

Education, Skills and the Economy Sub Committee Enquiry into Apprenticeships

Evidence from the Tech Partnership

Summary

1. With over a million new recruits needed into digital roles by 2023 and severe digital skills shortages across the economy, there is significant opportunity for digital apprenticeships. Collaborating through the Tech Partnership, hundreds of employers are already contributing to the development of digital industries Trailblazer standards, and new freedoms, such as the inclusion of industry certificates and the creation of degree apprenticeships, have been instrumental in increasing the relevance and value of apprenticeships to this fast moving sector.
2. However, new policies intended to increase the uptake of apprenticeships could easily be thwarted, notably by the following risks:
 - proliferation of standards leading to lack of coherence for employers or prospective apprentices;
 - lack of employer confidence in the quality of training or assessment;
 - lack of common foundations for vocational education and training, which compromises progression and portability;
 - the inability to maintain the currency of apprenticeship standards over time;
 - inhibited uptake due to lack of clarity on questions concerning public contribution to funding, use of employers' own training, and rules around the use of apprenticeships for non-traditional employee groups.
3. To bring coherence to what would otherwise become an increasingly chaotic landscape there needs to be a clear mechanism for employers to take responsibility by sector. This means employers working together inclusively and transparently to:
 - define and maintain an occupational map of standards for the sector;
 - define and maintain the suite of standards set out in the occupational map;
 - ensure the availability of quality training to deliver the standards;
 - determine the most appropriate approach to moderation of assessments.
4. Effective employer collaboration, both in the immediate term and over time, requires a suitably skilled, sector-based convening agent chosen by employers and recognised by government and the Institute for Apprenticeships.
5. The Institute should oversee a quality system which ensures accountability by employers collaborating at the sector level. It should not take direct responsibility for functions that need to be performed at the sector level and managed by the employers of the sector.



About this evidence

6. This evidence is submitted by the Tech Partnership on behalf of the digital industries - the tech industry itself and companies right across the economy who employ staff in technology and digital roles.
7. The Tech Partnership is the UK's growing network of employers collaborating to create the skills for the digital economy. Their purpose is to inspire young people about technology, accelerate the flow of talented people from all backgrounds into digital careers, and help companies develop the digital skills they need for the future.
8. This network of over 800 employers is led by [Employer Boards](#) which comprise CEOs of leading organisations in the technology industry, business leaders responsible for technology in companies right across the economy, and small company representation.
9. Note that the term 'sector' is used throughout this paper. In the case of the digital industries, sector refers to digital specialists (digital occupations) across all sectors and employers of digital specialists across all sectors.

The digital skills gap and the role of apprenticeships

The target of three million apprentices by 2020, how the Government proposes to achieve this and how this may affect the 'skills gap'

10. Ensuring a nation has the skills for productivity and growth in the global digital economy is a pressing priority for governments around the world. The UK's digital skills shortage is a major brake on all sector productivity, and a significant factor within this shortage is the difficulty of attracting and training people for digital roles. Faster uptake of employer-designed digital apprenticeships can make a real contribution to addressing this.
11. The UK is suffering from deficiencies in digital skills at all levels, for example:
 - Over a million new recruits are needed into the digital specialist workforce¹ by 2023ⁱ. 42% of employers recruiting digital specialists are already struggling to fill their vacanciesⁱⁱ, with digital specialist job vacancies amounting to around £2 billion of lost GVA to the UKⁱⁱⁱ.
 - 44% of IT executives report current digital skills gaps are impacting productivity^{iv}. 50% of companies across the economy with digital specialists report skills gaps (72% of large firms and 49% of SMEs)^v. A fifth of the digital specialist workforce are, on average, only 52% proficient in their jobs^{vi}: if this is increased by just 20% as a result of appropriate training, a GVA uplift of £5.5bn would be delivered^{vii}.
 - Digital skills gaps are particularly problematic in new technology areas, for example 95% of companies implementing cyber security systems are struggling with skills gaps^{viii}, and four out of five companies trying to recruit into big data roles are struggling to find the talent they need^{ix}.

¹ Digital specialist workforce (= tech specialist workforce / IT & Telecoms specialist workforce) is defined in the annex.



12. Key levers the government is employing to increase the number of apprenticeships include the introduction of a new approach to apprenticeship standards (Trailblazers) and the introduction of the apprenticeship levy in April 2017. Implemented well, these could accelerate uptake of apprenticeships in ways that make a real difference to the skills gaps. Implemented badly, they could cause greater market confusion, complexity and cost, and inhibit investment in training for both apprentices and the wider workforce.
13. Effective implementation will require:
- Clear mechanisms for employers to take responsibility by sector, working together inclusively and transparently, and with recognition that effective collaboration needs a highly skilled, sector-based convening agent of the employers' choice.
 - This sector based responsibility must include ensuring that there is an up to date coherent suite of apprenticeships that are easy to understand, relevant, and attractive to employers of all sizes and prospective apprentices. Taking account of all relevant roles across related occupations in a holistic way, this suite must enable progression for apprentices and portability between employers.
 - Proper consultation with employers about their concerns and open questions, with a clear timeline for their resolution, and recognition of the timeline employers work to in terms of recruitment.
14. There are particular risks:
- If no responsibility is established at the sector level, there will be a rapid proliferation of conflicting standards without coherence for employers or prospective apprentices.
 - Employers need to maintain the currency of standards over time, or they will quickly become irrelevant. A sector-based convening agent is needed to cause this to happen.
 - It is unclear how much employers of different sizes and recruiting different types of apprentices will be asked to contribute to the costs of training. At the moment, many employers contribute no direct funding and may be unwilling to offer apprenticeships until the financial implications are clear.
 - The availability of high quality training to meet employer needs is a particular challenge for the digital industries. Despite the levy, there is a risk that apprenticeship roles will not be offered unless:
 - There is an appropriate and coherent range of apprenticeship standards for the sector.
 - High quality provision is quickly put in place nation-wide to deliver to those standards.
 - There are simple mechanisms for employers to continue to deliver elements of the apprentices' training themselves without having to become Ofsted regulated.
 - There is also a real risk of impact on broader training budgets, with funding for wider training of the workforce compromised due to having to divert funding to the levy.
15. Over 200 employers have already contributed to the development of new apprenticeship standards for the digital industries, collaborating through Tech Partnership steering and working groups. Employers are keen to continue to work together collectively as the Tech Partnership and with government to ensure the implementation of apprenticeship policy is effective for the digital industries.



The Apprenticeship Levy

The proposal for an apprenticeships levy and how this may be implemented

16. Employers across the digital industries are concerned about the impact on UK businesses of this levy in terms of cost and competitiveness, and the knock-on effect on broader training budgets. They want to work together to try to help ensure it is implemented in a way that delivers the best value for employers individually and for the nation as a whole.
17. It is understood that apprenticeship vouchers will be directed by employers to a registered training organisation which is Ofsted regulated. This could be themselves or a third party. Some employers want, and indeed need, to deliver key elements of an apprentices' training themselves, for example in leading edge technologies, but do not want to take on the burden of being Ofsted regulated. Employers would like confirmation this can be accommodated.
18. Employers would also appreciate clarity on any constraints on using the levy for apprenticeships throughout the workforce, for example for graduate training, the training of new entrants from other careers, and the upskilling of existing digital specialists into new roles.
19. It is clearly critical for the success of the levy that there are suitable apprenticeship standards in place, that there is ready access to high quality training to meet those standards across the UK, and that apprentices are assessed consistently. Employers want a clear responsibility by sector / defined suite of occupations to ensure these conditions are met. In the case of digital occupations, employers want the Tech Partnership to be recognised as carrying this responsibility.

The Institute for Apprenticeships

The institutional architecture of current provision and how this may be affected by the proposed Institute for Apprenticeships

20. Apprenticeships need to have currency across sectors / occupational groups. This requires employers to work together to the broadest extent possible to create standards which have industry-wide recognition.
21. It is also essential to avoid the chaos of unnecessary proliferation of standards, and the creation of standards which are not maintained over time. Both potential apprentices and employers need to be able to understand the landscape, which is constantly evolving. This requires a coherent approach with an over-arching, employer-defined 'map of apprenticeships' by logical groupings (eg digital occupations). This needs to be defined by a respected group of employers on behalf of the sector (the Tech Partnership, in the case of digital), supported by a sector-based convening agent with the necessary technical expertise and long term commitment.



22. The Institute should orchestrate and oversee a quality system which ensures clear responsibility and accountability by employers collaborating at the sector level. It should not take direct responsibility for functions that need to be performed at the sector level. Rather, it should recognise respected groups of employers (for example the Tech Partnership for digital occupations), who take the ongoing responsibility at the sector level for:
- Defining and maintaining an occupational map of standards for the sector;
 - Defining and maintaining the suite of standards set out in the occupational map;
 - Ensuring the availability of quality training to deliver the standards;
 - Determining the most appropriate approach to moderation of assessments.

16-19 year olds

Take-up of apprenticeships amongst 16–19 year olds and steps that can be taken to make more young people aware of available opportunities

23. Young people need access to high quality, current information about progression opportunities, through apprenticeships, degree apprenticeships and degrees. This requires a coherent, employer-led approach as set out above.
24. Employers collaborating on behalf of a sector could play a much greater role in explaining what opportunities are available in entry level roles, both with up to date online information and physical engagement with young people.

Applying for apprenticeships

The process of applying for apprenticeships

25. Thought needs to be given to making it easier for all companies, especially smaller ones, to promote their apprenticeship opportunities to young people, and to make it easier for young people to understand and assess the apprenticeship opportunities that are available.

Routes for progression

Routes for progression to higher qualifications for current apprentices

26. All apprentices should have access to progression routes that help them fulfil their potential, including apprenticeships at different levels and to support movement into different roles throughout their career. This should be part of the employer-defined map of apprenticeships set out above.



Standards

The quality of, and minimum standards for, apprenticeships, and how standards can be enforced

27. Employers want to see cohesion between national occupational standards, apprenticeships, and other forms of vocational education and training such as the new Technical and Professional Education routes. This would avoid duplication and fragmentation, and enable progression and portability for the individual.
28. In particular, apprenticeship standards for England should be underpinned by employer defined national occupational standards, as they are in the other nations of the UK. Employers value these national occupational standards and have used them to support the development of Trailblazer apprenticeship and degree apprenticeship standards for the digital industries.
29. The digital industries have been a path finder in creating degree apprenticeship programmes, working together through the Tech Partnership, and expect to build on that with new, high level apprenticeship programmes for post-graduates.
30. As set out above, the setting of standards requires a coherent approach with a long term employer group (with open and changing membership over time) which has responsibility for ensuring that there is an up to date cohesive suite of apprenticeships for the sector.
31. This employer group needs to be respected by and representative of the sector, and should take responsibility for:
 - Defining the apprentice occupations map for the sector, which sets out the structure of apprenticeships within the Board's scope of responsibility.
 - Overseeing the setting and maintenance of standards and assessment plans for occupations within their scope. Task and finish employer working groups comprised of occupation-specific experts should contribute the detailed subject matter expertise.
 - Endorsing the standards and assessment plans created by the working groups, ensuring fitness for purpose and compliance with guidelines, and submitting to the Institute for publication.
 - Maintaining visibility of the number and nature of starts and completions for the sector, understanding trends and assessing how uptake can be increased.
32. In fulfilling its function, this employer group must:
 - Act independently for the good of all.
 - Be transparent and inclusive, including overseeing formal sector-wide consultation.
 - Ensure it has in place the necessary technical support services to fulfil its responsibilities.
 - Collaborate with other employer groups for other sectors to ensure cohesion across the whole apprenticeship landscape and avoid unnecessary duplication of effort.



ANNEX: Definition of the digital specialist workforce

The definition of the digital specialist workforce used for the data in this evidence is as follows:

Occupation (SOC2010) codes:

1136	Information technology and telecommunications directors
2133	IT specialist managers
2134	IT project and programme managers
2135	IT business analysts, architects and systems designers
2136	Programmers and software development professionals
2137	Web design and development professionals
2139	Information technology and telecommunications professionals nec
3131	IT operations technicians
3132	IT user support technicians
5242	Telecommunications engineers
5245	IT engineers

End of document

Contact: Margaret Sambell
Date: 18th March 2016
E-mail: Margaret.sambell@thetechpartnership.com
Phone: 07904 941326

On behalf of the Tech Partnership, 1 Castle Lane, London SW1E 6DR
info@thetechpartnership.com / www.thetechpartnership.com

Proprietor: The Tech Partnership Limited - A registered charity in England and Wales (1161311) - A company limited by guarantee, registered in England and Wales (4019051) - Registered office: Victoria House, 39 Winchester Street, Basingstoke, Hampshire RG21 7EQ - VAT no GB 830 3758 35

ⁱ The Tech Partnership / Experian, 2015

ⁱⁱ The Tech Partnership, 'Employer Insights 2015', May 2015

ⁱⁱⁱ Development Economics / O2, 'The Future Digital Skills Needs of the UK Economy', 2013

^{iv} CompTIA, 'International Technology Adoption and Workforce Trends Study', May 2015

^v The Tech Partnership, 'Employer Insights 2015', May 2015

^{vi} The Tech Partnership, 'Employer Insights 2012' and 'Employer Insights 2014'

^{vii} Adroit Economics analysis, July 2015

^{viii} The Tech Partnership, 'Employer Insights 2015', May 2015

^{ix} Nesta, 'Model Workers: How leading companies and recruiting and managing data talent', July 2014