

Digital Britain: Becta's response to BERR/DCMS on the Interim Report

March 2009

Becta is the government agency leading the national drive to ensure the effective and innovative use of technology throughout learning.

We develop and implement the Harnessing Technology strategy as well as delivering the national Next Generation Learning campaign and the Home Access programme.

It is our ambition to utilise the benefits of technology to create a more exciting, rewarding and successful experience for learners of all ages and abilities, enabling them to achieve their potential.

We work with government to lead the delivery and development of the e-strategy, and we influence the strategic direction and development of national education policy. We also work with industry and education providers to make sure the right technology is available, and we set standards and provide tools that help establish and promote best practice.

Our priorities include enabling people to have equal opportunity and access to learning resources; creating links between schools and the home; ensuring the safety of all learners; personalising learning; helping providers to plan effective investment in technology in building or refurbishment work; and using technology to ensure efficiency and value for money.

We know that technology has the potential to transform learning. We are committed to inspiring education providers to realise that potential, and equip learners for Britain's future success.

Our evidence shows that the appropriate use of technology in education and skills can increase learner engagement and motivation as well as improve outcomes.

Universal access to Broadband is essential to achieving Becta's strategic objectives, including those of the Home Access programme.

Becta welcomes the publication of the Digital Britain Interim Report. We believe the report sets out significant challenges for public and private sector stakeholders to equip the UK for a digital future.

Meeting the needs of learners and educators is of paramount importance in achieving Digital Britain's aims. This response to the consultation reflects our understanding of those needs, gained through research and delivery in education and in the consumer marketplace, through the Home Access programme.

Becta works with both the supply and demand sides in technology for learning. Our aim in supporting Digital Britain will be to ensure that proposed improvements to systems and

infrastructure are appropriate and are backed with initiatives to make a digital Britain an inclusive Britain.

In this consultation response, we present a range of issues, opinions and questions around the Report's priorities of digital networks; universal access; and media literacy.

Digital Networks

The ongoing next generation access (NGA) debate underlines the importance of maintaining a dedicated, managed broadband network for education and other public services. Such dedicated networks will not (or should not) be subject to the same degree of commercial and regulatory upheaval and pressures as the consumer broadband marketplace.

Recent announcements around NGA have focused primarily on the consumer marketplace, to increase the availability of higher bandwidth services. Indeed, the recent Caio review regarded broadband provision for health and education as "job done". We contest this.

The new Universal Service Commitment

While Becta recognises that the delivery of 2Mbps is intended as a Universal Service Commitment, this needs to be a "lowest common denominator". The commitment should be to provide a minimum of 2Mbps connectivity 'all day every day' for all users.

It may be more appropriate to translate this figure into minimum functional capabilities, such as those Becta provides for educational institutions (see [here](#)).

Becta's work with the stakeholders for an online vision for FE and Skills to 2020 suggests that 2Mbps is not sufficient to exploit the opportunities of educational technology. Transformational change is likely to be achieved at speeds of 100Mbps and above.

Institutional and consumer connectivity should be considered separately. Once we start seeing consumer services reliably offering 10 or even 100 Mbps connections, as in the Wembley City project (see [here](#)), institutional connectivity (and its supporting core infrastructure) will need to support Gigabit or even tens of Gigabit rates in order to deliver a concurrent user experience comparable with consumer connections. The London Grid for Learning, for example, already uses two 10Gbps links to JANET for Internet access for London schools (see [here](#)).

There is an important user expectation issue here too: if learners cannot access services and applications in school or college that are at the very least as engaging and as powerful as they experience at home, we risk disengagement and place in jeopardy all the successes of recent years in embedding ICT within teaching and learning.

We believe the business case for broadband provision for education and skills is now strongly established across all education and training sectors. Our evidence shows that the appropriate use of broadband-based technology in education and skills can increase learner engagement and motivation as well as improve outcomes.

Broadband provision must be seen as dynamic, with bandwidth requirements increasing continuously, rather than as something that can simply be fixed as a one-off policy.

Public Sector broadband provision is different to the consumer market

Government policy is to ensure a strong, competitive, market-led approach to NGA rollout. It has not yet made the case for direct investment, although the Digital Britain report confirms that this is now being considered.

Public sector provision is very different from the consumer marketplace. The market cannot be relied upon to deliver what education and other public services need. Initiatives like shared services, Government Connect and the Public Sector Network (PSN) add an additional level of opportunity (and complexity) in consolidating broadband services for education. We believe Government should consider opportunities to use public-private partnerships to reduce risks through a more stable revenue stream.

Becta believes Government should consider funding an upgrade to institutional connectivity, echoing the funding made available some 10 years ago, which led to the formation of Regional Broadband Consortia (RBCs). If managed and implemented effectively, this could have an immediate and significant impact, exploiting opportunities in the marketplace, e.g. recent reductions in Openreach's Ethernet pricing. This has made higher bandwidth services more affordable and cost-effective for local authorities and RBCs, offering education and training institutions an opportunity to significantly increase their bandwidth.

We also believe Government should consider creative approaches, where investment in support of NGA deployments is predicated on the provision to health, education and other public sector institutions as appropriate, mirroring the approach set out in NESTA's Spectrum for Speed strategy (see [here](#)).

Supporting Digital Britain in education and skills

Our evidence shows that school use of broadband continues to increase. The Home Access programme will create even further demand, as personally owned devices begin to be used more and more and schools move towards a 1:1 device-to-pupil ratio as a result. We are also aware of Government's interest in reaching adult learners through Home Access and using the programme to develop wider adult learning and skills training.

Given this convergence of multiple policy priorities, we think the time is right for an order of magnitude increase in the capacity of broadband provision for educational providers, in order to accelerate progress towards delivery of Harnessing Technology outcomes across the education and training system.

The interim Digital Britain report states very clearly that broadband for education is important. Becta welcomes this recognition of education's central place in the Digital Britain of the future. Our position at the heart of the educational technologies debate means we have insight into the technical and pricing challenges that affect education providers and other public services. We are committed to supporting the Digital Britain agenda by continuing to report on achievements to date and develop future potential.

Universal Access

Becta welcomes a commitment to universally available broadband services, not just in relation to bandwidth but also in relation to guaranteeing universal coverage via fixed or mobile/wireless connections.

While we agree that 2Mbps is a significant step forward and likely to be sufficient to deliver a good broadband experience in the home (for example, to access video content via a hosted learning platform), we would encourage industry to seek to increase the availability of bandwidth: this can only improve the quality of and broaden the range of services available to learners.

Becta will continue to advocate higher speeds for both individuals and institutions. We believe strongly that universal access cannot be 'fixed' at a certain speed. A culture of regular review and upgrade to reflect changing dynamics and requirements is vital to protect the benefits of the universal service commitment. We point to JANET's regular re-procurement of the SuperJANET backbone (see [here](#).) as a model of good practice.

The Universal Service Commitment will support Becta's implementation of the Home Access programme. We concur with the report's conclusions on the importance of addressing current broadband not-spots and preventing a new, deeper digital divide.

We also note that Ofcom's recent statement on regulatory barriers to investment by BT paves the way for a significant upgrade to connectivity by 2012. However, we are concerned that, in order not to exacerbate digital exclusion at this critical time, this investment must also target the significant broadband not-spots that exist across the UK.

Driving the demand for broadband

We welcome the way that the Digital Britain report highlights the importance of broadband to public service delivery, and how high quality public services can help drive demand for broadband. We see parallels here with education policy and the Home Access programme, for example in the potential for universally available broadband to drive up demand for online reporting for parents and enable access to learning platforms from home and elsewhere.

The report emphasises the important roles of both private and public sector in driving uptake through the provision of innovative and effective digital/online services. It cites the central role of the Digital Inclusion Minister, the DCMS-hosted Cross-Government Digital Inclusion Team and the soon-to-be-appointed 'Digital Inclusion Champion' and expert task force.

Becta welcomes this broadening of responsibility for take-up. We will support this work both through its contributions to Ofcom's current work on a Media Literacy Plan and through the delivery of our Next Generation Learning Campaign.

We believe it is important that these initiatives are joined up and that partners should work to the media literacy plan being developed.

Digital literacy

The report commends the initial report of the Independent Review of the Primary Curriculum, led by Sir Jim Rose, and provides a clear message in relation to learning and resources for children to acquire "the essential ICT skills for learning and life" that underpin full digital literacy.

The first step is to understand the importance of ensuring that all children and young people in education have access to the right level of learning and technical resources to enable them to develop the digital literacy without which they will be unable to play a full part in

society. To achieve that, we will also need to ensure that our teachers have the skills and support they require to provide the right level of learning.

Realising the vision of Digital Britain will make many demands on teaching professionals. There is a pressing need to consider how teachers can be supported to enable them to rise to the challenges we have set.

Becta's evidence convinces us that the pedagogical knowledge and skills of teachers will be vital in realising the benefits of technology. Evidence from the UK and from international sources tells us that technology will only bring about improved pedagogy when schools and teachers are prepared and ready to use it. Technology is not enough to guarantee improvement, but a desire to improve classroom practice can lead to better use of technology.

Teachers will be required to support deeper learning across a wide range of curriculum subjects, some of which will not be areas of previous specialism. This means they will need accessible development opportunities across all learning areas.

Technology is already playing a major role in CPD not only in the UK but elsewhere (Denmark and Finland have particularly well advanced ICT-based programmes in place) and our recommendation is for implementation strategies that consider how ICT can support teacher development, in the light of international experience.

The report also states that further work will be done to: "...strengthen the understanding of the ways for education and business to work together to create the skilled workers and leaders which businesses need..."

We believe that this work should be co-ordinated with the Media Literacy Plan emerging from Ofcom's current work with partners, including Becta.

e-safety

We welcome the report's endorsement of the 'Byron model' of internet safety and its proposal to extending the approach to wider media literacy. Becta leads the education working group of the The UK Council for Child Internet Safety (UKCCIS), which aims to produce a Child Internet Safety Strategy in Spring 2009.

We anticipate that this group will enable delivery of all of the associated education and training recommendations and set out what the expectation is in relation to learners, children's workforce and parents. We will work to transpose these into wider media literacy messages.

Becta is a key agency for advice, delivery and influence on digital media literacy and e-safety. We will continue to lead on engagement with schools, local authorities, Further Education providers and government.