all party parliamentary group on apprenticeships

APPG on Apprenticeships - 4IR and career development – What skills do we need in education to prepare future generations – Minutes – January 15th 2019

Chair – Gillian Keegan MP

Speakers: David Phoenix, Vice Chancellor of London South Bank University, Minister for the Digital and Creative Industries, Margot James, Sue Parr, Director of Apprenticeships WMG at the University of Warwick and Kathryn Gomme, Apprenticeship Program Lead at KPMG

Officers Present: Lord Aberdare, Baroness Garden

Co-Chair **Gillian Keegan MP** opened the meeting by discussing her work as an apprentice, working on new technology of the time, specifically digital payments, she said these technologies went onto make a large impact. As such, she said there was a huge opportunity in the next industrial revolution. She posed an open question of how the upcoming generation of apprentices could equip themselves to grasp this opportunity of a technological revolution.

First of the panel to speak was **David Phoenix, Vice Chancellor of London South Bank University (LSBU)**. He spoke of his university's significant apprenticeships programmes, having set up technical college and adult education facilities.

He then turned to the skills agenda, stressing that the core skills agenda was being held back by arbitrary standards. On core skills, saying that while you needed a standard of literacy and numeracy, often the arbitrary requirements of GCSE maths and English were creating barriers to otherwise competent and skilled workers, for example nursing associates, who may lack maths and English GCSE, but were perfectly able to treat patients, he said we should be looking to test competencies rather than use outdated methods of examination practice.

In addition to core skills, there was the issue of higher-level skills. Compared to other countries, the UK was not particularly different in terms of the number of the people getting degrees, where we are outpaced by other countries, is in the number of people doing higher level vocational or apprenticeship qualifications, as such he said stopping people getting degrees was not the answer, rather we should be looking at how to support more people (who would not consider university) into higher-level qualifications. Especially as we look towards 4IR and the higher-level skills needed to develop those technologies.

He emphasised that universities needed to engage with entrepreneurial, soft and creative skills in the future to meet the needs of the economy as the environment changes, linking this to the LSBU apprenticeship program, saying that they offered an educational framework that expects knowledge but also the application of that knowledge. That is why LSBU was working to create environments in which all students could apply that knowledge, pointing to the example of their legal clinic for law students. He also noted the importance of student employability, which the University was improving through its internal internship program, in addition to its own employment agency.

Next to speak was **Minister for the Digital and Creative Industries, Margot James**. The Minister began by stressing the importance of the topic and praising the work being done around digital skills. She first emphasised the importance of getting young people to engage with more STEM

subjects, especially young girls. With only 20% of girls choosing computer science at GCSE and only 10% taking the subject at A level. She said that the shift had to start at primary level and be encouraged throughout secondary school.

She said one issue with computer science was that often teachers lacked the skills to teach it, especially when those that did have the skills could often earn more in the private sector than they would teaching. She said to combat this the **Department of Education** had established a national centre for computing, which was ensuring that teachers had the skills to teach computer science.

The point was raised that it the digital sector was growing fast, approximately 2.5x the national average for economic growth. But the necessary skills improvement could not entirely come from those currently in the education sector, a certain amount of it would have to come from existing workers and that apprenticeships (not just for young people) offer an opportunity to fill that skills gap.

She then spoke of the work her department was undertaking, including the cyber skills immediate impact fund, work with the national autistic society and the tech talent charter.

She concluded that we would not be able to close the digital skills gap by just doing things in schools and colleges, rather it had to be done throughout society in an inclusive approach.

Next to speak was **Sue Parr, Director of Apprenticeships WMG at the University of Warwick**. She began by saying that the University of Warwick has always worked very closely with businesses, which meant that degree apprenticeships were an obvious move to make. She said that by working with businesses and doing outreach to local schools, the university was able to bring more people, from different academic backgrounds into the STEM field.

Sue spoke of their engineering program, where in designing the program, they had been able to ensure that apprentices could go into businesses where there was modern equipment and facilities, enabling the apprentices to work in a far more relevant environment to their education and future career. The skills and behaviours that apprentices developed when embedded in the businesses were striking and they could really be seen to contribute to projects.

The topic of outreach to schools by universities was also addressed, saying that they were able to send staff and PHD students into local schools and as well as bring pupils into WMG to work on projects through their academies program, she noted that pupils who took part in this had gone on to undertake an apprenticeship.

On the topic of qualifications or a lack thereof, Sue echoed David Phoenix, saying that when upskilling she said that they ran into apprentices who didn't have the necessary qualifications, but had the skills and that they were working to find appropriate bridges to give people the maths knowledge outside of traditional structures.

The next speaker was **Kathryn Gomme, Apprenticeship Program Lead at KPMG**. She said that KPMG had been running their apprenticeship program since 2015. She said that as professional services firm it was vital that that they could attract and maintain talent, and apprenticeships were an important part of that. She said that in thinking about the skills employers need, modern jobs required modern skills. She said the technology was revolutionising what those skills are and that there was a social duty to address that skills gap so that social mobility doesn't deepen.

She said steps that could be taken outside the private sector could include compulsory coding programs, implementing greater diversity in STEM subjects and bringing businesses into schools to show what real digital careers look like.

She spoke of a survey of 2000 people of which 60% thought that AI meant they would have to learn new skills. She said that while this was true, it was also about skills beyond STEM, including problem solving, people skills and the ability to work in a team. She also said that it was vital to instil a culture of lifelong learning in which continued learning is embraced and valued. As such KPMG were investing in improving digital literacy across its staff.

Lastly, she spoke about KPMG's recommendations to government about recognising the importance of skills beyond STEM and enabling sustained collaborative action between businesses across sectors to develop people.

In the discussion that followed several key points were raised, **Baroness Garden** spoke about the problems surrounding the Baker amendment and evidence that schools were not letting providers in, she asked the panel if they were finding it difficult to make contact with school children. David Phoenix said that it was difficult, schools being worried about their own financial viability. He said two things needed to be done, he said that the government needed to try and find ways to provide further help and guidance and the success indicators on how schools are judged should be altered to view students going into apprenticeships to be as a successful as a student going onto further education.

Lord Aberdare said that while there were three excellent approaches on display on the panel, he asked how without scaling up would this solve a national skills problem. He called for sustained collaborative action on the problem.