Department for Education

The safe and effective use of AI in education

Leadership toolkit video transcripts

May 2026

Contents

Video 1 – Introduction

Presenter: Welcome to video 1, Introduction, from the leadership toolkit in the safe and effective use of AI in education online resources.

We are living through a period of significant technological change, with artificial intelligence (AI) beginning to reshape how we lead, communicate and deliver education. From streamlining administrative processes to supporting operations, workload, teaching, CPD, inclusion and personalised learning, AI offers real potential to enhance the way schools and college's function and to support staff in powerful new ways. But, if we decide to adopt these tools, it's more important than ever that we move in a considered and safe way, with humans at the heart of everything we do.

Rose Luckin, Emeritus Professor of Learner Centred Design, UCL:

"So, there are many opportunities that AI brings to help us with teaching and learning, and indeed with the administration of being an educator, running a school, running a college, too. But of course, there are risks associated with artificial intelligence and these risks relate to many features of that artificial intelligence. So, for example, we can think about the lack of transparency that often exists in the AI technologies that we're using. In fact, even the people who are building them don't always know how they work. We also need to recognise that there's inherent bias often in these AI technologies, because they use machine learning and that machine learning is trained on datasets that are not necessarily representative of the populations that the AI is then designed to serve. But we also have a whole load of safeguarding risks that we need to take into account when we look at the use of AI in education. These range from protecting children's intellectual property to protecting children from the lack of transparency in the systems, protecting children from fake news and images, protecting children from profiling, and protecting children from over-reliance and there are others in addition to this. We do need to be careful that we mitigate the risks if we're going to be able to leverage the opportunity. I always say to educators, learn fast, but act more slowly. Do not feel pressurised to buy into an AI. Do not feel pressurised to select an AI tool until you are ready. It's really important that you learn enough about artificial intelligence first so that you can decide what purpose you want the AI to serve you and then design the way that you interact with AI strategically."

Olivia Raven, Assistant Headteacher, Aylesbury High School:

"We sat around the leadership table and said, right, this is going to be a really big thing for schools, a really big thing for education. Who's going to take a lead? And everybody looked away except for me, I think, at that stage. But actually, I was interested. My role is about teaching and learning, and I thought it was going to have a huge impact there. So, step one was research and finding out more. I didn't have any expertise in AI or anything particularly technological, so research was key. I kicked off at the Festival of Education, and I saw two really interesting talks there – Daisy Christoudolou and Dan Fitzpatrick – and they were two polar opposite talks; one very excited about what AI could bring to

education, one more cautious. That really helped me, as a leader. That was the first step in us taking a very balanced approach. Then I was looking at what was available on the internet in terms of guidance for schools and, obviously, with a brand-new technology there really wasn't very much in the first instance – I was even looking at guidance from a department in Germany, it was really interesting seeing what was and wasn't out there. The next stage was we need to do some staff training. Normally with a strategy in schools, you'd start with the strategy and work backwards from it but we thought that students would be using it straight away and teachers needed to know what it is and how it works and what the risks are, how to use it safely, what the opportunities are. So in that first September we got straight on with some training for staff and then carried on with our research and thought, actually, until we understand more we're going to keep AI locked down at the school, we were cautious at the start so we had everything pretty much blocked until we knew a little bit more. The next stage was that once we felt that teachers had had the training to use it effectively and safely, to open up those tools, let them have a play, let them explore, see what resources they could create from it. Alongside that, we thought, strategy. Ok, what are we going to be looking at in the long term? I did lots of training, lots of webinars, training days, lots of interesting materials from Rose Luckin, if anybody wants a tip there. We went out to our stakeholders, we asked our governors, our students, our staff, our parents – we were looking at what was their current usage, were they using it? What do they know about it? Do they feel confident about it? What sort of things were they using it for? Also, what were their worries? What were their concerns – really hearing those voices and understanding for our context, what it meant for us. And all of that we then took back to SLT and we said, right, what's our SIP? What are our school priorities? What are we trying to achieve?"

Presenter: We need to have a clear understanding of AI's potential and pitfalls when deciding how and if we will implement it in our setting.

This toolkit:

- Has been developed through wide engagement with school staff. We asked a wide range of school and college staff for their views on AI, and their input has directly informed our approach. We know that leaders, like teachers, hold a range of views – some are enthusiastic, others are cautious or unsure where to begin. This toolkit is designed to support you as a leader, whether you're just starting to explore AI or already integrating it into your systems.
- Accompanies the four-module staff toolkit. We recommend that, as a leader, you also use the staff toolkit to support you in your role. If you don't already have an understanding of how AI works or you don't have much experience of using AI, we recommend working through the staff toolkit to give you the foundational knowledge this toolkit will build on.
- Reflects the Department for Education's policy position. This is set out in the Generative artificial intelligence (AI) in education document. We also refer to the

need to ensure you align your use of AI with the Generative AI: product safety standards.

- Introduces the key issues you need to know about generative AI, whether you are a leader in a school or college or have another leadership role in an education setting. Between each video you will be able to reflect on the content and note plans as well as access a checklist of what was covered in the video.

As a leader of an education setting, this toolkit will help you plan for the safe and effective use of AI in education as part of your wider digital strategy, so it benefits all of your staff. It should be used in conjunction with meeting digital and technology standards in schools and colleges guidance. It includes areas you will need to consider for your strategy including:

  - Safety – assessing suitable tools, safeguarding, data protection, intellectual property
  - Opportunities – reducing workload, supporting inclusion and supporting business and operations
  - Embedding AI into your digital strategy – CPD, digital standards
  - DfE guidance – policy paper, product safety standards, data protection guidance, KCSIE, digital standards

We recommend that you work through this toolkit with colleagues, and you may decide to explore each video in a series of meetings, reflecting and gathering information before moving on to the next.

Video 2 – Audit of where you are now

Presenter: Welcome to video 2, Audit, from the leadership toolkit in the safe and effective use of AI in education online resources.

The audit tool is designed to help school and college leaders reflect on their current position across key areas of AI use, including strategy, policies, staff training, curriculum, student use and procurement. To get started, complete the “Where are you now?” section in each area in the PowerPoint, based on your current understanding and practice. This initial snapshot will help you to identify strengths and gaps. After watching the videos linked in each section of the toolkit, revisit your responses to reflect on what has changed, what you’ve learned, and how your approach might develop.

Video 3.1 – Safety

Presenter: Welcome to video 3.1, Safety, in the leadership toolkit from the safe and effective use of AI in education online resources.

It's essential that all educational settings are clear with staff around what tools are safe to use and how they can use them. Carefully selecting AI tools for your setting will help to ensure the safety of your school or college community.

The integration of AI into education presents both transformative opportunities and significant challenges. This section will delve into the key issues that must be considered when planning for the safe and effective use of AI in schools and colleges. From understanding the inherent limitations of AI, such as the generation of inaccuracies and the potential for bias, to navigating the complexities of data protection, intellectual property rights, and safeguarding responsibilities, this overview will highlight the critical factors that educational leaders must address to harness the benefits of AI while mitigating potential risks.

In this section we will look at the following considerations:

3.1.1 Limitations of AI systems

3.1.2 Data and intellectual property considerations

3.1.3 Safeguarding

3.1.4 Selecting tools safely

3.1.5 Enterprise tools

3.1.6 Curriculum and skills to support safe use

3.1.1 Limitations of AI systems

As the staff toolkit explains, there are certain issues inherent in AI systems that must be considered when planning for the safe and effective use of AI.

We know that AI can be inaccurate due to "hallucinations". Hallucinations are inaccuracies in an otherwise factual output. For example, the AI system might give you a fake fact, a made-up quote, or an answer that sounds right but isn't. It doesn't do this on purpose – it doesn't have any intention and can't 'think' – it just guesses based on patterns in the data it's been trained on. That's why it's important to always have a human in the loop to double-check the output from AI systems.

We also know that AI systems can sometimes show bias. This can be because there was bias in the data that it was trained on, or the developer could have intentionally or

unintentionally introduced bias or censorship into the model. This again highlights the importance of a critical mindset when using AI, and we need to consider how the whole school community can develop these important critical thinking skills.

We're still learning exactly how AI can best support student learning, but there's one principle educators need to keep front of mind: if AI allows students to skip over the hard work of learning, it can harm their progress. This is reflected in findings from research in this area and also from cognitive neuroscience about how the brain builds lasting knowledge. Learning happens when students engage in what researchers call "desirable difficulties", tasks that require genuine mental effort and struggle. When a student wrestles with recalling information from memory, works through a complex problem step by step, or explains a concept in their own words, their brain is actively encoding and consolidating that knowledge into long-term memory.

Many researchers have likened it to building a muscle, the resistance is what makes you stronger. The same principle applies to learning. If AI becomes a shortcut that removes this productive struggle, it can prevent the formation of the neural pathways needed to learn something from forming in the first place.

For example, if a student asks AI to summarise a text they haven't actually read, or to solve a multi-step physics problem without working through it themselves, they're bypassing the exact cognitive processes that would help them learn. The AI might give them the answer, but the student hasn't done the thinking that creates genuine understanding.

This is why we need to be thoughtful about when and how AI is used in learning contexts and follow the Department for Education’s AI product safety standards, especially if we're planning to use an AI tool with students.

3.1.2 Data and intellectual property

Data protection is of paramount importance when introducing AI into a school or college, as is the need to safeguard intellectual property (IP). It is important to have a clear understanding of the risks and ensure that staff are able to distinguish between IP and data protection.

IP covers a broad range of creative and original works, including text, images, music and code. Before using AI to generate or manipulate content based on someone else’s work, such as using an AI-based application for marking or feedback on a student’s work, permission must be obtained from the rights holder. This distinction is crucial because an individual’s work may be protected under intellectual property laws even if it does not contain personal data. To protect data and intellectual property, we should be certain that the AI system being used doesn’t train on the work that we enter as prompts or upload to the system.

In the case of student or pupil work, we would be infringing their intellectual property rights if, for example, we were to enter their work, without their permission, into an AI system for marking or feedback, which then used their work to train the AI model.

There is also the risk of secondary copyright infringement, which could happen if AI products are trained on unlicensed material and the outputs are then used in educational settings or published more widely.

Examples of this may include:

1. publishing a policy that has been created by an AI tool that used input taken from another school or college's policy without that setting's permission
2. using an image on a website that has been created by an AI tool using input taken from the copyright holder without their permission.

Good data protection practices are also essential. Under UK General Data Protection Regulations (UK GDPR), if you're processing personal data – information that identifies an individual, such as pupil names, assessments, or work that contains identifiable details – you must have a lawful basis. Your lawful basis will depend on why you are processing data and must be determined by your specific circumstances, but must be one of the following:

- Consent
- Contract
- Legal obligation
- Vital interests
- Public task
- Legitimate interests

Before using an AI tool that processes personal data, you must ensure it complies with UK GDPR, staff could be breaching data protection law. This is why it is so important to understand how the AI tool processes the data you introduce into it and, based on that knowledge, create an approved list of tools for your setting. To do this you should work with your school or college's data protection officer and IT lead, managed service provider or technical support company, and link governor with appropriate responsibilities to read and understand the terms and conditions of use.

Phrases such as "not reviewed by anyone", "data is not used to train the artificial intelligence model or shared with other users", "activity isn't used for model improvements" and "prompts are not reviewed by humans", all suggest that data will be safer.

The Department for Education's using generative artificial intelligence safely training video provides schools with guidance on the safe use of generative AI in schools. It is supported by downloadable resources on the "Need, Read, Proceed" approach to aid compliance with data protection. These resources are available for your schools to use as a visual

reminder, helping you stay informed on protecting personal data while using AI safely and securely to enhance teaching.

In addition, you need to look for a tool that gives enterprise-level controls. For example, you could check if your organisation can suspend activity and monitor use, which may be provided as part of the AI tool or through your filtering and monitoring systems. There are additional safeguards needed if you were to provide an AI tool to students. Most free tools with personal accounts do not provide these protections, which is why it's important to provide a list of any approved AI tools in your setting that have been assessed and which the organisation has control over. In all cases it is important that the use of any intellectual property is consented to by the copyright owner and, in the case of students under 18, parental or guardian permission would need to be sought on behalf of the pupil or student.

3.1.3 Safeguarding

Any access to AI for students or pupils needs to be carefully planned, bearing in mind the Department for Education policy position on use of AI, and its product safety requirements. You'll also need to ensure that use is in line with the Keeping children safe in education guidance. Most freely available tools will not be suitable for student use as they will not have the appropriate safeguards in place and the AI tool or model may learn on the prompts and information that is input into them. It's important to understand and enforce the minimum age requirements of these tools and consider how their responsible use can be supported. There is a lot we still need to know about the impact of AI use on young people, and evidence is still developing. There are potential safeguarding risks as well as the danger of over-reliance and deeper learning being bypassed. Many AI systems will simply provide an answer rather than explain the process and so do not contribute to the learning process. We will be focusing mostly on teacher use in these toolkits.

Safeguarding is everyone's responsibility and should be the top priority when deciding whether and how to use generative AI in an educational setting. Leaders can work together to understand emerging safeguarding risks related to AI in order to take action to protect the students in their care. To facilitate the safe, responsible and effective use of generative AI, leaders and staff should remember the online world often mirrors or amplifies behaviour issues seen offline. Child protection, including online safety policies and behaviour policies should be updated to reflect the rapidly changing risks from AI use. You can learn more about this in module 3 of the staff toolkit.

To reduce risks and encourage responsible AI use, consider the following:

- Understand the limitations: AI isn't perfect, and outputs may be harmful, inaccurate, outdated, biased, or offensive. Human involvement and quality assurance is essential. You need to be sure as a leader when promoting any use that the potential outweighs the risks.
- Apply the basics: reinforce existing online safety education.

- Keep data secure: protect personal information when using AI tools and be aware of data protection settings. Follow legal guidance, such as the Data Protection Act and UK GDPR.
- Stay vigilant: be aware of the realistic nature of AI-generated content and the potential for scams.

To use AI systems safely and effectively, schools and colleges should comply with age restrictions – ensuring that any access to AI systems is only given in line with the age restrictions with that AI tool, seeking parental consent before granting access where necessary.

The increasing accessibility of AI image generation tools presents new challenges that schools and colleges must prepare for and there are some things we can do to support this. Proactive measures are essential to minimise potential harm, such as initiatives to educate students, staff and parents about the risks of online image manipulation and the dangers of AI-generated images. Conduct regular training for staff on identifying and responding to online risks, including AI-generated sexual extortion. Government guidance for frontline staff on how to respond to incidents where nudes and semi-nudes have been shared also applies to incidents where sexualised deep-fakes (computer generated images) have been created and shared. The online world is constantly evolving, so training should be recurring to address emerging threats and should be delivered alongside your statutory regular safeguarding training for staff.

The Keeping children safe in education guidance highlights the importance of online safety as a core safeguarding responsibility for schools and colleges. It emphasises that staff must be trained to recognise risks such as cyberbullying, inappropriate content, online radicalisation and child exploitation. Schools should have clear policies on filtering and monitoring internet use while educating pupils on digital literacy, online behaviour and recognising misinformation. Leadership teams must ensure a robust approach to safeguarding children in an increasingly digital world, integrating online safety into the wider curriculum and staff training.

Schools should have clear policies on photographs that must be read in conjunction with other policies such as data protection, safeguarding and child protection. This is particularly important as some students opt out of their images being shared publicly, this may be in cases where the student is subject to a court order, is in care or at risk of abuse. School leaders must ensure use of photos is responsible, allowing them to achieve their objectives while respecting the privacy of students.

Photos that identify individual children are regarded as personal data, therefore, schools must ensure there is a clear lawful basis before using or publishing them. To determine the most appropriate lawful basis, schools will need to think carefully about the reasons why they are using photos. For example, schools may use student’s photos for identification purposes or for promotional or marketing purposes.

For transparency, you must have clear privacy notices detailing how student images will be used, where they will be published and for how long. Where consent is your lawful basis, you must keep evidence of consent forms and provide easy and accessible means for parents and students to withdraw consent for image sharing. The Information Commissioner's Office provides further guidance on taking photos in schools. As best practice, avoid including students' names when publishing photos unless there is a clear and necessary reason to do so.

In the unfortunate event of an online extortion incident, you must follow your school or college's safeguarding processes and in the case of criminal activity this must be reported to the police. If the extortion is with the school, you may need to report it to your risk protection arrangement or insurance company.

Report any indecent images to the Internet Watch Foundation (IWF). The National Crime Agency's CEOP Safety Centre provides a reporting route for under-18-year-olds to report online sexual abuse and grooming directly to NCA Child Protection Advisors.

In line with Keeping children safe in education guidance, schools and colleges should consider carrying out an annual review of their approach to online safety, supported by an annual risk assessment that considers and reflects the risks students face. Tools that support this include 360safe and the London Grid for Learning's Online Safety Audit.

The Department for Education has also published the filtering and monitoring standards to give more information on how you can meet your statutory obligations under Keeping children safe in education. The standards that recommend reviewing your filtering and monitoring provision at least annually. They state that this review should be carried out to identify your current provision, any gaps, and your students' and staff's specific needs. As part of this review, the standards say that you should consider how your school uses technology, including generative AI tools. Your requirements for a filtering and monitoring provision will be different depending on whether students and/or staff use generative AI.

Reviewing reports from filtering and monitoring systems is also critical. Many systems will provide alerts in real-time, and filtering and monitoring reports can also help the school to spot trends to be addressed. Regular reviews of reports as standing agenda items in leadership and governor meetings will keep everyone informed and help to respond to trends.

The Department for Education states that:

"Schools and colleges are free to make their own choices about the most suitable use cases for generative AI tools in their settings, as long as they comply with their wider statutory obligations such as Keeping Children Safe in Education." (Generative Artificial Intelligence (AI) in Education)

Security is paramount for all products, whether student or staff-facing. Your home school agreement should clearly communicate how you plan to use AI tools and include necessary permissions.

3.1.4 Selecting tools safely

It is important to thoroughly assess any AI tool to ensure it is safe and secure enough to protect data before using it, especially when it comes to student data. Conducting a data protection impact assessment before using new AI tools will help settings identify risks to personal data and allow for the implementation of mitigations to assure that AI tools are safe, secure, and ethical.

There are many products available for schools/colleges, and it is important to ask some questions such as:

1. Does the tool solve an identified problem, such as teacher workload?
2. Is there any evidence that the tool has been effective in other education establishments?
3. Is the tool secure, does it meet UK GDPR requirements, and does it safeguard against the loss of student data or intellectual property?
4. Does it meet the DfE's AI product safety standards?
5. Does the cost of the tool represent value for money?

One important area covered in this guidance is filtering and monitoring.

We also need to be particularly careful of any app or online tool that supports pupils or students directly with mental health issues as there are many risks associated with this, including disclosures or patterns of behaviour not being identified. Any app or online tool offering mental health related interventions must be regulated by the medicines and healthcare products regulatory authority.

Transparency and human oversight are essential to ensure AI systems assist, but do not replace, human decision-making.

AI systems can analyse large datasets of school or college information to identify patterns and trends and inform strategic decisions regarding pastoral care. For example, anonymised behaviour marks can be analysed to reveal trends and areas where support is most needed. However, it is essential that no decision that could adversely impact a student's outcomes is based purely AI without human review and oversight. For example, generating a student's final mark or declining their admission based on an AI-generated decision.

Leaders can use AI platforms to interrogate their organisation's data in plain English, removing the barrier of needing expertise in spreadsheet manipulation or data analysis.

AI tools can help to highlight students or pupils who may need additional support by identifying patterns in attendance, behaviour, or academic performance. This allows for proactive intervention and support, preventing issues from escalating.

Another key consideration is cost. When evaluating a tool, evaluate the cost effectiveness of it and consider how this may be sustainable. Some providers offer educational tools in their enterprise grade suites at low cost or for free; their safety for use in your setting must always be paramount.

Before implementing any AI tool, it is important to consider factors such as inclusivity, accessibility, cost-effectiveness and compliance with school privacy and security policies. A key consideration is whether its output has a clear, positive impact on staff workload and/or the learning environment and whether it aligns with the vision for digital technologies and the school development planning. Your data protection officer and IT lead can work together with leadership to assess tools by understanding the terms and conditions, including any minimum age requirements. It is important to work with data officers, leadership or management to conduct the necessary checks, including a data protection impact assessment.

3.1.5 Enterprise tools

There are many generative AI tools available. Many of them use standard large language models and are chatbots you can interact naturally with, while others generate slides and resources. An integrated AI agent, such as those found in some productivity suites or integrated into your operating system, can perform tasks and make decisions within the software to help users work more efficiently. Others may offer adaptive testing or insights into data that can help you to target support and interventions. These tools need to have the proper safeguards in place – a freely available tool that staff sign up for on an individual basis won't have the technical safeguards to protect data and intellectual property, and these products are unlikely to meet product safety expectations. In evaluating approved tools for your organisation, you might explore what is available as part of your organisations' existing productivity suite or look to procure suitable tools that have appropriate safeguards in place. These tools are likely to be what's known as enterprise tools.

What are enterprise tools?

In the context of AI applications for schools and colleges, enterprise tools are professionally developed AI platforms or software designed for use across a whole organisation, such as a school, college, or trust.

They may be provided as part of a suite of educational tools sometimes called a workspace or productivity suite.

They offer more control, security and support than consumer versions of AI tools. For example, an enterprise AI tool might allow leaders to:

- Manage how staff use AI
- Set permissions and safety controls
- Ensure data protection and compliance with policies
- Access training and technical support

Using enterprise tools can help schools adopt AI in a safer, more consistent and scalable way. There are other tools that will be useful and appropriate also that you may well consider as part of your school or college planning.

While we have explored many of the risks already around AI, it is important to approach the topic thoughtfully and ensure AI is used appropriately. We recommend that all leaders engage with module 3 of the staff toolkit to gain a deeper understanding of the risks. Leaders need to understand the capabilities and limitations of AI to ensure everyone can enjoy its benefits safely.

It is important to be clear with all staff on the tools that have been evaluated and made available to staff and emphasise that only AI tools approved for your setting should be used. Non-approved tools can be blocked on the school network and devices. You may have a school intranet, learning platform or landing page where you can list links to these approved tools, further aiding this clarity.

Chris Loveday, Vice Principal, Barton Peveril Sixth Form College:

"I think it's really important that when you build a bespoke solution, what you're trying to do is address a problem, but you're also able to do it in a safe and effective way. So, everything we built was built within our digital tenancy. Everything operated, i.e. within our own secure domain. No data left our site, our servers, essentially, all stayed within its source base. Meaning it was safe and secure in that regard. But also, we were able to explore the guardrails and the safeguards we wanted to input. On some of our agents, there's 100% accuracy. So, this means if one character is wrong, or if the agent doesn't know the answer is 100% correct, it says that. In others, there are enhanced guardrails, so our large language model for students won't answer questions on sensitive topics like misogyny or pornography. When you build your own solution, you can identify the risks or the concerns or the safety features you want built in. And then we were able to build those in to make sure that it was safe, effective, and useful for all stakeholders."

3.1.6 Curriculum and skills

Presenter: In the case of online safety, you should consider your computing and relationships, sex and health education, personal development and online safety curriculum and whether it addresses the nuances related to online safety that are introduced by Generative AI. You can use newsletters and websites to provide regular

updates on AI and online safety guidelines. Workshops for parents can extend the online safety net beyond school or college boundaries – these could cover discussing the key issues around safeguarding and responsible AI use. The Department for Education has produced the guidance “teaching online safety in schools”, which should be considered when planning any curriculum around AI. In addition, filtering and monitoring must be in place in line with the statutory guidance, Keeping children safe in education.

In teaching and learning activities it’s important to measure the impact of AI tools being used by educators. Review how effective these tools are for teaching and learning and gather feedback to be able to adjust the approach regularly. Module 4 of the staff toolkit explores use cases in education and can help you to consider your approaches to use of AI in teaching and learning.

As generative AI tools become more prevalent, integrating AI literacy and critical thinking into existing lessons and activities should be considered. There are several ways leaders can ensure that students and pupils develop the skills necessary to navigate an increasingly digital world.

If, as teachers, we take a critical thinking approach – where we evaluate any output of an AI system carefully, checking for bias, accuracy, and pedagogical alignment – it becomes more likely that the output will be appropriate for its intended use. We can explicitly encourage students to question, analyse, interpret, evaluate and make judgements about information they encounter that could be or is generated by AI. This highlights the need for pupils and students to have strong knowledge and the ability to triangulate information from trusted sources. There are opportunities in the classroom and as leaders to model the need to critically evaluate sources of information.

As part of your PSHE/Personal Development or Computing curriculum you can consider incorporating AI ethics and digital citizenship, creating opportunities for students to discuss the ethical implications of AI, including issues such as bias, privacy and transparency. You can also encourage awareness of the environmental and societal impact of AI systems and promote responsible and ethical use of AI technologies.

The National Centre for Computing Education has produced curriculum resources for Key Stage 3 that schools can incorporate into their computing programmes of study. These materials focus on helping students understand the fundamental principles of how AI works and explore the ethical implications of AI technologies.

Separately, Common Sense Media has developed materials that can support delivery of personal development curriculum that explores young people’s relationships with AI, such as a short lesson on friendships and chatbots. They have also produced some AI risk assessments that can be a useful resource to support an understanding of the risks; some schools have told us that they have shared these with parents.

In colleges and schools, you could encourage lecturers and teachers to investigate the career opportunities and impact that AI is having in a wide range of industries and include

this with career advice and guidance for students. Aligning with the Gatsby Benchmarks', emphasis on relevant labour market information and the statutory duty to provide comprehensive careers support, schools and colleges can make use of the range of insights provided by the AI industry.

Colleges have long worked closely with employers, but with AI changing some fields so quickly, it's now more vital than ever to build strong links with the companies leading the AI charge. The Department for Education has put together a useful report, The Impact of AI on UK Jobs and Training (DfE, 2023), on the industries most affected by AI, which can help us decide where to focus our efforts. For instance, AI is boosting creativity in film and music, streamlining tasks such as contract reviews in business, and becoming a standard tool for writing code. Incorporating real-world examples of how AI is used in these workplaces into our courses will help students feel ready for a future where AI is commonplace.

Jisc has produced guidance for learner use of AI to support how you can approach this in college, which is linked to in the workbook.

Before introducing or developing your use of AI tools, it’s essential that you consider whether staff have the knowledge around safe use and initiate foundational training about AI and the safety implications around its use. The staff toolkit linked to this leadership toolkit addresses this need.

Video 3.2 – Opportunities

Presenter: Welcome to video 3.2, Opportunities, from the leadership toolkit in the safe and effective use of AI in education online resources.

This section dives into the effective use of digital technologies, particularly AI, in education. It draws on guidance from the Education Endowment Foundation (EEF) and the Department for Education (DfE) to explore how these tools can support teaching, reduce workload, and enhance learning for all students, while also highlighting critical considerations for their implementation and linking to the risks explored in the last section.

3.2.1 Principles of digital technology use

The Education Endowment Foundation (EEF) provides guidance on the effective use of digital technologies in education in its report Using Digital Technology to Improve Learning. This emphasises that technology should be used as a tool to support high-quality teaching rather than as a standalone solution. EEF's evidence suggests that digital tools can improve learning when they are carefully integrated into well-designed lessons, aligned with clear pedagogical goals and supported by teacher professional development. The guidance highlights the importance of using technology to enhance student understanding, facilitate effective feedback and support independent learning, rather than simply replacing traditional teaching methods.

Key recommendations from the EEF include ensuring that technology use is purposeful, with a clear link to improving learning outcomes, and that teachers receive adequate training to use digital tools effectively. The guidance also stresses the need for careful implementation, as technology can be costly and time-consuming if not used strategically. Settings should consider how digital tools fit into their broader teaching and learning strategies, ensuring that their use is evidence-informed and sustainable. While technology has the potential to support disadvantaged students, its impact depends on thoughtful deployment and ensuring that all students have access to the necessary resources and support.

When it comes to AI, there are some additional risks that you need to consider, such as the risk of cognitive offloading. If students use AI to complete work rather than engaging with the learning process, they miss the cognitive struggle that builds understanding. The effort of working through a problem, making mistakes and refining thinking is where learning happens. The risk of cognitive offloading doesn't mean we shouldn't use AI, but it does mean that both students and teachers should use it thoughtfully, considering how specific uses of AI will support teaching and learning tasks and preserve the thinking that matters.

Aila, from Oak National Academy, is designed to support teachers by helping to create high-quality, curriculum-aligned resources. While a general AI large language model (LLM) can generate teaching materials, it may not produce results that fully align with the

curriculum. Aila, however, is specifically grounded in the National Curriculum in England, making it more likely to generate appropriate and relevant content for teachers. It will encourage us to get the best results by requesting key details such as the subject, year group, number of questions, and mark scheme.

3.2.2 Reducing workload for teachers

In the policy paper Generative Artificial Intelligence (AI) in Education, the Department for Education states:

"Generative AI has demonstrated that it can help the education workforce by reducing some of the administrative burdens that hard-working teachers, staff and school leaders face in their day-to-day roles."

Strategic implementation of AI can cut down administrative tasks for leaders and all school or college staff, particularly in areas such as data analysis, lesson planning, report generation and correspondence. This could allow educators more time to work directly with students and pupils and help to reduce workload if implemented well.

The Education Endowment Foundation conducted a study: ChatGPT in Lesson Preparation: A Teacher Choices Trial, which looked at the effect on teacher workload of using ChatGPT for lesson preparation compared to preparing lessons without using any form of generative AI tools. The trial found that the ChatGPT group needed significantly lower lesson and resources preparation time than the non-generative AI group. The study also found no evidence to suggest that the quality of the lesson resources created by the two groups differed. Teachers adapted the amount they used ChatGPT and their approach to using it based on their needs.

The EEF findings suggest that LLM-based applications such as ChatGPT, Gemini and Copilot can reduce teacher workload without negatively impacting the quality of lesson resources. However, it is important to provide teachers with guidance and support to use generative AI tools effectively. It is also essential that teachers check outputs generated by AI for accuracy before using them in the classroom and that they adapt the content. With any use of AI systems, as leaders you should make judgements about how well equipped your staff are to check the outputs. Consider how some staff, such as trainee teachers and early career teachers (ECTs), may still be developing their subject knowledge and pedagogy, so may not yet be equipped to check these outputs effectively.

For more on how to check outputs and adapt content, see modules 2 and 3 of the staff toolkit. You will find several case studies about reducing teacher workload in the staff toolkit, especially in module 4.

3.2.3 Reducing workload for leaders

As a school or college leader you can also reduce your workload. When used safely, AI can support activities such as timetabling, summarising large amounts of information, generating letters, reviewing policies and analysing budgets. By doing this transparently you can also lead by example and inspire school staff to adopt the benefits that AI can bring.

Tim Clarke, Digital Leader Cornerstone C of E Primary School:

“A recent example, myself and the deputy heads, were planning for our pupil achievement meetings, which is ones we do with the teams each term. And in terms of looking through the data and analysing groups of children, whole classes, whole cohorts, we used AI to support us with that, and that reduced the task by about 50% of the time. That meant we had more time then to spend discussing with each other about how we were going to phrase questions and work with colleagues to better support the children.

One of the things that we've done as a leadership team is, we've built an SLT critical thinking partner in Notebook LM, and this is including a range of our internal documents, but also a lot of external documents from the DfE, Ofsted, our local authority. When we're then creating information for our headship team report, we're able to feed in certain questions or certain documents. So, for example, our latest IDSR, which is a 100-page document, it managed to summarise that in a really simple, clear way for us, but also importantly, for us then to be able to share with governors."

Presenter: For early years leaders and smaller settings such as alternative provisions and smaller special needs provisions, AI has the potential to play a role in supporting the unique challenges of managing a nursery, early years setting or smaller provision, where teams can be small and responsibilities are shared across multiple roles. AI tools can help streamline administrative tasks such as rota management and ensuring staff-to-child ratios are optimised in line with statutory requirements, among other uses. For all settings, AI can also help in analysing attendance patterns and supporting home communications by generating updates for parents, bearing in mind that all outputs need to be checked for accuracy. In this way it can reduce the administrative burden while maintaining strong relationships with families and enabling you to focus more on the quality of care, learning and development for young children.

3.2.4 Supporting personalised learning

AI tools can be used to create, adapt and personalise educational content to support student learning. There are many AI applications available, with different capabilities. These tools can assist in creating paragraphs, simplifying writing, separating content into sentences, extracting keywords, creating tables with definitions and designing gap-fill activities.

When we talk about digital accessibility tools, it's important to remember that many effective assistive technologies don’t use AI, and among the AI-powered tools available, not all use generative AI.

Many accessibility features that have existed for years, such as voice typing, screen readers, text-to-speech and colour overlays, don't necessarily use AI at all. These established tools remain valuable and shouldn't be overlooked in favour of newer AI-based solutions.

There are also a growing number of specialist tools that use a range of AI technologies to improve accessibility, such as apps that describe a scene in detail using a phone’s camera or dictation technologies that adapt to atypical speech.

Some of the key uses of AI to support inclusion can be found in module 4 of the staff toolkit.

Cheryl Shirley, Director of Digital Learning, Leo Academy Trust:

"I think one of the things that has been so powerful for me has been, is our SEND children. We're thinking about how can we adapt lessons to support them in the best way possible? And how can we make sure that, for example, if you're a year six child and you've got a reading age of four or five, how can we make sure that you're reading texts that are at your level, but actually things that you actually like and enjoy? And you're not giving them texts of, you know, of what children of that age would like and enjoy. And I think there's a real difference there. So being able to create resources that are really bespoke to their likes and needs, that are at the level that they need to be able to continue to develop. And I think that's been, for me, that's the most powerful side of it."

Mathew Clements, Cloud Champion, Leo Academy Trust:

"Also, when you're saying about different texts, they're able to maintain the same text, but it's able to put it at a level that's understandable and achievable for them. And that way that maintains their dignity and they feel included. They feel part of that lesson rather than being someone on the outside. They're integrated within everybody else. They're all focusing on the same text. They're all focusing on, you know, the same learning journey, but they're just doing it at their particular level. And I think that's been a huge game changer and a complete leveller”.

Cheryl Shirley, Director of Digital Learning, Leo Academy Trust:

"And assistive technology has really been beneficial for those children as well."

Presenter: In module 4 of the staff toolkit, you can explore the opportunities for AI to generate speech from text as well as many other use cases for inclusion.

As well as recognising speech, dedicated AI tools can also take a scene and describe it in detail to those who are visually impaired.

Large language models and many AI tools are multilingual and as such could be used with pupils, students and families who have English as an additional language when used as part of an effective strategy to support those pupils or students.

Beyond this there are bespoke and effective digital tools that may or may not use AI for a range of disabilities. For example, imagine a student who isn't able to write, but can use their voice. An AI tool may be able to listen to the student and rewrite what they've said more succinctly and that can be very useful, but if the learning objective is for that student to work on sentence structure, a straightforward voice dictation tool would be more appropriate. It's also always more important to consider the pupil or student's specific identified needs, ahead of their diagnosis, in selecting appropriate tools. You should consult specialists and the pupil or student's EHCP, if one is in place, to help in identifying specific needs and consider carefully whether an AI tool is the most appropriate solution on a case-by-case basis. You should also consider how your teaching assistants can make use of AI systems to support the work that they're doing.

Chris Goodhall, Head of Digital Education, Bourne Education Trust:

"There's a real use case around saving time for, or not saving time, actually, making best use of time with TA's. But again, as they evolve, they started to look at how actually they can adapt work specifically for the student. So, the students have got their own IEP support strategies, and again, with individual tasks, we taught them they can put in the task and get the AI to adapt that task bearing in mind all of those support strategies."

Presenter: Whoever in your school or college is making use of AI tools, they should always check any AI-generated content before using it. It is important for everyone to understand that generative AI works by predicting the next word in a sentence based on probability, without understanding the content it produces. That means it's crucial to keep a human in the loop when generating work with AI.

We also need to consider carefully how a student or pupil will interact with AI and be aware of risks such as over-reliance or misuse, particularly with regard to what we know about how students learn best, and particularly with some of the most vulnerable students, such as those with SEND. The way that some chatbots respond can encourage an emotional attachment and lead to over-reliance. This leads to the risk of bypassing learning processes and other effects such as a reduction in help-seeking from human sources and the potential to miss important opportunities to safeguard pupils or students. AI systems will often purely provide an answer, they aren't going to have the knowledge that many educators and leaders have of how students learn and your setting's approach – for example: how we scaffold tasks, use retrieval practice or promote metacognition. Human oversight, as well as all of the safeguards previously explored, are crucial if we are to reap the potential benefits.

With the right safeguards, careful planning, and a deep understanding of individual needs, AI can be a powerful tool for inclusion. Used thoughtfully, it has the potential to enhance

learning, increase independence and open up new possibilities to support every learner to thrive.

3.2.5 Supporting business, operations and support staff

We know that AI can support your role as a leader and we've also seen how it can support teachers in a range of ways. However, it's also important to plan for its wider use across your organisation. There are many use cases where AI can streamline and enhance the broader operation of a school/college. Some examples shared with us by schools include:

- finance teams using safe and approved AI tools to analyse budgets and support planning;
- business managers generating tender documents based on a survey of requirements;
- site staff using voice dictation within approved tools to create reports;
- teaching assistants adapting and preparing personalised content; and
- data managers using AI to generate insights that help target interventions and additional support around progress, behaviour, and attendance.

The staff toolkit is aimed at supporting all school staff to use AI safely and effectively. Module 3 has important messages related to safe use, and module 4 exemplifies use in a range of roles within school. By involving all school or college staff in CPD on AI, you can help improve efficiency and effectiveness across operations – ultimately having a positive impact on pupil and student outcomes.

Video 3.3 – Embedding AI in your digital strategy

Presenter: Welcome to video 3.3, Embedding AI in your digital strategy, from the leadership toolkit in the safe and effective use of AI in education online resources.

AI should be considered as part of your school's wider digital strategy. Key considerations include:

- Vision: define a clear purpose for using AI to support teaching, learning and operations.
- Strategic alignment: link AI use to your school development plan.
- Infrastructure: ensure your systems can support safe, effective AI use.
- Staff skills: invest in training so staff can use AI confidently and critically.

The DfE's guidance, Generative Artificial Intelligence (AI) in Education, states that "AI has the power to transform education by helping teachers focus on what they do best: teaching."

To create a safe and effective AI environment there are some key things that you can consider:

1. Ensure your use of AI is compliant with your statutory duties in Keeping children safe in education guidance and the filtering and monitoring standards.
2. Ensure alignment of your digital strategy with your school or college's strategic development planning and wider priorities.
3. Consider how your use of AI aligns with your organisation's broader alignment with education philosophy and school vision and values.
4. You may decide to develop and AI policy or incorporate AI use into existing policies to address data governance, intellectual property, privacy, equity, teacher/staff training, curriculum integration, safeguarding and ethical considerations.
5. Create a clear infrastructure roadmap that outlines the hardware, software and network upgrades needed to support AI applications and data storage.
6. Establish a team that will help to provide guidance, training and technical support.
7. Evaluate AI tools carefully to make sure they will positively impact on staff workload and effectiveness.
8. Monitor or audit your school or college's use of AI to assess the effectiveness of AI implementation and identify areas for improvement.
9. Develop an AI steering group.

Stephen Morales, CEO, ISBL:

"It feels like a very central, strategic conversation that requires resource management, finance, pedagogical leaders with pedagogical ambition, and governance colleagues being very close to it so while I would of course not encourage the opposite of joined-up leadership, which is siloed activity, I would argue that mature organisations would do that by default."

Jisc (in AI: five actions for college leaders, 2024) recommends five actions for college leaders:

1. Lead by example: make good use of AI tools yourself.
2. Set boundaries to enable exploration: define clear guidelines for AI use to encourage experimentation.
3. Invest in staff development: ensure educators are equipped to support students in an AI-driven environment.
4. Create an AI culture: foster curiosity and critical thinking about AI within the school or college.
5. Collaborate with industry: learn from businesses how AI is transforming the workplace.

When exploring AI for use in your school or college, it's crucial to address key questions about your policies to ensure a safe and effective integration. As a leader, your understanding and approach to these policies will significantly shape how AI is used within your educational setting. Here are some key considerations:

1. What is your school or college's stance on AI? Does your approach acknowledge AI's potential to enhance teaching and learning, personalised learning and administrative processes? Does it encourage responsible AI use while recognising the need for accountability? Do your students know your stance on AI? Have you acknowledged that there is still a lot to be known, particularly around long-term effects of enabling AI use for students or pupils?
2. Are your existing online safety and safeguarding policies up to date? You may want to consider interweaving AI into existing safeguarding policies and procedures or create a stand-alone AI policy. You could review and update existing policies to address AI-related terminology such as potential harms, deep fakes and student-generated images, and establish clear reporting mechanisms for any safeguarding or wellbeing concerns linked to AI.
3. What training and support will staff receive? Ensuring staff are adequately trained is essential. Does your school or college have sufficient training to make sure staff are equipped with the knowledge and skills to confidently integrate AI into their professional practice and prepare pupils and students for a future shaped by AI-driven innovation and opportunities? This can include using the staff toolkit resources linked to this leadership toolkit which can be used alongside other AI CPD programmes that are available.
4. What training and support will your pupils/students receive?
5. What is the context of your setting in terms of digital equity and literacy (for staff and students). Does everyone have access to the same hardware or tool? Can all users access them in the same way with the same degree of competence?

Laura Knight, Digital Educator and AI Expert:

"I think there are three grounding questions that we should start with. The first, what are the standards that we want to raise? Secondly, what are the problems that we need to

solve? And third thirdly, what are the opportunities we want to create? Now, if we can't answer those clearly, perhaps we aren't ready to choose at all yet. Technology should be a lens, not a loudspeaker. It must clarify our vision, not distort it. Now, once we're clear on purpose, the next step is thinking about alignment. We should hold every potential tool up against our school development plan. What's it here to support? Teaching, planning, inclusion, safeguarding? What difference is it going to make? Now, if a tool isn't going to have a strategic impact on our school and it's not going to move the needle on something core for our purpose it might well be a distraction rather than a priority. This is about selecting tools that amplify what works, not just what's new."

Jeff Howson, Trust AI Consultant, Osborne Cooperative Academy Trust:

"Right from the start, we wanted to provide an AI strategy which was for everyone in the trust – not just for teaching staff, but for non-teaching staff, parents, governors, and of course students. We started off with a four-phase approach. Phase one is the research, so we were researching best practice from around the world. We were looking and reviewing AI itself and how others were creating strategies. Phase two is the build process, so we were then starting to create the processes and put things into place. We were setting up groups within the trust. These include a governance group, an AI champions group, AI focus group, AI leaders' group, which are the students themselves. With this we've been moving forward step by step. The third stage is the training stage because you can have all of the processes in place but unless you give appropriate, regular training, it won't succeed. So, we've got a robust training programme which is trust wide and we've worked with departments, with individuals. The fourth stage is the AI literacy roll out and this is how we can develop the AI literacy skills of both students and staff and it isn't just about learning the tools, it's about everything to do with ethics, bias, the benefits, the risks and so on so that they really understand AI – the fundamentals. By producing a strategy where the AI is deemed to be 'safe', and providing lots of opportunities to discuss AI, people who are a bit nervous can actually talk through their concerns."

Ravi Chagger, Assistant Headteacher - AI Implementation, Osborne Cooperative Academy Trust:

"I feel like our headteachers have been gently supported and nudged to see the benefits, and obviously we're dealing with a lot of different leaders who have different beliefs and ethics, so showing them the benefits and gently guiding them to achieve what we're aiming to achieve at the end of this strategy has been the key."

3.3.1 Student use of AI

Presenter: We're still learning exactly how AI can best support student learning, but there's one principle educators need to keep in the front of their mind: if AI allows students to skip over the hard work of learning, it can harm their progress. This is reflected in findings from research in this area and also from cognitive neuroscience about how the brain builds

lasting knowledge. Learning happens when students engage in what researchers call "desirable difficulties", tasks that require genuine mental effort and struggle. When a student wrestles with recalling information from memory, works through a complex problem step by step, or explains a concept in their own words, their brain is actively encoding and consolidating that knowledge into long-term memory.

Many researchers have likened it to building a muscle, the resistance is what makes you stronger. The same principle applies to learning. If AI becomes a shortcut that removes this productive struggle, it can prevent the formation of the neural pathways needed to learn something from forming in the first place.

For example, if a student asks AI to summarise a text they haven't actually read, or to solve a multi-step physics problems without working through it themselves, they're bypassing the exact cognitive processes that would help them learn. The AI might give them the answer, but the student hasn't done the thinking that creates genuine understanding.

This is why we need to be thoughtful about when and how AI is used in learning contexts.

The Department for Education's generative AI product safety standards outline the capabilities and features that generative AI products and systems should meet to be considered safe for users in educational settings. They are mainly intended for edtech developers to ensure that AI is safe by design, but schools and colleges will also find the standards helpful in assessing which AI products are safe for use in education. Key areas of the guidance include content filtering, activity monitoring, security, data protection, intellectual property, and standards on emerging harms, including cognitive offloading and emotional and social development.

School and college leaders should ensure they have an effective child protection policy in place which includes reference to online safety. This should be regularly reviewed to ensure they are kept up to date with safeguarding issues as they emerge and evolve as set out in Keeping children safe in education. As school and college staff, we must all be aware of the potential for AI tools to be used to generate misleading or harmful content and look for opportunities to enhance pupils' and students' understanding about misinformation and deep fakes alongside the laws that are in place.

Critical thinking and AI literacy are the terms often used to describe approaches that can be promoted within the existing curriculum. In addition, the National Centre for Computing Education has produced curriculum resources that support an understanding of online safety, AI and the associated risks.

You will also need to consider the issue of academic integrity and the risk of students using generative AI to create academic work, vocational work or work for formal summative assessments. You may need to consider your approach to homework tasks, focusing on tasks that can’t be easily completed by AI. Clear guidance, that may sit within your school or college’s assessment, behaviour or other policies, will help students to

understand expectations clearly. When it comes to formal summative assessments in qualifications, there is guidance from the Joint Council for Qualifications, or JCQ, on AI generated content. It must be highlighted that many plagiarism detection tools may be ineffective, and they must be evaluated for compliance with data protection and intellectual property laws. Remember, to simply upload student work to a free AI detection tool without permission is likely to breach intellectual property rights. With a free tool there is also the likelihood that the model could learn from the work uploaded.

Merve Lapus, Vice President, Common Sense Media:

"I think what's really interesting is we're at a point where AI is a very big part of the conversation, and we're oftentimes hearing that we're developing policies or guardrails specific to AI. And I think as you think more about these tools, these technology tools, and how they exist and what they intend to be oftentimes they already fit into a lot of the policies that we've lined out, but we need to account for the technology of it also. As we think about academic integrity, that's never changed. We've always wanted to look at academic integrity as a pathway for success. AI can bring in some problematic issues, or it can also help extend opportunity and academic growth. As long as you've got strong policies that recognise what we're trying to achieve, we can address some of those realities."

Presenter: Your setting will likely wish to develop guidance on when it is acceptable or appropriate to use generative AI tools. Schools and colleges may also wish to consider how they engage with parents, taking time to clarify the approach to AI, and communicate how your school or college is making use of these tools. Parent engagement sessions and the inclusion of some of the risks relating to AI in parent online safety sessions, as well as regular tips in parental newsletters, could help to engage the wider community. As you evaluate your setting’s guidance to staff and students on AI, focus on clarity, safety and ethical considerations. By proactively addressing these questions and implementing appropriate measures, you can lead your setting safely towards a future where AI enhances education responsibly and ethically and where students are prepared with the knowledge and skills to thrive in an increasingly digital world.

Bukky Yusuf, Deputy Headteacher and Science Lead, Edith Kay School:

"AI can be considered as part of a wider digital strategy in educational settings in three key ways. So first and foremost, the school, educators, leaders need to consider what the school development plan or the school improvement plan priorities are because that should run through everything we actually do. That then should actually link towards the digital strategy. So, in terms of the hardware, software, websites, platforms that we use, it should prioritise what the key aspects of the school improvement plan are and think about how you can actually transform / make changes in that regard. You can have administrative changes, for example, can it help in terms of reducing workload. But I think the key priority is looking at how we can actually aid student learning as well. Once you've got those plans in place or that key framework, then you can drill down into how the AI

matches with that. I think that if you've got your AI as a standalone with the best will in the world, it would not be successful because it's not a part of the wider and more strategic considerations. The SDP, or SIP, is fundamental and everything should actually tie into that in order for it to be not just successful but in order to ensure that there is longevity to the strategies that are being deployed from an AI and digital perspective."

Al Kingsley MBE, Multi-academy trust chair, speaker and writer:

"So, I think when we're thinking about why do we want to introduce an AI, our first consideration is, what are we trying to fix? What are we trying to address? And if our main priorities are recruitment and retention, then we might be looking at AI in the sense of reducing staff workload. If we're thinking about attendance and SEMH, we might be thinking about, well, actually, we're looking at technology, including AI, to make the learning space more inclusive, more accessible for our learners, that's going to help support attendance Maybe the workload aspect is we're talking not generative, but non-generative AI that's going to have better analyse data so that we can have decision informed, not decision-led data that that supports leadership and staff in spotting gaps in interventions."

3.3.2 Adopting effective practices

Presenter: If establishing an AI working group, you should consider including representation from a range of stakeholders. These could include trust or college group leaders, teachers, lecturers, support staff, IT experts, IT leads or representatives from your managed service provider or tech support company. It can be helpful to include general classroom practitioners (with varying levels of digital literacy) as well as governors or trustees in your development and a link governor for AI or digital technologies could support strategic alignment with wider priorities. It should be remembered that governors will also need support in understanding AI, which could be provided by a specific course for governors or them attending CPD in school. The staff toolkit would give a link governor a good understanding of the risks and benefits. Pupil or student voice is also important, and you may consider a range of ways to achieve this including surveys, interviews or involving pupil or student digital leaders.

Daniel Emerson, Executive Director, Good Future Foundation:

"A first step for me in creating a policy for a school is to ensure that student voice is part of the decision that you make when writing that policy. So, at Good Future Foundation, for example, we have an incredible advisory council — people who are professionals who work in this space, who know education well, who know the technology well — but with the same level of power on the other side of that, we have our student council. And these are young people aged between 15 and 22. Essentially, they can remember what learning felt like before AI became more mainstream, and it was used in teaching and learning more readily. And for them, they could feel the difference when they were using an AI tool for

their learning, whether that was task completion or research, or preparing for an exam, versus what it was like before ChatGPT, for example, became more mainstream. Incorporating their voice into our work has really boosted my motivation, I think, when it comes to encouraging senior leaders in schools to do the same. It’s not an unheard-of practice to bring in stakeholder voices from multiple areas of school life but, in this case, the implications of getting this right for your students are so significant. To have conversations with students around, is it ok to be evaluated by a machine? Do I feel comfortable knowing that what I write or what I produce is going to be graded by an AI? And how do I feel about that versus my teacher, who knows me and understands me and is able to see my social context, and to see me for who I am? There are all sorts of nuances within that of course, but I think having student voice as part of the conversation, for leaders that are moving in that direction, is an essential piece of the puzzle."

Presenter: Smaller schools may also wish to form a working group with other schools or across a school partnership, trust or local authority.

Developing and sharing guidance and case studies can raise the profile of AI and help teachers and support staff take their initial steps in using AI tools.

Chris Goodall, Head of Digital Education, Bourne Education Trust:

"We trained all the staff across the trust, and again, role specific training so it's about what they're doing in their task. So again, when I've moved to the central team, my workflows and the types of tasks that I got have adapted, is different to the things that I was doing when I was teaching. One example is we were looking with our HR processes about automating those."

Presenter: It is important that all staff review related school or college policies, attend training and seek advice before using AI. Always make clear that only those systems that you have assessed as safe to use in an approved way should be used by staff in your setting. Any policy needs to be implemented and embedded in the school through regular reminders in staff briefings and integration into school or college CPD.

You should also consider where AI can support school or college operations. By integrating AI into management information systems, it can give insights that may not otherwise be possible, and these insights could support interventions around behaviour, attendance and progress. Due to the sensitive nature of this data, particular care needs to be taken over the contract in place and the way that the tool handles data, bearing in mind the advice within this toolkit on data security. Module 4 of the staff toolkit offers a range of examples of use to support business and operations, which will also be useful for school or college leaders.

3.3.3 Effective CPD

Continuing professional development (CPD) is an important part of supporting any implementation in your setting. Before introducing AI tools, it's essential that teachers and other school or college staff are aware of how to use them safely and effectively. The four modules in the staff toolkit provide strong foundations for AI use and will help to minimise risks and misuse. You also need to consider carefully how this training sits within your CPD programme as a one-off training event is unlikely to have lasting impact.

Jonathan O'Donnell, AI lead, Harris Federation:

"The most important thing that we started off with was getting key stakeholders across the organisation together and we formed an AI governance council. That included representation from directors of primary, secondary, our head cyber security, CIO, director of compliance and other multiple areas. We got together to agree what our principles were and, having everyone together, we agreed what we would and wouldn't accept across all areas of education. We came up with our principles of use; we came up with our use cases and from there we went out to decide which AI tools we would approve. We didn't want to approve every single tool, we were very cautious, every tool had to go through a thorough cyber security check. We wanted to ensure we protected our students' IP."

Presenter: The Education Endowment Foundation guidance highlights the importance of adapting CPD to suit the context it is delivered in. Once the safe and effective use is introduced, you could provide dedicated time for staff to explore approved AI tools, possibly by repurposing a staff meeting. Training on the safe use of these tools is paramount first.

As a starting point, the staff toolkit that accompanies this leadership toolkit can be downloaded and delivered in your setting by an appropriate person, or teachers can download the PowerPoint workbook and videos and work through them independently. The staff toolkit consists of four modules and is a resource for all staff. It covers:

Module 1: Understanding AI in education

Module 2: Interacting with generative AI in education

Module 3: Developing the safe use of generative AI in education

Module 4: Use cases of generative AI in education

We recommend that all four modules are completed by all staff as a foundation to using AI.

Once staff have a good foundation of safe and effective use, you could consider how the use of AI could be interwoven into CPD around school priorities. For example, a CPD session focusing on formative assessment could include carefully planned ways in which AI can support this, as approved by your setting. You could then include practical sessions on using AI tools safely and critically evaluating AI outputs.

Laura Knight, Digital Educator and AI Expert:

"Now, even the best tools will fail if staff don't feel confident and comfortable using them. So, let's start with small pilots. If we make time for reflection and professional dialogue and we build a culture where staff are supported, then exploring, adapting, and sharing learning becomes normal. Adoption without understanding is just jumping through hoops, and innovation is something that we can't just roll out, we have to grow into. So, remember, it's about failing forwards. Let go of worrying about perfection, and instead, think about participation and progress."

Presenter: Consideration also needs to be given to the career stage of different teachers. For example, for trainee teachers and ECTs you may want to provide different support, such as focusing on the fundamental safe use and importance of human oversight and checking and understanding effective planning and resources before using AI. Consideration should be given to those teachers and leaders who are studying NPQs. For example, those taking leadership NPQs may be able to support with implementation planning, whereas those taking the NPQ in SEND may bring new insights to a school or college working group looking at use of AI in SEND provision.

Chris Loveday, Vice Principal, Barton Peveril 6th Form College:

"We've really focused on staff training throughout our journey. The opening INSET day very much was to launch AI to say, look, we're going to look at it. Making it clear to staff at the outset, what we felt was safe or not safe use of artificial intelligence. So that was really essential. The public large language models were available and I think if we didn't have clear guidelines to support staff, it would have been easy for them to think it would be okay to put a class set of data into the open source models without truly understanding that that was training the large language model that it was available in the public domain. So, the first INSET was focused on AI safety. How can you use AI safely with our data, the student's personal data, and make sure that what we're doing is ethical? From then, just giving them access to Gemini and the opportunity to play. We had our partner come in and deliver some staff training and then sporadically through the year, we've offered drop-in sessions."

Presenter: To sustain the adoption of AI within the schools safely and securely, key messages need to be reiterated over time. Many schools use briefings or school meeting time to have short CPD sessions where teachers can share ideas, and AI could be the focus for some of these. If it’s identified that any of the key messages from the staff toolkit are being forgotten, you could consider showing key videos as reminders about safe and effective use.

3.3.4 Helpful edtech frameworks

There are frameworks that can support the adoption of digital technologies and can help to frame thinking about AI models as part of a wider digital strategy. These tools may or may

not be appropriate for your context so it's important to think carefully before adopting a framework. Two of the most common frameworks are outlined below.

SAMR

SAMR is a model to support technology integration developed by Ruben Puentedura. SAMR stands for Substitution, Augmentation, Modification and Redefinition. It could provide a useful framework for leaders when you're considering how AI tools can support teachers in reducing workload, preparing resources and assisting learners with special educational needs and disabilities (SEND). At the Substitution level, technology simply replaces existing tasks – such as generating lesson plan templates or summarising meeting notes. At the Augmentation level, technology enhances these tasks, for example, using AI tools to refine instructional materials, generate differentiated worksheets, or suggest alternative explanations for complex topics. These kinds of uses can save time and help teachers focus on high-impact activities.

In the SAMR model, technology plays a more transformative role when it comes to Modification and Redefinition. In Modification, technology could offer new opportunities, such as rapidly adapting resources for students, while still maintaining human oversight or an AI-powered speech to text tool could be used. At the Redefinition stage, technology enables entirely new ways to support both teachers and students, such as AI-powered tools that convert text into multimodal formats for accessibility, for example, in the form of a podcast, video, presentation or narration.

Although the SAMR model was developed before generative AI use became widespread, it can be a useful lens through which to consider your use of technology. You don't always need to be aiming for the top of the SAMR model, but it can help you to reflect on how you are using digital technologies, including AI.

TPACK

The TPACK model, short for Technological, Pedagogical, and Content Knowledge, was developed by Punya Mishra and Matthew J Koehler in 2006. They created the framework to help educators understand the complex interplay between technology, pedagogy and subject content when designing effective teaching and learning experiences. For leaders looking to integrate digital tools to support teaching and learning, TPACK provides a valuable structure. It emphasises that effective use of technology in education is not just about the tools themselves, but about achieving a balance between technological knowledge, pedagogical knowledge, and deep understanding of the subject matter. The TPACK model is depicted as a Venn diagram with three key areas:

1. content knowledge (what is being taught)
2. pedagogical knowledge (how it is taught)
3. technological knowledge (the tools that support teaching and learning)

Technology use should not be viewed in isolation but as part of a broader approach where technology enhances, rather than dictates, classroom practice. Understanding the TPACK framework could help educators and leaders to implement digital tools in a way that supports teachers and improves outcomes for learners.

Digital tools and AI must be integrated safely and thoughtfully. It’s important to note that consideration should be given to your setting’s capacity to deal with implementation. By embedding AI tools within the "pedagogical knowledge" domain, settings could try to ensure that its use enhances, rather than disrupts, teaching and learning. AI should support evidence-based teaching strategies, such as scaffolding and formative assessment, rather than leading to over-reliance on automation. A well-rounded digital strategy considers not just what AI can do but how it fits into the curriculum and supports teachers as they use their professional judgement.

Finally, remember AI is a tool to support teachers and cannot replace them. Teachers need professional development to use AI tools effectively, ensuring that it aligns with strong pedagogical practice rather than replacing human decision-making. The same concerns that we have about students using AI to ‘outsource thinking’ could apply to some teachers in their planning. Providing continuous professional development to staff as part of a wider AI and digital strategy and regularly reviewing the effectiveness of AI tools can help to ensure they align with your setting’s operational and strategic goals as well as a wider digital strategy.

Video 3.4 – Department for Education guidance

Welcome to video 3.4, Department for Education guidance, from the leadership toolkit in the safe and effective use of AI in education online resources.

To support you and ensure that you are following best practice, the Department for Education has produced a policy paper – Generative Artificial Intelligence (AI) in Education. It states that:

“If used safely, effectively and with the right infrastructure in place, AI has the potential to support every child and young person, regardless of their background, to achieve at school and college and develop the knowledge and skills they need for life.”

It acknowledges the potential of AI tools to enhance teaching and learning by reducing administrative burdens and providing tailored support. However, it also emphasises the need for safe, responsible and effective implementation, highlighting the imperative to address risks such as inaccuracy, bias and intellectual property infringement.

The Department for Education has also produced the guidance Generative AI: product safety standards. These guidelines are primarily aimed at edtech developers and suppliers but, as a leader, you also need to understand them to ensure that the AI tools used in your setting are safe and effective. Remember, it’s your responsibility to ensure that any AI tools introduced in your setting are appropriate, safe and have the correct safeguards, including those to protect personal data and cognitive development.

Education settings need to ensure that the infrastructure is in place to support the use of AI systems and other digital tools. To do this you can review your position against the Department for Education’s digital and technology standards in schools and colleges. These include standards on cyber security, filtering and monitoring standards, and digital leadership and governance standards. This guidance highlights that:

“Good digital technology governance:

1. identifies roles and responsibilities
2. establishes critical processes to manage digital technology
3. ensures that up-to-date information on the school or college’s digital technology is available to support decision making.”

To support schools and colleges in meeting the digital and technology standards, the DfE has developed a service called Plan Technology for Your School. Designed in collaboration with senior education leaders, the service helps schools and colleges make strategic decisions about technology procurement and implementation. You can use the service to:

- Assess your current technology setup against the DfE digital and technology standards

- Receive actionable recommendations on how to meet these standards.

Schools and colleges must have systems to block harmful or inappropriate online content and to monitor online activity for safety concerns such as bullying. These systems should be reviewed every year to stay up to date.

A senior leader should be responsible for digital technology, making sure it supports school priorities and meets the needs of staff and students.

Keeping records of digital equipment and planning for emergencies helps ensure smooth running. Having a clear digital strategy, reviewed annually, supports safe, effective use of technology – including AI.

To summarise, the Department for Education's guidance on digital leadership and governance standards outlines essential practices for schools and colleges to effectively manage digital technology and can help you get started with creating a digital strategy, if you don’t have one already. Key recommendations include:

1. Assigning a senior leadership team (SLT) member for digital technology
2. Maintaining up-to-date registers
3. Incorporating digital technology in disaster recovery plans
4. Developing a digital technology strategy

As with any new initiative in schools and colleges, it’s important to consider your strategic priorities and see what opportunities there are to align the use of AI and digital tools with your development planning. For example, if one of your priorities for development is to make better use of data to reduce the attainment gap, or you have a priority to use formative assessment to improve progress, you could explore how AI can support you in achieving this safely. Alignment with these wider priorities helps with implementation, as staff will see the immediate benefits. It’s important to always remember that while AI systems can support your work, you must always maintain human oversight and not outsource your thinking or decision-making to AI. Human interaction remains at the core of education.

Video 4 – Planning for implementation

Welcome to video 4, Implementation, from the leadership toolkit in the safe and effective use of AI in education online resources.

Before planning how you may implement AI use in your setting, we recommend that you first revisit the audit questions. When you have completed this toolkit, you will want to make an implementation plan. The Education Endowment Foundation (EEF) offers guidance on implementation in its report A School's Guide to Implementation. It explores effective implementation in schools, and this can be equally helpful in colleges. There are three key recommendations:

1. Adopt the behaviours that drive effective implementation. This includes engaging people so they can shape what happens while also providing overall direction, uniting people around what is being implemented, how it will be implemented, and why it matters and then reflecting, monitoring and adapting to improve implementation.
2. Attend to the contextual factors that affect implementation.
    - Engage people so they can shape what happens while also providing overall direction.
    - Unite people around what is being implemented, how it will be implemented, and why it matters.
    - Reflect, monitor, and adapt to improve implementation.
3. Use a structured but flexible implementation process.
    - Use a structured process to apply the behaviours and contextual factors to your day-to-day work.
    - Adopt a practical and tailored set of implementation strategies organised into manageable phases: Explore, Prepare, Deliver, and Sustain.
    - Treat implementation as a process of ongoing learning and improvement.

By using a structured approach that considers all aspects of AI implementation we can ensure that use is adopted safely and effectively and it is embedded.

We hope this toolkit has been useful in supporting you to consider and implement the safe and effective use of AI in education. As you've watched each video you've reflected in your workbook on the content. As we mentioned at the start of the toolkit, it's important to plan your approach strategically, align it with your school or college's priorities, identify safe tools and ensure staff have the foundational knowledge needed. AI is a constantly evolving field, and this will require you to regularly review approaches as new tools and issues emerge.

As we move forward, it's clear that we must keep humans at the heart of education. AI is not here to replace the relationships, empathy and professional judgement that define great teaching and leadership. Instead, when used safely and effectively, it can play a

useful role in education, potentially giving us back time and supporting the goals we have for our pupils and students.

Department for Education

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