

## Who benefits from apprenticeships? The English experience

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Apprenticeships are paid jobs incorporating on- and off-the-job training. Traditionally they have been seen as a route for young people to transition from education to productive skilled employment. In practice apprenticeships are very diverse – in terms of age of apprentices and levels and quality of apprenticeships.

In England an ongoing programme of reform is seeking to increase the number of apprenticeships while at the same time rationalising the range of apprenticeships available, making them more attuned to employers' skills needs and enhancing their quality. Perhaps the single most prominent reform is the introduction of an apprenticeship levy for large firms in 2017, which was followed by a reduction in apprenticeship starts.

The evidence suggests that there are positive returns to individuals in terms of earnings from apprenticeships but their size varies markedly by gender, sector and apprenticeship level, with bigger returns for men than for women (in part explained by gender segregation by sector) and for advanced, higher and degree level than for intermediate level apprenticeships. Employers benefit from the supply of skills provided by apprenticeships but in their decision-making about investing in apprenticeships are concerned to trade-off costs (e.g. wages, training and supervision costs) versus benefits (i.e. the productive contribution of apprentices). Net costs and benefits and associated payback periods vary markedly by sector and apprenticeship level.

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## Background

Apprenticeships have assumed a prominent position in skills policy debates. They are seen variously as a solution to addressing youth unemployment and improving pathways to lifelong learning and sustainable employment with progression, and as a route to providing the vocational skills that employers and the wider economy needs, so contributing to productivity improvements.

So what are apprenticeships? They are paid jobs incorporating on- and off-the-job training. Apprentices are classified as being in employment and legally they should be paid at least the apprentice level of the national minimum wage. Apprenticeships are diverse in that they can be studied at different levels – from Intermediate (Level 2: equivalent to 5 GCSE passes), through Advanced (Level 3: equivalent to 2 A level passes) and Higher (Foundation degree or above) to Degree level. They take between one and four years to complete and are available across a range of occupations and sectors (Powell, 2019).

Skills and training policy is a devolved responsibility in the UK. The focus here is on England. Currently apprenticeships come under the remit of the Department for Education and form a key component of broader skills policy (including reforms to technical education) at national and local levels.

Relative to countries such as Germany, Austria, Switzerland and Denmark the apprenticeship system in England is relatively underdeveloped. Compared with experience in much of the rest of Europe apprenticeships in England are distinctive (Kuczera and Field, 2018) in that they:

- are shorter;
- include less general education;
- are more likely to be incumbent workers (i.e. apprenticeships play a role in upskilling the existing workforce as opposed to new entrants); and
- have less emphasis on employer-provided training in the workplace and more on off-the-job training provided by training providers.

The apprenticeship system in England is subject to substantial ongoing reforms intended to develop and strengthen it from its current sub-optimal position. Key components are:

- a target of 3 million new apprenticeship starts between 2015 and 2020;
- an apprenticeship levy (introduced in 2017) requiring employers with a pay bill in excess of £3 million paying a levy of 0.5% of the value of the employer's pay bill, minus an apprenticeship levy allowance of £15,000 per year to be spent on apprenticeship training and assessment;
- the development of apprenticeship standards (developed in consultation with employers) for each occupation to replace qualification-focused apprenticeship frameworks (following Richard, 2012);
- rationalising the range of apprenticeships available; and relatedly
- increasing the quality of apprenticeships.

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## Evidence

Human capital theory (Becker, 1962) assumes increasing returns to investments in training. Hence investment in apprenticeship would be expected to benefit the individual. For young people especially, apprenticeships potentially offer an opportunity to develop general and specific skills in a workplace environment, so easing the transition from compulsory education to employment (Ryan, 2001).

In England apprenticeships have generally suffered an image problem, being viewed less favourably than traditional academic routes for young people. This is especially the case amongst parents with a university education, even though their perceptions of apprenticeships as a route to progression in the labour market

are quite positive (CIPD, 2013). Amongst young people, analyses of the Longitudinal Study of Young People in England show that young men, young people from a White ethnic background and lower attaining students are more likely to apply for and take up apprenticeships than young women, those from ethnic minorities and higher attaining students (Kashefpakdel and Rehill, 2018). This suggests that there is scope to diversify apprenticeships beyond white boys from disadvantaged backgrounds, especially as research shows that young people have limited information to challenge gender and ethnic stereotyping in making career decisions (Beck et al., 2006) which might facilitate well informed apprenticeship take up and would encourage them to enter non-traditional sectors/occupations (Fuller and Unwin, 2014). Schools and colleges have an important role to play in making apprenticeships attractive for young people, and ensuring that young people are prepared for apprenticeships.

The policy direction of focusing more attention on higher quality apprenticeships chimes with evidence on returns to individuals from apprenticeships. Analyses based on modelling of future earnings shows that lifetime earnings of higher apprentices (at level 5) are higher than for university peers from non-Russell Group universities, while returns to those on level 2 apprenticeships are only marginally higher than holding no qualification (Kirby, 2015). This suggests that it is higher level apprenticeships that offer a route to social mobility. But from an inclusion perspective the relatively low level of the apprenticeship wage (i.e. lower than the national minimum wage) means that it is difficult for young people living independently/ without parental support to take up an apprenticeship. Other research on returns to apprenticeship, utilising linked education and labour market data from administrative data sources (Longitudinal Educational Outcomes) on cohorts who finished their compulsory education between 2002/2003 and 2007/2008 also shows that returns are positive and persist up to age 28 (the age of participants at the end point of the analyses) (Cavaglia et al., 2017; 2018). However, there is substantial variation between individuals, with men faring better than women. Much of this gender differential is attributable to men being concentrated in higher return sectors (e.g. engineering) and women in low return sectors (e.g. childcare). Differentials are greater for advanced apprenticeships than for intermediate apprenticeships.

Employers potentially benefit from apprenticeship supplying the skills that they need. Indeed, business need – specifically the retention and development of staff – has been found to be the key motivation for small and medium-sized enterprises to provide apprenticeship training (Johnson et al., 2014), although a disconnect between training providers and employers has limited the extent of their influence over the content of apprenticeships. Nevertheless information from the a survey undertaken in early 2017 (just before the introduction of the apprenticeship levy) with 4,004 employers that had employed apprentices who had completed their apprenticeship between June 2015 and January 2016 showed that apprentices made up a higher proportion of the workforce at workplaces with between 10 and 99 employees than amongst smaller or larger workplaces (IFF Research, 2017) (see Table 1). However, there are more micro, small and medium-sized workplaces without apprentices than is the case for larger workplaces (with 100 or more employees).

*Table 1: Number of recent apprentices as a proportion of employees by workplace size*

<i>Staff at workplace</i>	<i>% of all workplaces of this size with apprentices*</i>	<i>Apprentices* per 1000 employees</i>
2-9 staff	2%	6
10-24 staff	11%	11
25-99 staff	19%	10
100 or more staff	29%	5
Total	6%	9

Source: IFF (2017), taken from Table 3.1.

Base: All employers (sites with and without apprentices)

\* Apprentices completing framework in survey window versus current employees

Apprenticeship take up in smaller enterprises faces constraints in terms of time, resource and cost (Peate, 2016). Lack of a dedicated HR function is also an issue in finding out about taking on apprentices. Responses to the Federation of Small Businesses Apprenticeship Survey 2016 identified an appetite for taking on apprentices, but the three most frequently cited challenges to taking on apprentices by smaller firms without apprentices at the time of the survey were: (1) the quality of applicants, (2) day-to-day management of an apprentice alongside other responsibilities, and (3) lack of time to devote to training an apprentice.

To invest in training an apprentice employers (whatever their size) want to know that they can recoup the costs of their investment over the short-/medium-term (i.e. that skilled workers are not poached – and to some extent the Apprenticeship Levy does this). A series of analyses of the net costs and benefits of training to employers undertaken over the period from the early 1990s to 2012 (i.e. before the introduction of the apprenticeship levy) (Hogarth et al., 2012; Hogarth, 2014; Gambin and Hogarth, 2017) has been developed using an accounting framework with information collected in employer interviews. Costs include apprentice wages, training course costs and supervision costs, while benefits are any income received for training an apprentice and the productive contribution of an apprentice while training. Summarising across studies from 1995 to 2014 Gambin and Hogarth (2012) estimated that the net costs of training in 2011 prices varied from £39,600 in Engineering (apprenticeships at levels 2 and 3) and £34,600 in construction (apprenticeship levels 2 and 3 combined) where apprenticeships are traditionally three years in length, to £3,800 in social care and £3,000 in retailing (where apprenticeships last around a year). Hence the costs and benefits of apprenticeships vary by sector and level of apprenticeship, but the evidence suggests that employers can recoup the cost of apprenticeships (Hogarth, 2014).

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## **Overview and evidence gaps**

England is distinctive relative to most other European economies in its traditionally weaker apprenticeship system, reflecting a focus on using third-party training providers to deliver training rather than placing the onus on employers to provide work-based learning. Through a raft of reforms to the apprenticeship system the aim is to strengthen the quality and place more responsibility on employers. At a time of change, promoting, embedding and monitoring developments is a priority.

While the evidence suggests that good quality apprenticeships offer good returns in terms of pay and possibilities for advancement, it also suggests that there is a marked variation in experience. Fuller and Unwin (2017) contend that there are too many apprenticeships that fail to provide sufficient training and access to skilled work to enable progression. This suggests that there may be an evidence gap in understanding and best incentivising quality improvements. A review by the What Works Centre for Local Economic Growth (2015) highlights further evidence gaps on the effects of apprenticeships on particular local areas (as opposed to individuals or employers) and on comparisons of the effects of nationally versus locally run programmes. These gaps are particularly pertinent given the policy direction of devolution to local areas.

At economy and societal levels, a key to benefiting from apprenticeships is striving to find the balance between making investment attractive to employers by reducing costs to an acceptable level, while also making apprenticeships attractive to potential quality apprentices who can derive greatest benefit from them. Reducing the costs of apprenticeships by shortening their length and/or reducing the amount of general off-the-job training goes against the policy aim of increasing the quality of apprenticeships, while the latter also reduces the transferable skills element so making them less attractive to potential apprentices. Hence there is work to be done on how best to reduce the gap between employers and potential apprentices.

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