Harnessing Technology Learning in the 21st century Call to action







Background

March 2005

The DfES published its e-Strategy, Harnessing Technology: a system-wide approach to the application of ICT in education, skills and children's services.

January 2006

Becta given the role of lead delivery agency for the e-Strategy and the responsibility to work with partners to deliver it.

December 2006

Harnessing Technology delivery plan published by Becta, setting out a series of concrete aims to deliver the e-strategy. based around a 'balanced scorecard' of priorities designed to improve the supply of technology and demand for technology in the education system.

March 2007

Becta's new remit: Government gives Becta responsibility for leadership in all matters relating to the educational use of technology including future strategy development and policy advice.

September 2007

Harnessing Technology – Learning in the 21st century: Becta launches a series of seminars to shape the next phase in the development of technology in education.

Call to action

Becta is running these events to engage all of your expertise and experience in shaping the next phase of the national technology strategy for education. We want this revised strategy to fully exploit the power of technology to provide a 21st century education that reaches and benefits all learners and enables the UK to compete globally. The aim is to make this a strategy which underpins and helps deliver a more demand-led and personalised education system.

We need your expertise and experience to help us get this right and to shape the next steps in this national strategy. The process will consist of a series of seminars leading to a major national conference on November 6th for over 500 of the country's top educational leaders to be followed by a wider national consultation. We welcome your participation and look forward to working with you to draw up the framework for the next phase and to shape the campaign which will achieve it.

Andrew Pinder, Chairman, Becta Stephen Crowne, Chief Executive, Becta

Foreword



It will be three years next March since we published "Harnessing Technology: Transforming Learning and Children's Services". Much has happened in that time and my visits to schools continually remind me of the many positive ways that learners and teachers use

technology to raise standards of achievement. Real progress is being made and we are one of the leading countries in the world for the way we make available and use technology in education. Of course we all know that technology is continually changing and just in these last three years the opportunities it offers have grown enormously. The ways we use it at home, on the move, at work, in education continue to grow and make real differences to our lives.

So now is a good time for us to review Harnessing Technology and I have asked Becta and its Board to undertake this process. This will help to develop our Children's Plan to ensure that it is supported by a strong underpinning technology strategy. Becta is therefore running this series of seminars to harness a wide range of expertise and experience to help get this process right and to shape the next steps in this national strategy. This will feed through into the National Conference on 6 November when I will have the pleasure of talking to, and meeting many of you. I want to emphasise the importance of ensuring that "Harnessing Technology" continues as a crosssystem strategy. In today's world learners of all ages have to cross many boundaries and technology can help make transitions easier between home, school, college, university and the workplace as well as addressing the skills challenges the country faces.

Good luck in your deliberations and I look forward to hearing your views, both at the National Conference and later when Becta brings this all together into a revised Harnessing Technology Strategy.

Jim Knight MP, Minister for Schools and Learners, Department for Children, Schools and Families



Technology is the wonder of our age. It is transforming our lives, and no doubt our children cannot imagine a world without it. Nor have we reached a 'technological plateau' – scientists tell us there is much more to come, and the world of our grandchildren will have super-computers of – to us – unbelievable power.

I echo Jim Knight's words about technology and education. As an aid to teaching and learning, technology can help us master all manner of things in ways undreamed of even a few years ago. And of course we all need to master technology itself in order to use it effectively in the world outside education. The Prime Minister wants the new Department for Innovation, Universities and Skills to break down the barriers between research, innovation, education and business. Technology is a one vital aspect of this. Many of our schools, colleges and universities already use it imaginatively and effectively. We want to see all leaders, teachers and trainers understanding and taking full advantage of technology's potential.

I too await the outcome of the discussions led by Becta with interest.

Bill Rammell

Bill Rammell MP, Minister of State for Lifelong Learning, Further and Higher Education Department for Innovation, Universities and Skills

How we are going to revise the strategy



Policy and delivery design



Process

We begin with Becta's research forum on 17 September, which will bring together key researchers to discuss what evidence and research can tell us about our key questions. Becta will publish its *Harnessing Technology Review* at this conference, providing the current picture of technology in education and identifying issues and barriers to further development.

The evidence from the *Harnessing Technology Review* and other research will be taken into the series of five seminars involving key people who will develop a picture of what needs to change for the future. These seminars will be based on our key questions (see next page) under the headings:

- 1. What are the learners' needs?
- 2. What are the employers' needs?
- 3. What can technology offer to meet these needs?
- 4. What will be the changes in educational processes?
- 5. What will be the changes in the education system?

Each seminar will build on the preceding ones, each developing the strategy further, resulting in the final plenary session to bring all of this material together and give a clear direction to the strategy.

The seminars will be run as participatory workshops, with short inputs followed by extensive small-table



discussions. We will capture all of the discussion and outputs from each seminar.

In addition to taking part in the seminars, all delegates will be able to access a dedicated online forum throughout the period of the Harnessing Technology: learning in the 21st century seminar series.

As part of this process, Becta is also running three focused FE and skills events to ensure full consideration of the educational needs of learners in this sector. These will take place 9 October in Bristol, 11 October in London and 16 October in Manchester.

We will also discuss our strategic delivery partners, the national agencies, in considering how they will contribute and help shape the revised strategy.

This will all lead to a major national conference on 6 November for over 500 of the country's top educational leaders, followed by a wider national consultation involving policy makers and other stakeholders.

The process is designed to enable the ideas generated through these seminars to support the processes and working groups developing the children's plan for the Department for Children, Schools and Families (DCSF) and the strategic planning processes developed by the Department for Innovation, Universities and Skills (DIUS).

Reception and seminars at the RSA, John Adam Street, London.

The seminars are full-day events from 10:00am to 4:00pm. The national conference is in Birmingham.

Strategy review: key questions

The Strategy Review is focussed on the following key questions:

Learners' needs

Learners and their parents and carers, are entitled to an education system that makes appropriate use of technology to improve their learning chances. This use in formal educational and training settings should support a more personalised and deeper approach to learning and take advantage of the learners' own use of technology at home and elsewhere, as well as preparing them for the opportunities and risks that technology offers.

What is this learner and parent entitlement, and how does it affect the revision of the Harnessing Technology strategy?

Future skills

The country needs an education and training system that equips all its citizens with the necessary skills and abilities to enable the country to compete effectively in global markets. IT skills will be an essential foundation for all, alongside literacy and numeracy. Employers will also need increasingly flexible ways of training and increasing the skills of their workforce, with technology-based delivery embedded into training across the board.

What are the needs of employers for their employees in the future and how can the strategy reflect these needs?

How can the strategy support employers to recognise the importance of technology based solutions to training and to enable employers to demand the training and development they need to thrive?

Technology model

Technology when properly configured can support a more demand-led, personalised approach and can provide major gains to the education and training system. Continuous, remote and mobile access could have a major effect on learners but the system is not well prepared for this shift. Not all future solutions will be cost-effective, and there will be a need to consider aggregating the education system's purchasing and deployment of technology.

What are the best configurations for education and training's use of technology in order to meet learners', parents', and employers' needs?

How do we work with the supply side to encourage and provide incentives for innovative solutions which support educational reform?

What is the aggregation model that can best meet the needs of the learners and the system as a whole?

Up-to-date educational processes

Technology improves many business processes. The education system will need increasingly effective processes to enable more personalised approaches and to support the need for greater institutional collaboration. Mobility, access from home, and the availability of rich online learning environments will require new ways of teaching and new ways for institutions to work together. Teachers need more help, through proper support and less fragmented training, to change and adapt to these changes.

Which educational processes will be most improved by technology, and which of these will best meet learner, parent, employer needs?

What is the impact on the management of education and the way the system is structured?

What are the implications for teaching and learning, and for the professional development for teachers and others?



Technology fully integrated into national education policy

The revised strategy needs to start from the needs of educational policy and build technology in from the beginning. A long term view of technology and its impact should be part of specific government initiatives including capital build initiatives, the skills pledge, 14–19 diplomas, Leitch Implementation Plan, family learning support and the Key Stage 3 curriculum.

How can the revised Harnessing Technology strategy best support greater choice and flexibility in education by providing the underpinning technology support needed to deliver the developing children's plan from the DCSF and the equivalent strategy from the DIUS?

Demand-driven delivery model

The strategy needs to develop delivery models where the existing market processes are not meeting the needs of learners, parents and employers. It will need to engage local authorities and others in connecting national policy with the work of schools, colleges and end users making sure that they know what 'good' looks like and there are incentives to achieve it. The delivery model needs to identify national and local performance indicators based on international and other benchmarking and look to ensuring that no learners miss out.

What are the key elements of a worked out delivery model that is both demand-led and provides good support and impetus to the individual institution's own change processes?

Campaign

To develop a world class education system we need to harness technology to the needs of the learner, the employer and the education system. There needs to be a step-change which is not just about using technology but about using it for real purpose. This step change can only be achieved through the concerted effort of all those involved.

How can the revised strategy help shape and provide support for such a future campaign?

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Science Park Coventry CV4 7JJ Tel: 024 7641 6994 Fax: 024 7641 1418 Email: becta@becta.org.uk URL: http://www.becta.org.uk

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