Realising the potential of technology in education: A strategy for education providers and the technology industry

Our aim is to support the education sector in England to develop and embed technology in a way that cuts workload, fosters efficiencies, supports inclusion and ultimately drives improvements in educational outcomes. Schools, colleges, universities and other providers face a range of barriers to supporting and integrating the good use of technology. This strategy aims to help address these barriers.

Commitments to support the use of technology in education:

<table>
<thead>
<tr>
<th>Securing the digital infrastructure</th>
<th>Get the connectivity right – many education providers struggle with slow internet connections and outdated internal networking and devices. So we:</th>
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<td></td>
<td>Are working with industry to accelerate the rollout of full-fibre internet connectivity to schools most in need.</td>
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<td>Encourage providers with good broadband connections to move to a cloud based approach for their IT system.</td>
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<td>Support Jisc to provide full-fibre connections through their Janet network to colleges and universities.</td>
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<td>Have published guidance documents covering the key questions and issues to consider when implementing technology infrastructure.</td>
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<tr>
<th>Developing digital capability and skills</th>
<th>Set a vision, know the outcomes you want to achieve and ensure staff have the right skills – it can be hard to know where to start and to get the implementation right. So we:</th>
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<td></td>
<td>Will launch a network of technology ‘demonstrator schools and colleges’ to provide peer-to-peer support and training.</td>
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<td>Support ‘LearnEd’, BESA’s regional EdTech roadshows to showcase products and services and facilitate learning from other education leaders.</td>
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<td></td>
<td>Have worked with the Chartered College of Teaching to launch online training courses about the use of technology for teachers and leaders.</td>
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<td>Have worked with the Chartered College of Teaching to publish an EdTech research journal to highlight and disseminate key research findings.</td>
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<tr>
<th>Promoting effective procurement</th>
<th>Get the right tools, solutions and services, at the best price – it can be challenging to understand what technology to buy to meet specific needs and to get the best price. So we:</th>
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<td>Recommend pre-negotiated buying deals for technology and trial regional buying hubs in the South West and the North West.</td>
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<td>Support an online lending library allowing educators to ‘try before they buy’ through BESA’s online LendEd service.</td>
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<td>Will explore how to facilitate a better online marketplace for education technology to help educators to connect with trusted providers.</td>
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<th>Promoting digital safety</th>
<th>Stay safe – it can be daunting to navigate the responsibilities around privacy, security and data. So we:</th>
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<td>Provide guidance on monitoring, filtering, data security and cyber security.</td>
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<td></td>
<td>Support Jisc to provide training, guidance and consultancy for colleges, universities and other providers.</td>
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<td></td>
<td>Encourage EdTech suppliers to follow ‘Cyber Essentials’ minimum standards and the Code of Practice for Consumer Internet of Things Security.</td>
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Commitments to support the education technology industry:

Supporting the development of the UK’s innovative EdTech businesses will be key to the success of our EdTech strategy. Our aim is to stimulate a vibrant and growing sector of EdTech businesses: generating ideas, innovation, and providing high-quality, effective technology for education providers to choose from. Businesses face a range of barriers to starting and growing in the EdTech market and this strategy aims to help tackle those, including by supporting access to the investment and business assistance set out in the government’s Industrial Strategy.

<table>
<thead>
<tr>
<th>Clear vision and sector leadership</th>
<th>Setting out clear ambition to build on the strength of the UK EdTech sector. We will:</th>
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<td></td>
<td>Clearly state the Government and Educators’ ambitions for Edtech to drive demand.</td>
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<td>Provide clarity on the challenges that educators most want solved, in order to</td>
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<td>catalyse business investment.</td>
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<td>Build a sense of cross-sector leadership and sector identity, and ensuring that</td>
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<td>business’ insight and expertise is harnessed in delivering this Strategy.</td>
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<tr>
<th>A vibrant market for EdTech products and services</th>
<th>The EdTech sector needs clear routes to market for innovative products and services. We will:</th>
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<td>Create new opportunities for buyers to meet sellers.</td>
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<td>Increase opportunities for businesses to develop, test and validate products in real-world</td>
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<td>settings.</td>
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<td></td>
<td>Enable businesses to promote their Edtech products, and build a wider evidence base on the</td>
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<td>effectiveness of Edtech products and services.</td>
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<th>Building business environment</th>
<th>Supporting tech-led businesses to grow and thrive. We will:</th>
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<tr>
<td></td>
<td>Build on our Industrial Strategy, and ensuring EdTech businesses can access the finance they need to start, scale and grow.</td>
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<td></td>
<td>Ensure EdTech businesses can access the support and expert advice necessary to break into the specialised education market.</td>
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<td></td>
<td>Work with the British Business Bank and the EdTech Leadership Group to ensure that potential EdTech investors and EdTech innovators are aware of and can benefit from the options available.</td>
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<tr>
<td></td>
<td>Work with key industry partners including BESA, TechUK and the Digital Catapult to engage incubators &amp; accelerators and ensure EdTech businesses are aware of the opportunities they offer.</td>
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Promoting EdTech innovation through collaboration

To catalyse change in the use of technology across the English education system, we are launching a series of EdTech challenges. They are designed to support a partnership between EdTech industry and the education sector to ensure product development and testing is focused on the needs of the education system. The challenges are to industry and the education sector (including academia) to prove what is possible and to inform the future use of EdTech across our education system.

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<th>Administration</th>
<th>Reducing the burden of ‘non-teaching’ tasks.</th>
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<td><strong>Challenge 1:</strong> “Improve parental engagement and communication, whilst cutting related teacher workload by up to five hours per term.”</td>
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<td><strong>Challenge 2:</strong> “Show how technology can facilitate part-time and flexible working patterns in schools and colleges, including through the use of time-tabling tools.”</td>
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<th>Assessment</th>
<th>Making assessment more effective and efficient.</th>
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<td><strong>Challenge 3:</strong> “Cut teacher time spent preparing, marking and analysing in-class assessments and homework by two hours per week or more.”</td>
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<td><strong>Challenge 4:</strong> “Show that technology can reduce teacher time spent on essay marking for mock GCSE exams by at least 20%.”</td>
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<td><strong>Challenge 5:</strong> “Identify how anti-cheating software can be developed and improved to help tackle the problem of essay mills.”</td>
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<th>Teaching practice</th>
<th>Supporting access, inclusion and improved educational outcomes for all.</th>
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<td><strong>Challenge 6:</strong> “Challenge the research community to identify the best technology that is proven to help level the playing field for learners.”</td>
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<th>Continued professional development (CPD)</th>
<th>Supporting teachers so that they can develop and learn more flexibly.</th>
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<td><strong>Challenge 7:</strong> “Demonstrate how technology can support schools and teachers to diagnose their development needs and to support more flexible CPD.”</td>
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<th>Learning throughout life</th>
<th>Supporting decisions about work or further study and helping those who are not in the formal education system gain new skills.</th>
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<td><strong>Challenge 8:</strong> “Prove that the use of home learning early years apps (both those aimed at parents and those aimed at children) contributes to improved literacy and communication skills for disadvantaged children.”</td>
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<td><strong>Challenge 9:</strong> “Widen accessibility and improve delivery of online basic skills training for adults.”</td>
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<td><strong>Challenge 10:</strong> “Demonstrate how artificial intelligence can support the effective delivery of online learning and training for adults.”</td>
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To support these challenges, we will establish:

A small ‘testbed’ of schools and colleges to support the development, piloting and evaluation of technology.

A series of innovation competitions to promote product development in areas where the existing market offer is not yet well developed. We expect that the winning bidders will work in partnership with the education sector and evaluators to help build our understanding of what works.

Leading ‘demonstrator’ schools and colleges to exemplify how these technologies can be used to best effect, and which build on existing good practice in the sector.

A new EdTech Leadership Group, made up of representatives across the education sector and industry to continue to drive this agenda forward, find new ways to collaborate and to produce an EdTech agreement by the end of the year.