

Britain's Future Workforce: Skills and the Industrial Strategy

21st February, 17:30 to 20:30, Attlee Suite, Portcullis House

A joint event by the All-Party Parliamentary Groups for: Manufacturing
Skills and Employment

Host: Chris White MP, Co-chair of the APMG

Chair: Peggy Hollinger, Industry Editor, Financial Times

Panellists: Neil Carmichael MP (Con), Chair, Education Select Committee
Iain Wright MP (Lab), Chair, BEIS Select Committee

[Opening comments from panel](#)

Neil Carmichael MP, Chair, Education Select Committee:

"I welcome the relocation of skills policy into the Department for Education as an opportunity for us to take a comprehensive approach to education and skills policy. Going forward, particularly if we are to leave the EU, there are three points we must address if the education sector is to do a better job than before:

1. Ensuring provision better matches needs and demand
2. How to improve the utilisation of skills, and their development in work, not just the provision.
3. The encouragement of continual learning"

Iain Wright MP, Chair, BEIS Select Committee:

"Manufacturing will play a key part in the fourth industrial revolution. Ensuring that there is the pipeline of skills to enable us to greater integrate manufacturing processes with services, will be vital if we are to make a success of this, and crucially, if we are to rebalance the economy so it works for everyone"

Peggy Hollinger, Industry Editor, Financial Times:

"The Green Paper mostly addresses 'basic skills' which we'd all agree are really important – but what about higher skills and the need to re-skill the current workforce for fast changing technologies such as those in manufacturing. How are we to get the best brains to succeed in these industries at all levels and how do we link education and training to the cutting edge of technology development?"

I'd like to turn to Ian Collier from the High Value Manufacturing Catapult, Ian it's your organisations job to drive progress in this sector. What do you think is the challenge of this high-end skills gap and does the green paper address this?"

Discussion point one: Linking innovation to national skills provision and political will

Ian Collier, Director of Operations at HVM Catapult:

“We welcome the increased focus on skills but don’t believe it addresses the critical shortage in the means to deliver the number of skilled technicians and engineers that are needed across the UK now and in the future. In the HVMC the UK has created an outstanding centre of innovation in Advanced Manufacturing. We’re developing the manufacturing technologies and processes that industry will be using in 5 to 10 years’ time. However, technology doesn’t deliver without skilled people – who may take just as long to develop.

We have established some first-class training capability within the HVMC, at the MTC and at the AMRC in Sheffield, where we’re using our foresight of what industry will need to know in the future to develop training courses and delivery capability.

So, we are in a position to support the higher-level skills needed by for instance McLaren, who’ve just announced the reshoring of a major part of their composites manufacturing local to AMRC. But if the UK is to build capability to meet employer skills needs locally, we need to invest in the national means to deliver courses aligned to Institute for Apprenticeship Standards when and where they are needed. This means training of trainers and supporting them with the right equipment, facilities and strong technical links to centres such as ours but the Industrial Strategy Green Paper does not consider this.

We’ve been working with others to develop ways to create national capability that leverage the country’s investment in Centres of Innovation – not just the HVMC – but, as well as industry engagement there needs to be a political will to see a national infrastructure that every company can plug into as part of the solution. Is there the desire and the will to seize this opportunity?”

Iain Wright MP, Chair, BEIS Select Committee:

“This model is really strong, it’s about embedding innovation into the long term and the education system needs to be better geared towards this. The local national point is also exactly right, we must hone in on collaboration with industry to create a national collective model of delivery”

Neil Carmichael MP, Chair, Education Select Committee:

“The post-war stimulus involved investing in bricks and mortar, but today it must be people. Finland and South Korea, ruined by war and with few natural resources, recognised this and both adopted comprehensive strategies around education and skills development. We need to think big here, not incrementally, here and there, but take an almost Keynesian approach for the future. In leaving the EU, we now have a new political imperative to get this right”

Discussion point two: Technical education

Neil Bates, Principal and CE, Prospects College of Advanced Technology (PROCAT):

“The education system in this country is fundamentally broken. We have the highest post-16 participation rate than any time since the war. Yet there are significant skills shortages in key sectors. This is because of a lack of alignment between what the education system is producing and what businesses and industries need. We have a low level high volume model, rather than a high level model.

Of the 504,000 apprenticeship starts in 2016 only a tiny percentage were young people starting out in key sectors such as engineering, construction, and manufacturing above level 3. Less than 5% of 16-19 starts last year were in level 3 STEM subjects. There are nowhere near enough new skilled people coming through in

the pipeline and it's vital to address this mismatch. In order to start delivering these skills we need to develop the skills infrastructure on a national level"

Dr Susan Scurlock, CE and Founder, Primary Engineer:

"Following on from the previous comment, it is revealing to compare and contrast the English and Scottish national curriculums. Whereas the English curriculum mentions engineering 6 times, in three distinct ways, the Scottish curriculum has 19 meaningful references to engineering. We must start to recognise engineering as an integral part of our curriculum if we are to address the problems in the STEM Pipeline"

Neil Carmichael MP, Chair, Education Select Committee:

"There is a culture of embedded snobbery in this country which has held us back. Even 10 years after 1944 Education Act which proposed to create a tripartite system, only 2% of learners got to the technical schools which were supposed to compliment grammar and secondary moderns. We need to address this and yes, our primary system needs to develop a better understanding of the possibilities open to our young people, how else do we expect them to aspire to careers in exciting new areas"

Iain Wright MP, Chair, BEIS Select Committee:

"Engineering must be key, we need a vision, mission. There is still a hangover today from what pupils used to be told about if they didn't succeed academically they'd end up in the factory. Generally we need greater integration between the education system and employment, better CPD for teachers, and yes the industrial strategy should consider primary level schooling"

Comments from Robert Hunt, Chief Corporate Office , Veolia and Stephen Pattison, VP Public Affairs, ARM Holdings:

"Employers don't want oven ready school-, college- or university-leavers, ready to defrost. Almost every aspect of a modern business needs inquiry, analytical minds able to problem solve."

"We must be careful in designing an education system around the special needs of particular employers, and with the Levy there is also a danger that we are offloading training costs to the state."

Discussion point three: In the workplace and lifelong learning

Iain Wright MP, Chair, BEIS Select Committee:

"These issues transcend governments and we've moved from a high technically skilled manufacturing economy to lower skilled service economy. Today people may now be working 10 different jobs across their lives, so we need to be more intelligent about workplace learning and about leadership and management, equip them with the ability to help them create environment where people can take off.

For the next 20 years, the majority of the workforce, are there already, it is imperative that we adopt a dual approach to education and lifelong learning, that start to upskill and value FE. My concern is that the DfE won't see this as a priority."

Andrew Large, Director General, Confederation of Paper Industries:

"We must make a globally competitive skills structure, that needs to be attractive to foreign companies: an ecosystem that creates continual learning."

Barry Sheerman MP, Co-Chair, Skills Commission:

"As Chair of the Education and Skills Select Committee, as it was back then, I remember the fiasco that was Individual Learning Accounts. While their implementation was open to abuse and fraud, there was something in this idea, and the more I hear, it seems like it might be an idea worth resurrecting in the form of a personal learning account through which individuals and employers could co-invest in skills development. "

Discussion point four: supply chains and interconnectedness

Iain Wright MP, Chair, BEIS Select Committee:

“Our manufacturing sector has been hollowed out. The big primes say they cannot grow as fast because of this. Vince Cable recognised this and the problems of scaling-up our companies. While our university and design sectors are recognised around the world for their innovativeness, we are around 13th for scale-up in the G20. Are we selling too early? Does the fiscal situation not reward longterm growth? We used to over supply for the big industries and that would cascade down. But today we may need to ask how we can mitigate the risks for small employers, particularly if we want to grow apprenticeships at this level, the apprentice must have a job to go to.”

In response to a question from the Chair on how to support SMEs in enabling industries Ellen Daniels, Public Affairs Manager, British Coatings Federation suggested:

“Could there be greater flexibility around how the levy is spent by employers to buy a more varied training?”

Neil Carmichael MP, Chair, Education Select Committee:

“There are theories that too many SMEs can be linked to lower growth in a sector, so there may be valid questions about business size and how we can encourage growth. I remember visiting a car factory in Leipzig, former GDR, and being surprised by the sophistication of their supply chain management. They showed me a map of their supply chain and it included schools, technical colleges and universities. It wasn't just where processes took place or their components came from, but also their human capital. At the University of Warwick they have department which specialises in supply chains and we need to start applying these lessons.”

Peggy Hollinger, Industry Editor, Financial Times:

“Is the job of navigating supply chains, and the impact of automation, exclusive the job of companies and employers? Rockwell, in the United States, are doing some work on the mapping of supply, schools and colleges.”

Neil Carmichael MP, Chair, Education Select Committee:

“Yes, but these are structural challenges and cannot be met by a rotary club approach alone. To achieve this level of connectivity, is some statutory underpinning needed?”

For further information please contact:

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