

Friend or Foe?

Teacher attitudes to artificial intelligence



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Foreword

In the fast-paced world of technology, it's crucial to pause and listen to those on the front line of education regarding the role of Artificial Intelligence (AI). At Trinity College London, with over 150 years dedicated to supporting educators, we've done precisely that by surveying teachers for their views and insights on AI in education. Understanding teachers' perspectives on AI is not just an academic exercise for us; it's a commitment to our educational mission.

Teachers have long embraced new technologies, from slide projectors to digital apps. Their engagement with AI follows this tradition – driven by curiosity and guided by a demand for quality and relevance. According to our survey, many remain wary. But this scepticism towards generic AI tools underscores not a rejection but a call for precision and reliability. Notably, our research indicates that a quarter of teachers are already incorporating AI into their instruction, signalling a readiness for change, provided these tools meet their exacting standards.

This readiness has inspired us at Trinity to innovate with purpose, leading to the development of tools like our NoteLab English – crafted to deliver bespoke, dependable content that enhances the educational journey.

Looking forward, we see a future where AI, used ethically, serves as a pivotal tool in expanding traditional learning boundaries and fostering creativity, critical thinking, and problem-solving skills. By integrating AI seamlessly into education, we aim to prepare students for a future where technology and human creativity converge, rendering education more inclusive, effective, and forward-thinking.

Embracing these insights, we are poised to lead a future where AI in education is characterised by collaboration, trust, and a relentless pursuit of excellence.

Erez Tocker,

Chief Executive, Trinity College London



Introduction

It is a little over a year ago since generative artificial intelligence tools were made available to the public. In that short time, Al's potential to transform – and disrupt – has exercised the minds of entrepreneurs and researchers, tech evangelists and sceptics, prime ministers and presidents.

This is no less true in education, where Al's potential impact has been quickly recognised. In the past year alone, hundreds of academic articles have been penned either eulogising its transformative promise or warning of its ability to corrode established practices. Some institutions have incorporated Al into student modules; others have banned its use completely.

But while there is no shortage of opinions on AI, there is little in the way of data. Are teachers actually using it? If they are, what are they using it for and if not, why not? Do they think schools and students should be encouraged to use it and if so how? Regardless of their own hopes or fears, how big an impact do they think AI will have on education within the next five years, and where can they see it making the greatest impression?

To answer these and other questions, Trinity College London (Trinity) commissioned pollsters YouGov to survey 1,000 teachers in the UK.

The results were illuminating:

- A quarter of teachers already use AI
- But opinion is evenly divided over whether students and teachers should be encouraged to engage with it
- Three-quarters worry that student misuse of AI will be a persistent problem
- A large majority think AI is too unreliable currently but only a minority would ban its use in the classroom
- Yet over half think AI will transform education in unforeseeable ways within five years
- And by 2:1 they believe effective AI would allow them to spend more time with students and improve educational outcomes

A quarter of teachers already use Al



IN SHORT:

Most teachers are, for now, more cautious than enthusiastic about AI in education. But while they are alive to its risks, they are not in denial of its potential and remain open to the many possibilities and benefits.

Elsewhere in this report, we outline how educators can best exploit Al's potential in and outside the classroom – and what cutting-edge products have been launched by Trinity to enable them to do so.

METHODOLOGY:

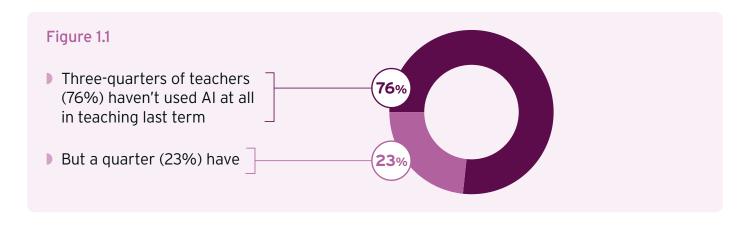
Sample size was 1,012 adults surveyed online by pollsters YouGov between 7-17 November 2023. The figures have been weighted and are representative of UK teachers. Not all responses will add up to 100% due to rounding.

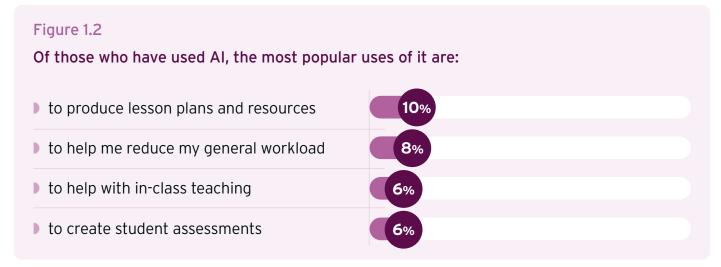




1. Current use of Al

Although most teachers haven't yet used AI in their teaching, a significant minority already have despite its relatively recent development:





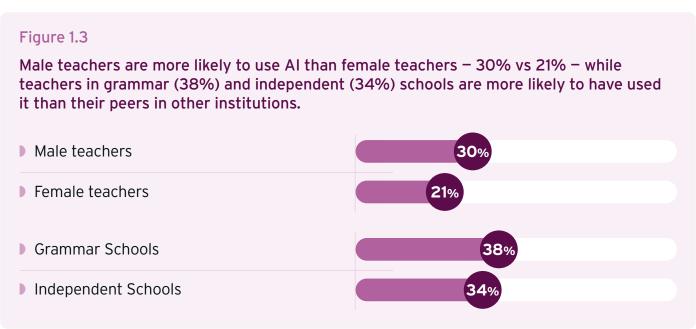


Figure 1.4

Many teachers, however, are unsure about how widespread future adoption of AI will be:



- ▶ 52% Half say they won't rely on it to customise lesson planning and resources for individual students
- ▶ 32% A third think they will
- ▶ **15%** Don't know



- ▶ 50% Half don't think most assessment will by Al-led
- ▶ 28% A quarter disagree and think it will
- **22%** Don't know



- ▶ 55% Half are unconvinced that every classroom will use a personalised AI assistant
- ▶ 22% A fifth disagree
- **24%** Don't know

Figure 1.5

Part of the reason of this uncertainty may be that most teachers think AI is too unreliable to assess students' work or help with resource or lesson planning:



- ▶ 64% Almost two-thirds think it is unreliable
- ▶ 8% Less than one in ten think it is reliable
- ▶ 29% Don't know/neither agree nor disagree

Figure 1.6

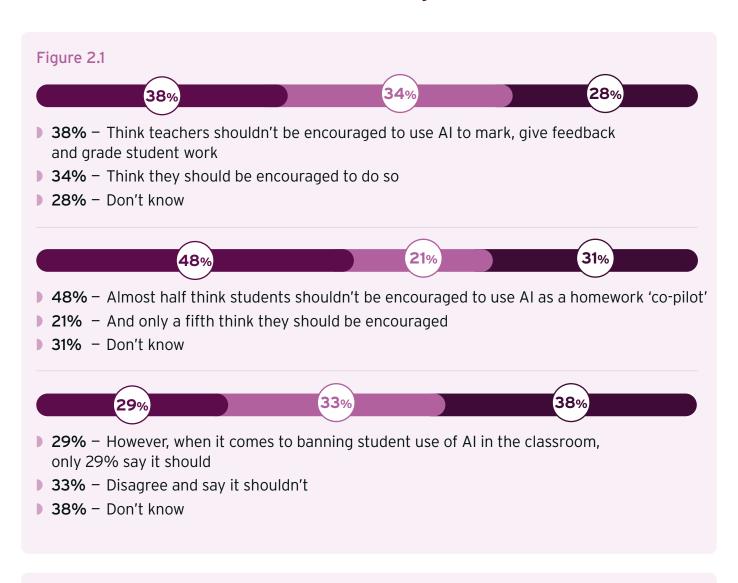
And a large majority think worries over misuse of AI by students will remain:



- ▶ **74%** Three-quarters think those concerns will persist
- ▶ 13% Little over one in ten think they won't
- ▶ 13% Don't know

2. How should schools approach AI?

Opinion is more evenly divided, however, when it comes to whether students and teachers should be encouraged to use AI:



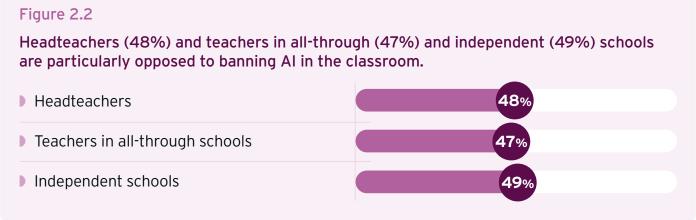


Figure 2.3

Opinion is equally divided over whether students should be encouraged to use AI to develop their problem-solving and critical thinking skills:



- ▶ 31% Say they should
- ▶ 35% Say they shouldn't
- **34%** Don't know

Figure 2.4

One of the areas in which AI is already making a difference and could potentially play an even bigger role is in the creation of lesson plans and resources. Respondents say they spend a significant amount of time each week planning their lessons:

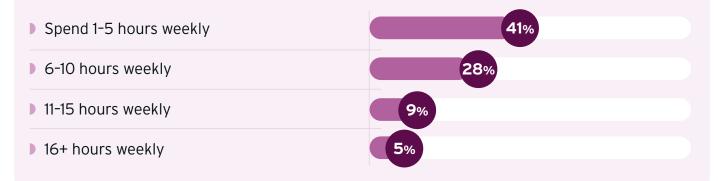


Figure 2.5

A fifth of teachers (20%) think that AI could save them time (1-5 hours) planning lessons – though a large majority (61%) don't know. And a similar proportion (19%) say they envisage it saving the same amount of time on non-teaching activities.



- ▶ 20% Think that AI could save them time (1-5 hours) planning lessons
- ▶ 19% Say they envisage it saving the same amount of time on non-teaching activities
- ▶ **61%** Don't know

3. Using AI in the future

Regardless of their hopes and fears, most respondents think AI will revolutionise teaching in unforeseeable ways within five years:

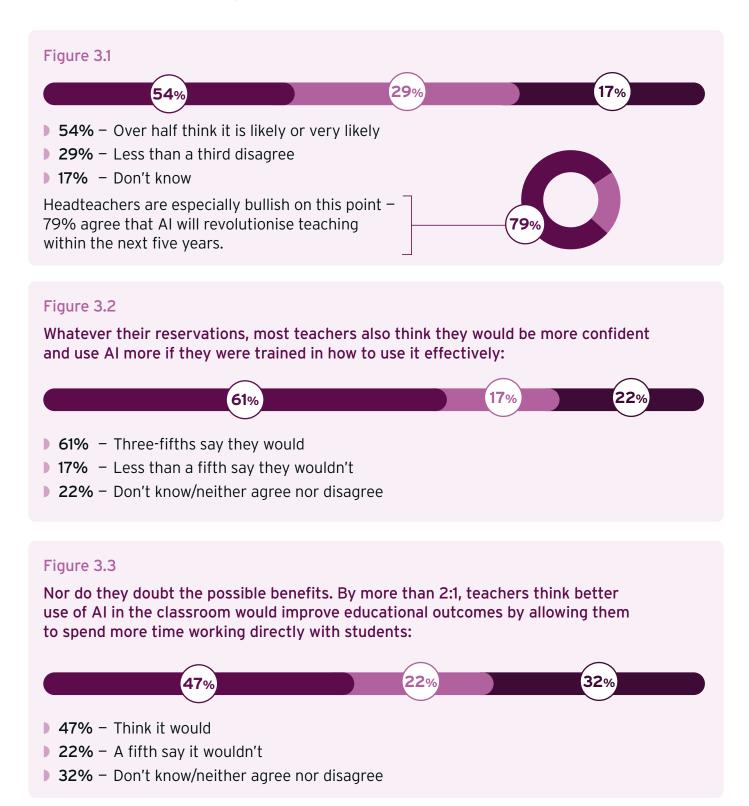


Figure 3.4

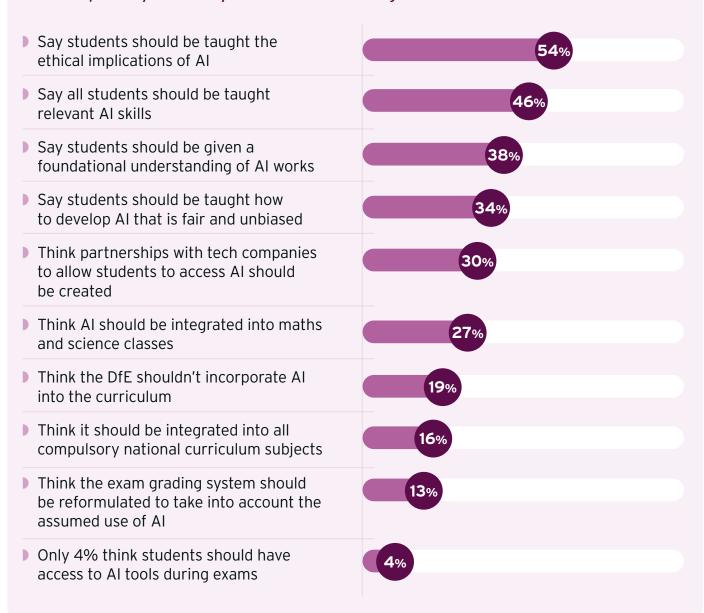
Conversely, fears that AI will threaten jobs seem overblown. Few teachers think that AI will allow the government to replace those who are leaving the profession:



- ▶ 58% Almost three-fifths think it won't
- ▶ 19% Only a fifth think it will
- ▶ 23% Don't know/neither agree nor disagree

Figure 3.5

Asked in what ways they think the Department for Education should incorporate AI into the curriculum, teachers on the whole think students should be taught to use it responsibly – but they draw the line at letting them use it in exams:



Conclusions

It's clear from the answers to our survey that although teachers may have questions about the impact of AI, especially student misuse, many are already embracing this new technology to plan, prepare and create different approaches for their learners' needs. They understand that to ban its use in education would be foolish, impractical and counter-productive.

Teachers are understandably cautious of the challenges artificial intelligence poses, but they aren't in denial about its potential to transform education. They have engaged with disruptive technologies in and out of the classroom before – and there is no reason to doubt that ultimately the profession will accommodate this latest innovation.

Moreover, despite the doubt and uncertainty, there is obviously an appetite to learn how AI can help – and how best teachers can avoid any pitfalls.

This entails a pragmatic approach to AI if users are to get the most out of it. And that means in turn giving teachers practical solutions and tools that will enable them to save time, reduce their workload and improve educational outcomes for their students.



How AI can be a teacher's ally

Teachers are understandably wary of AI in the classroom. But David Weller explains why they should embrace it and why it could be more of an ally – to them and their students – than many realise.

'Whenever you meet up with somebody you haven't spoken to for a while who's in the sector, then talk inevitably turns to Al. What will happen? What's the timeline? It's clearly at the top of people's minds,' says David Weller, a TEFL teacher and trainer and now the Digital Skills Lead at the University of Exeter. So he isn't surprised that respondents to the Trinity survey were wary about Al in the classroom.

A few institutions have gone so far as to ban it – though Weller thinks that such drastic action is foolish and ultimately futile. 'We won't be able to ban it, it's incredibly hard to detect, and that will only become harder. The best thing to do is to set expectations; to teach students how to use it responsibly and to cite it like they would any other source.'

Nor does he think change will be as quick or as drastic as initially thought. 'When AI was first introduced, I think people were expecting rapid, sweeping changes. But the way that some of the bigger tech organisations have started to integrate AI into their tools with incremental updates and the fact that schools are taking their time to find out the practical approach means that change will be more gradual.'

Al he says will induce change in education, but it won't upend it. 'Previous innovations gave teachers more options. Whether they used those options and how enthusiastic and creative they were was up to them. It's the same with Al, but perhaps slightly more so.'

Why? Because he thinks that AI could be more of an ally than most teachers realise. 'AI is probably going to force more change than previous tools because teachers will quickly realise the futility of setting certain tasks. Much as the calculator made setting homework for simple arithmetic redundant, so teachers will have to come up with more interesting ways to set homework that doesn't rely on lower order skills such as memorisation and regurgitating facts.'



Mundane, time-consuming tasks such as sourcing content for lesson plans, setting multiple choice quizzes, or basic data reporting can be delegated to AI as well as more complex challenges. It can be used, for instance, to give feedback on existing material and suggest improvements, or quickly create lesson plans on the same topics for different year groups, or allow highly individualised plans for different learning needs.

Weller gives an example of teaching English to students from a variety of backgrounds: 'If you have students from different cultural backgrounds, each one has different levels of first language interference on the language they're learning. What might they be? How might that affect pronunciation, grammar, common mistakes in vocabulary? Al can show you and produce quite complex activities that not only save time by doing run-of-the-mill tasks but also make you better informed by helping you anticipate learners' issues.'

One of the reasons teachers aren't using AI in greater numbers is that many of them, according to the Trinity survey, thought it unreliable. Are their concerns justified? 'Very much so,' Weller says. 'Everything needs to be double-checked – though that said new factchecking tools are coming onto the market to address that. Even so I'd still definitely double-check everything before using it in class

everything before using it in class.

'Another thing AI is not very good at is the cultural aspect. Teachers may face cultural challenges or certain things that are taboo to bring up in the classroom and that they might want to omit in lesson plans. There definitely needs to be cultural oversight by teachers, especially in language teaching.'

By far the biggest issue for teachers, according to the survey, is the potential misuse of AI by students. Three-quarters of respondents believe those concerns will persist – and Weller agrees. 'Students are definitely misusing it and the issue isn't going to go away, especially as all but the laziest cheaters can fool detection software.' What's more, he says, as AI becomes more sophisticated and able to do ever more complex tasks, the job of detecting AI-manufactured content becomes much harder.

Al is probably going to force more change than previous tools because teachers will quickly realise the futility of setting certain tasks. The answer for teachers, he believes, is not deny that student use of AI is widespread, but to get them to use it well and ethically. 'I would try my utmost to get them to be enthusiastic about it. How by using it in the right way they can increase their ability, their memory and their creativity – it's far more than just an outsourcing tool. And ultimately you remind them, as teachers have done throughout history, that if they cheat, the person they're really cheating is themselves. Sure, it might get them through the next assignment, but in the real world, they need to be able to have instant access to those capacities and capabilities that they should have developed in the classroom.'

When it comes to their own practice, he advises teachers to play around with AI and give it tasks to see what it can do. 'Start with a model of what you want to achieve – upload a picture, a document, a spreadsheet – and ask AI what prompt you should give it to create this, and it will give you a prompt and test it. The output won't be perfect – but it will produce a draft of say end-of-term reporting that you can edit, it will only take five minutes but save you a great deal of time.'



David Weller,Digital Skills Lead at the University of Exeter

David Weller is Digital Skills Lead at the University of Exeter. He regularly publishes newsletters for teachers interested in AI – <u>AlEducatorNews.com</u> – and his book, *ChatGPT for Language Teachers: the Ultimate Prompt Handbook for AI Productivity,* is available on Amazon.



Introducing NoteLab English

One of the main benefits of AI for teachers is its ability to create lesson plans. Trinity's innovative NoteLab English helps them do just that.

It not only saves teachers an enormous amount of time by doing much of the mundane legwork for them, but also allows them to customise lesson plans by age, ability and duration – using a variety of content in multiple formats that will ensure lessons are topical and engaging.

When we asked teachers what they wanted from an AI lesson plan generator, most wanted a tool that would save them time, be flexible and adaptable enough to tailor lessons to different needs, inspire new ideas, align with the curriculum, and be easy to use.



Time saving

Creating lesson plans can be a time-consuming task – researching content, organising it, ensuring it is age and ability appropriate and that it's up to date. NLE streamlines this cumbersome process instantly with the required prompts. Nine in ten teachers in our focus group said NLE would save them time.



Adaptable

By analysing student performance data and any additional information the teacher provides, AI can tailor lesson plans to group, and even individual, need. Over half of our focus group said this was an important consideration and would help them meet the diverse needs of students.

> One of the main benefits of AI for teachers is its ability to create lesson plans.



Inspirational

Teachers also appreciated the fresh teaching ideas AI could generate. NLE can not only source content from multiple, up-to-date material - videos, slides, audio, historical documents - making lesson plans more engaging, it can also give feedback on existing content, allowing teachers to refresh and improve their work.



Curriculum-aligned

Al can automatically cross-reference lesson plans with course standards and objectives, ensuring content is consistent and meets the requirements of the curriculum. Two-thirds of our focus group said that aligning plans to lesson objectives was crucial.



Easy to use

NLE was highly rated by our focus group of teachers for its user-friendly, easy to access interface. They particularly appreciated that it was fast, reliable and accurate – and its ability to generate appropriate teaching prompts.

If you would like a demonstration of NoteLab English, or would like to know more, please contact notelabenglish@trinitycollege.com



