# AI empowerment in schools offers UK a path to lead in ethical innovation



Artificial intelligence is fast becoming a fixture in UK classrooms, with educators pushing for “AI empowerment” that goes far beyond teaching basic tool use. This emerging approach seeks to equip students with critical thinking, digital resilience and ethical awareness—laying the groundwork for responsible AI innovation.

Dr Caitlin Bentley, senior lecturer in AI education at King’s College London, defines AI empowerment as encouraging students to question AI outputs, understand their limitations and recognise the perspectives embedded in AI systems. Speaking at a recent summit, Bentley said education should position students as “active agents of change,” combining independence, collaboration and critical inquiry.

Experts agree that three strategies are essential. First, purpose-led teaching that encourages students to assess AI critically. Second, teacher training to give educators the skills and confidence to guide students in AI’s creative and ethical use. Third, embedding AI into digital citizenship and online safety programmes through collaboration with families and communities.

Schools are already experimenting with practical applications. Richard Slade, executive headteacher at Plumcroft Primary in London, reports that AI tools have reduced administrative tasks and enabled personalised learning. Computer science teacher Jonathan Wharmby describes AI as “a teaching assistant in every teacher’s pocket,” offering real-time feedback tailored to each student.

Yet risks remain. Teachers including Gina Parnaby warn of diminished critical thinking if students become over-reliant on AI. Research from Carnegie Mellon University and Microsoft supports these concerns, identifying potential reductions in attention span and cognitive engagement.

The solution, say educators, is not to reject AI but to integrate it thoughtfully. Joanne McGovern of South West College stresses the need for clear ethical frameworks and strategic planning. Her approach begins with a simple question: “Why do we need to embrace this now?”

Interactive tools are reinforcing these lessons. Minecraft Education’s ‘Reed Smart: AI Detective’ teaches children to spot misinformation and question digital content. In the US, the Connecticut State Department of Education is trialling AI tools in classrooms alongside teacher training to track their impact responsibly.

New training courses are also emerging to support teachers, blending online safety, digital citizenship and AI integration. These aim to prepare educators to manage AI in lesson planning, teaching and administration while promoting inclusion and innovation.

Broader policy work backs these efforts. The Spencer Foundation’s AI and Education initiative supports equity-driven research to ensure AI benefits all learners—not just the most advantaged.

The UK’s opportunity lies in leading this shift. By embedding ethical awareness and critical digital skills from an early age, schools can prepare students not just to use AI but to shape its future. With coordination between educators, parents and policymakers, the country can set a global example for inclusive, responsible AI education.

Created by [Amplify](https://www.hbmadvisory.com/amplify): AI-augmented, human-curated content.

## Bibliography

1. <https://www.relocatemagazine.com/the-path-to-ai-empowerment-ledetta-asfa-wossen-0625> - Please view link - unable to able to access data
2. <https://www.windowscentral.com/gaming/minecraft-education-teaches-kids-the-dangers-of-ai-through-a-noir-detective-lens> - Minecraft Education Edition has introduced 'Reed Smart: AI Detective', an interactive game designed for children aged 8 to 18. Presented in a noir detective style, players assist Detective Reed Smart in solving crimes involving AI misuse, such as deepfake videos. The game aims to teach children about AI's potential to spread misinformation and how to identify reliable information. As players progress, the game's environment transitions from black-and-white to full colour, symbolising improved information literacy. Developed in partnership with Microsoft, the program emphasises skills like lateral reading, fact-checking, and critical analysis of AI-generated content. It's available on the Minecraft: Education Library for licensed users and as a demo for free users, as well as on the Minecraft Marketplace for Bedrock players. ([windowscentral.com](https://www.windowscentral.com/gaming/minecraft-education-teaches-kids-the-dangers-of-ai-through-a-noir-detective-lens?utm_source=openai))
3. <https://www.axios.com/2025/03/30/teachers-ai-students-critical-thinking> - Teachers are expressing concerns that the increasing use of AI among students is negatively affecting their critical thinking skills. AI technologies are now a common presence in students' lives, evident in tools like Google searches and Spotify playlists. Gina Parnaby, a 12th grade English teacher, has observed students using AI to outsource thinking, which sometimes leads to cheating. A recent study by Carnegie Mellon University and Microsoft supports this, indicating improper use of generative AI tools can impair cognitive faculties. Alexa Borota, an 11th grade teacher, concurs that AI can further diminish students' attention spans. Nonetheless, AI can beneficially serve as educational tutors if used appropriately. Opinions among teachers and experts on AI's role in education remain mixed. ([axios.com](https://www.axios.com/2025/03/30/teachers-ai-students-critical-thinking?utm_source=openai))
4. <https://school-education.ec.europa.eu/en/learn/courses/level-your-teaching-superpowers-digital-citizenship-online-collab-splash-ai-magic> - This 5-day course empowers educators and school staff with essential digital skills to promote responsible online behaviour, create collaborative learning environments, and integrate AI into their daily tasks. Participants will explore digital citizenship, online safety, and the use of digital tools to enhance student engagement. Teachers will learn how to leverage AI, such as ChatGPT, for lesson planning and personalised learning, while staff members will discover AI applications for administrative efficiency. Through hands-on workshops and discussions, attendees will develop practical strategies to implement in their classrooms and offices, ensuring a safer, more innovative, and digitally inclusive learning environment. ([school-education.ec.europa.eu](https://school-education.ec.europa.eu/en/learn/courses/level-your-teaching-superpowers-digital-citizenship-online-collab-splash-ai-magic?utm_source=openai))
5. <https://portal.ct.gov/sde/press-room/press-releases/2025/csde-launches-groundbreaking-artificial-intelligence-pilot-program> - The Connecticut State Department of Education (CSDE) has launched a groundbreaking Artificial Intelligence (AI) Pilot Program, running from January to June 2025, introducing state-approved AI tools into classroom instruction in seven districts. The program focuses on students in grades 7-12, providing hands-on experience with tools such as CK12 Foundation, Cloud Navigator, MagicSchoolAI, SchoolAI, and SNORKL. Educators will receive professional development to maximise the tools’ benefits and assess their impact on teaching and learning. The initiative aims to build upon the digital citizenship curriculum by providing students with skills such as prompt engineering and critical analysis of AI-generated content. Throughout the six-month pilot period, CSDE will monitor implementation and outcomes, sharing best practices to guide future technology integration efforts across the state. ([portal.ct.gov](https://portal.ct.gov/sde/press-room/press-releases/2025/csde-launches-groundbreaking-artificial-intelligence-pilot-program?utm_source=openai))
6. <https://www.spencer.org/initiative-on-ai-and-education> - The Spencer Foundation has launched an initiative on AI and Education to re-envision possibilities for education and learning across the lifespan. The initiative supports novel research on key topics related to AI, equity, and education, aiming to offer evidence-based guidance that centres the needs of young people. The goal is to ensure that technology solutions, systems, and policy directions contribute to the learning and thriving of all students. ([spencer.org](https://www.spencer.org/initiative-on-ai-and-education?utm_source=openai))