



**APPG for Education inquiry call for evidence: Do schools
prepare young people for their future careers?**

**Evidence from BT
June 2016**

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BT is pleased to respond to this inquiry. Being primarily a technology business, many of our answers reflect our concerns around IT, an increasingly vital part of the nation's skill-set.

Inquiry questions

What should our schools be focusing on in order to prepare young people for the future?

It is essential that the importance of building digital capability is embedded in the UK education system with digital competency seen as a cross-curriculum responsibility on a par with literacy and numeracy.

Ensuring the UK has a well-educated and highly skilled workforce relative to the rest of the world is vital to the country's economic success. The pace of skill development and education in other parts of the world means the UK will need to invest significantly to retain and improve upon its current position. The need for digital skills will continue to increase, indeed it is predicted that within a decade the economy will create one million new digital roles. Tech City UK¹ reports the growth of digital jobs over the next six years is expected to be higher than that of all other occupations combined. It is essential the future workforce is equipped to fill them. And our economy won't generate just more specialist tech jobs; almost every job in the future will have some digital element.

Every child needs to be able to access and use everyday technology, be confident with the concepts of how it works and embrace its impact in shaping society. We have to recognise that for today's generation of school children, 'tech literacy' is part of enabling them to participate in modern society and they need to be as confident with tech thinking as they are with reading and writing when they leave school.

Lifting levels of UK tech literacy must start with children at primary school. The introduction of the computing curriculum was an important first step. BT has picked up the baton on the Barefoot computing programme, which supports teachers to teach computer science, and over 401k children were reached during the 2015/16 academic year. BT's research has shown that those teachers using the free resources find them extremely helpful and are more confident in delivering the curriculum. However, as we extend the programme across the UK, we would welcome Government support in making primary schools more aware of Barefoot resources and teacher workshop opportunities.

Should schools play a role in developing skills, or should subject knowledge be prioritised?

Subject knowledge and skills development should go hand in hand. By teaching children about computing, for example, we do not expect them to become computer scientists but to develop the thinking, communication and problem solving skills necessary in any future career that will inevitably involve tech in some way, shape or form.

¹ [Tech Nation report](#)

A digital 'pathway' is required to help people move from the basic digital skills everyone needs to participate in a digital world, to those skills everyone will need for work, whatever that work might be, through to advanced skills for specialist digital roles. Workers across the wider economy will need to possess strong analytical, critical thinking and communications skills, while being highly adaptive as technology-driven innovation continues to reshape all sectors. As all sectors increasingly become technology driven, virtually everyone will need to have a basic competence across a broad set of common digital skills (use of communications devices and software, internet navigation, social media, etc) if they are to be fully effective. Specialist technical roles will require these broad competencies but with additional specific digital skills. From BT's perspective, skilling future workers in cyber security, digital media, data science and specialised diagnostic skills, will enable us to remain competitive and at the forefront of customer and business global requirements.

BT's tech literacy research suggests that children don't understand how what they're taught will help them in their 'real' life or how tech skills are relevant to their ambitions. Girls, in particular, respond better when technology is centred on human needs, making life easier and solving real-world problems. If children don't see the point of their learning they won't be fully engaged to acquire the skills and confidence they need for the future.

Schools are focused on delivering exam results; they are being driven to show success through high pass grades across all subjects, especially the core subjects. This is often detrimental to subjects that don't fit the norm, with many schools struggling to find teachers with the skills to educate and teach pupils in computer science, for example. This means pupils and students often do not appreciate or understand the subject matter, its impact on society and the importance for business. This view is supported by the independent review of curriculum and assessment arrangements in Wales by Professor Graham Donaldson CB, which found a recurring concern that the curriculum was out of date in relation to digital technology: *"Children and young people need to learn how to be more than consumers of technology and to develop the knowledge and skills required to use that technology creatively as learners and future members of a technologically competent workforce."* The curriculum reform underway in Wales will position digital competence as a cross curriculum responsibility on a par with literacy and numeracy. The rest of the UK needs to take note.

While at a higher education level, our experience has been that where a focus is on subject knowledge and academic qualification alone, graduates coming into a company may not be work ready with the skills a business needs (for example, able to influence in a team working setting, engage with customers to understand their needs, communicate the results of their analysis in an easy to understand manner). This reinforces our belief that subject knowledge combined with skills development is required.

Who should be responsible for ensuring that young people develop soft, financial and entrepreneurial skills?

Employers can play a role in ensuring the school curriculum addresses the future needs of the economy. Delegates (from tech, education, business, policy, parenting and youth networks) at a BT event 'Cracking the Tech Literacy Challenge' proposed that the Government could help bring major employers together with educationalists to develop a curriculum that better addresses the tech needs and employment opportunities across all industries. In order to get more young people inspired by the kind of jobs they could go on to do with tech, experts at the event were also

supportive for a 'Year in Tech' for 16 year olds to provide an immersive learning experience. Complementing the core curriculum in a similar manner to the Duke of Edinburgh Awards model, a scheme could provide an engaging programme of intensive tech skills development, industry placements and extra-curricular activity giving students the opportunity to gain extra academic credits.

We work with The Tech Partnership, a network of employers collaborating to create the skills for the digital economy, to develop employer-relevant tech standards for education and training. Tech Industry Gold Degrees, apprenticeship programmes and training courses have been assessed as meeting the employer-relevant standards defined by the Tech Partnership. These programmes, offered by universities, colleges and training providers, are a model for what can be achieved with business and education establishments working together to give their learners the best possible development opportunity and employability skills. In addition to the tech standards BT is conscious that young people need diversity in their choices for a career, working with the likes of BPP University and Ravensbourne College we have helped to develop new standards that cover professional work areas such as HR, finance and media.

Young people need to have opportunities to see exciting workplaces and talk to apprentices and other employees about their career paths and experiences. Research from the Education and Employers Taskforce² has shown that young adults who recalled four or more employer contact activities while at school were five times less likely to be NEET and earning 16% more than peers who recalled no activity. The Inquiry could look at how to integrate apprenticeships with the sixth form more effectively.

Do education providers have the resources to prepare young people for the workforce?

The availability and quality of career advice in schools is variable. Many teachers will lack direct experience of business and so understandably find it hard to imagine what work-specific skills are now necessary. Parents are seen as trusted advisers by their children, yet many of the careers available today may not have existed when they were making career choices and this will continue to be the case in the future as technology increasingly shapes the world.

More needs to be done to help young people to understand the full range of career prospects associated with digital skills so that classroom learning is seen as leading to tangible work opportunities. Schools subliminally encourage children to think of technology as separate to, rather than an integral part of, modern life by confining it to the ICT suite. There is a need to demonstrate how tech pervades every aspect of work by encouraging schools and teachers to embed the use of tech into every aspect of school (homework, coursework, exams, etc) so that it becomes second nature. Delegates at the BT tech literacy event, mentioned earlier, proposed that there needs to be professional development for teachers to build capacity in use of tech to transform lessons and learning outcomes.

There is a need to bridge the gap between school and work for example by encouraging employers into schools and systematically giving children greater exposure to employers very much earlier in the education system before they rule out career options. There are good examples where this is beginning to happen, for example:

² http://www.educationandemployers.org/wp-content/uploads/2014/06/its_who_you_meet_final_26_06_12.pdf

- The network of enterprise advisers being established by the Careers and Enterprise Company, to help schools build engagement plans with businesses, is a real opportunity to blur the boundaries between education and work and highlight the career options digital skills can offer. The advisers' network shares opportunities for engagement in local areas.
- The Tech Partnership has a range of free resources for teachers and students and is developing a campaign to inspire more girls and attract young women into tech careers. The Careers and Enterprise Company is one of its partners
- Online tools and resources that open young minds to possibilities such as the career games and industry worlds on Plotr.

What examples are there of schools and colleges preparing young people well for the workforce?

- BT played a significant part in National Apprenticeship Week. Our apprentices attended 40 local events, including those hosted at BT Tower and BT Centre, and visited 27 schools and careers events - but we had over 20 rejections mainly from colleges who run their own apprenticeship schemes and view employers' schemes as potential competitors. This can create tension and the FE-based models, in general, tend to be 12 month programmes heavily focused on theory and technical training with very little work experience or work-based learning for young people, so on completion they may have an apprenticeship certificate but still lack employment skills or experience.
- Manchester Communications Academy (MCA) provides broad-based learning with technology used effectively throughout the school. It aims to provide students with qualifications and experience that enable them to make real choices about their future and next steps, whether university, apprenticeships, vocational training or directly into a job. Students learn to work independently and apply their skills. MCA has strong links with the local community and people from business and industry are active in the school.
- The new Ada, National College for Digital Skills, is aggressively focusing on skills to match work placements and has fully engaged with employers, so much so it has an employer forum to help drive the engagement and curriculum.

What examples are there of employer-led initiatives that have had an impact?

Many young people come out of school without any exposure to what work means and therefore don't know how to present themselves in a way that demonstrates what they are good at and in a way that is going to impress an employer. BT's 'Work Ready' programme aims to address this through its initiatives aimed at disadvantaged young people and provides traineeships for young people not in education, employment or training (NEET). Movement to Work³ is an employer led organisation set up to tackle youth unemployment, BT was one of its founder members. It has 240 members and has provided over 41,000 placements for 16-24 year olds NEETs with 54% of the young people who complete the course going on to sustained employment or education.

BT trainees follow a seven week course that builds essential skills for employment, provides work experience and leads to an accredited qualification in business administration and an additional qualification in maths and English if required.

³ http://www.movementtowork.com/media/22426/movementtowork_report.pdf

More broadly, Barclays Life Skills, a scheme to “inspire young people to get the skills they need for a better future,” provides interactive tools and resources for young people and teachers covering a wide range of skills from applying for jobs to time and money management.

In addition, the APPG for Education would welcome details of any relevant research carried out by your organisation which it would be willing to share with the Inquiry.

We would be willing to share confidentially with the Inquiry research conducted into the attitudes of parents, teachers and children to tech. Summary findings of the barriers to greater understanding of tech is publicly available⁴ as is the full report from BT’s Cracking the Tech Literacy Challenge event⁵

*We would be happy to discuss these issues further. Further enquiries can be directed to David Pincott, head of political research, policy & briefing, BT Group.
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⁴ <http://home.bt.com/tech-gadgets/5-barriers-holding-back-tech-literacy-in-the-uk-11364001442589>

⁵ www.bt.com/techliteracy