

Response to Digital Britain – The Interim Report

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The following response relates specifically to section 5 of the Interim Report – Equipping Everyone to Benefit from Digital Britain. While we welcome the report’s vision of a Digital Britain and the need for infrastructure to deliver high speed access regardless of location, we also concur with some of the concerns raised in section 5. However, findings from research that we have conducted over the last five years into public perceptions of eSafety and eSecurity, would suggest there needs to be greater concern for the capacity of the UK’s population to safely and effectively have digital lives, and whether we will have sufficient Digital Workers to fully realise the potential of the digital vision. More specifically, our research has identified that:

1. The adult population within the UK has a fragmented knowledge of the risks of online life and many do not have sufficient knowledge to safely carry out their digital lives.
2. The schools system is not effectively providing comprehensive eSafety education for young people, which may result in a generation of “digital natives” who are extremely comfortable with digital life but are not sufficiently aware of the broad range of risks associated with the online world.
3. The quality of ICT education in schools runs a serious risk that there will not be sufficient workers to deliver the full potential of Digital Britain

In supporting these conclusions, we present some headline evidence below, with reference to further reading at the end of the response.

Issues with Digital Life

Our work with adults and younger people has shown that the UK population has, at best, a fragmented knowledge of the threats of the online world. Research has included focus group activity with more than 400 UK citizens, interviews with end users, and a broad Internet security survey eliciting 415 responses. Early focus group research provided interesting attitudes toward Internet awareness and education – while many undertook many activities online, there was little formal education involved in the development of the knowledge of the digital world. Many of our discussions centred on the responsibility for online protection, and the majority of our subjects acknowledged this to lie with the individual. However, they also felt that the Government should provide objective information sources to support the end user. Many individuals did not feel that they had the necessary knowledge to ensure effective protection. It was as likely that an individual would rely upon the knowledge of a friend or peer as an IT professional. Survey work supported these findings – while 43% of respondents claimed to seek advice from the IT professional, 41% relied on friends and peers. It was also telling that while many of our subjects had felt that the Government has a role to play in informing the public, their appreciation of existing efforts was not good. Only 11% of our survey respondents had heard of either www.getsafeonline.org or www.itsafe.gov.uk, with only around a third of those finding them useful.

Our work with younger people presents an even more alarming picture. This work has, again, included focus groups with more than 100 subjects, workshop activities with more than 20 local schools, and complimentary activities with our local National Education Network trust – South West Grid for Learning. This work has presented two key findings:

1. Young people are extremely comfortable with digital technologies, and have adopted them as essential life tools.
2. Young people's awareness of online threats and risks is fragmented, and their online behaviour can be irresponsible and place them in positions of danger.

Most alarmingly from the focus group activities was that out of 100 young people, we could identify 3 clear attempts at online stalking and grooming. Each case followed a similar pattern – the young person would accept a stranger's invitations to chat via messaging technologies (MSN, Yahoo Messenger, etc), they had some discussion around common interest, and then the stranger asked to meet. Thankfully in each case the young person blocked the stranger at this point, but none of them reported the incidents to teachers or police. Indeed, many young people felt that there was no point in discussing eSafety issues with their teachers as they didn't understand the risks. This is supported by our discussion with teachers – many of whom acknowledge that eSafety is an issue, but do not feel confident to deliver such education, or cannot find space in the curriculum to deliver such. Recent work with South West Grid for Learning exploring eSafety practices in schools further supports this – it is more likely that eSafety will be covered in Key Stage 1 or 2 than 3 or 4. In addition, there is little consistency about where such education is delivered – while some view it as an ICT issue, others address it within PSHE, and others still will place it as "extra curricular". This mixed approach demonstrates severe inconsistencies within the education system, therefore there is no dependable coverage between different schools, which, of course, has knock on effects to the potential of the next generation of online adults to embrace and exist safely in Digital Britain.

Issues with Digital Workers

The second strand of research centres upon the attitudes of young people to the sector and their willingness to consider careers as digital workers. The drive for this research has been the severe reduction in Computer Science graduates in recent years – the British Computer Society reported a drop of 50% from 2000 to the present day. eSkills UK, the Sector Skills Council for IT and Telecoms, report that, in a sector that has double in size since 2004, there will be 120,000 job opportunities by 2012. This should cause concern for Digital Britain – as demand for Digital Workers grows, the number of young people who wish to embark on careers in the digital world is in decline.

Our work in this area is based on work conducted over two years with over 20 schools and colleges in the South West of England, drawing data from discussion with over 1,500 young people aged between 12 and 18, and over 30 ICT teachers. This work concludes that while young people are clearly engaged with the digital world, indeed their social lives are reliant upon digital technologies, they cannot relate this to digital careers. Their perspective on working in the digital world centres on their exposure to the ICT subject at school. It would seem from our research that disengagement with digital careers occurs at Key Stage 4 – discussions with younger people would, on average, show around 10% of young people considering digital careers, by the end of Key Stage 4 this would have dropped sharply to around 2-3%. In discussions with young people around the issues of Key Stage 4 they generally felt that the subject was boring and related little to the digital social world –

most thought that the life of the digital worker centred around “office” applications, working with spreadsheets, writing presentations, etc.

This disengagement was also compounded by little appreciation of the sorts of careers that exist for the digital worker. The most common job roles mentioned when asking young people about the sort of careers digital workers had were “technician” and “teacher”. Upon reflection, there should be little surprise with this finding – digital careers are not very visible in schools, the sector as a whole is not one with a high profile in the media. Therefore, young people’s expectations are fed solely by those adults in their lives that do working with digital technology – their teachers and support staff in schools.

This position is also hampered by careers advice, which seems hopelessly out of date. Our discussions with young people, as well as applicants to degree programmes at our own institution, suggest that careers advisors have little awareness of the breadth of careers within the digital sector, and still believe there are job shortages that result from the artificial demand “spike” that occurred around 2000 as a result of the .com boom and the Y2K bug. In addition, they also believe that, in order to have a digital career, one has to have strong maths skills. While this is not the case across the majority of the sector, with such a belief being articulated to young people it is little wonder they do not show any interest – if you want to disengage young people, tell them they need strong maths skills!

The final barrier to engagement with digital careers lies with the primary influencer of career choice – teachers. Our discussions with teachers have also shown a group that are not engaged with the sector, have little awareness of the career opportunities, and do not feel confident in advising or working in the digital world. More concerning is that many teachers do not have any enthusiasm for existing qualifications – they know these are dry and have little relation to young people’s strong engagement with digital technologies. Yet they feel constrained by the curriculum, and cannot deviate from the prescribed syllabus.

Implications for Digital Britain

We are greatly enthused by the optimism from the Digital Britain Interim Report and support its drive to deliver a world class infrastructure to ensure that the UK is at the forefront of the Digital World. However, we do not feel, with current education practices, that Digital Britain will have sufficient workers to deliver the next generation of applications and services to fully exploit the future infrastructure. We also believe that there is still much work to be done to ensure the many of the inhabitants of the Digital Britain can live safely and securely without placing themselves and others at risk from the potential threats. There is a need to ensure that the digital sector is more closely engaged with education systems; the emerging IT Diploma is a clear opportunity for this to happen, but requires across the board engagement to ensure teachers are aided in aligning their teaching with sector need and can bridge the gap between young people’s digital social world with their career aspirations. The sector also needs to acknowledge their responsibility to ensure education and awareness of the potential harm that can result from their technologies.

We also feel that much more needs to be done to education those who have already left school. Indeed, it is arguably easier to address these issues with the school population – they are a captive audience. However, there are many opportunities to engage the adult population – through schools

with parental activities, or even using young people to promote awareness among their parents. In addition, Government and the sector need to work closely to develop *effective* campaigns that communicate clearly to adults about the risks of the digital world and how they might protect themselves.

For further information

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