Teaching with GenAI:

Insights on Productivity, Creativity, Quality and Safety

About Avallain

Pioneering digital education

At Avallain, we are on a mission to reshape the future of education through technology. We create customisable digital education solutions that empower educators and engage learners around the world. With a focus on accessibility and user-centred design powered by AI and cutting-edge technology, we strive to make education engaging, effective and inclusive.

About Oriel Square

Specialist education insight

Oriel Square is an educational consultancy. We provide independent research, communications, strategic planning and content production to the world's leading education organisations to define and deliver the best in educational products and services. Our research engages educators around the world to understand their behaviours, experiences, needs and wants, in order to inform and share good educational practice throughout the sector.

Contents

Foreword

This report offers key perspectives on the diverse ways in which generative AI is being integrated into schools today, as well as offering a general introduction to AI. It not only introduces emerging practices, but also highlights areas where teachers and school leaders require further guidance and support from policymakers, for example in relation to questions of data security and potential bias. This report will be of value to teachers, school leaders and policymakers.

As you read this report, I hope you will be as inspired as I am by the educators who are engaging with the challenges and opportunities of AI. Their work, and this report, contribute to a framework for continued exploration and collaboration as we shape the future of learning together.

Dr Imogen Casebourne, Research Lead, Digital Education Futures Initiative (DEFI), Hughes Hall, Cambridge University

A Note from the Sponsor

From our beginnings in the early days of digital education, the team at Avallain has been dedicated to developing educator-led technology, believing that a research-driven approach is essential to ensuring that technology is never an end in itself but a true enabler of learning. We have seen this in the evolution of online learning, mobile learning and adaptive learning. However, with the rapid rise of generative AI, this approach has never been more important.

We commissioned this research to explore educators' experiences with generative AI — how it is used, its benefits, potential, limitations and risks. Drawing on conversations with teachers and specialists, and recent reviews and frameworks, we present this report to offer valuable insights and recommendations to the educational community. Together we are navigating this emerging field to deliver technology that supports teachers and students throughout the learning process.

Ursula Suter and Ignatz Heinz, Co-Founders of Avallain

GenAI in Education: A Brave New World?

AI is increasingly pervasive in our daily lives. Developments in machine learning are enabling voice and face recognition, and advances in large language models and generative artificial intelligence (genAI) are facilitating text, image, sound and video generation to support multi-modal content creation and interaction. Since ChatGPT launched in November 2022 – the first widely, freely available genAI – the impact of AI on the world, and in multiple domains and disciplines, has grown much bigger. In April 2023, 17% of teachers in England reported they had used AI tools for school work[1] and by August 2024 that number had more than tripled to 57%.[2] ChatGPT ignited great interest because, as a genAI model, it seems to do what most thought only humans could: 'create' (although this report later suggests a more accurate term would be '(re)generate'). The model is trained on huge amounts of data and learns the underlying patterns to generate output consistent with the training set.

The practical possibilities of genAI have caught the attention of intergovernmental organisations, national governments, trade bodies, schools and school chains, consultants and, of course, technology companies, who all recognise great potential for using AI in education. In 2021 and 2023, the United Nations Educational, Scientific and Cultural Organization (UNESCO) published guidance reports on AI and education,[3] the latter one specifically about genAI. The EU published its guidelines for the ethical use of AI in teaching and learning in 2022[4], and in 2023 the UK's Department for Education (DfE) published its position on the use of genAI in education.[5] In August 2024, the new UK government announced a project[6] (backed by £4 million of government investment) to pool government documents including curriculum guidance, lesson plans and anonymised student assessments so they can be used by AI companies to train their tools to generate accurate, high-quality, usable educational content. In September 2024, a consortium of 23 UK school groups published the findings of a five-month research project, the outcome of which is a set of proposals for multi-academy trusts on how to respond to the opportunities and challenges of AI.[7] Addressing the unique situation of English Language Teaching (ELT), the British Council also carried out its own research review and teacher survey, publishing its findings in an updated report in July 2024.[8]

Each of these agencies clearly wants the use and experience of genAI to improve for users, but what is happening in schools today? Is AI being used to make education systems richer and more

57% of teachers in England use AI tools for schoolwork

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[1] 'Education Insights: AI in Education' (Oriel Square, 2023).

[2] 'AI Teachers, School Exclusions and Cutting Workload' (TeacherTapp, August 2024); 'Beyond the Hype: The Reality of AI in Education Across England' (Educate Ventures, 2024).

[3] 'AI and Education: Guidance for Policymakers' (UNESCO, 2021); 'Guidance for Generative AI in Education and Research' (UNESCO, 2023).

[4] 'Ethical Guidelines on the Use of Artificial Intelligence (AI) and Data in Teaching and Learning for Educators' (European Union, September 2022).

[5] 'Policy Paper: Generative AI in Education' (29th March 2023, latest update 19th October 2023).

[6] Press release, 28th August 2024.

[7] 'Shape of the Future: How Education System Leaders Can Respond to the Provocations of Artificial Intelligence. A Set of Insights and Recommendations from 23 Groups of Schools', September 2024.

[8] 'Artificial Intelligence and English Language Teaching: Preparing for the Future', 2nd Edition (British Council, July 2024).

efficient? Or are education systems ignoring the impact of AI on the world into which today's learners will graduate? How are education leaders navigating the thorny issues of data, ethics, safety and usage policies?

This independent research report shares the experiences of education leaders from the public and private sectors of UK and international schools, and specialist ELT and private language schools, on four key topics relating to genAI: time-saving opportunities, creativity, content quality, and ethics and safety. Their experiences demonstrate a positive navigation of concerns about using AI and fruitful integration of AI tools in day-to-day practice.

Our research methodology consisted of two main tasks: in-depth interviews and desk research. The interviews were conducted with a purposive sample of teachers and education experts to gain qualitative insights into their experiences of and perspectives on the use of AI in education. This approach allowed for a detailed exploration of real-world applications, challenges and opportunities identified by practitioners. Additionally, desk research was carried out using publicly available reports and academic literature on AI in education to gather existing knowledge and contextual data.

GenAI in the Classroom: Saving Time to Create

While genAI promises time savings – automating administrative work and repetitive tasks – all this, at a few clicks of the mouse, changes the dynamics of both the teaching and learning experience. The benefit that proponents are keen to impress is that, when used well, AI will help teachers use their time more productively. However, there are drawbacks to consider: over-reliance on AI might lead to a lack of human oversight of educational content, and some tools may not perfectly align with specific curricular goals or student needs. Additionally, ethical concerns around data privacy and the risk of fostering dependency on automated solutions are important factors for educators to weigh up.

The recruitment and retention problem: is genAI the answer?

There may be a strong correlation between time-saving in real terms, and teacher recruitment and retention. According to the data from the UK's DfE, a record number of teachers left the profession in England in the 2021–22 academic year: nearly 40,000 teachers left teaching for reasons other than retirement, which represents 8.8% of the teaching workforce. Nearly 13% of newly qualified teachers leave within the first year, and after three years, nearly 24% have left. After five years, almost a third of teachers have left the profession. These figures are concerning, and for new teachers early in their careers it raises the question: *why is this happening?* Education experts have said measures such as reducing workload and increasing pay packages would restore the profession's appeal.

International schools are facing similar challenges with teacher recruitment and retention. A study found that 14.4% of teachers leave international schools each year,[9] and the ISC reports a trend in growing recruitment to return to pre-pandemic teacher numbers that will likely continue over the next decade.[10] Although there may be many factors contributing to challenges with recruitment and retention, the profession has a clear reason to look for ways of easing the pains of day-to-day teaching.

Reducing workload and saving time is one of the main selling points for many AI tools. In England, according to a recent survey, over half the teachers reported using AI tools to reduce their workload, and two-fifths used it to personalise learning for their students; they also reported using it for administrative tasks outside the classroom.[11] In the British Council's survey of the use of AI in ELT, a number of respondents reported using AI to save time by building initial frameworks for lesson plans that they could adapt and build on.[12] In our interviews, we asked teachers whether using genAI tools saved them time, and how. Although there were some caveats, the general consensus was that it did and, moreover, that genAI could be used as a tool to expand teaching practices rather than replace them.

> Over **50%** of teachers in England use AI tools to
>
> **reduce workload,**
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> and **40%** use them to
>
> **personalise learning content**

9   Ruzuvika, M., 'A Study of Teacher Turnover in International Schools was Conducted to Know the Choices', *Education Research*, Volume 13, Issue 1 (2022).

10 'Specialist Report: International Teacher Recruitment and Retention 2023' (ISC, 2023).

11 'Beyond the Hype: The Reality of AI in Education Across England' (Educate Ventures, 2024), p.11.

12 'Artificial Intelligence and English Language Teaching' (British Council, July 2024), p.35.

Freeing up time to spend with students and colleagues

'Integrating AI tools has streamlined my workflow, reducing the time spent on lesson resource preparation and administrative tasks. This efficiency allows me to focus more on facilitating richer student interactions and participating in additional school leadership responsibilities. As a result, I have been able to contribute more significantly to school initiatives and support colleagues in similar endeavours.'

– Aleks Todorovic, Queen's Gate School

'I've done some research into our first year of piloting a genAI tool […] I captured the amount of time staff spent on planning, marking and creating resources outside of their contracted hours before the pilot – most tutors fell into the 10 to 15 hours category, and after phase 1 of the pilot, their non-contracted work hours had reduced by 34%. Of course it's not magic, but it's definitely had an impact.'

– Kirsty Ingleson, Kirklees College

Building skills for efficiency

'A huge motivator for our teachers to use AI tools is time-saving and efficiency. As a multi-academy trust, we spend a lot of time training teachers on what makes a good prompt, how to go back and refine it, and not just settle for the first result. If I generate a test, I don't want all the questions to be on the same thing, so I have to instruct the genAI quite carefully so that it covers the content I do want.'

– Greg Hughes, Affinity Learning Partnership

'Using genAI can take time; it needs to be prompted properly, and there are banks of resources that can help do that now.'

– Shaun Wilden, International House World Organisation

Faster creation of teaching materials and resources

A significant advantage of genAI in education lies in its potential to streamline planning and create classroom materials. UK educators highlight the ability to generate lesson plans, assessment questions and schemes of learning as a distinct benefit. Aleks Todorovic at Queen's Gate School uses genAI in a very organised way. At the end of each year, he and his colleague in the computer science department review the exam board's GCSE and A-level curricula for any topics that have been removed, modified or added, and then use genAI to update the course resources. With only two teachers teaching several year groups, this systematic use of the technology saves several precious hours of work.

Greg Hughes of Affinity Learning Partnership explained how genAI-created quizzes are significantly reducing teacher workload in science. 'Checkpoint quizzes' are used throughout the year at the trust to survey student learning. Rather than spending hours developing questions, teachers now use a quizzing tool with built-in AI question generation that creates multiple-choice quizzes in minutes. Having a bank of these checkpoint quizzes that are shared and used by all 40–50 science teachers in the trust is also a very powerful tool for benchmarking and for early intervention with students who need extra support.

In the uniquely placed ELT sector, there is also enthusiasm for delegating lesson planning to genAI, though coupled with a greater concern about correct levelling to the Common European Framework of Reference for Languages (CEFR). Shaun Wilden of International House World Organisation sees many teachers employing AI for routine exercise creation such as gap-fills, but believes that the real opportunities lie in adapted and personalised learning. Rob Howard, Consultant and ELT Trainer, uses genAI to create texts and audio for English for Academic Purposes (EAP) as the technology can create authentic accents; Howard concurs with Wilden that there is already a wealth of material available on the internet for common tasks such as gap-fill. Matthew Wemyss at the Cambridge School of Bucharest agrees that genAI can save teachers prep time on particular learning objectives, but is more circumspect on the narrative that the technology can automate tasks more generally: 'If you know exactly what you want, and you prompt it, yes it can save you time on a routine task.'

Reduce the time-consuming production of personalised/differentiated classroom materials

The ability to quickly generate differentiated materials is a key time-saving advantage of genAI, and one of the most important benefits that the tools can offer. Learning support departments are particularly interested in genAI's ability to break down and explain content, and ELT educators are exploring ways to use tools to appropriately level reading texts – although teachers must be aware of the current limitations in aligning generated content with the CEFR. Language teachers also use genAI to provide more targeted feedback on student writing and speaking, with the aim of enabling learners to take charge of their own revision and skills improvement. However, they acknowledge the need for further development in this area to ensure accurate, formative and bespoke feedback for learners. Leading educators stress that, while AI can be very helpful here, it is critical that teachers review and select the most appropriate output, ensuring robust quality control.

> Quickly generate
> **differentiated materials**
> using genAI

Admin efficiency – where it's wanted

The potential of genAI to automate administrative tasks is widely recognised across several industries. UK school administrators see value in using genAI for tasks like analysing documents and updating policies, which can free up valuable time for other responsibilities. At Clifton High School, genAI was recently used to produce a report for governors on all policy updates over the past three years. Headteacher Damien Beech now uses genAI to facilitate the Goetre Primary School's curriculum monitoring. Members of the monitoring team contribute to a central document which Beech reviews and summarises into headlines and suggested action points; what used to take several hours' work is now done in less than half the time. School websites can be 'staffed' by customer service bots to answer common queries and direct users to relevant information, saving

more valuable office employee time. But as James Garnett indicated in his presentation 'Ethical AI deployment: safeguarding practices and legal compliance',[13] applying AI to tackle meeting administration is easy to do, but diligence and vigilance is needed as summaries and transcripts – like any other artefact containing personal information – will be liable to subject access requests (a legal right that allows individuals to request and obtain copies of their personal data from an organisation, such as a school).

Personal administration is another area ripe for time-saving tools. Kateryna Protsenko, NILE Delta Programme Leader and Teacher Trainer, uses GPT assistants for specific tasks such as replying to emails, and the time saved on these allows her to take on new projects. In an increasingly information-rich world, several interviewees use AI to summarise lengthy research articles, webinars and podcasts, and as indicators of the benefits of reading/watching/listening to the whole thing. At Repton Dubai, Devon Jamison Horne notes that, since using genAI tools, colleagues now have more time in the evenings and at weekends for their own personal development – time previously taken up by preparing lesson resources.

There are differing opinions on using genAI to draft school reports and generate parent communication; nevertheless, all educators emphasise the necessity of human oversight and the need to highly personalise reports to reflect students as individuals. This corresponds to the EU's reminder that, before using any AI tool, we should consider: 'Is the teacher role clearly defined so as to ensure that there is a teacher in the loop while the AI system is being used? How does the AI system affect the didactical role of the teacher?'[14]

Time-efficient implementation: things to consider

Cost

With the array of genAI tools growing rapidly, the market can look overwhelming in terms of choice. Strategic technology adoption needs to be a key consideration for schools, who should look for cost-effective solutions that prioritise an ethical and educational approach to ensure data security and consistency across the institution.

Guidance and training

In the latest report from Educate Ventures Research,[15] which examined self-assessments from 256 schools and colleges in England of their AI preparedness and use, 87% of respondents reported understanding general AI concepts, whereas only 38% felt confident using AI in the classroom. Although specific to England, these statistics resonate across the UK, international and ELT sectors where there is a clear need – and call – for AI literacy training. The schools we spoke to all have some form of AI training in place that includes 'dos and don'ts' around data and safeguarding, alongside practical workshops on specific tools or departmental demonstrations on how AI can be integrated into different subjects.

38%
of survey respondents are confident about using AI in the classroom

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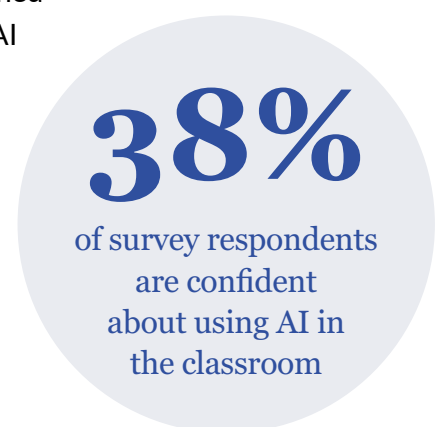
[13] Presentation in the BESA seminar 'Unlocking AI's potential in education', 16th October 2024.

[14] 'Ethical Guidelines on the Use of Artificial Intelligence' (European Union, September 2022), p.19.

[15] 'Beyond the Hype: The Reality of AI in Education Across England' (Educate Ventures, 2024), p.2.

But comprehensive and continually updated training needs to be embedded across all schools and in teacher training courses. Many products also offer training and onboarding; another effective approach is for individual schools or school chains to support an AI Lead.

Some educators call for a more 'judicious' use of genAI. As ELT Consultant and Trainer Vicky Saumell notes, 'We are bombarded with AI enhancements for everything, but for some things, Google works just fine. There's also a fine balance between the time required to create the input (writing precise prompts) and the validity of the output. In these cases, the sensible decision may be not to use a genAI tool.'

Does GenAI Help Bring Creativity into the Classroom?

While genAI tools hold significant potential for innovation in education, their impact on classroom creativity remains a subject of debate, and even a threat to some. It is perhaps best to remember that the definition of 'create' is to 'bring something into existence', and genAI tools certainly deliver on this, but *only* with human input. UNESCO's 'Guidance for Generative AI in Education and Research' includes an entire section on facilitating the creative use of genAI in the classroom,[16] highlighting the need for teachers to be fully engaged with the tools they are using. For example, when a generative chatbot is used as an assistant to provide individualised learner support, the teacher should monitor the conversations and responses, and be prepared to intervene.

Giving space for curiosity

'With AI, I can generate instructional guides based on my resources that are clear and aligned with student learning needs, design visual aids (e.g. infographics) that make lessons more engaging and produce structured documentation that is easy to reference. This has enabled me to devote more time to refining lesson delivery, exploring emerging innovative teaching methods and documenting our digital learning processes as our practice evolves.'

– Aleks Todorovic, Queen's Gate School

Enabling pedagogical innovation

'Our school is using a literacy scheme that is good, but once pupils have been through it, it can become a bit mechanical. We are using AI to uplift the learning for pupils and keep them engaged – for example, pupils write character descriptions and AI generates animated characters from these. So far we've had a good response.' **– Damien Beech and Cerys Evans, Goetre Primary School**

'I use genAI as a partner for creative writing. For instance, I get the students to lay out the plot and look at the main areas of conflict, then use genAI to bounce off ideas or co-write.' **– Nik Peachey, PeacheyPublications**

'I think genAI has been really powerful for pedagogy because tutors are checking back: are we doing good things? Are we inclusive? Are we diverse?' **– Kirsty Ingleson, Kirklees College**

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[16] 'Guidance for Generative AI in Education and Research' (UNESCO, 2023), pp.28–35.

GenAI as a catalyst for creative thinking

Some educators believe that genAI can indirectly foster creativity by prompting teachers to consider new possibilities and challenge conventional methods. Oliver Pocknell, Director of Digital Technology and AI at Hurstpierpoint College, notes that genAI encourages him to 'think about things conceptually' and explore different ways to implement technology in his teaching. Similarly, Vicky Saumell remarks that by experimenting with variations of the same prompt that include a different methodology, a generated lesson plan can present a different pedagogical approach to the same content, which is especially valuable for new teachers or those who are less familiar with the content. Author and consultant Nik Peachey explained how he created a GPT with a background persona so that English language learners could interact with it in a semi-realistic setting. This use of AI as an instigator and thought partner can help teachers break out of routine practices and consider innovative ways to engage students.

GenAI's role in content creation and adaptation

GenAI's capacity to generate and adapt content can also contribute to more creative teaching practices. Joe Cozens describes using AI-powered image-generation tools to create visuals for his biology lessons so that complex concepts are presented in a more engaging and accessible manner. In ELT, Kateryna Protsenko uses a genAI assistant to generate language analysis examples for her teacher training courses, providing trainees with a wider range of illustrative material.

Implementing new educational practices

'I've been using AI as CPD; in my teacher training I was not taught about problem-based learning or gamification, but you can ask genAI for ideas on how to approach this. You do need to be aware of the AI using outdated practice, though.' – **Matthew Wemyss, Cambridge School of Bucharest**

'I use a grading rubric for each lesson to give feedback to students – genAI is able to translate this without having to use spreadsheets. It can visualise this data over time and highlight areas of improvement. Each lesson in my class, pupils are asked how they felt about that lesson and their learning – the output of this can be used to provide more strategic support for pupils based on how they felt a lesson went versus how the lesson was graded. This can be really useful in differentiating for the learner.' – **Joe Cozens, Clifton High School**

Scepticism about AI as a source of creativity

Several educators express scepticism about genAI's ability to truly initiate creative pedagogical approaches. Shaun Wilden from International House World Organisation questions whether AI can make teachers more creative, arguing that this is a fundamental aspect of the profession that cannot be replicated by technology. Similarly, Rob Howard comments that genAI's current capabilities do not extend beyond what a skilled teacher can achieve in the classroom, but does believe that genAI will eventually become much more sophisticated. This signals that, at present, teachers see AI as a tool that can enhance creativity but cannot replace the human ingenuity and pedagogical expertise of educators.

Looking ahead: the future of creativity and genAI in education

As genAI technology continues to evolve, its potential to support creativity in the classroom seems certain to expand. At Repton Dubai, Devon Jamison Horne has set up 'digital champions' in each department: teachers try out different genAI tools for their specific subject needs, and share their findings with other digital champions. This also helps 'reluctant' teachers see how the technology can be brought into their own specialism.

> Set up
>
> **'digital champions'**
>
> in each department

In terms of student use of genAI, rather than fighting the endless battle against genAI-completed essays, why not flip the learning and ask students to critique the bot's work? Or use AI (under teacher supervision) for a specific task, and then discuss the ethical pros and cons? Educators must remain at the forefront, however, ensuring that AI tools are used responsibly and effectively to enhance, rather than undermine, human creativity and pedagogical innovation.

How Good is the Output?

To have a lesson plan on solving ratios or a podcast on *Romeo and Juliet* generated in minutes will instil some degree of amazement and/or relief for hard-pressed teachers, but how good is AI-generated content perceived to be? Greg Hughes notes that at his trust, staff are 'getting more confident' with AI and are pleased with the quality of the content it produces, and the MFL faculty have been impressed by the accuracy and complexity of the output. At Goetre Primary School, where Headteacher Damien Beech uses genAI for several administrative tasks, he 'marvels' at the quality of the output reports and summaries – and how quickly the tasks are completed.

You get what you put in

One crucial aspect brought up by the majority of educators is that genAI performs best with clear prompts. Damien Beech said it was a 'game changer' when he started crafting clear and specific prompts. Now, Goetre Primary School has a shared bank of prompts that is in continuous development. Aleks Todorovic had already spent several years in the computing industry before joining Queen's Gate School, and is meticulous in the prompts he writes to get the outcome he wants. Most teachers would not have a similar industry background, so this again points to the need for robust AI literacy CPD in education. Nick Hockly encapsulates this in the British Council's report: 'there is a need to map out exactly what AI literacy means in terms of specific, codified areas. Currently, this will need to be a rapidly evolving map, and revising content will be a near-constant endeavour due to the fast pace of technological change.'[17]

> Crafting clear and specific prompts is a
>
> **'game changer'**

Revising prompts for diversity

> 'While preparing for a workshop on growth mindset, I used genAI to get a picture of children playing basketball. The first result was a group of only boys, less than half were white, illustrating that basketball was only for a certain ethnic group.'
> – **Kateryna Protsenko, NILE Delta Programme Leader and Teacher Trainer**

AI is not human … and can be inaccurate

One leading ELT practitioner notes that, when she requested a practice exercise for past simple and present perfect, the AI-generated sentences only included examples of the past simple, highlighting the need for careful review and understanding of the tool's limitations. In other cases, ELT educators raise concerns about the lack of context-awareness in some genAI outputs, particularly those related to language teaching. Kateryna Protsenko's work involves training ELT teachers who may

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[17] 'Artificial Intelligence and English Language Teaching' (British Council, 2024), p.58.

be in different countries. One AI task she assigns her students is prompting ChatGPT to generate a dialogue, with all students using the same prompt. The generated dialogues tend to include the same types of discussions and exhibit similar themes, and do not take into account each student's environment or location. Jo Langford and Chris Moore at Specialist Language Courses think that 'there are possibilities perhaps in the future' but the technology is 'not there yet' for their English as a Second Language (ESL) medical students who are studying for very specific exams.

GenAI tools may appear invaluable for filling in knowledge gaps in subjects where teachers are not specialists or where they are teaching above their own language level in ELT. However, there is a greater risk of undetected error. Matthew Wemyss highlights that AI can perpetuate certain 'edumyths' by outputting content based on outdated teaching theory. An example is when a genAI tool produces content tailored to specific visual-auditory-kinesthetic learning styles, as there is no evidence that adapting content in such a way improves students' learning. Checking output content is strongly advised in all the research reports consulted, by AI advocates and by the educators who took part in this research – even more so when users are not subject experts.

Using content to generate ... content

One way to improve the quality and reliability of generated content is through using educator-created or evaluated sources alongside the text prompt. There are multiple possibilities: by uploading reviewed PDFs, documents, YouTube videos and weblinks, the genAI tool is given a more directed question framework, which results in output based on credible information. While some educators may be hesitant to do this because of data and copyright implications, others are constantly experimenting and vetting new tools, especially when the school's closed IT system has integrated AI tools (such as Microsoft 365 and Copilot, or Google for Education and Gemini). Matthew Wemyss uses PDFs, screen grabs, PowerPoints and YouTube links to create a richer classroom experience. Following student feedback, Aleks Todorovic has used genAI to add more granular instructions and images to his computer science course booklets. The enhanced booklets have been positively received, and in tandem the computer science GCSE intake at Queen's Gate School has significantly increased.

Checking for quality

'If you're producing an output beyond what you know, you need to fact-check it. Some genAI tools are good because they produce web sources so teachers can double-check some of the facts.'
– Matthew Wemyss, Cambridge School of Bucharest

'GenAI's output quality is good but needs checking. I go to multiple sources, but most teachers don't do that. They are using genAI as a time-saver, so if you need to do all that checking, the time saved is lost. Really good tools cite where it gets information from, then it's much easier to locate the source. The key is citing where the info comes from.'
– Rob Howard, ELT Consultant and Trainer

Responsible Use: Using GenAI in a Considered and Safe Way

Since becoming more ubiquitous in our daily lives, ethical and safety concerns regarding the use of genAI are two of the most pressing issues for organisations that hold personal data. These concerns are shared by education sector reports, and the teachers and school leaders involved in this research.

Copyright: who owns what?

GenAI tools are trained on massive datasets of existing text and code, and this raises questions about the ownership and attribution of AI-generated content and its potential for infringement of existing copyrights. The legal situation is unclear, and also differs according to geographic location. The EU's 'General Purpose AI Draft Code of Practice' includes a section on rules related to copyright, requesting member states to 'put in place a policy to comply with Union law on copyright and related rights',[18] while the UK's parliamentary working group on AI and copyright code of practice was set up in June 2023, only to be abandoned in February 2024 due to a lack of consensus.

For educators, the blurred lines are problematic. Shaun Wilden expresses concern about teachers being unaware of copyright implications, both for content used as prompts and content generated by AI. Who owns the copyright for AI-generated material: the AI developer, the user who crafted the prompt or the original creators of the content the AI was trained on? Rob Howard articulates a related concern which occurred when he prompted a genAI to create a business English article, only to read excerpts from his and a colleague's work in the generated content. Howard also anticipates potential conflicts between genAI and traditional publishers, and questions whether publishers will develop their own platforms, or how copyright will be managed in an environment where AI can easily generate educational content. 'AI is a disruptor', as one interviewee remarked.

Keeping personal data secure

Data security and student privacy are paramount in educational settings. All departmental leaders interviewed for this report have put in place or are developing AI usage policies so as to avoid unintentional breaches, but this is still a complicated landscape to navigate. The level of detail and clarity in provider privacy policies varies significantly, which complicates the task of assessing and comparing how different genAI products deal with data. What is clear is that, when selling into the EU and UK, genAI tools must comply with those countries' GDPR regulations.

> When selling into the EU and UK, genAI tools must comply to
>
> **GDPR regulations**

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[18] 'General Purpose AI Draft Code of Practice' (European Union, 2024), p.14.

Ethical considerations

'We are in the middle of developing our AI policy, reviewing how people have been using it, seeing what is needed and what needs to be addressed. Part of the process is reviewing the landscape and our context in order to establish clear guidelines on ethical usage, data privacy, and the integration of AI tools into teaching and administrative practices. When choosing an AI tool, I additionally ensure that any content generated is thoroughly reviewed to align with curriculum standards and protect student information.'
– Aleks Todovoric, Queen's Gate School

Demonstrating good use

'It's not widely known that you need to be 13 to use a lot of free genAI tools, or that platforms may automatically take your data. International House World now has an AI policy: this is a list of self-checklists for schools to use and to display on school walls. It demonstrates how the schools are using AI and what we are doing to secure student data.'
– Shaun Wilden, International House World Organisation

As Head of Transformation and AI at Clifton High School and Independent AI Consultant and Ethicist, Joe Cozens is ideally placed to comment on the need for GDPR-compliant tools, stating that there is a lot of encouragement among AI enthusiasts to use a breadth of tools without necessarily thinking about safety and data security. Consequently, carefully vetting AI tools to ensure they meet data security standards, comply with relevant regulations (such as GDPR), and have clear policies regarding data collection and usage is vital. As Computer Science and Esports teacher and Repton Dubai's new Digital Learning Coordinator, Devon Jamison Horne is keen to educate students on how to use AI practically, creatively, ethically and safely. He explains that his students often have multiple devices *and* the ability to pay for AI platforms at the highest output (premium licences), so they need to know how best to use them – imaginatively and legally.

Bias in AI-generated content

All too often, according to AI image-generation models, all lawyers and judges are white men, women are rarely doctors, and men with dark skin commit crimes: we have all come across news headlines of biased output from genAI tools. The educators we spoke to also noted some of the problems they face, from an image of white people in a cave representing the beginning of civilisation to an image of an all-Black team of basketball players. Rob Howard comments that AI tools developed by large tech companies can inherit and perpetuate the biases present in their training data. For Specialist Language Courses, a provider of medical English resources and test preparation training, the lack of diversity in generated content is especially problematic.

The British Council specifically addresses the issue of inclusion and bias in AI within the context of ELT[19] as AI can reinforce a particular standard of English, potentially excluding certain groups or varieties of the language. This can also be problematic in placement assessments, where a plagiarism detection tool may unfairly discriminate against students whose native language is not English.

Tackling the biases

Although AI system developers should ensure that AI tools are 'trustworthy and ethically sound',[20] include diverse actors, and avoid discriminatory impacts and unfair biases, teachers should be cognisant of the potential for problematic content and validate output before sharing it with students. For the British Council, more research is needed to understand the challenges associated with AI use in ELT and develop effective mitigation strategies; meanwhile UNESCO advocates training tools on data that represents diversity across gender, disability, social and economic status, ethnic and cultural background, and geographic location.[21] This involves initiatives that promote the inclusion of voices and perspectives from marginalised groups in the data used to train AI, as well as intra-governmental consensus on AI. In 'The Shape of the Future' report,[22] authors advise multi-academy trust (MAT) leaders to address the complex challenges of bias and misinformation by developing whole community education programmes for students, staff and families, and introducing digital literacy as core subjects.

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At Clifton High School, where understanding AI is 'essential' for students, Joe Cozens has implemented a Skills for Tomorrow course for year 7 and year 12 students. The course covers AI's impact on society, ethics and privacy, and aims to equip students to navigate the AI world in an informed and responsible way. Similarly, at DeFerrers Trust, students might use AI (under supervision) in an IT or photography class, and then discuss the ethics and responsible usage of AI in an ethics class. Matthew Wemyss is clear with students that genAI datasets learn from everything we've ever written or put online, and are essentially 'holding a mirror up to us'.

Tech companies, governments and education leaders: working together

As the UK education sector awaits specific usage guidance from the DfE, and international and private language schools operate within their relevant frameworks, there is a clear need for decisive steering and collaboration between policymakers, industry and educators.

The future – and the evolving role of the teacher

Considering teaching with genAI as a critical skill rather than another demand on teachers, schools, governments and policymakers must work together to provide continuous AI literacy support, alongside thoughtful technology integration into teaching practices. With an array of genAI tools already embraced by many students, schools and education leaders need to think about how teachers can harness the opportunities available.

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[19] 'Artificial Intelligence and English Language Teaching' (British Council, 2024), pp.55–57.

[20] The AI Act (EU) (Official Journal of the EU, 2024/1689), regulation 27.

[21] 'Guidance for Generative AI in Education and Research' (UNESCO, 2023), p.20.

[22] 'Shape of the Future: How Education System Leaders Can Respond to the Provocations of Artificial Intelligence', September 2024, p.18.

The avenues for genAI are wide and varied: improving critical assessment skills; more personalised and formative feedback, and potentially supporting student wellbeing. At Clifton High School every student has a wellbeing app on their device which they use to check-in and indicate how they are feeling. Tutors and heads of year receive notifications, and this eliminates the need for students to take that difficult step of reaching out in person when they are struggling. Joe Cozens thinks this has 'revolutionised' the way in which the school supports its students. This is highly likely to be a field where AI will develop in the near future.

> **Trustworthiness and human-centred design**
>
> must be the cornerstone of all future advancements in AI

From the research, policy frameworks, teachers and school leaders consulted for this report, the opportunities presented by genAI in education are multifarious, while – as with any new technology – there are risks to address. One clear message sits above all this: trustworthiness and human-centred design must be the cornerstone of all future advancements in AI so that educators can confidently rely on and explore the vast potential of generative AI for teaching.

Key Take Aways

From the teachers and school leaders interviewed, and the research reports and policy frameworks consulted, the most salient points for integrating genAI into teaching practices are outlined below.

Educators demonstrate that genAI tools can:

- foster productivity and save time on resource creation
- reduce the out-of-contract time spent on lesson planning
- free up space for them to focus their efforts on learners
- act as a catalyst for creativity and innovation in their practice
- create meaningful learning material when teachers use appropriate prompts and curate the results, or use specialised tools that do this
- help create personalised learning content adapted to different students' needs
- be used safely and responsibly when there is sufficient guidance and training available.

But to make the most out of these opportunities:

Schools need to provide:

- AI literacy training programmes for teachers, time to practise using genAI tools, and ongoing support
- reliable AI solutions for education that provide specialised functionalities and safe environments
- reassurance that genAI is not a replacement for them, but a tool they can use with agency within their teaching practices
- guidelines or policies for AI usage within their school.

Governments and policymakers need to provide:

- policy guidance that helps schools to adopt effective AI strategies for education
- clear and up-to-date frameworks that guide the EdTech industry in delivering safe and reliable solutions.

AI-systems developers and deployers need to provide:

- trustworthy AI tools adapted to educational settings, where educators' real practices and needs have been taken into consideration
- solutions that integrate safeguards and mitigation strategies into their product designs and systems to address the inherent risks associated with AI.

Afterword

This timely report is based on interviews with education leaders and presents a balanced view of genAI's potential while acknowledging current limitations and challenges. The authors emphasise that successful implementation requires careful consideration of institutional readiness, robust training programmes and clear policies around usage. What particularly stands out is its practical focus – drawing on the lived experiences of educators across different settings to illuminate both the opportunities and challenges of AI implementation.

The report maintains a clear focus on what matters most: ensuring that AI serves as a tool to enhance human intelligence and learning, rather than replace them. The case studies and practical insights make this an essential read for any education leader navigating the AI landscape.

Professor Rose Luckin, University College London and founder of Educate Ventures Research

From the Avallain Lab

This report is part of Avallain's ongoing engagement with domain experts, balancing the need for urgency as AI develops at an extraordinary pace with rigorous analysis amidst a blizzard of opinions, findings, concerns and misunderstandings.

In this context, while schools and educators acknowledge the potential of genAI tools to assist in key pedagogical tasks – such as curriculum design, exploring more diverse and innovative teaching methods, and providing formative feedback – they also express concerns about content accuracy, the risk of perpetuating biases, and the impact of these tools on their evolving role in the classroom. All of this underscores the need to provide educators with genAI solutions tailored to educational contexts, along with the critical analysis skills required to engage with these technologies safely and effectively.

The Avallain Lab is actively monitoring and analysing the challenges faced by educators already integrating generative AI into their teaching practices, particularly in the fields of ethics and pedagogy. The results of this research will guide the design and development of Avallain's next iteration of genAI products, including Teachermatic for teachers, as well as Avallain Author and Magnet for publishers and institutions.

Professor John Traxler, UNESCO Chair, Commonwealth of Learning Chair, Academic Director of the Avallain Lab