Realising the potential of technology in education: A summary report

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Summary

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:

Securing the digital infrastructure

Get the connectivity right – many education providers struggle with slow internet connections and outdated internal networking and devices. So we:

• are working with industry to accelerate the rollout of full-fibre internet connectivity to schools most in need
• encourage providers with good broadband connections to move to a cloud based approach for their IT system
• support Jisc to provide full-fibre connections through their Janet network to colleges and universities
• have published guidance documents covering the key questions and issues to consider when implementing technology infrastructure

Developing digital capability and skills

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:

• will launch a network of technology ‘demonstrator schools and colleges’ to provide peer-to-peer support and training
• support ‘LearnEd’, BESA’s regional EdTech roadshows to showcase products and services and facilitate learning from other education leaders
• have worked with the Chartered College of Teaching to launch online training courses about the use of technology for teachers and leaders
• have worked with the Chartered College of Teaching to publish an EdTech research journal to highlight and disseminate key research findings

Promoting effective procurement

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:

• Provide guidance on monitoring, filtering, data security and cyber security
• Support Jisc to provide training, guidance and consultancy for colleges, universities and other providers
• Encourage EdTech suppliers to follow ‘Cyber Essentials’ minimum standards and the Code of Practice for Consumer Internet of Things Security
Commitments to support the education technology industry:

Clear vision and sector leadership
Setting out clear ambition to build on the strength of the UK EdTech sector. We will:

- clearly state the Government and Educators’ ambitions for Edtech to drive demand
- provide clarity on the challenges that educators most want solved, in order to catalyse business investment
- build a sense of cross-sector leadership and sector identity, and ensuring that business’ insight and expertise is harnessed in delivering this Strategy

A vibrant market for EdTech products and services
The EdTech sector needs clear routes to market for innovative products and services. We will:

- create new opportunities for buyers to meet sellers
- increase opportunities for businesses to develop, test and validate products in real-world settings
- enable businesses to promote their Edtech products, and build a wider evidence base on the effectiveness of Edtech products and services

Building business environment
Supporting tech-led businesses to grow and thrive. We will:

- build on our Industrial Strategy, and ensuring EdTech businesses can access the finance they need to start, scale and grow
- ensure EdTech businesses can access the support and expert advice necessary to break into the specialised education market
- 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
- work with key industry partners including BESA, TechUK and the Digital Catapult to engage incubators & accelerators and ensure EdTech businesses are aware of the opportunities they offer
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.

Administration

Reducing the burden of ‘non-teaching’ tasks.

Challenge 1: “Improve parental engagement and communication, whilst cutting related teacher workload by up to five hours per term.”

Challenge 2: “Show how technology can facilitate part-time and flexible working patterns in schools and colleges, including through the use of time-tabling tools.”

Assessment

Making assessment more effective and efficient.

Challenge 3: “Cut teacher time spent preparing, marking and analysing in-class assessments and homework by two hours per week or more.”

Challenge 4: “Show that technology can reduce teacher time spent on essay marking for mock GCSE exams by at least 20%.”

Challenge 5: “Identify how anti-cheating software can be developed and improved to help tackle the problem of essay mills.”

Teaching practice

Supporting access, inclusion and improved educational outcomes for all.

Challenge 6: “Challenge the research community to identify the best technology that is proven to help level the playing field for learners.”

Continued professional development (CPD)

Supporting teachers so that they can develop and learn more flexibly.

Challenge 7: “Demonstrate how technology can support schools and teachers to diagnose their development needs and to support more flexible CPD.”
Learning throughout life

Supporting decisions about work or further study and helping those who are not in the formal education system gain new skills.

**Challenge 8:** “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.”

**Challenge 9:** “Widen accessibility and improve delivery of online basic skills training for adults.”

**Challenge 10:** “Demonstrate how artificial intelligence can support the effective delivery of online learning and training for adults.”
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.