

All-Party Parliamentary Group on Digital Skills – call for evidence on the impact of COVID-19 and lessons learned for improving digital skills in the future.

BCS, The Chartered Institute for IT

The purpose of the BCS is to promote and advance the education and practice of computing for the benefit of society. We bring together industry, academics, practitioners, and Government to share knowledge, promote new thinking, inform the design of new curricula, shape public policy and inform the public. As the professional membership and accreditation body for IT, we serve over 60,000 members, in the UK and internationally. We also accredit the computing degree courses in universities across the UK and offer a range of widely recognised professional and end-user qualifications.

BCS welcomes the opportunity to submit evidence to the All-Party Parliamentary Group (APPG) on Digital Skills call for evidence on the impact of COVID-19 and lessons learned for improving digital skills in the future.

What issues has your organisation identified during the COVID-19 crisis?

Covid-19 presented many issues for the BCS, as an employer which is like most other office-based organisations. However, the area of significance was the need to pivot to online delivery to support teachers through its joint leadership with Stem Learning and the Raspberry Pi Foundation of the National Centre for Computing Education (the NCCE) and to maintain its thriving Computing at School (CAS) network. This was particularly crucial given the necessity to continue online teaching provision and continuing professional development during the pandemic.

How has your organisation adapted to the issues raised in the answer to question (1) and in the move to remote working/learning?

- Support for teachers: In the shift to online teaching, BCS has supported teachers by producing
 resources for home teaching activities and created webinars on the learning and technology tools that
 support remote teaching. We also delivered webinars to teachers on the new more intense
 safeguarding challenges we face as we are encompassed by a solely digital way of teaching and
 learning¹.
- Age UK: BCS branches are teaming up with Age UK local branches to offer a 'tech befriending service' to elderly community members, to help them learn sufficient digital skills to navigate their daily lives in an increasingly digital UK
- Digital IT apprenticeships: BCS is a digital IT apprenticeship end point assessment organisation and is
 refocussing its efforts towards upskilling and reskilling the workforce in response to changes in our
 industries and the economy during and post Covid-19. We also see this as an opportunity to diversify
 the talent pipeline and establish a more inclusive future workforce. Apprenticeships and other workbased learning methods should be significantly increased post COVID-19 to upskill and retrain the
 current workforce into increasingly digital and 'online' roles whilst increasing the digital skills pipeline.
- Professionalism: The UK's national and international reputation as a world leader in digital skills
 deserves appropriate recognition and scrutiny to maintain its high standards, to grow and respond to
 the challenges and support individuals to take advantage of internationally recognised professional
 standards and qualifications. A fundamental part of this is trusted independent accreditation of
 employee's capabilities, aligned with the evolving needs of industry as the economy emerges from
 COVID-19 and BCS is currently reviewing and future-proofing key areas of its professional standards
 offering.

¹ https://www.computingatschool.org.uk/

What recommendations do you have for policy makers to support digital skills in the future?

- It is essential for organisations' resilience and sustainability to **maximise their digital operations and capabilities**. The UK Government and devolved administrations should work collaboratively with industry and employers to provide the UK's workforce with opportunity and education to develop, progress and refine their current digital skills utilising professional certifications, apprenticeships, and internal upskilling/reskilling schemes. A proactive approach should help minimise disruption as we seek to create a continuous professional development or 'virtuous' cycle combining education, workplace training and apprenticeships, professional development, and digital transformation.
- A key success measure will be the level of **professional registration and accreditation across all regions and demographics** of the UK of newly qualified digital apprentices and chartered IT practitioners. Professional registration and accreditation are a significant indicator because of its objective, independent and authoritative validation of expertise, competencies, and ethical practice against globally recognised standards.
- Digital transformation is held back by a lack of ethically minded, diverse, interdisciplinary teams that are skilled at:
 - o Transferring a deep scientific knowledge of computing into business contexts
 - Engineering digital systems that meet business needs
 - Managing the adoption of digital technologies and maximising their value across strategic business units
- UK Government and devolved administrations should work with employers and industry to create a virtuous cycle combining education, workplace training and apprenticeships and professional development to overcome barriers to digital transformation. This is especially necessary in sectors that are traditionally non-digital, e.g. agriculture, care, food manufacture, but which could greatly benefit from digital technologies to improve productivity.
- Lack of or limited digital skills is associated with an increased risk of experiencing poverty², therefore BCS recommends that areas of **deprivation across the UK should become communities of practice**³ to increase digital skills, attract businesses and become technology hubs. Communities of practice should be the collaboration of technology, education and business professionals that can provide structure and guidance to establish digital capability in disadvantaged areas of the UK and assist the community in the economic recovery from the coronavirus pandemic, whilst improving digital skills.
- **Digital exclusion** needs to be tackled to increase digital skills. 51% of households earning between £6000 and £10,000 had home internet access compared with 99% of households with an income of over £40,001⁴.
- The coronavirus pandemic has increased the use of digital in every aspect of life, consequently the government should re-visit its plans to ensure the UK's digital literacy level is acceptable for a more digital way of life.

² https://www.goodthingsfoundation.org/areas-of-work/digital-inclusion

³https://pictfor.org.uk/wp-content/uploads/2020/05/PICTFOR-Covid-19-stakeholder-input-report-April-2020-1-2.pdf

⁴ https://www.cam.ac.uk/stories/digitaldivide