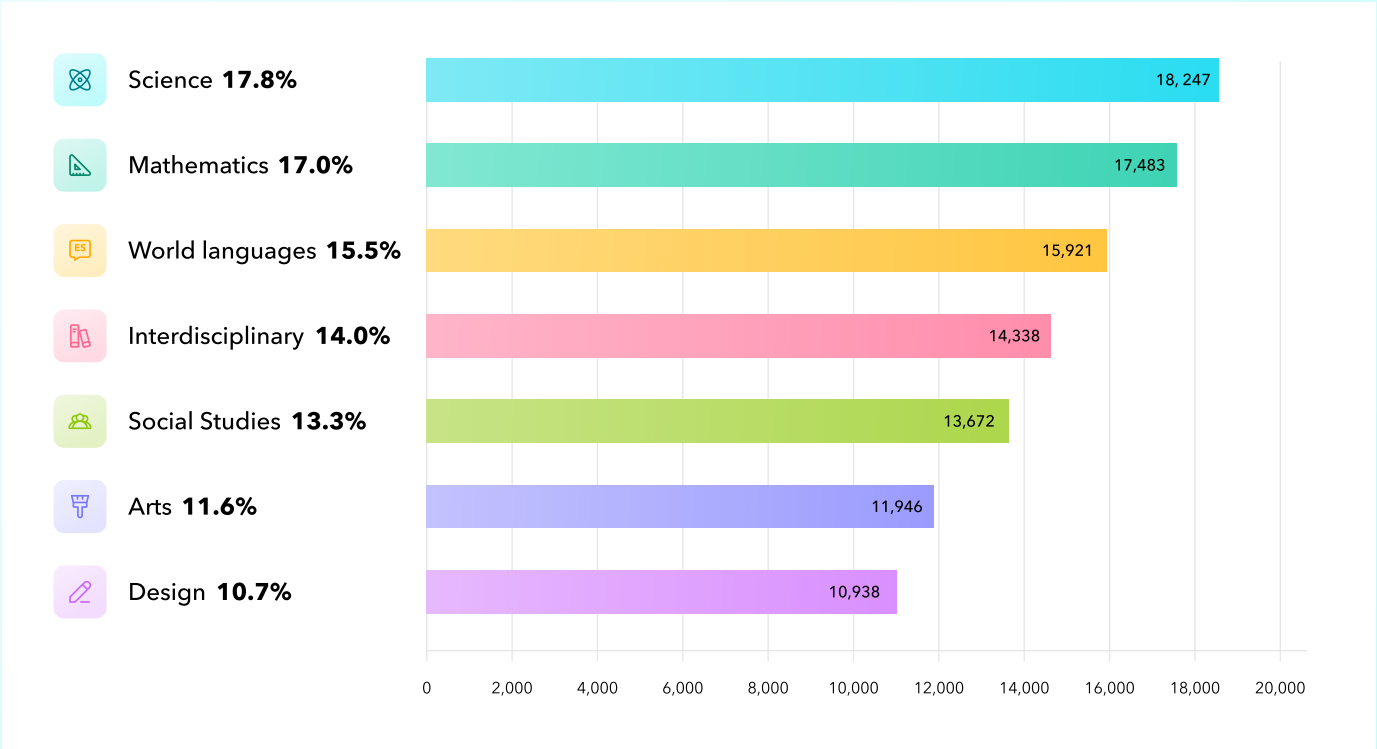
Across 100,000+ AI Tutors, the distribution was remarkably even across school stages:

Primary school	Middle school	High school
28%	**35%**	**37%**
Most common uses	*Most common uses*	*Most common uses*
34% Role-play and scenarios	**30%** Reasoning and debate	**33%** Reasoning and debate
23% Quizzes and games	**26%** Role-play and scenarios	**24%** Practice and exam revision

What teachers built changed with age. Primary teachers leaned towards role-play and simulation, middle school teachers towards problem-solving, and high school teachers towards exam preparation.

Across the curriculum

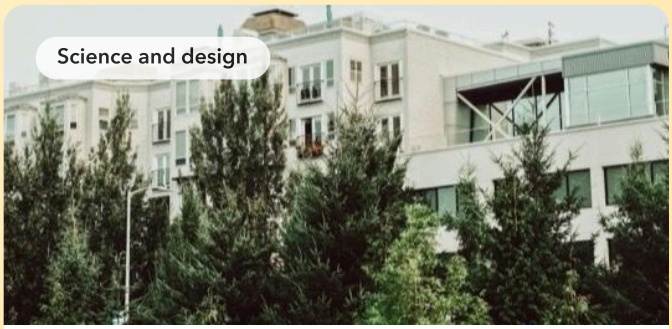
Science and mathematics were the two largest subject areas, but together accounted for 35% of tutors. Every subject category accounted for at least one in ten tutors, including world languages, social studies, arts, and design.



Source: Analysis of 102,545 AI Tutors built on Toddle.

AI Tutor examples across school stages

Primary school



Sustainable City Builders

Make choices about how a city could meet people's needs more sustainably.

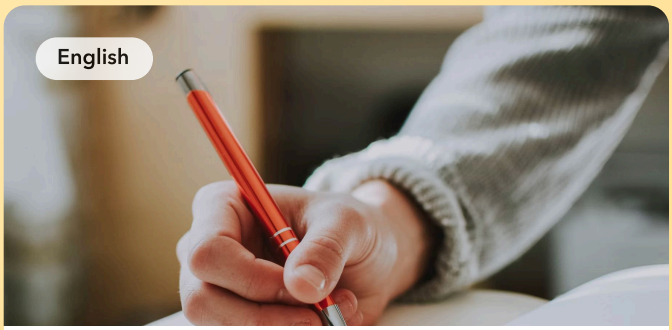
Andrea Helgesen, Skagerak International School



Convict Journey Chat

Question a convict preparing to board the First Fleet in 1787.

Christina Mavris, Greenacre Christian College



Persuasive Writing Coach

Shape an argument, use rubric-aligned feedback and revise without being given the answer.

David Gardner, Cedar College



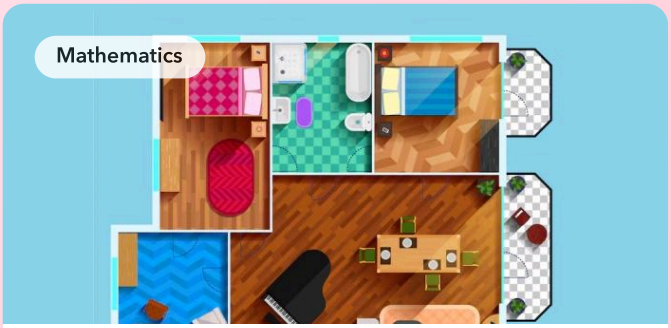
My Drawing Story Helper

Talk through their own drawings, explaining who is in the picture, what is happening, and how everyone feels.

Grace Dunya, International College - Ain Aar

AI Tutor examples across school stages

Middle school



Percentage Planner: A Dream House Project

Plan a home within a fixed plot and budget using fractions, decimals, and percentages.



Bhavika Vyas, Nita Mukesh Ambani Junior School



Journey with Zhang Qian: Silk Roads Explorer

Travel the Silk Roads through the perspective of a Han-dynasty diplomat.

Jade Donnelly, Nord Anglia International School



Make Your Case: Lunchroom Fight

Defend a judgement about a school conflict while a parent challenges the reasoning.



Leon Martinez, Canadian International School Kunshan



My Name Poem

Write name poems across Arabic, English and Spanish while exploring language and identity.



Khalid Sultan Abdo Hussien, Turtle Bay International School

AI Tutor examples across school stages

High school

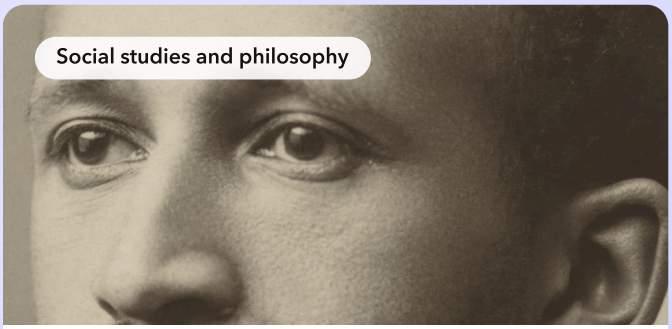


Martian MagLev Maestro

Apply physics to design magnetic-levitation transport for a settlement on Mars.



Geoffrey Mitchell, ACS International School



Philosophical Journey with W.E.B. Du Bois

Question W.E.B. Du Bois about double consciousness, then test the assumptions and limits of his ideas.



William Tolley, International Community School of Addis Ababa



Respiration Investigation

Investigate a brewery fermentation problem, analyse data, and justify experimental decisions.



Sarah Jinks, St Clare's, Oxford



Monetary Policy Mastery Quiz

Work through questions on interest rates and monetary policy, revealing prior understanding before formal teaching begins.



Charles Sebalinga, Waterford Kamhlaba United World College

Key findings at a glance

1

AI Tutors helped teachers meet individual learner needs like never before.

Four in five teachers said AI Tutors helped them meet individual learning needs better than they could before.

2

Teachers were better able to support multilingual, neurodivergent, and anxious learners.

AI Tutors played to the strengths of students with ADHD, dyslexia, and dyscalculia, while giving multilingual and anxious learners a safe space to express themselves, build confidence, and exercise agency over how they participated.

3

Teachers designed experiential learning across subjects.

Student engagement deepened as learners questioned historical figures, tested scientific systems, designed solutions, and defended decisions.

4

Critical thinking, creativity, and metacognition grew stronger when teachers set the guardrails.

Teachers built tutors that challenged unsupported claims, offered hints instead of answers, and asked students to explain, test, and revise their ideas, helping students grow future-ready skills.

5

Teachers gained better visibility into student thinking.

85% of teachers reported that AI Tutors surfaced understanding they would not otherwise have seen, from a hidden misconception to a quiet student's real reasoning.

Finding 1

AI Tutors helped teachers meet individual learner needs like never before.

Differentiation has never been limited by teachers knowing what to do. It has been limited by how many students one teacher can respond to at once.

Carol Ann Tomlinson gave the field its working model decades ago: good teaching adjusts what a student learns, how they learn it, and how they show what they know, in response to each learner. In practice, however, differentiation has usually meant small adjustments like an extra worksheet, a lighter homework load, flexible grouping, or a modified assessment. Better than one size fits all, but often still only a few sizes that fit a few.

How, then, does one teacher remain truly responsive to 25 learners while the lesson is under way?

Across these classrooms, AI Tutors took on part of that responsive work. The teacher still chose the learning goal, source material, success criteria, and guardrails. But as students worked, the tutor could slow down, offer a scaffold, ask for stronger evidence, or follow an unexpected line of inquiry. The single biggest finding across the report: teachers used AI Tutors to move past that compromise and differentiate deeply, responding to each learner's readiness, their interests, and how they show what they know.

Four in five teachers said AI Tutors helped them meet individual learning needs better than they could before.

This changed more than the amount of feedback available. It changed who received the teacher's time, whose ideas had room to develop, and whether additional support had to single a learner out.

Classroom story

FAIRGREEN INTERNATIONAL SCHOOL

“AI Tutors helped me reach every learner even when I couldn’t be everywhere at once.”



Greg Joiner, Fairgreen International School, Dubai

Over seventeen years of teaching, I’ve tried all kinds of ways to make feedback more personalised and timely. We’ve built rubrics together, conferred at desks, and had students review their own work and each other’s. But marking still ran late into the evening, and by the time feedback came back, we had often already moved on.

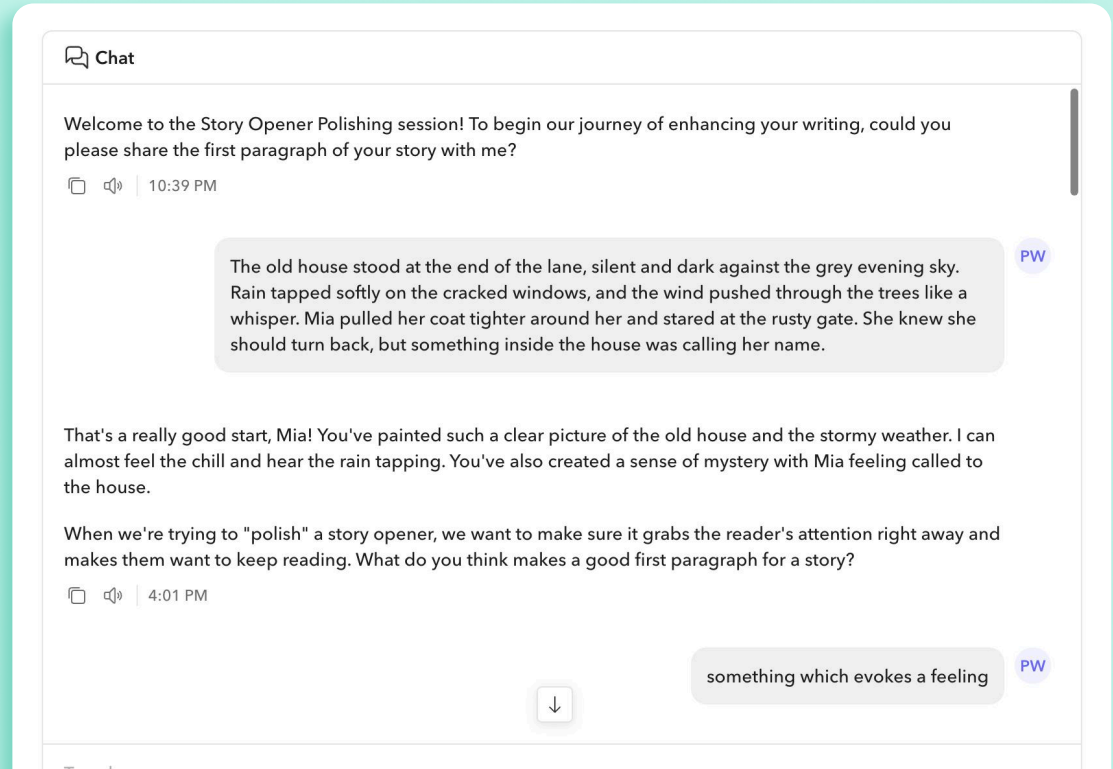
Once I set up AI Tutors to follow our rubric and use our feedback language, it changed what I could do for learners. The feedback became faster, yes, but what surprised me most was how effective it was.

I saw students move from simple, flat sentences to writing with real intention, pushing their ideas further than they might have with me marking alone.

And it wasn’t happening one student at a time. It was happening at every desk, simultaneously.

I couldn’t have done that alone.

Read more about Greg’s AI Tutor here.



Classroom story

CEDAR COLLEGE

“The most confident students no longer received most of the feedback.”



David Gardner, Cedar College, Northgate, South Australia

We have 28 students in our classes, so one teacher to 28 students is a pretty significant ratio.

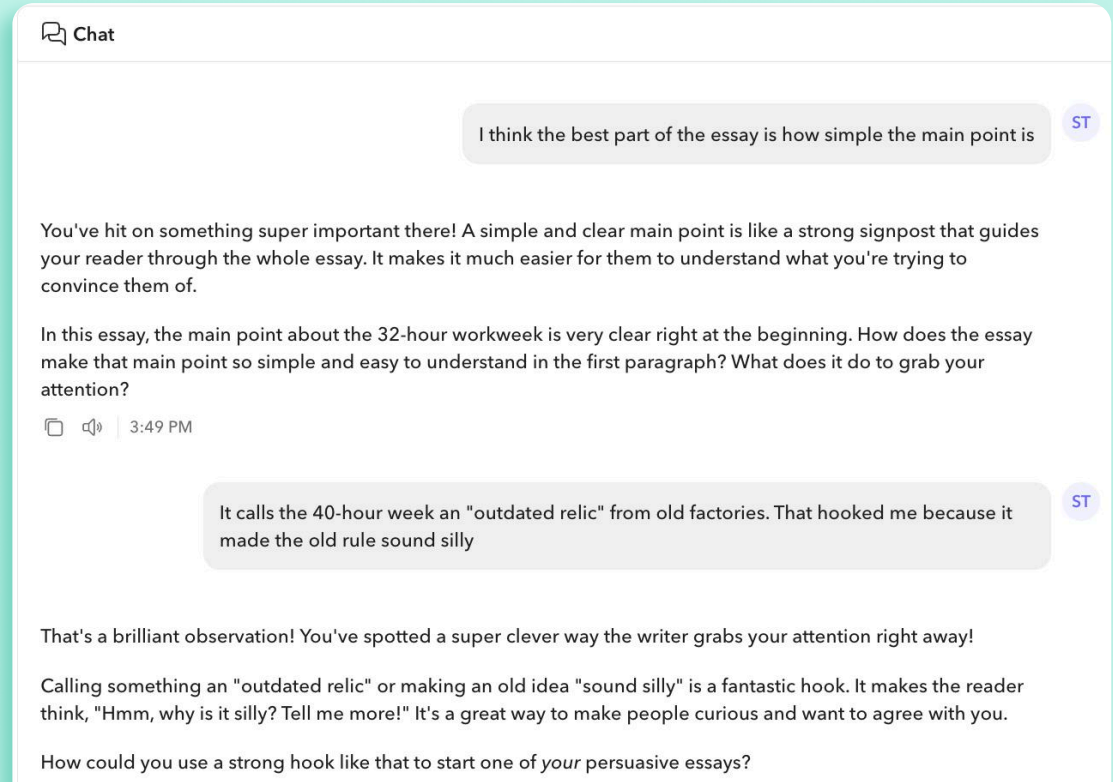
During persuasive writing, the students asking for help were often my most independent and capable. Some came several times in the same lesson: “Can you please read this?.” I would give feedback, they would make the change and return.

Those four or five students could command all my attention. Meanwhile, I struggled to reach students who lacked confidence or thought they were on track when they weren’t.

I built a Persuasive Writing Coach around the structure, techniques, and rubric I had explicitly taught. It didn’t give answers; it reminded students of techniques and suggested how to strengthen their writing.

It almost flipped on its head. The confident students could keep improving without returning several times a lesson. That freed me to spend more time with students who needed explicit teaching, lacked the confidence to ask for help, or did not realise they had gone off track. I could spend more time with those who needed me more.

Watch David talk about his AI Tutor here.



Finding 2

Teachers were better able to support multilingual, neurodivergent, and anxious learners.

Inclusion, in its true sense, should be built into how the lesson is designed.

Universal Design for Learning begins on this same simple premise: barriers to learning often sit in the design of the curriculum, the environment, or the experience, not in the child (Meyer, Rose, & Gordon, 2014). Shelley Moore frames it through bowling: aim for the pins at the margins, the learners hardest to reach, and you bring down more of the whole (Moore, 2013). Al Kingsley applies the same argument to technology: when every student uses the same supportive tools, no child is singled out (Kingsley, 2026).

The challenge is doing this for 25 learners at once. AI Tutors allowed teachers to build more of that support into the lesson. They decided when a tutor should simplify language, break a task into smaller steps, use a visual explanation, respond in a learner's home language, or give someone space to practise before speaking in class.

Teachers described students communicating more readily, participating with greater confidence and approaching difficult tasks with less anxiety.

Classroom story

INTERNATIONAL SCHOOL RIMINI
SCHOOL OF LIFE

I built the tutor so I could "literally split myself in half".



Hannah Miller, International School Rimini, Italy

Two of my Grade 6 students, both of whom have dyslexia, were working on a sustainable spaceship project while I taught a different topic to Grade 7. Because we have a mixed-grade class, I could not work with them one-to-one as I would have liked. I designed the tutor so I could "literally split myself in half."

It guided them through planning the poster: what they would need to make life in space sustainable, what to include, and how to organise the layout for the reader. Without that support, their poster projects could be quite formulaic.

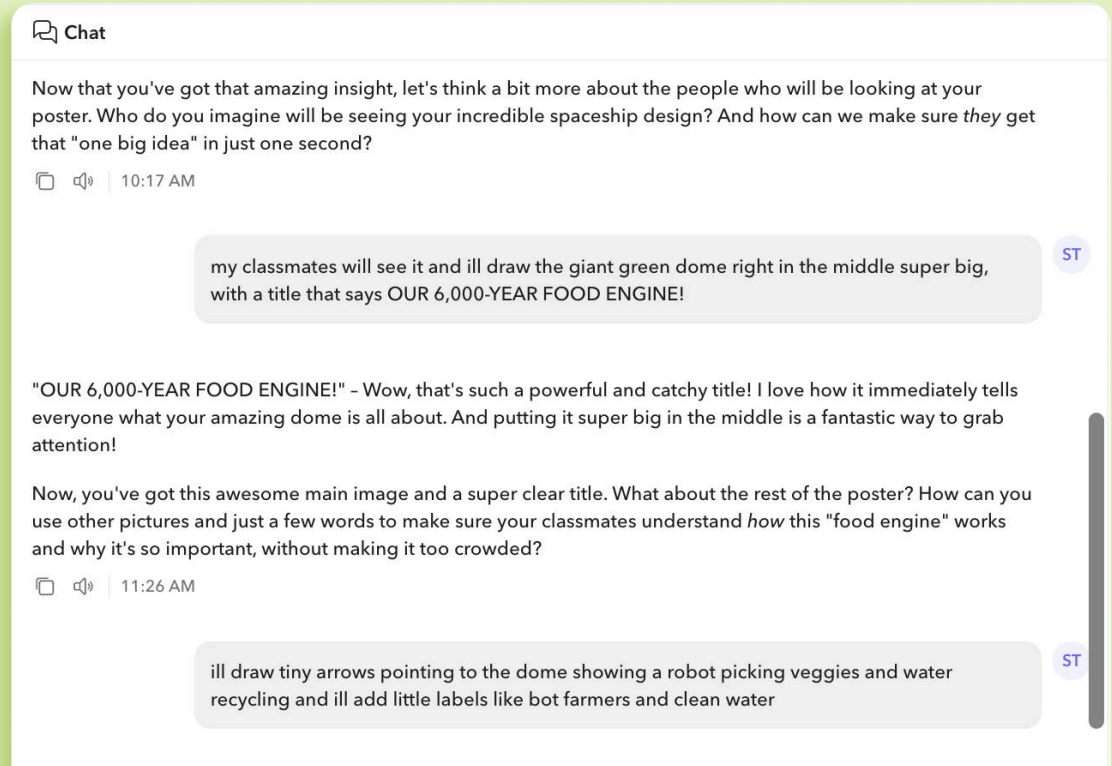
Normally, I might have given them a scaffolded worksheet or information sheet. But that would still have been a lot of text for them to read. If I was not there to read and interpret it with them, accessing the task would have been difficult.

With the tutor, they could listen to the messages and reply using their voices. I also asked it to simplify its language because they were learning in English as an additional language. Rather than being confronted with a whole page of text, they could work through the task in real time.

The finished posters showed a strong understanding of sustainability and were far more elaborate than the posters they would usually produce. It now hangs outside our classroom, asking everyone who passes whether they would join us on the spaceship for the next 700 years.

Everything I put into the tutor was what I would have done if I had been available to work with them one-to-one.

Watch Hannah talk about her AI Tutor here.



Finding 3

Teachers designed experiential learning across subjects.

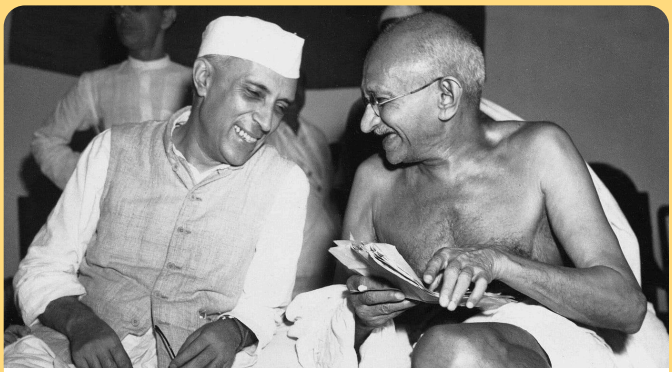
Experiential learning is more than making a lesson feel immersive. Kolb (1984, p. 38) described it as a cycle: students encounter something, reflect on it, make sense of it, and apply what they have learnt. Learning therefore is "the process whereby knowledge is created through the transformation of experience".

Role-play, simulations, and real-world scenarios have long had a place in classrooms. But designing them well takes considerable time and planning, so they tend to happen occasionally. AI Tutors are changing that. Teachers could create these experiences quickly enough to make them part of everyday teaching.

Across subjects, tutors took on roles that would otherwise be difficult to recreate in class: a figure from history or culture, an expert responding to students' work, or someone pushing back on a decision. Students, in turn, became researchers, designers, or decision-makers, working through the evidence and constraints of a situation before applying what they had learnt to the task that followed.

A lesson could be...

A conversation across time



Partition Perspectives

Question Nehru, Jinnah, Mountbatten, or a villager living in 1946.

Oscar Scafidi, International Community School of Addis Ababa



Meet John Blanke

Explore court life and social hierarchy with a Black Tudor trumpeter.

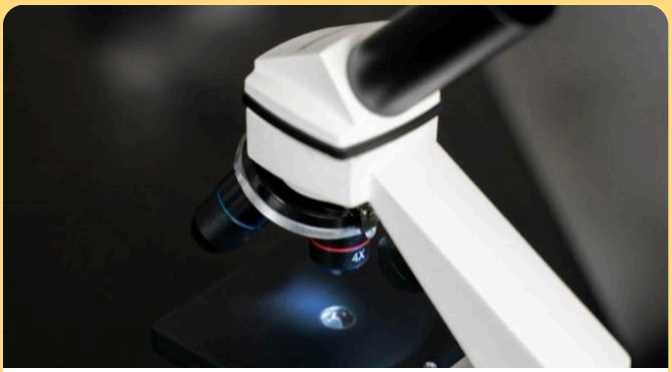
Jade Donelly,
Nord Anglia School



Playtime in 1926 China

Talk with a child from 1926 China to explore old games, handmade toys, and how play has changed.

Stephane Vermeulin,
Mulgrave School



Robert Hooke: Unveiling the Cell

Ask about his microscope observations and the beginnings of cell theory.



Alyssa Chan,
Haileybury

A lesson could be...

Another point of view



Exploring Poverty with Amartya Sen

Examine relative poverty, inequality, and the capability approach.



William Tolley, International Community School of Addis Ababa



Highview Constitutional Challenge

Argue a property case before a judge using the Australian Constitution.

Terri-Anne Scott, Xavier Catholic College Albury



Deep Sea Debate

Argue both sides of deep-sea mining in the Clarion-Clipperton Zone, weighing environmental, economic, and ethical concerns.

Brian Rivas, Munich International School



Problem-Solver Pro

Interview a programmer to uncover everyday problems and design a coded micro:bit solution.

Andrew Deir, Skagerak International School

A lesson could be...

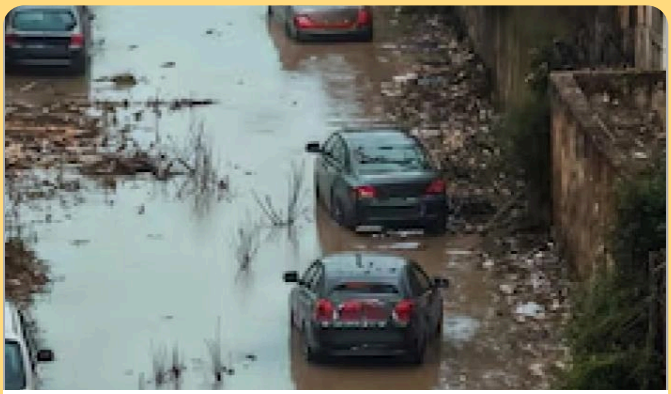
A human problem to solve



Empathy Playground Interview

Interview a parent, then design a safer playground for wheelchair users.

Elizabeth Holder, Maple Bear Canadian School



Mumbai Monsoon Masterclass

Investigate the causes, impacts, and prevention of the 2005 floods.

Pratima Sridhar, Nita Mukesh Ambani Junior School

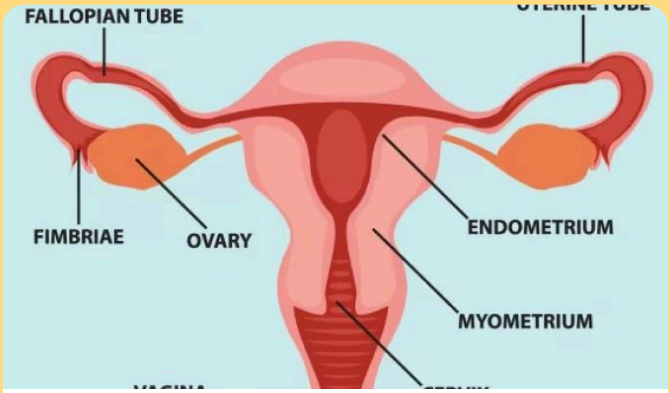


Children's Rights Advocate

Question a UNICEF expert about children's rights and their core principles.



Jacqui Hefferman, Misr Language Schools



Teen Health: Understanding Your Hormones

Speak with a doctor about hormones, puberty, and the menstrual cycle.

Sweetee Hurruck, Westcoast International Secondary School

A lesson could be...

Mathematics in the world



Algebra in Action

Run a virtual lemonade stand, using algebraic equations to work out costs, revenue, and profit.

Bhavika Vyas, Nita Mukesh
Ambani Junior School



Scale Master Engineer

Co-design rollercoasters with a virtual engineer coach to master scale factors, blueprints, and proportional math.

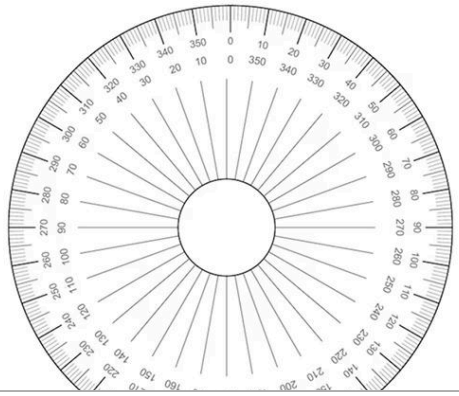
Ashley Jane Smyth, Raha
International School, KCC



Road Trip Math

Plan routes and distances using proportions, scale factors, and conversions.

Ruchika Gupta, Shiv Nadar
School Noida



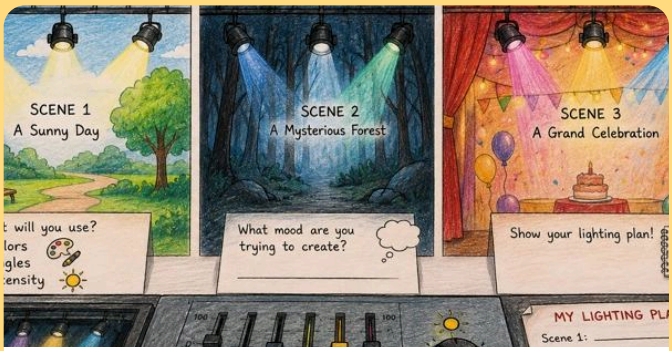
Innovador Geométrico

Engineer a machine part using circles, sectors, and arc length.

Julisa Galindo, Colegio
Internacional Terranova

A lesson could be...

A professional role



Lighting Designer's Challenge!

Choose lights for a puppet theatre, exploring how brightness, colour, and mood shape a story.

Rozelle Bezuidenhout, American Gulf School



Rocket Engineer Interview

Test a design against questions about thrust, drag, materials, and angle.



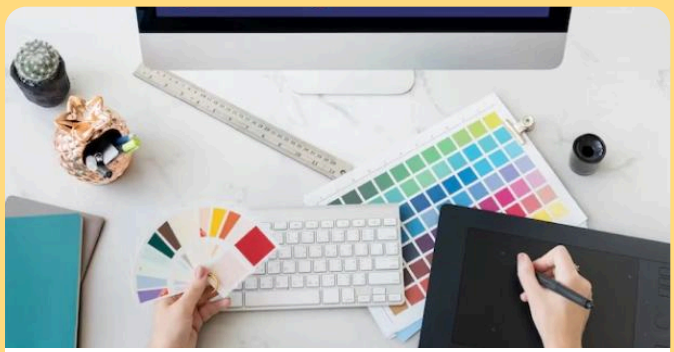
Thomas Poole-Phillips, BAE Campus



Decision-Making Lab

Work through business decision scenarios, weighing options, pros and cons, and justifying clear strategic choices.

Harshit Shah, The Galaxy School - Wadi



Healthy Drink Design Studio

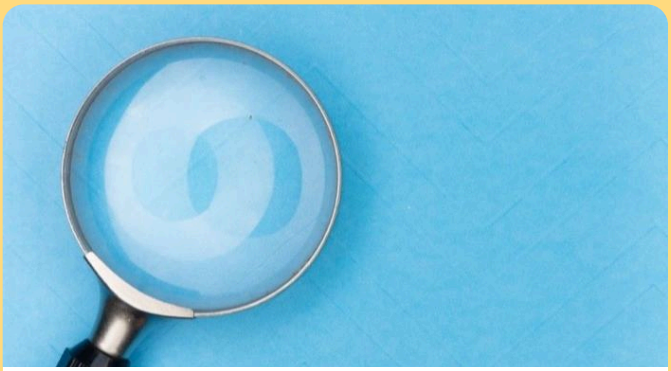
Create a brand using colour psychology, typography, logos, and slogans.



Christopher Engström-Roberts, Bavarian International School gAG - Haimhausen Campus

A lesson could be...

A story to enter

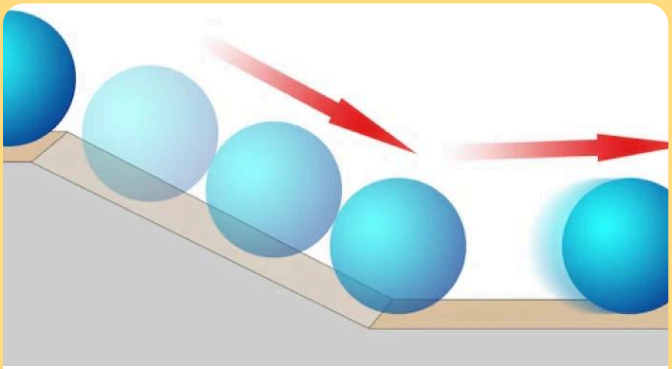


Nancy Drew's Mystery Challenge

Interrogate suspects and gather clues to solve a poisoning.



Rachel Beluah,
Shiv Nadar School



The Narrative Machine: Physics in Story

Connect Newton's three laws of motion to plot and character in Langston Hughes's 'Thank You Ma'am'.



Deborah Buttridge,
The Brilliant MicroSchool



Mrs Birling's Interrogation

Question her about Eva Smith, social class, and responsibility.



Katarina Ule, Wotton House International School Gloucestershire



The Road Not Taken: Inside Frost's Multiverse

Explore the worlds created by different readings of a life-changing choice.



Ebony Taylor Oregan,
Summit International School

Classroom story

“At lunchtime, they were still learning about science.”



Thomas Howard, Western Academy of Beijing

Continental drift can become a fairly dry topic when it is taught through a worksheet. For this Grade 8 lesson, I wanted students to gather the evidence and then have to use it.

I set up the classroom as a research conference on Pangaea. Students became experts in one area of evidence for continental drift. Some studied the fossil record, others looked at how the continents fit together or examined seafloor spreading. They then shared their findings so that everyone left the conference with a wider body of evidence.

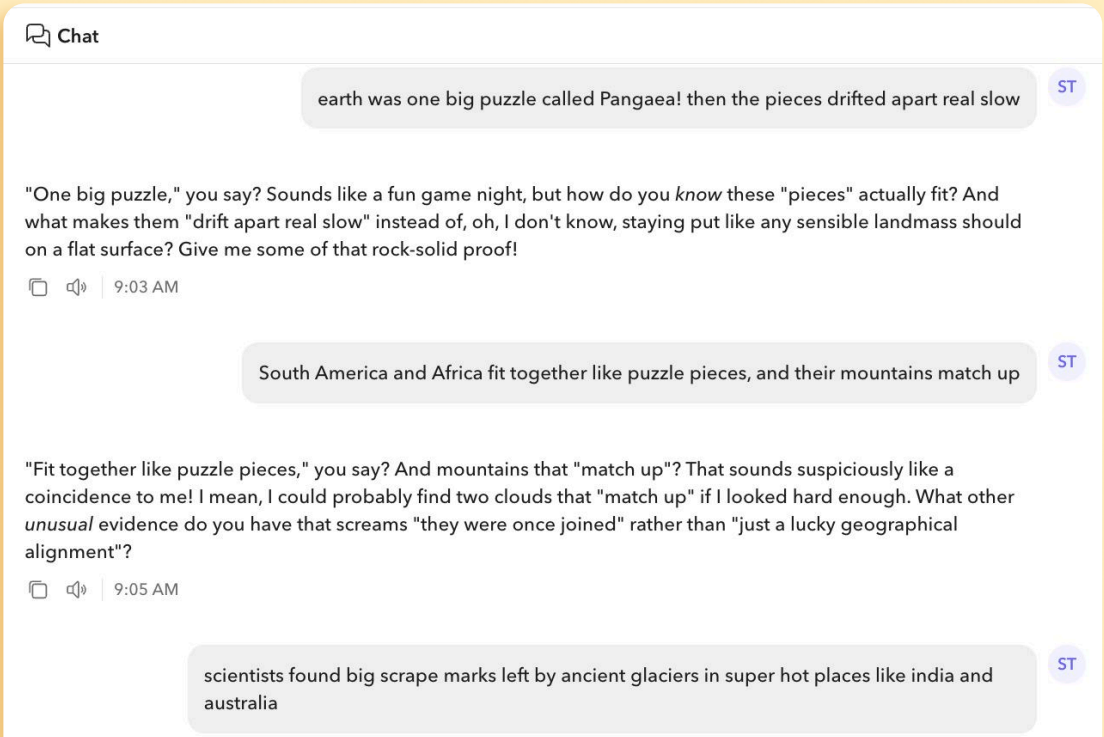
Then came what we called “Pangaeaemonium.” Outside the conference, protesters were claiming that Pangaea had never existed. The tutor played one of them, and the students’ job — as researchers — was to convince it otherwise.

The tutor did not simply praise their answers. It said, in effect, “I don’t believe you. That evidence isn’t strong enough.” It sometimes quoted their own words back to them and even made jokes about their explanations. Instead of answering another set of questions about continental drift, students were trying to make a case for it.

There was a lot of laughter, and students kept sharing the responses they received. When the lesson ended, they were still comparing what they had said and asking one another what had convinced the protester. The class was just before lunch, so the conversation followed them out of the room.

I had used jigsaw activities before, but the final stage would normally have been a worksheet or students interviewing one another. This gave every student the chance to put the evidence together and defend it. It felt a little sneaky: at lunchtime, they were still learning about science.

Watch Thomas talk about his AI Tutor here.



Finding 4

Critical thinking, creativity, and metacognition grew stronger when teachers set the guardrails.

Several contemporary thinkers including Dylan Wiliam (2026) and Ethan and Lilach Mollick (2024) point to a fine line between AI that thinks for a student and AI that extends a student's own thinking, and they argue that it's the teacher who usually draws it.

For the teachers in this study, it came down to how the tutor was built and used. They decided what a tutor should refuse to do as carefully as what it should do. They told tutors not to give away answers or accept unsupported claims. A tutor could offer a hint, ask for evidence, or send a student back to reconsider an answer.

Their role did not end once the tutor was built. Teachers tested the tutors, read the conversations, and refined the guardrails as they saw how students responded.

With those guardrails in place, and a teacher who remained present, AI strengthened the skills many feared it would weaken. Students had to reason, generate possibilities, test their ideas, and reflect on how their thinking changed.

Classroom story

ST CLARE'S OXFORD

"The tutor would not accept the right answer without the reasoning."



Sarah Jinks, St Clare's, Oxford

As a biology teacher and examiner, I often see students who know the content but struggle to reason through an unfamiliar experiment. Practical lessons can be part of the problem: so much time goes into collecting data that there is little left to think about what the data means.

For a respiration investigation, I gave students data from a brewery fermentation experiment. We talked through how the experiment would work, then used almost the whole lesson to think about what the data meant. Everyone began with the same problem, but what the tutor asked next depended on each student's response.

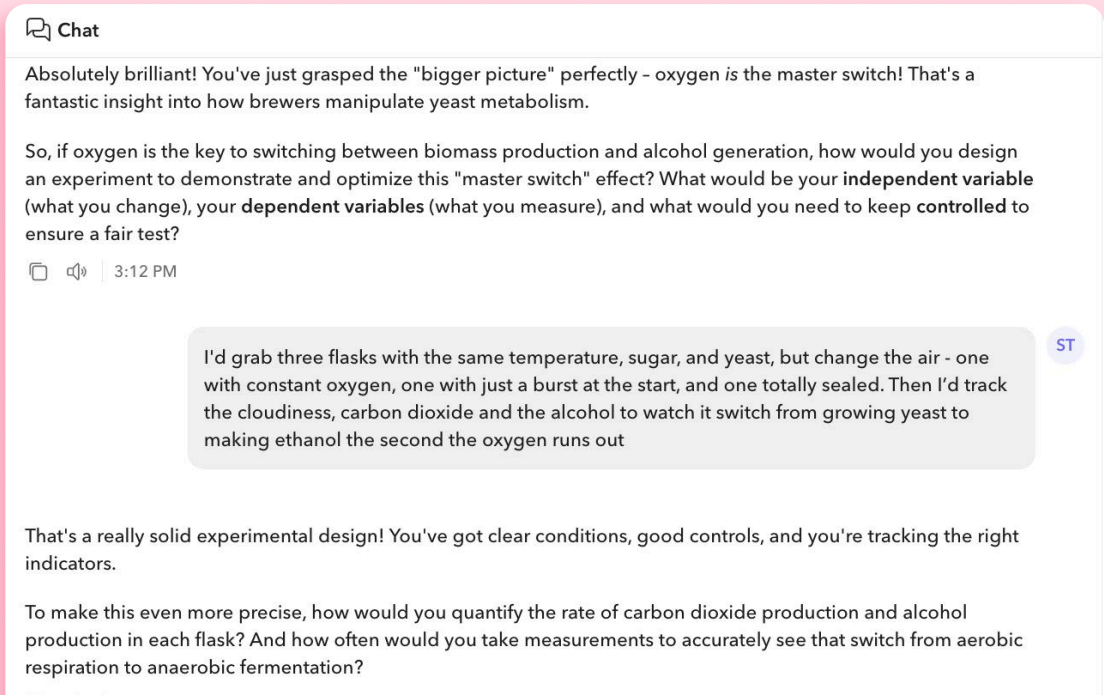
One student reached a difficult point and wrote, "I don't know. You tell me." The tutor did not. It responded, "Well, let's think about this," and asked another question that helped him take the next step.

Another student, one of my most ambitious and highest-achieving, went away, researched the answer, and returned with it. The tutor told her that she had found the answer rather than worked through it, so it could not give her the marks. She had to go back and do the reasoning.

What surprised me was that some of my highest-achieving students found the task difficult. They are very good at memorising information, but this asked something different of them: they were pushed to work through the problem solving skills.

For some students, the tutor went back and worked through the problem step by step. Others were pushed further. Almost the whole lesson went into reasoning rather than collecting data. It was not about just giving me the right answer. They had to work through it.

Watch Sarah talk about her AI Tutor here.



Finding 5

Teachers gained better visibility into student thinking.

An answer tells a teacher where a student arrived. It rarely shows the route: what they assumed, where they became stuck, or why they changed their mind.

Ritchhart, Church and Morrison (2011) describe the importance of making thinking visible. When students explain how they are making sense of an idea, their reasoning becomes something both they and their teachers can examine and develop.

With AI Tutors, the full conversation remains visible to the teacher. They can read the questions students ask, the explanations they try, and where their understanding begins to break down. Across a class, they can also see when the same misconception or difficulty appears repeatedly.

85% of teachers reported that AI Tutors surfaced understanding they would not otherwise have seen, from a hidden misconception to a quiet student's real reasoning. They used those insights to revisit concepts, adjust tutor prompts, add checks before a task, or plan different support for particular students.

Classroom story

DSB INTERNATIONAL SCHOOL

“The process showed me what the finished work could not.”



Stephanie Holt , DSB International School, Mumbai

By the end of the year, my middle school students could produce polished work with AI in seconds. I could no longer tell from the finished piece who had done the thinking and who had handed it over.

I designed a three-day project that gave the process and the final product equal weight. Students had one open brief: create an “AI Survival Kit” that would teach someone else how to use algorithms and AI safely and sensibly. They chose their audience and format. Some built websites, others created apps or handbooks, and on the third day they exhibited their work to other year groups.

I wanted to see how they planned, where they became stuck, what they tried, and when they chose to use AI. I built six tutors, each with one job: a Metacognition Coach, an Algorithm Detective, a Socratic Tutor, a Project Management Tutor, an Audience Tutor, and a Wellbeing Coach. They were designed as thinking partners, not answering machines.

The Metacognition Coach was the one students returned to most frequently. At set points, it stopped them and asked: “What did you do here? How much of this is yours, and how much is the AI’s?” It asked them to check their work, notice when they were offloading their thinking, and be honest about the choices they had made. Without those pauses, many would have raced through the task because AI is fast and speed can feel like progress.

What I saw surprised me. Several of my highest-achieving students raced through the project and skipped the tutors. Their work looked polished, but there was very little thinking underneath. Students I would usually have placed in the middle of the class slowed down and produced some of the strongest work.

One eleven-year-old built her own app: a thinking partner modelled on the Metacognition Coach, with points and streaks. She then created a diagram showing where her thinking had been strongest.

This assessment told me more about my students than a traditional exam ever could.

The teacher remained the constant

> *"Teachers are designers. An essential act of our profession is the crafting of curriculum and learning experiences to meet specified purposes."*
>
> — Grant Wiggins and Jay McTighe (2005, p. 13)

Across all five findings, the teacher remained the constant. Teachers decided the purpose of the lesson, what the tutor should know, where it should challenge or hold back, and what to do with what it revealed. AI Tutors gave teachers new possibilities to design with but their knowledge of learners and learning determined what those possibilities became.

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About this research

This report draws on 100,000+ AI Tutors created by educators on Toddle, 1,345 submissions to the AI Tutor Awards 2026, and over a 100 educator survey responses and follow-up interviews. Survey findings and classroom accounts describe educators' reported experiences. The survey was voluntary and self-selecting, and this was an observational study.

The five findings reflect patterns in what teachers built and what educators reported through surveys and interviews. Percentages are based on respondents who answered each question.

Classroom accounts have been lightly edited for length and clarity and approved by the educators featured.

Schools whose work is reflected in the report

