

Technology Strategy for
Further Education and Skills

March 2010

Next Generation Learning

The implementation
plan for 2010–2013



 department for
children, schools and families

BIS | Department for
Business Innovation & Skills

This three-year plan was first published in April 2008 and then revised and re-issued in June 2009. It has now been updated again to cover the period from 2010 to 2013, building on the progress made during the past year. You can read about this in *Progress through harnessing technology: A year in the FE and skills sector*. Please visit www.becta.org.uk/publications and go to the further education and skills section.

We have written this plan for practitioners, leaders and managers working in the further education (FE) and skills sector, for their representative bodies and interest groups and for national agencies and policy makers. (By 'FE and skills', we mean the wide range of organisations that make up the learning and skills sector and the national partners responsible for planning, funding and quality improvement.)

If you would like to offer your views on how technology could be used in FE and skills, please join the conversation at <http://collaboration.becta.org.uk/community/feandskills>. We want to hear from colleges and providers, especially those that have not yet joined the discussion, and from learners and employers too.

We will report the progress of this plan on the Becta site (www.becta.org.uk), in newsletters and via other channels.

Contents

FOREWORD	02
INTRODUCTION	04
1. DEVELOPING OUR PLANS	06
2. WHY LEARNING TECHNOLOGIES MATTER	12
3. EFFICIENCIES AND EFFECTIVENESS	14
4. SECTOR LEADERSHIP AND WORKFORCE	20
5. CONTENT AND DIGITAL RESOURCES	25
6. COMMUNICATIONS AND NETWORKS	28





Foreword

by Graham Badman

As the chair of Becta's Board, I am very pleased to introduce our updated technology implementation plan for the FE and skills sector. The plan is a key element of Harnessing Technology 2008–2014, the national e-learning strategy for which the government has given us responsibility.

I have worked in education now for many years, in a variety of roles from teaching to advising the government on the development of policy. In all that time, across all that experience, I have seen little to equal the potential of technology. We cannot but be aware now of how our everyday lives, both at work and at home, are made possible by technology.

Learning is no different from any other aspect of our lives, whether one is a professional or a student. Technology is already having a tremendous impact in the classroom, laboratory or workshop, in the library or information centre and in the office of the principal, chief executive or headteacher. It motivates learners of all ages and backgrounds, including those who come to it new. It speeds their progress and improves their achievements. It stimulates the teacher and trainer, enabling them to share their subjects with their learners in exciting and challenging ways. And it enables the college, school or training provider to manage the organisation effectively and efficiently.

The contribution of technology can be summed up in the words of Frank McLoughlin CBE, the Principal of City and Islington College and Chair of the 157 Group:

“Technology is like a golden thread that runs through the college. It impacts on everything we do, from teaching and learning, to how we operate as a business to liberate resources to invest back for the students, to how we communicate with everyone.”

Although Frank is talking about his own college, the message is one for the whole sector, for all colleges, for work-based learning providers and informal learning.



This implementation plan is designed to help the people who work in the sector to apply technology effectively and efficiently.

But technology needs people – people who are skilled in its everyday use in the classroom or the office; and also people who can apply technology to help them achieve their vision for the organisation. For all its capacity, technology cannot replace the dedicated and knowledgeable principal, teacher, manager or support worker. Rather it is a tool to be used by them to enhance their experience and expertise for the benefit of their learners. Without them technology is just an extravagance, and this is not a time when anyone can afford to be extravagant.

This implementation plan is designed to help the people who work in the sector to apply technology effectively and efficiently. The range of policies, services and products included here are practical, flexible and cost-effective. They have been developed in partnership with the sector and our fellow agencies. They build on years of solid achievement, from the Generator service to help with planning and review, to our procurement frameworks which offer best value for money.

The plan also takes account of the fact that each college or provider has its own circumstances, its own goals and challenges. Technology cannot be applied in the same way and at the same time across the entire FE and skills sector. Each provider needs to develop its own plan, which suits its aspirations and needs. That is why we have developed our national plan by talking with colleges and providers. It represents what you have told us you need.

I write this at a time when all public institutions are concerned about their finances. The economic circumstances in which we find ourselves mean that every penny must count more than ever. Every investment must work harder. Technology can seem expensive, and I can understand someone hesitating before committing. But I would urge that commitment. Properly deployed, technology is efficient and cost-effective. Becta's recent publications, *Efficiency and effectiveness case studies from the FE and skills sector*¹ and *Delivering results with learning technologies in the workplace*², offer a wealth of evidence to that effect. The payback, the return on the investment, is clear and unequivocal.

I'm pleased to say that the word is spreading. More and more colleges and providers every day are coming to understand the potential of technology, and are making sense of it for themselves. This is so very encouraging for me and my colleagues in Becta, and we are committed to working with you all.

Graham Badman CBE MA

Chair of Becta
March 2010

Introduction



Stephen Crowne
Chief Executive
Becta



Jane Williams
Executive Director
FE and 14–19
Becta

This plan sets out our priorities, actions and targets to support the FE and skills sector from 2010 to 2013. They are firmly based in our national Harnessing Technology strategy but should also be seen within the overall context of quality improvement in FE and skills. They are set out in sections 3 to 6.

Colleges and providers are making good progress, and there are now many which are innovative and creative in their use of technology.

We look at this in more detail in the sections below, but here we note for example that in a little over a year more than 700 FE colleges and providers have registered with Generator, our technology improvement tool for leaders in FE and skills. This includes 89 per cent of English general FE colleges.

The actions and targets we detail are evolving. We continue our discussions with our partners and the sector to ensure that what we propose meets their needs and fits with their own plans. We will also review these proposals in the light of the priorities of the new government after the general election. Our plans are grouped under four broad themes:

- efficiencies and effectiveness
- sector leadership and workforce
- content and digital resources
- communications and networks.

In each case we identify who takes the lead, but of course most activities depend upon the lead agency and others working in concert.

Our proposals include, for example, the further development of Generator, our work on the efficiency and cost-effectiveness of technology and support for the government's plans to raise the participation age. One new and exciting initiative for us is a commission from the Department for Business, Innovation and Skills (BIS) for a national ILT capital investment programme, backed by a budget of £7 million in 2010–11. This will build on the excellent work previously funded through the Learning and Skills Council (LSC).

Our plans are ambitious but achievable. We say this with confidence for two reasons:

- The commitment colleges and providers across the sector have shown to harnessing the potential of technology and the undoubted progress they have made in the last year.
- The strong partnerships we have with the other national agencies supporting the FE and skills sector.

Stephen Crowne

Chief Executive
Becta



Jane Williams

Executive Director
FE and 14–19
Becta



Section 1

Developing our plans

Setting our objectives

We want learners in the FE and skills sector to get the learning they need when and where they need it, backed by expert support. Our role is to ensure that colleges and providers of all types are fully confident with technology and thus able to maximise its potential.

Why? Firstly, we know that technology-enabled learning is a flexible and responsive means of developing the highly skilled workforce businesses will need to compete globally as the economy recovers. Secondly, we have seen the tremendous capacity of technology to strengthen inclusion, equality and citizenship across society. Thirdly, we are sensitive to the current economic climate, and want to demonstrate the cost-effectiveness and efficiency of technology-enabled teaching, learning and management systems. Lastly, we note the huge economic importance of the digital technologies sector to the country and are committed to supporting this in every way we can.

Our work will continue to keep colleges and providers up to date with developments in technology and with the professional development of their staff. We will continue to improve the quality and accessibility of teaching and learning materials and the capacity of management and delivery systems.

A major element of our work will be to support access to technology in the home and in the community. We will build up communications networks to draw on and share the talents and ideas of our 14–19 partnerships, colleges and providers to demonstrate best practice and offer guidance. At the same time, it will also be important to engage with the people who use the service – learners, business, central and local government and the community, to see if their aspirations are being met. Our five strategic objectives are set out below, along with the impact we expect them to have on the FE and skills sector.





For us, the Technology Exemplar Network has really raised the bar. We don't go for gongs just because we want gongs. We choose carefully the things we aspire to and the Exemplar status gave us that additional push to reach even higher standards.

Jane Machell, Principal, Alton College

- We will increase the numbers of colleges and providers using technology effectively to improve outcomes for learners and deliver value for money.

If learners are to get the best from modern technology, it is essential for their teachers and trainers to have the most up-to-date skills and knowledge. About a third of all colleges and providers are now e-mature (see figure 1 on page 9) and many are benefiting from the efficiencies and savings that follow strategic investment and deployment. FE managers believe that on average around three-quarters of staff are now competent or advanced users of technology and around two-thirds are at a similar level in using technology with learners. We need to build on this progress and see it applied consistently across the sector and throughout the curriculum to develop colleges and providers that are fully e-mature and can maximise their investments.

- We will develop and offer expert advice and propositions to achieve future efficiencies through new operating models and approaches.

Our expertise and experience enable us to take a lead role in policy discussions about the role of technology in learning, including the contribution it makes to efficiency, value for money and overall better public services. We shall focus on helping the sector succeed and make savings through new approaches to technology systems and infrastructure. More generally, we will identify and promote opportunities for collaboration through technology. Such opportunities can be found within and across the various education and skills sectors; in business, where we shall work with the UK Commission for Employment and Skills (UKCES) and the Sector Skills Councils (SSCs); and within the public sector, in line with the principles of Smarter Government³.

-
- We will ensure more local authorities, 14–19 partnerships, consortia and providers use technology effectively to deliver apprenticeships, diplomas, foundation learning and also meet the needs of young people who are not in education, employment or training (NEET).

Many of our schools, colleges and providers are already pioneering ways of using technology to benefit learners and to increase efficiencies. Our support will help ensure the successful delivery and implementation of the 14–19 reforms including Raising the Participation Age (RPA) by encouraging and promoting the use of technology to engage even more young people in learning.

- We will increase the numbers of learners across the FE and skills sector who can safely and legally access, adapt and develop world class digital content and tools, in both formal and informal settings.

A wealth of digital material is already available to teachers, trainers and learners, but it is of variable quality. Also people often need help to find what is most appropriate for their needs quickly and efficiently and to clarify issues like copyright. We will offer impartial advice to the government and technology users on resources and on procurement that increases efficiency and saves money. We will also work to ensure that all learners in the sector know how to use computers safely.

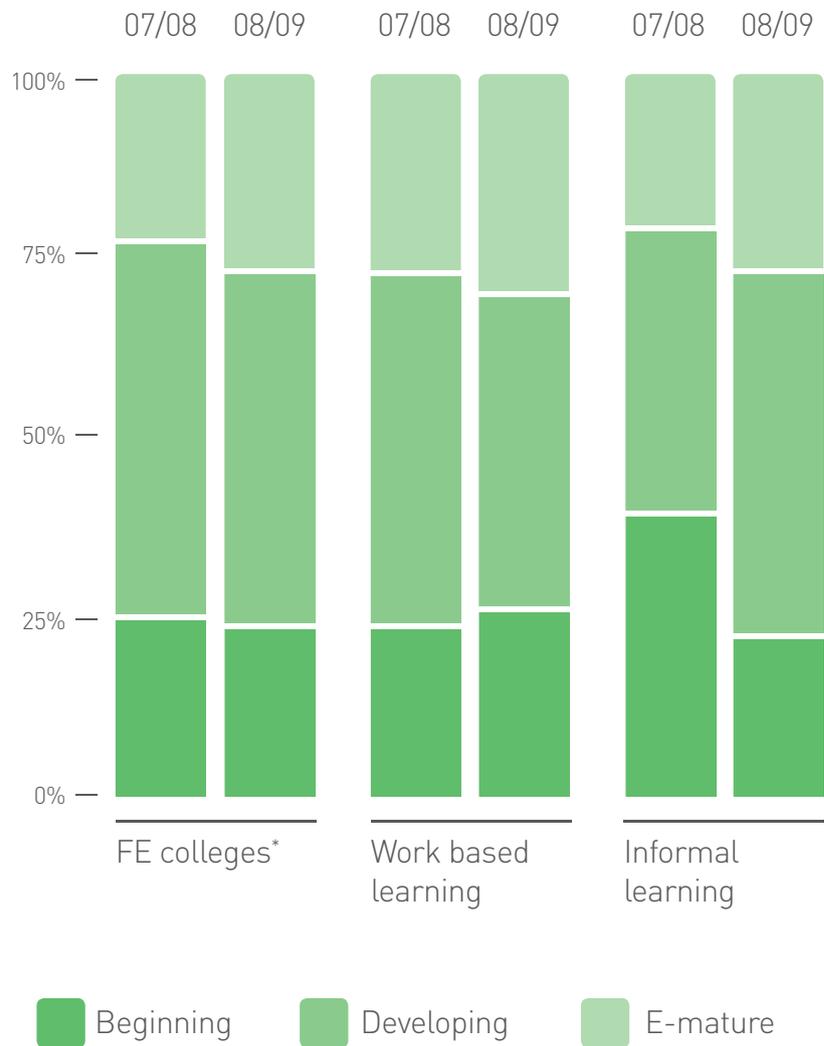
- We will increase the use of learning technologies in the workplace.

Organisations that are mature in their use of technology have a greater business impact and can adapt more readily to address the increasing pace of change in the global market. We expect more learning and development professionals to use learning technologies effectively and we expect more SSCs to promote and support this.

Recent progress

It is almost two years since we published the original version of this implementation plan, covering the period 2008 to 2011. In that time a great deal has been achieved, with the support of the sector itself and our national partners. You can read about this in *Progress through harnessing technology: A year in the FE and skills sector*. Please visit www.becta.org.uk/publications and go to the further education and skills section.

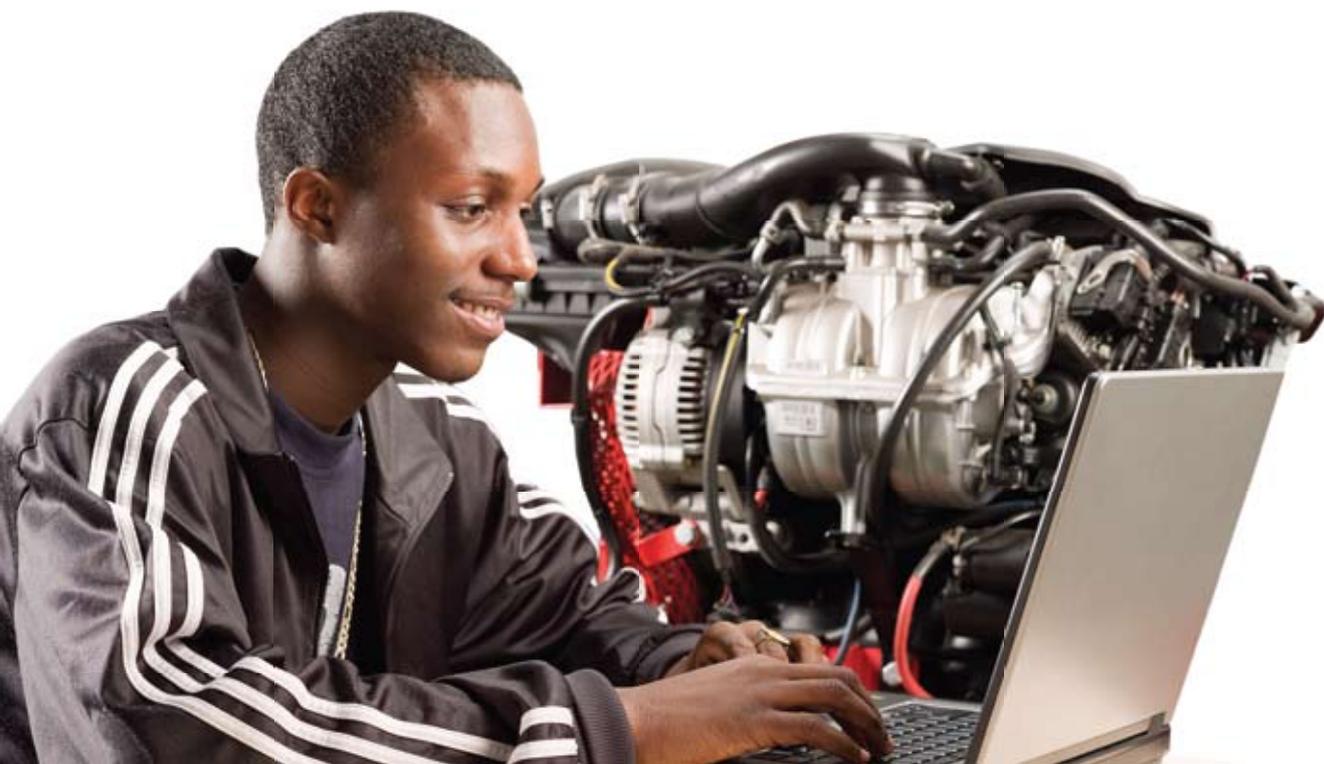
Figure 1: Developing e-maturity in FE and skills⁴



* Includes sixth form colleges and specialist (designated) colleges but not school sixth forms or NATSPEC colleges.

Here are some system-wide successes which we think are essential to the development of the fully e-mature sector we want to see:

- We have clear evidence of the efficiency of technology in the sector. Brockenhurst College, for example, developed an electronic provider self-assessment report and estimates a net benefit of £127,000⁵.
- Businesses are increasingly investing in technology-enabled learning, to great effect. BT saved over £8 million a year and the BBC up to £2 million of licence fee money⁶.
- By February 2010, more than 700 English FE providers were registered with Generator, along with 180 higher education (HE) institutions, partners and FE providers from the Devolved Administrations and abroad.
- Ofsted inspectors are increasingly aware of what to look for in the use of technology. 97 per cent of learning and skills inspectors have attended training.
- The influence of the Technology Exemplar Network now extends across the sector, benefiting two million students and 50,000 teachers.
- Teachers, trainers and others can now access the first-ever e-Prospectus for technology-focused continuing professional development (CPD) (www.thenationalprospectus.com).



Working together

Our partners:

- Department for Business, Innovation and Skills
- Department for Children, Schools and Families (DCSF)
- Institute for Learning (IfL)
- Joint Information Systems Committee (JISC/ JISC Advance)
- Learning and Skills Council and its successors, the Skills Funding Agency and the Young People's Learning Agency (YPLA)
- Learning and Skills Improvement Service (LSIS)
- Lifelong Learning UK (LLUK)
- National Union of Students (NUS)
- Ofsted
- Qualifications and Curriculum Development Agency (QCDA).

Our national partners, for whose continuing support and commitment we are grateful, play an important role in this implementation plan. We all share the aim of helping FE colleges and providers offer a high quality service to their learners, and we work closely together to ensure that the various types of support we offer the sector are coherent and co-ordinated. So, for example, we are working with Ofsted to ensure that learning and skills HMIs are confident when they inspect the use of technology; we are joining forces with LSIS to embed the use of technology in all of its teaching and learning offerings; and we welcomed the formation in 2009 of JISC Advance, bringing together various JISC services greatly valued by colleges and providers.

Individual colleges and providers are also our partners. It is worth repeating the point made in earlier versions of this plan:

“It is for colleges and providers themselves to adopt and embed technology, both in their core business of teaching and learning and in their ‘backroom’ systems. They have to see the benefits of technology for themselves and then take the strategic decision to invest in it. They need to see the quantifiable benefits and savings that can be achieved before they will invest⁷.”

We believe that there is ample evidence available of these benefits and we stand by to support any college or provider on the journey to e-maturity.

Section 2

Why learning technologies matter

We do not propose, in this second update to our implementation plan, to make the case for technology-enabled learning in any detail. The majority of colleges and providers are either using technology very well, or are making progress. (That said, we will not be complacent and are very conscious that there is much still to be done. Some colleges and providers remain in the early stages of adoption. Our plan addresses this.)

In lieu of detailed statistics and research reports (which are all readily available on our website, www.becta.org.uk), we have chosen to present three examples (from among many) of colleges and providers where technology is used successfully and innovatively.

North Warwickshire and Hinckley College: Turning point in the use of technology brings resounding success

North Warwickshire and Hinckley College is a technology exemplar.

The college has multi-function ID cards giving students more control over network accounts and library facilities. These are being extended to include services such as cashless catering and room access. In addition, all college assessors will be using smart phones in their everyday work as the institution comes closer to eliminating day-to-day paperwork.

The TurningPoint system is also adding value. This is a student response system that provides a fun and engaging way of learning. It offers hand-held responders that let staff save valuable time and adapt their teaching style to suit the level of the learner. Mital Ladwa, Director of E-Services, believes it will reshape the college as it looks to the future in a new £8.3 million state-of-the-technology campus next summer.

Staff generally are keener to get involved when they see the wider benefits beyond the gadgetry being used by others. “Staff development is central,” says Mital Ladwa. “Helping members of staff brings about greater e-maturity and makes them more efficient and able to help learners.” TurningPoint is a typical example of a system that grew with use. Initially used by ‘e-learning champions’ in selected lessons, it has since been used by staff in childcare, travel and tourism and essential skills, and is now a regular feature of the college’s staff development programme.



Without using technology really well,
it's difficult for a college to be excellent.

Steve Bell, ILT Development Manager, Wakefield College

Middlesbrough Council Community Learning Service: Virtual learning environment partnership has global reach

Middlesbrough Council Community Learning Service is a technology exemplar and winner of the 2010 Next Generation Learning Award for adult and community learning.

Partnership has long been a byword for the service. It underpins innovative work in promoting e-learning and e-assessment across more than 100 venues in the North East.

In 2005, Chris Kemp, Deputy Head of Adult Education Service, helped develop TeesLearn, a virtual learning environment (VLE) for the people of Tees Valley and County Durham. "What we witnessed was phenomenal, as the boundaries between formal and informal learning faded away."

The system focused on e-assessment, e-portfolios and benchmarking. The driver for change was the complex catchment area – a mix of urban and isolated rural communities and rapidly growing demand for learning from shift operatives working anti-social hours in the steel and chemical industries. As the VLE developed, Chris Kemp saw that pensioners were even logging in for regular language lessons from their homes in Spain and France.

The service has looked at the wider potential of Generator, our technology improvement leadership tool. "We have used it across the organisation and now we are using it to assess learner progress."

Didac: Generating a return on investment from an e-learning and assessment tool

Didac is a work-based learning provider specialising in woodworking training. The Woodwise programme, accredited by City and Guilds, is delivered via e-learning materials and test followed by a work-based practical assessment, just like a driving test. Operators can become certified on just one machine or a selection.

In 2001 the Health and Safety Executive recommended changes in the woodworking sector to reduce accidents from the use of machinery. Didac saw the potential to use technology to improve the competence of machine operators. This led them to invest in developing an innovative tool to facilitate efficient learning and assessment of learners.

Investment began in 2005, and the material developed is anticipated to have a lifespan of 10 years. To date, Didac has developed modules for 11 different woodworking machines.

This investment will provide an estimated return on investment of £408,000 (net present value) over the life of the product, with the potential of more in the future. It provides a cost-benefit ratio whereby for every £1 invested a return of £1.69 is achieved. The forecast return on investment is 20 per cent over the 10-year period.

Section 3

Efficiencies and effectiveness

Why focus on efficiency and effectiveness?

Any investment, including in technology, has to be worthwhile. In today's economic circumstances, investments have to return more than ever before. All the evidence says that, properly deployed, technology makes a difference, helping learners and institutions to succeed. To quote just one piece of evidence, a recent US Department of Education⁸ survey showed online and blended learning outperforming conventional face-to-face learning in terms of cost and reach and results. The survey reporting such learning helping a wide range of types of learner, keeping learners on task for longer, and the learner control enhancing the experience.

We are committed to making the case for technology in FE and skills at all levels, by researching and sharing the evidence, by developing and testing new approaches and by offering guidance and support to all those who want to harness the efficiency of technology to their ambitions.



If you're undertaking [any building work], you have to realise that IT underpins everything else. It's a utility, like water and lighting.

**John Bingham, chair of governors,
Thomas Rotherham Sixth Form College**



 We have seen much improved retention and achievement rates since introducing technology. The reason is that it gives instant grades and instant feedback, which is highly motivating.

Angela Davenport, Centre Manager, BL Hairdressing

What are the next steps?

We will work with our partners and the sector to:

- ensure that those who work at the front line use technology effectively and efficiently and that the sector as a whole benefits, as well as individual colleges and providers
- advise on how technology can help the government develop and successfully implement its policies
- develop and offer expert advice on new operating models and approaches.

Lead partner	Description and targets
Key Action 1: Support for the front line to achieve efficiencies through technology	
Becta	<ul style="list-style-type: none"> • Expert advice and propositions to help colleges and providers achieve strategic and tactical efficiencies: <ul style="list-style-type: none"> – benefits realisation plan developed by September 2010 – demonstrators and case studies on e-delivery, e-assessment and shared services by March 2011.
Becta	<ul style="list-style-type: none"> • Financial savings released to the front line: <ul style="list-style-type: none"> – increasing three year savings in schools, colleges and local authorities to £120 million by the end of 2010/11 (or to £140 million if policy changes enable greater aggregation) – increasing the number of schools and colleges using or intending to use ICT services for part or all of their ICT provision by a further 2,000 (building on a first year target of 500 towards a three year target of 5,000) – national framework (i) of ICT service integrators and infrastructure suppliers available from October 2010 and (ii) for data services and learning services available from April 2011 – periodic update and review of technical principles, functional requirements and standards to define and support an ongoing fit-for-purpose national infrastructure.

Continued 

Lead partner	Description and targets
Becta	<ul style="list-style-type: none"> • Capital programme of innovation and development to accelerate the adoption of learning technologies in FE and skills through a national virtual centre supporting regional hubs. (This new programme, which will build on the work led by LSC, is currently being developed in partnership with the sector, and we shall keep colleges and providers informed of progress.)
Becta	<ul style="list-style-type: none"> • Defining appropriate metrics for assessing the environmental impact of ICT in education and three-year targets against which to drive improvements. Immediate action to include: <ul style="list-style-type: none"> – training and support for technical support staff in schools and colleges regarding power management (working with the FITS Foundation to develop and provide materials, training and support) – work with industry to develop tools to reduce energy consumption – driving improved efficiency in technical components through revisions to Becta’s specifications and new ICT Services procurement arrangements – considering developing an A-G rating system for ICT services – building on relevant JISC research work and supporting initiatives such as the Green Gown Awards in further and higher education.
Becta	<ul style="list-style-type: none"> • Programme of research activity, appropriate communications and marketing activity and the FE and skills Next Generation Learning awards portfolio: <ul style="list-style-type: none"> – Harnessing Technology annual survey – impact studies to develop the technology evidence base – online pedagogy – a 50 per cent increase on the number of providers participating in the 2009–10 awards; and extending the awards to incorporate JISC RSC awards schemes – national dissemination (linked to Generator) to maximise the impact of the awards.

Lead partner	Description and targets
JISC/JISC Advance	<ul style="list-style-type: none"> • JISC RSC networks working to raise awareness of the various JISC tools to support accessibility, cost effectiveness and sustainability, such as the online accessibility self-evaluation service (OASES), JISC TechDis, JISC InfoNet, JISC Suste IT and JISC Procureweb. • Ensuring the outputs of JISC Innovation research activity are widely promoted (JISC Advance).
Key Action 2: Policy support for use of ICT to support BIS priorities for education and skills	
Becta	<ul style="list-style-type: none"> • Reactive and developing support in agreement with BIS policy leads including support to national partners and their activities.
JISC/JISC Advance	<ul style="list-style-type: none"> • JISC RSC networks encouraging the use, including in conjunction with Generator, of infoKits on strategy and change management. • Working with Becta to ensure the outputs of the Information Standards Board reflect accessibility. • Working with technology companies and Becta to ensure research programmes include specialist provision for learners and staff with particular needs. • Addressing the needs of all learners including those requiring specialist provision.
Becta	<ul style="list-style-type: none"> • Exploiting capital investments to achieve world class outcomes: <ul style="list-style-type: none"> – work with the key partners and major suppliers to promote and disseminate the capital vision to local authorities, schools, colleges, consultancy companies and suppliers – briefings for school and college leaders, partner agencies and DCSF and BIS.
Becta	<ul style="list-style-type: none"> • Developing guidance to find exemplar Skills for Life resources.
Continued 	

Lead partner	Description and targets
Key Action 3: Expert advice and propositions to achieve efficiencies through new operating models and approaches	
Becta	<ul style="list-style-type: none"> Working with JISC and JANET to develop a clear proposition for the government, with interim findings in the summer and final recommendations in the autumn, on how new operating models could work: <ul style="list-style-type: none"> – advice on issues such as ‘cloud computing’ and work with BIS and DCSF on new models of IT procurement and usage.
JISC/JISC Advance	<ul style="list-style-type: none"> Advice and support to the sector, to government and to partners from JISC RSCs and JISC Innovation through events, online resources and peer networking opportunities.
Key Action 4: Supporting the RPA, NEETs strategy and 14–19 reform	
Becta	<ul style="list-style-type: none"> Working with partners to develop a plan to ensure that technology is used to best effect to underpin the delivery of RPA between now and 2015 (including safeguarding in 14–19 partnerships, consortia, demonstrator projects and new delivery models). Increasing the number of partnerships and consortia which use technology effectively to deliver diplomas by at least 20 per cent. Exploring the potential of technology to support and re-engage young people who are NEET: <ul style="list-style-type: none"> – 35 per cent of relevant providers reporting using technology to engage young people who are NEET in the Harnessing Technology survey.
JISC/JISC Advance	<ul style="list-style-type: none"> Advice for 14–19 partnerships and consortia on the use of technology, including for example exploring the use of e-portfolios and remote, gaming and mobile technologies in support of accessibility and inclusion (JISC RSCs, JISC TechDis). Working with Molenet networks to ensure the sustainability of mobile learning initiatives designed to support young people who are NEET.

Lead partner	Description and targets
Key Action 5: Improved operational efficiency by ensuring that systems work well together	
Becta	<ul style="list-style-type: none"> • Increasing to 90 per cent the number of school and college information systems that can deploy Systems Interoperability Framework (SIF) open standards for data interchange. • Support for colleges and providers to use interoperable systems including: establishing baseline figures; fostering the UK community within the SIF association with quarterly SIF conferences; developing implementation guidance, marketing and support materials; and working with suppliers to increase the availability of SIF agents and with local authorities and regional broadband consortia to implement zone integration servers. • Online and security advice, guidance and training within the Information Management Systems Framework. • Maintaining and developing functional requirements and technical principles and supporting take-up. • Development of work on identity management.

Section 4

Sector leadership and workforce

Why focus on leadership and the workforce?

For all its capacity, technology is nothing unless it is deployed confidently and intelligently and managed effectively. Most colleges, for example, now have a VLE – 92 per cent in 2008–09, up from 58 per cent in 2003–04 – but Ofsted has found that while many colleges use it as a valuable repository for resources, far fewer use it to send assignments or assessments to learners and fewer still use it to support independent learning⁹. If learners are to succeed, they need expert support in many areas, including technology. It is not enough for teachers and trainers to know how to send an email or access the internet. Rather they need to know how to build technology into their lessons, so it has a practical impact.

In the same way, 14–19 partnerships and FE leaders must be able to regard technology strategically, to see how it can underpin their ambitions and then ensure that it does so. Our latest research, *Harnessing Technology Review 2009*, shows a mixed picture: work-based learning providers feel confident in the area of technology management, but colleges and informal learning providers less so.

We are committed to helping the FE and skills sector become fully confident and mature in its use of technology and to get best value for money from it.



We use Generator as a benchmarking tool internally and externally. It is a fantastic tool that really makes a difference when measuring performance. I think Becta and its partners have achieved something really significant here.

Chris McLean, Vice Principal, Quality and Information Services, North Hertfordshire College



 We have identified three very straightforward aspects that make a difference. First is the drive of staff in the department, second is the way you go about it and third is the software that enables it to happen.

Mark Jenkins, Head of Learning Resources, Priestly College

What are the next steps?

We will work with our partners and the sector to:

- ensure that Generator is the basis of technology planning and implementation across the sector
- give teachers, trainers, leaders and support staff practical opportunities to improve their use of technology
- recognise and share best practice about the effective use of technology.

Lead partner	Description and targets
<p>Key Action 6: Increased number of colleges and providers performing well against Generator e-maturity criteria</p>	
<p>Becta</p>	<ul style="list-style-type: none"> • Working with partners to embed the use of Generator into college and provider annual planning cycles, leading to more colleges and providers performing well against Generator e-maturity criteria: <ul style="list-style-type: none"> – colleges from 35 per cent to 40 per cent – work-based learning (WBL) providers from 37 per cent to 40 per cent – adult and community learning (ACL) providers from 31 per cent to 35 per cent – 40 per cent of providers registered in 2009–2010 to complete a new review in 2010–2011 – adoption targets for WBL and ACL to be set at 20 per cent increase on March 2010 adoption figures. • Working with partners to enhance Generator to take account of, for example, the needs of independent specialist colleges and of emerging priorities such as an efficiencies modelling component. • Case studies to demonstrate how Generator can drive organisational improvement, based on findings from the Generator impact study. • Further work with Ofsted to help HMIs update their skills and knowledge in the effective use of technology by colleges and providers.

Continued 

Lead partner	Description and targets
LSIS	<ul style="list-style-type: none"> • LSIS work with Becta to embed the use of Generator in its eCPD and eLeadership programmes, including through the production of case studies.
JISC/JISC Advance	<ul style="list-style-type: none"> • Support for leadership and workforce development, in line with the Generator framework, across the FE sector, including providers of specialist provision, through local and regional knowledge, direct advice, and case studies (JISC RSCs, JISC InfoNet, JISC TechDis).
IfL	<ul style="list-style-type: none"> • Dissemination and provision of opportunities for funded research. • Auditing 2010 CPD review and member survey. • Collaboration with partners on evidence and dissemination of good practice. • Briefing Ofsted on developments with REfLECT and CPD. • Integrating LSIS teaching and learning resources within REfLECT.
<p>Key Action 7: Increased number of colleges and providers using technology effectively to improve outcomes for learners and deliver value for money</p>	
Becta	<ul style="list-style-type: none"> • Working with national partners to increase the number of teachers, trainers and leaders who use technology effectively: <ul style="list-style-type: none"> – teachers and trainers in FE colleges: from 65 per cent to 75 per cent – teachers and trainers in WBL: from 62 per cent to 70 per cent – teachers and trainers in ACL: from 25 per cent to 40 per cent. • Developing products and services to safeguard FE learners. • Taking forward our international benchmarking project, reviewing and updating the practitioners' ICT capability indicators with international partners.
Becta	<ul style="list-style-type: none"> • Working with Ofsted to ensure HMIs update their skills and knowledge about the effective use of technology by FE and skills providers.

Lead partner	Description and targets
Becta	<ul style="list-style-type: none"> • Development of additional modules for the e-Prospectus to support initial teacher training (ITT) and CPD.
LSIS and Becta	<ul style="list-style-type: none"> • Working to embed the effective use of technology in support for teaching, learning and leadership across the sector, including: <ul style="list-style-type: none"> – seeing how the Becta ‘strategic leadership of technology’ module can be utilised for leadership and management training – developing a college governor programme to help them make informed decisions on the strategic planning and deployment of technology – making the LSIS Professional Development Adviser and E-Guides training programmes available online for ‘in house’ provider delivery.
LLUK	<ul style="list-style-type: none"> • Working with partners to help colleges and providers make the most of the technology application guides (which are based on the professional standards) by, for example, identifying tangible examples of good practice and pointing to useful resources for teachers, tutors and trainers working across the sector. • Development of guidelines based on research and good practice on effective digital pedagogy, in consultation with the sector.
Continued 	

Lead partner	Description and targets
JISC/JISC Advance	<ul style="list-style-type: none"> • Sharing good practice for those that lead on eCPD, through contextual accessible materials, workshops etc (JISC RSCs, JISC TechDis, Netskills, JISC Digital Media, JISC InfoNet). • Regional support and peer networking opportunities for colleges and providers to help them assess and develop safeguarding needs, using risk management frameworks and aligning this with Becta's advice on safeguarding (JISC RSCs, JISC Legal, JISC infoNet). • Creating safeguarding guidance resources, implementing and monitoring policies for Specialist College Provision (JISC TechDis). • Creating interactive case studies to support teaching and learning (JISC RSCs). • Delivering programme of L2 and L3 skills to practitioners in Specialist Provision and increasing awareness among senior managers of the importance of accessible IT practices (JISC TechDis). • Creating support package and deliver pilot for ITQ in accessible IT practice including specialist college, WBL, ACL and FE participants (JISC TechDis).
IfL	<ul style="list-style-type: none"> • Use of REfLECT to record CPD through the Connections network. • Identifying priorities for CPD opportunities for technology from IfL's 2010 membership survey. • Dissemination and promotion of technology CPD messages through Connections network, the IfL website, case studies etc.
NUS	<ul style="list-style-type: none"> • Research to identify, from a learner perspective, the skills, knowledge and understanding required of the 'FE teacher of the future'.

Section 5

Content and digital resources

Why focus on content and digital resources?

Technology is revolutionising the resources used in learning. Content creation tools and the internet make it easy for teachers, trainers and, increasingly, learners to develop, adapt and share materials, often on a worldwide basis. Modern, well-produced and directly relevant resources can have a huge impact on how learners learn and how their teachers teach. Some 85 per cent of FE teachers use in-house materials and most of them also download material from the internet. Similarly, almost 80 per cent of work-based learning providers use computer-based resources in their courses¹⁰.

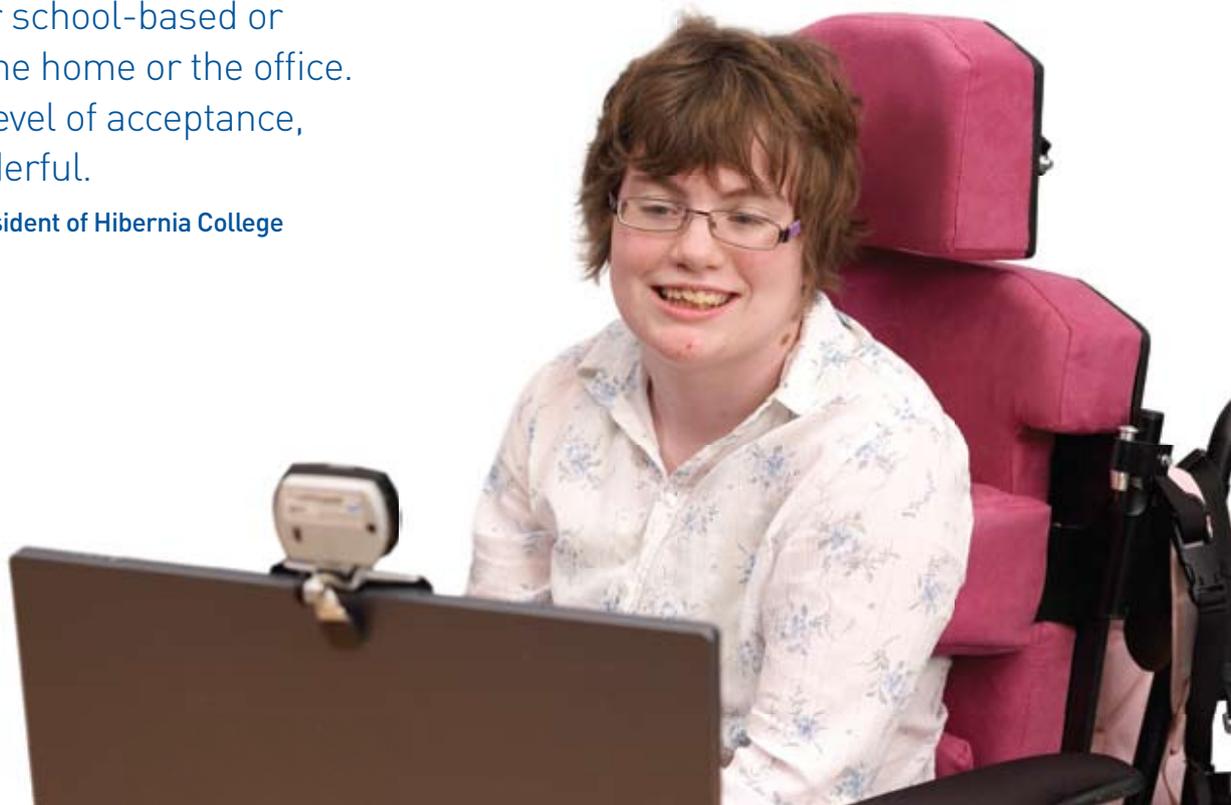


There are more sophisticated and more academic opportunities for adults, whether school-based or learning from the home or the office. There's a new level of acceptance, and that's wonderful.

Seàn M. Rowland, President of Hibernia College

However, the content available is of variable quality and some people lack the confidence or knowledge to find what is most appropriate for their needs and to deploy it. Questions of ownership, intellectual property and copyright often make people pause, and even decide not to use materials. There may also be hesitation about what system or software to buy or use. Finally, the advance of technology means that people are always running to keep up.

We are committed to offering impartial advice and guidance to colleges and providers, and to the learners they serve, so that they can take full advantage of this revolution in resources.



What are the next steps?

We will work with our partners and the sector to:

- ensure that everyone can benefit from digital technologies
- improve the quality of content and make it accessible and user-friendly.

Lead partner	Description and targets
Key Action 8: Digital opportunities for learning for the most disadvantaged and digitally excluded	
Becta	<ul style="list-style-type: none"> • Engaging adult learners and self-organised groups with the School of Everything informal adult learning (IAL) web portal: <ul style="list-style-type: none"> – setting a baseline for current levels of engagement and activity and setting a three-year target in 2010–11 – supporting BIS/Skills Funding Agency to align Online basics, the national directory of learning provision and providers and the Adult Advancement and Careers Service with the School of Everything – further developing the Learning Revolution online community and producing case study material on IAL through technology – further review of the potential of digital TV for IAL.
Becta	<ul style="list-style-type: none"> • Support and expert advice in setting up the new Education Technology Taskforce, chaired by Lord Puttnam, to look at developing the overseas market for the UK's educational technology. The taskforce will report to DCSF and BIS.
Becta	<ul style="list-style-type: none"> • Setting quality standards, advice and guidance for the safe and effective use of digital content and resources: <ul style="list-style-type: none"> – establishing and evaluating pilot core services (core index) – stimulating other services around the index (for example, content sharing, vocabulary management, resource review) – input to standards catalogue and establishing specifications, standards requirements and guidance (including metadata, accessibility, identity management and IPR/licensing) – establishing and embedding content sharing specifications.

Lead partner	Description and targets
JISC/JISC Advance	<ul style="list-style-type: none"> • Providing regional support, case studies, peer networking opportunities and sharing of practice for voluntary, ACL sectors and other providers (JISC RSCs). • Working with Becta to ensure and promote accessible content within the Home Access programme, School of Everything and Online basics (JISC TechDis, JISC RSCs). • Working with e-book publishers and librarians to provide good practice guidance on how e-books can support inclusive learning (JISC TechDis). • Working with LSIS to establish the way forward for the NLN materials.
Becta	<ul style="list-style-type: none"> • Online basics evaluation and project support for rollout: <ul style="list-style-type: none"> – evaluation report and ten detailed case studies by September 2010 – providing project management support.
JISC/JISC Advance	<ul style="list-style-type: none"> • Pilot of the ITQ in accessible IT practice with UK Online Centres (JISC TechDis).

Section 6

Communications and networks

Why focus on communications and networks?

Colleges and providers of all types often tell us that the journey towards e-maturity is a lonely one, that staff feel isolated as they make the case for technology-enabled learning and systems within their institutions and as they invest significant sums. Business leaders trying to decide whether to invest in their own online learning systems or looking to buy an online solution from the FE and skills sector share these feelings. That technology develops and changes so quickly is another factor which worries people making choices to invest in it.



This is our second time around in the Technology Exemplar Network and it is getting better and better. You can feel very isolated as a specialist college and the network has helped us share expertise and realise ambitions for our students that we could never have achieved.

David Finch, Director, National Star College

In fact there is a huge amount of hard-won expertise and experience on hand in a variety of forms, including good practice networks, online communities, conferences and publications. Information and guidance are readily available on most issues.

We are committed to sharing this advice as widely as possible. We will research it, package it and promote it.



 Before the Technology Exemplar Network, we never seemed to communicate with people other than work-based learning providers, but there are hundreds of colleges out there we are able to benefit from. This is really excellent work by Becta.

Mick Gilroy, Lincoln Academy, T/A ISIS Training

What are the next steps?

We will work with our partners and the sector to:

- ensure that FE and skills leaders champion technology at the sectoral level and within their own organisations
- promote the benefits of technology-enabled learning to businesses
- support colleges and providers working in this market so that they offer effective and practical provision.

Lead partner	Description and targets
Key Action 9: Support leaders to develop system leadership	
Becta with LSIS and LLUK	<ul style="list-style-type: none"> • Establishing a National Technology Network with strategic partners to help leaders develop the capability and confidence to improve their adoption of technology, building on the Technology Exemplar Network and ILT capital projects. • Increasing from 34 per cent to 40 per cent in Harnessing Technology surveys the number of college leaders who demonstrate strategic leadership of technology.
JISC/JISC Advance	<ul style="list-style-type: none"> • Supporting leaders to improve the overall efficiency and effectiveness of their technology and acting as a conduit for regional activities and co-ordinating multiple agency initiatives (JISC RSCs). • Running the Independent Specialist College Advisory Group (JISC TechDis).
Continued 	

Lead partner	Description and targets
Becta	<ul style="list-style-type: none"> • Supporting leadership across the sector by developing products and services for FE colleges, WBL, IAL providers and Lead Accountable Bodies as they are formed, in partnership with providers' own representative groups and using their own channels to disseminate: <ul style="list-style-type: none"> – working with the Association of Colleges (AoC) Principals Technology Group, leading to an increase in the number of principals engaged with Harnessing Technology from the March 2010 baseline – establishing national leadership forums of ACL and WBL leaders with NIACE and the Association of Learning Providers (ALP).
Becta	<ul style="list-style-type: none"> • Increased stakeholder engagement and commitment to next generation teaching and learning: <ul style="list-style-type: none"> – dissemination of guidance, advice and information at regional, national and international events, including the annual Next Generation Learning conference, the Learning and Technology World Forum and regional events with the JISC RSCs.

Lead partner	Description and targets
Key Action 10: Increased use of learning technologies in the workplace	
Becta	<ul style="list-style-type: none"> • Extension of employer-facing network to engage employers: <ul style="list-style-type: none"> – 50 per cent of SSCs recognising and valuing Becta’s support for greater use of technology in delivering work-based learning – working with stakeholders such as ALP to establish good links with providers striving to make progress in this area – re-convening the multi-agency WBL technology group to encourage improvement.
LLUK	<ul style="list-style-type: none"> • Brokerage within the alliance of SSCs to support the Harnessing Technology agenda.
JISC/JISC Advance	<ul style="list-style-type: none"> • Regional support, peer networking opportunities and sharing of best practice for WBL providers in, for example, supporting inclusion and strategic development (JISC RSCs, JISC TechDis).

References

1. Efficiency and effectiveness case studies from the FE and skills sector, Becta, March 2010, at www.becta.org.uk/feandskills/efficiency
2. Delivering results with learning technologies in the workplace, Becta, January 2010. Please visit www.becta.org.uk/publications and go to the further education and skills section.
3. Putting the Frontline First: Smarter Government, Cm 7753, The Stationery Office, December 2009.
4. Harnessing Technology Review 2009: The role of technology in further education and skills, Becta, November 2009. Please visit www.becta.org.uk/publications and go to the further education and skills section.
5. Efficiency and effectiveness case studies from the FE and skills sector, Becta, March 2010, at www.becta.org.uk/feandskills/efficiency
6. Delivering results with learning technologies in the workplace, Becta, January 2010. Please visit www.becta.org.uk/publications and go to the further education and skills section.
7. Next Generation Learning – The Implementation plan for 2009 – 2012. Technology strategy for further education, skills and regeneration, June 2009.
8. Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies, by Barbara Means et al, U.S. Department of Education, May 2009, at www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf
9. Harnessing Technology Review 2009: The role of technology in further education and skills, Becta, November 2009. Please visit www.becta.org.uk/publications and go to the further education and skills section.
10. Harnessing Technology Review 2009: The role of technology in further education and skills, Becta, November 2009. Please visit www.becta.org.uk/publications and go to the further education and skills section.

Becta – Working in partnership across the further education and skills sector



From left to right:

Alan Tuckett OBE

Chief Executive, NIACE

Jean Kelly

Director of Professional Development, Institute for Learning

Fintan Donohue

Principal of North Hertfordshire College and member of the LSIS Council

Chris Swingler

Director of Business Development, Association of Learning Providers

Amadou Bah

Chair of National Learner Panel

Pat Bacon

Principal of St Helens College, AoC President and Becta Board member

© Copyright Becta 2010

You may reproduce this material, free of charge, in any format or medium without specific permission, provided you are not reproducing it for financial or material gain. You must reproduce the material accurately and not use it in a misleading context. If you are republishing the material or issuing it to others, you must acknowledge its source, copyright status and date of publication. While great care has been taken to ensure that the information in this publication is accurate at the time of publication, we accept no responsibility for any errors or omissions. Where a specific product is referred to in this publication, no recommendation or endorsement of that product by Becta is intended, nor should it be inferred.

Millburn Hill Road
Science Park
Coventry CV4 7JJ

Tel: 0800 877 8777

Fax: 024 7641 1418

Email: customerservices@becta.org.uk

www.becta.org.uk