Chapter 2. Promoting and strengthening youth apprenticeships in England

Increasingly, the English apprenticeship system has become numerically dominated by growing numbers of adult apprenticeships. This chapter argues that England could benefit from more youth apprenticeships, strengthened in quality. It explores how youth apprenticeships could be promoted both to employers and young people, by setting the wages and benefits of young apprentices appropriately. The chapter argues that English apprenticeship for young people should provide more general education, including for apprentices that already have Level 2 English and maths qualifications, noting that in comparison to many other countries youth apprentices in England receive less general education. The eligibility of apprentices aged 16-19 for social benefits should also be re-appraised, recognising the need to ensure the attractiveness of apprenticeship.
Introduction: Youth apprenticeships in England

Young people entering the labour market often obtain low quality jobs

Despite low unemployment overall, young people in England often face significant problems when entering the labour market. The UK (numerically dominated by England) unemployment rate for those aged 16-24 is currently 12.5%, slightly down on the previous year. Of these unemployed, about one-third are full-time students seeking part-time work. At the same time, in this age group, about a quarter of those in work are in fact full-time students. But although the figures suggest that some sort of job is open to most young people, there are major issues with the quality of those jobs. Pullen and Dromey (2016) point to many changes in the youth labour market, with more self-employment, more part-time jobs and structures such as zero-hours contracts. Keep (2012) argues that entry level employment is frequently of poor quality, and young workers often have to work on temporary contracts or part-time. Similarly, Shildrick et al., (2012) report that young people leaving school at 16-18 typically get jobs that are low paid, low skilled and insecure. So for many young people, their first jobs are very far from being the first step on a career ladder.

In some apprenticeship systems, youth apprenticeship is more common

Youth apprenticeships are here defined as those catering to young people in their late teens and early twenties; typically these young people have limited relevant work experience. In England, most of these apprenticeships are at Level 2 and 3 corresponding to upper secondary education and training in other countries. England, like some other English-speaking countries has an apprenticeship system numerically dominated by adult apprentices, while in others like Switzerland youth apprenticeships are much more common (see also Figure 1.2). In England, one-quarter of apprenticeship starters are aged 16-18, and a further one-third between 19 and 24. The construction and engineering sectors have the largest share of young apprentices aged 16-18 and 19-24 (84% and 68% respectively) (GOV.UK, 2014). So apprenticeship is no longer synonymous with the school to work transition (Mann, 2016). Some demographic decline in the number of school leavers is currently taking place, and this is affecting trends in the numbers of youth apprenticeships now and in the future. But the modest number of youth apprenticeships (Figure 2.1) may also be reflecting issues in the attractiveness of apprenticeships, both to young people and employers, with young people opting for other forms of education and training, and employers choosing other channels of recruitment.

England's apprenticeship system, serves both adults and youth

For youth apprentices, as with other young people who have completed the comprehensive phase of their schooling at the age of about 16, the need for general education remains significant, as teenagers are still building the knowledge and skills they will need to learn throughout life, to adapt to new career demands, and to play their full role as citizens. Government, in England as in other OECD countries, tends to take a full responsibility for the educational development of these older teenagers, through full funding of most educational programmes, and in other ways, until these young people reach the stage of post-secondary and tertiary education or enter the workforce. For older apprentices, typically incumbent workers, expectations are often different. While government in England and in other OECD countries typically take a close interest in upskilling the workforce and commonly support it in various ways, such upskilling is often seen as something where the responsibility falls more heavily in the shoulders of employers and individuals involved, since these parties are key beneficiaries of the upskilling.
Policy Issue 2.1: Promoting youth apprenticeship

This section looks at how youth apprenticeship might be promoted

While the promotion of youth apprenticeship is already government policy, there are ways in which, within the larger frame of apprenticeship, youth apprenticeships might be given more attention and encouragement. Promotion of youth apprenticeship requires both employer buy-in and an attractive offer for young people. This section therefore looks at how apprentice wages need to balance the interests of employers and the apprentices so as the institution of apprenticeship is attractive to both parties. It then looks at measures that could increase the attractiveness of apprenticeships to young people, such as better benefits for young apprentices. It then looks at how to increase benefits from apprenticeships for young apprentices.

Challenge: Transition from school to work is hard for some young people in England

In England, many young people experience a difficult transition from school to work

In 2012 in England, only 70% of 16-19 year-olds were participating in education or training leading to a formal qualification, compared to nearly universal participation in, for example, the Czech Republic, Poland, Estonia and the Netherlands (OECD, 2016, Table A2.1). This reflects low participation rates among older teenagers in England, with participation in full or part-time education at 90% among 16-year-olds, falling to only 56% for 18-year-olds in 2013 (OECD 2016a; DfE, 2015c). Many learners do not complete the 16-18 phase of education, with many dropping out from programmes leading to Level 2 qualifications (Pullen and Drome, 2016). In the United Kingdom, 9% of young people (15-19 year-olds) are not in employment, education and training, more than in many OECD countries (OECD, 2018). For young people at risk, it follows that there are good reasons for
looking to apprenticeships and pre-apprenticeships as a means of facilitating completion of Level 2/3 qualifications and transition to skilled jobs. The equity issues are further addressed in Chapter 6.

The impact of new reforms on youth apprenticeship is uncertain

Prior to the introduction of the levy, many employers were, in principle, paying around half the cost of the off-the-job training for older apprentices – although in practice local cross-subsidies probably reduced the impact of this funding arrangement. Now the levy is in place, (and setting aside the levy payments themselves) employers will now only have to pay a maximum of 10% (and often nothing) for the-off-the-job training of their apprentices. This may trigger a further acceleration in the growth of adult apprenticeships – perhaps displacing some young apprentices. To balance this additional support for adult apprenticeships, the government has exempted employers who offer apprenticeships to those who are 25 or younger from payment of National Insurance. Other measures encouraging provision of apprenticeships to youth include a grant of GBP 1 000 to employers taking on apprentices aged 16-18 (and to the training providers), and a lower apprentice wage in the case of young apprentices (Powell, 2017). The net effect of all these changes on youth apprenticeships is as yet unclear.

Apprentices under 19 are not eligible for benefits available to their peers in full-time education

In England, young people who become apprentices lose some benefits which they would retain if they remained in full-time education. Parents are eligible for Child Benefit, Child Tax Credit and Universal Credit if their child is aged 16-19 and is in full-time education and training other than higher education. Those in paid work, including apprentices, are not eligible (GOV.UK, 2018). The 2017 conservative election manifesto proposes to offer discounted bus and train travel for apprentices (Conservative Party, 2017).

Policy pointer 2.1: Promoting youth apprenticeships

In the light of a significant challenge of transitioning young people with poor school attainment into good quality jobs, the government should seek an expansion of quality youth apprenticeships, as in other countries, where such apprenticeships play a major role.

Options include:

- Evaluate the impact of the existing wage setting on provision of apprenticeship by employers in different sectors, and on the uptake of apprenticeships by individuals across different age groups.
- Explore whether the threshold effect induced by a sharp wage increases when an apprentice turns 19 or completes the first year of apprenticeship may prevent employers from providing longer apprenticeships.
- Ensure that where youth apprentice wages are low, that they are balanced by extensive benefits to the young apprentice, in terms of the quality of the learning opportunities with the employer, to avoid exploitation of youth apprentices as unskilled labour (as also argued in Chapter 3).
- In recognition of their status as a learner (as well as a worker), apprentices aged 16-19 (and their families) should be eligible for social benefits sufficiently attractive to allow youth apprenticeship to compete fairly, and without any bias in connection with social background, with other educational programmes for 16-19 year-olds.
• In line with other targets for apprenticeship, set up a target for an expansion of youth apprenticeships.

Analysis: Outcomes from apprenticeships

Evidence shows that apprenticeships smooth transition of young people to the labour market

Apprenticeships systematically blend education and training provided in schools and in work places, facilitating the transition of young people from school to work. Across countries, there is evidence that graduate apprentices have better labour market chances in terms of duration of job search, unemployment spells and wages than those who choose another type of upper secondary education (Bratberg and Nilsen, 1998; van der Klaauw et al., 2004; European Commission, 2013).

Individual and social outcomes from youth apprenticeship in the United Kingdom are positive

A study evaluating outcomes from apprenticeship in the United Kingdom (Level 2 and 3) between 1996 and 2004/2005 showed that apprenticeship was associated with a positive wage premium when compared with qualifications at a lower level (Level 1 and 2 respectively) and other vocational qualifications of similar level. The study also demonstrated that investment in apprenticeship was beneficial from the government point of view (McIntosh, 2007). These results refer mainly to youth apprenticeships as during the reference period there were relatively few apprentices above the age of 25 (see Figure 2.1).

Analysis: Apprentice wages

In some countries, apprentice wages increase gradually over the course of a 3- to 4-year apprenticeship

Other things being equal, employers might prefer to train adults with relevant work experience than young school leavers, as adults require less training and their productivity will be higher at the outset. On the other hand, apprentice wages are typically lower for young people, and these wages are usually the main component of costs to employers. Table 2.1 shows how the apprentice wage compares to the skilled worker wage, and the contribution of wage costs to total apprenticeship costs across countries. In other countries, apprentice wages commonly increase gradually but substantially during a 3- to 4-year apprenticeship, reflecting increasing skills and productivity. For example, in Austria, an apprentice in the metal processing industry earns EUR 550 per month in the first year, EUR 740 in the second year, EUR 1,010 in the third year, and EUR 1,360 in the fourth year (European Commission, 2013). For a young apprentice plasterer (under 21) in Australia, the hourly rate in 2013 was AUD 10 in the first year, just under AUD 12 in the second year, around AUD 16 in year three, and around AUD 19 in their final fourth year (CFMEU Construction, 2010).
### Table 2.1. Apprentice wages across countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Apprentice wage as compared to the skilled worker’s wage?</th>
<th>Share of apprentice wage cost in the total cost of the apprenticeship programme?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>On average 50% of the skilled worker wage.</td>
<td>57% of total costs in the first year and 72% in the third year of the apprenticeship</td>
</tr>
<tr>
<td>Germany</td>
<td>25-33% of the skilled worker wage, depending on the year of the programme.</td>
<td>Around 62%</td>
</tr>
<tr>
<td>Norway</td>
<td>30-80% of the skilled worker wage, depending on the year of the programme.</td>
<td>Information not available</td>
</tr>
<tr>
<td>Switzerland</td>
<td>On average 20% of the skilled worker wage, depending on the year of the programme.</td>
<td>Around 50%</td>
</tr>
</tbody>
</table>


In England, apprenticeships may involve a sharp wage increase after 12 months

In England an apprentice earns between 50% and 60% of the skilled worker wage but this average hides large variations. In 2011 apprentices under 19 earned approximately 32% of the fully qualified rate, while those aged 19-24 earned 49% (Conlon et al., 2013). The prevailing youth apprentice wage in England is thus close to that of their Austrian counterparts, but above that of their counterparts in Germany and Switzerland. In England, according to the law, the minimum wage of apprentices aged under 19, and those aged 19 or over in the first year of their apprenticeships amounts to 47% of the national minimum wage (GOV.UK, 2017a). Turning 19 or completing the first year of an apprenticeship trigger a substantial increase in an apprentice’s wage, if the apprentice is paid the legal minimum. For example, the legal minimum wage of an apprentice who started on a programme at the age of 18 will increase in the second year by 60%. This sharp increase may encourage employers to provide apprenticeships that do not greatly exceed one year in length. Around one-third of apprenticeships may be concerned as the recent apprentice pay survey shows that the rate of non-compliance with the minimum wage in the second year of apprenticeships among those 19-20 year-olds is 32% (BEIS, 2017). If these employers had to comply with the legal requirements, which they definitely should, they may opt for an apprenticeship not exceeding one year.

In some cases, employers may be relatively indifferent to the apprentice wage

Figure 2.2 shows how apprentice wages and productivity may change over the course of an apprenticeship in sectors where employers invest in apprenticeship to realise long-term benefits. It illustrates the case where an increase in apprentice productivity, resulting from the training, does not compensate for the costs related to wages by the end of apprenticeship – the employers therefore bear net costs during the apprenticeship, because they see it as a longer-term investment in the skills of their workforce. Many of these employers already pay youth apprentices above the minimum required wage and would be unaffected by a drop in the apprentice minimum wage. The costs illustrated only include apprentice wages, but if other in-kind resource costs to the employer were included, such as the cost of the supervision of apprentices, the net employer costs would be even larger. It is difficult to estimate exactly how many apprenticeships fall in this category of youth apprenticeships leading to long-term benefits. But 90% of 16-18 year-olds and 60% of 19-24 year-olds apprentices were recruited externally (Department for Education 2016), typically to meet longer-term skills needs. In some sectors this type of apprenticeship is more common than in others. Hogarth, Gambin, and Winterbotham (2012) report that, in
the engineering and construction sector, nearly all interviewed employers offered apprenticeships to meet their future skills needs. Apprenticeship positions were mainly offered, at wages above the minima, to young people between 16 and 24 who had recently completed full-time education.

Figure 2.2. Comparison of apprentice wages and productivity in an engineering and construction company in the United Kingdom (England)

Note: Relative apprentice wage = apprentice wage/skilled worker wage. Relative apprentice productivity = apprentice productivity/skilled worker productivity.

Employers who are not able to retain apprenticeship graduates may be more responsive to wage levels

Employers, who cannot count on recruiting or retaining apprenticeship graduates will only offer apprenticeships if they are able to break even by the end of the programme (for more information on costs and benefits from apprenticeships see for example Muehlemann, 2016 and Kuczera, 2017). Costs and benefits analysis of apprenticeship carried out in Switzerland shows that this is possible if employers use apprentices in productive work, while paying them below the regular wage (Muehlemann, 2016). In these circumstances, employers may be very sensitive to change in youth apprenticeship minimum wages. However, a lower apprentice wage increases the opportunity cost for apprentices. Lower wages would therefore need to be matched with standards and regulations ensuring a high-quality apprenticeship and making the investment worthwhile.

Wage setting – at which level?

Costs and benefits of apprenticeships to employers, and therefore reasons why employers provide apprenticeships, vary across companies and sectors. For example, in England employers in construction and engineering are more likely to provide apprenticeships to young people with recruitment benefits in mind. Conversely, in the health and retail sectors employers often offer apprenticeships to incumbent workers. Apprentices in these sectors
also tend to be older (Hogarth, Gambin and Winterbotham, 2012; DfE, 2016). As a result the costs and benefits structure and so the impact of the minimum apprentice wage on apprenticeship provision would be very different across sectors. To reflect this variation across sectors in many countries the minimum apprentice wage and its progression through the programme duration is set by sectors. This is different from the English approach where the minimum wage is defined nationally. Table 2.2 compares wage-setting arrangements across countries.

Table 2.2. How the minimum apprentice wage is determined

<table>
<thead>
<tr>
<th>Country</th>
<th>Level at which the minimum apprentice wage is determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Sectors at national and regional level; in some cases it is up to individual companies</td>
</tr>
<tr>
<td>Austria</td>
<td>Sectors at regional level</td>
</tr>
<tr>
<td>Denmark</td>
<td>Sectors</td>
</tr>
<tr>
<td>England (UK)</td>
<td>National</td>
</tr>
<tr>
<td>Germany</td>
<td>Sectors at regional level</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Sectors</td>
</tr>
<tr>
<td>Norway</td>
<td>Sectors at national level</td>
</tr>
<tr>
<td>Scotland</td>
<td>National</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Unregulated but in practice sectoral/industry bodies provide recommendations on the wage level that are observed by individual employers</td>
</tr>
</tbody>
</table>

Note: Apprentice wages can vary widely across sectors and tend to increase over the duration of the apprenticeship programme.


Young apprentices are more likely to accept lower wages if they expect good returns later

Wage setting should also reflect what apprentices are willing to work for – the reservation wage. Younger individuals will typically have a lower apprentice reservation wage as, through an apprenticeship, they can expect to recoup the investment in their own skills over a lifetime. They may also have low short-term costs as many still live with their parents. But the apprenticeship still needs to provide sufficiently attractive longer-term labour market returns, meaning a high-quality apprenticeship. So, youth apprenticeships should provide participants with solid basic skills and transferable occupational skills.

Older apprentices have a higher reservation wage

Adult apprentices typically have higher expectations in terms of the apprentice wage. They often have families to support, and the alternative to apprenticeship is often a job with an unskilled wage. For these reasons apprentice wages tend to be higher for older apprentices in England and other countries. To support older apprentices, other countries provide grants and subsidies to this population. In Germany, apprentices over 25 may receive financial support for education expenses, travel, child care, tutoring, and a subsistence allowance during the training. In Switzerland, adult apprentices earn around two-thirds of the unskilled worker wage, compared to one-fifth for younger apprentices. All those under 35 can apply for a scholarship of a maximum CHF 12 000 per year (equivalent to 2.5 times the median monthly wage of an unskilled worker). Additional financial assistance is available to those who are unemployed. In Canada the apprentice wage starts at around 50% of the skilled worker wage and the Canadian government offers apprentices one-off grants of up to CAD 4 000 (the minimum average hourly wage in Canada is CAD 11.43) (Muehlemann,
forthcoming). While these measures potentially increase the participation of older adults in apprenticeships, a robust evaluation of their impact is lacking. There is some evidence that the cost of participation in apprenticeships may be unacceptably high for some potential adult apprentices in England (Young Women’s Trust, 2017). Given that one-third of older apprentices do not receive the legal minimum apprentice wage it is vital to ensure that employers comply with the legal pay requirements. To support adult learners, the government may also explore introduction of other measures in line with other countries’ experience, as discussed above.

**Regulation is needed to ensure that adult and other apprentices have suitable job roles**

When employers provide apprenticeships mainly to benefit from the productive work of apprentices in unskilled roles, they will have less incentive to invest in training and skills development of their apprentices. In this context it is important to ensure apprentices receive training in the work place, preparing them for skilled jobs, alongside contributing to productive work. Regulation is therefore needed to ensure that the apprenticeship is of good quality and to prevent exploitation. Chapter 3 will argue that regulations and standards on the workplace training provided by employers would help to prevent employers from using apprentices solely as unskilled labour.

**Benefits equivalent to those received by other students would encourage youth apprenticeship**

In England, young apprentices lose the benefits for which other students under 19 are eligible. The English approach contrasts with practices in other countries (Box 2.1) where apprentices retain many of the benefits full-time students are eligible for, and at the same time receive an apprentice wage from the employer. This means that in England, while young apprentices receiving apprentice wages are typically better off than their student counterparts, and they earn more than their parents/families would receive in benefits, they are less generously treated in respect of benefits than their apprentice counterparts in some other countries. This point is relevant to any assessment of the prevalence and status of apprenticeship in England in comparison with other countries.
Box 2.1. Social benefits available to apprentices

In Austria, parents with children below 18, and those with children in training for an occupation or studying at the post-secondary level are eligible for family allowances. The Austrian Government also pays for most of the costs incurred for travel to school or the training location as well as educational material for children and young people enrolled in schools or undergoing training as apprentices.

In Australia, low-income 18-24 year-olds in full-time education and 16-24 year-olds in Australian Apprenticeships can benefit from income support through the Youth Allowance Student Payment.

In the Netherlands, students and apprentices under the age of 18 receive free education and training and their parents remain eligible for child benefits. But apprentices, unlike other vocational students, are not entitled to reductions in public transport costs.


Policy issue 2.2: Strengthening the general education component of youth apprenticeship

This section argues that young apprentices in England would benefit from stronger general education, including better basic skills, and discusses how this could be achieved.

Challenge: Increasing general education in youth apprenticeships leading to stronger basic skills

The 2012 Survey of Adult Skills showed young people in England had low basic skills

Young people in England perform less well on the basic skills of literacy and numeracy than their peers in many other OECD countries. According to the Survey of Adult Skills, England has one of the largest shares of 16-24 year-olds with weak basic skills among the participating countries, and those with vocational qualifications are particularly at risk (OECD, 2016a).

Requirements for English and maths among apprentices have been increased

To ensure all young people have adequate maths and English, the government now requires all young people, including apprentices, to pursue at least Level 2 qualifications in mathematics and English (at least GCSE C or equivalent), and pays the provider GBP 471 for delivery of the relevant qualification. In 2014 around half apprentices under 25 received education and training in basic skills during their working hours in England (BIS 2014, 2016a).
The new reformed vocational education and training (VET) system is intended to improve basic skills among young people by introducing a common core of more general education in vocational strands. As well as good literacy and numeracy, everyone will be provided with the essential set of digital skills necessary to succeed in the modern workplace (BIS, 2016, pp. 24). Precise requirements and how they will apply to young apprentices are not entirely clear as yet.

**General education is an important part of vocational education and training**

General education is defined here as leading to generic knowledge and skills, not directly relevant to a specific occupation and applicable in most contexts of work and life. It would include numeracy, literacy, science, social studies and civic education. General education is part of occupational training: a well-qualified electrician needs to be familiar with basic mathematical and physical laws. General education does not necessarily require classroom settings, and can take place in informal environments and the workplace. Since informal learning is difficult to quantify, this report compares the amount of formal general education received by apprentices as part of their programmes in different countries, focusing on the upper secondary level (Level 2 and 3 in England).

**In other countries apprentices normally receive more general education than in England**

In Switzerland, all apprentices receive 2.5 hours per week of teaching in the official language, communication, civic education (including some applied mathematics) and 45 minutes of physical education (e.g. see programme for kitchen employees (BBZ Biel Küchenangestellte/r, n.d.). This adds up to 120 hours of basic skills education and sport per year – so approaching 400 hours over a 3-year apprenticeship (Confédération Suisse, 2006). Some programmes are more demanding: an apprenticeship in clock making (in addition to the mandatory 2.5 hours block) requires 90 minutes in mathematics and 45 minutes in informatics per week in the 1st year; 45 minutes in mathematics and 45 minutes in physics in the 2nd year; and 45 minutes in physics in the third year (BBZ Biel Horloger, n.d.). In Germany, apprentices receive 160 hours annually of general education, and this time is divided among subjects such as German, English, sports, and economics or social science (Hoeckel and Schwartz, 2010). In Norway, most apprentices spend the first two years of their apprenticeship in full-time school education before moving to a work placement for the remaining two years of their apprenticeship. During the two school-based years apprentices must pursue 588 hours of basic education including Norwegian (or other official language), mathematics, English, science and physical education (Norwegian Directorate for Education and Training, 2011). In addition to general education, apprentices in the three countries also receive education and training in occupation-specific subjects during their off-the-job education. Conversely, in Australia, the employer-led training packages which define apprenticeships contain relatively limited amount of general education, and for that reason have been criticised as inadequate (see Knight and Karmel, 2011).

**Apprentices in England receive much less general education than their peers in other countries**

Acquisition of a Level 2 qualification in maths or in English typically involves 45 guided learning hours (e.g. Pearson, 2017 and NCFE, n.d.). Assuming guided learning hours are equivalent to learning time, this implies that an apprentice spends roughly one hour per
week on these subjects over a period of a year if she or he does not meet the minimum requirements in English or maths, or two hours per week if she or he does not meet requirements in either subject. This adds up to around 50-100 hours of general education focused on maths and literacy, compared with around 400 hours mandatory education (covering a wide range of subjects) for apprenticeships in the countries mentioned. Some English apprentices will receive more general education if that is what is required by the standard for the specific apprenticeships, but this depends entirely on the standard. These are large differences, recognising that, as explained earlier, the starting point for a young English apprentice will often be numeracy and literacy levels below those of other countries.

*General education should not merely be remedial, it also supports progression to further study*

Basic skills teaching is not mandatory for young people who already have Level 2 English and maths or higher. While some basic skills may be implicit in individual apprenticeship standards, according to the select committee report, some standards provide a worryingly narrow set of skills (House of Commons, 2017). Many standards do not require classroom teaching in basic skills other than those directly related to the specific occupational skills (see GOV.UK, 2017b). Given the aspiration to develop higher-level apprenticeships, and provide all apprentices with the kind of core academic skills that will facilitate further studies, more general education will be needed. It is not enough, as at present, to define a remedial numeracy and literacy module for those lacking the relevant prior school qualifications. Pullen and Dromey (2016) also argue that insufficient general education is included in youth apprenticeships to support progression to further study, and in comparison with strong European apprenticeship systems. On that basis, they argue that Level 2 apprenticeships for 16-18 year-olds should be restructured as pre-apprenticeship programmes that would include more general education.

*This raises a broader issue of the principles defining apprenticeship standards*

In England the apprenticeship standards that will drive the content of the 20% of programme duration required for training (mainly off-the-job) are developed by employers. This makes excellent sense, but it is subject to a limitation that has not been fully addressed in England. While employers will be interested in relevant occupational skills it is not realistic to expect them to take a close interest in general education, including numeracy, literacy and foreign languages. This is because these skills improve the employment opportunities of individuals and increase the chances of employees finding jobs elsewhere. In Austria, Denmark Germany, Switzerland and Norway by contrast, while employers take the lead in defining work-based learning requirements, and the core competences required for the target profession, the curriculum for off-the-job education and training (often also approximating to 20% of programme duration) is developed primarily by government and the education authorities in collaboration with social partners, and is therefore deliberately designed, in terms of its governance, to address the broader educational requirements of young apprentices.

*Policy pointer 2.2: Giving attention to wider education in youth apprenticeship*

The broader education of young apprentices, including numeracy, literacy and digital skills, is extremely important. While more young people have weak numeracy and literacy skills in England than in many other countries, young apprentices receive less general education than their apprentice counterparts in many other countries. New requirements for the study
of maths and English among apprentices are to be welcomed, but they do not go far enough. They do not address the needs for higher-level literacy and numeracy skills, and wider education, so as to support higher-level apprenticeships and pathways to further study.

- In the long run, all apprenticeships should provide more general education, including for apprentices that already have Level 2 English and maths qualifications. More demanding requirements may be necessary for youth apprenticeships, for example through a pre-apprenticeship programme linked to a technical qualification, with general education as a precursor to a full apprenticeship. This would be consistent with the government's broader strategy for post-16 education.

**Analysis: Apprenticeships conveying strong basic skills are associated with better outcomes**

**Basic skills provided early on lead to many benefits**

There is solid evidence showing that good numeracy and literacy skills developed early on in life yield positive labour market and social outcomes (OECD, 2013). This is because learning is a dynamic process, in which successive stages depend on skills acquired previously (Heckman, 2008). In many countries with strong apprenticeship systems young people may choose apprenticeship when they reach upper secondary level (Level 2 or 3 in the United Kingdom) at around the age of 16. Often, this level of education is seen as an educational minimum, and for this reason apprenticeships often include some of the same type of education received by their peers in full-time school education and training. This will commonly include numeracy, literacy and other generic skills, taught off-the-job in a vocational school or an equivalent institution.

**Strong basic skills increase the actual and perceived value of apprenticeships**

Recent research shows that young people in England associate apprenticeships with limited future career choices and poor opportunities for academic progression (e.g. Mann, 2016). For apprenticeship to be attractive to young people, it should lead to outcomes that are at least as good as those arising from alternative routes that would have an equivalent ‘cost’ to the student. The outcomes can be measured in terms of wages, employment opportunities in short and long term, and opportunities to continue in education and training. All these outcomes are positively associated with basic skills, and in England, the labour market returns to numeracy and literacy skills are greater than in many other countries (OECD, 2013). For high ability students, apprenticeship that also includes a strong element of the core academic skills, including numeracy and literacy, and that therefore support further learning, will be particularly attractive. The capacity of apprenticeship to attract high ability young people will in turn encourage employers to offer apprenticeships. A strengthened element of general education would therefore allow apprenticeship not only to stand comparison with high-quality apprenticeships in other countries, but would also compete well with other offers, including post-GCSE options such as A-levels, the new T-levels and other forms of full-time post-secondary education.
Apprenticeships can help to transition young people with weak basic skills through to completion

For those apprentices with the weakest basic skills, there is a substantial risk of dropout. Chapter 6 looks at the arrangements made by other countries to address this challenge, including pre-apprenticeship programmes that prepare young people to enter full apprenticeships, targeted support for those at risk during their apprenticeship, including additional support for numeracy and literacy, and special types of apprenticeship adapted to those with the weakest basic skills. All these measures are very relevant to English apprenticeship. But effective general education, with significant attention to basic skills, should be very much part of this effort.

Analysis: Funding the general education component of apprenticeships

In some other countries government funds the general education component of apprenticeship

In apprenticeship systems in continental European countries apprentices typically receive general education, including basic skills, as well as some more theoretical training in their target occupation, off-the-job in a vocational school or college. Funding arrangements often depend on the age of participants and the level of qualification. Off-the-job education in apprenticeship programmes for young people that lead to upper secondary qualifications is typically fully funded by public authorities. Off-the-job education for apprentices at post-secondary level and for older individuals sometimes involves fees. For example, in the Netherlands, while apprentices who are below the age of 18 receive their education and training for free, those who are 18 and above must pay tuition or course fees, which are set every year by the government (Ministerie van Onderwijs, 2011).

In England, also general education for apprentices is funded by government

Like other countries, in England, Level 2 English and maths is fully funded by the government, the provider receiving GBP 471 for delivery of the relevant qualification. If more general education, including basic skills, were to be introduced in all youth apprenticeship programmes at Levels 2 and 3 (the equivalent of upper secondary education elsewhere) the government would need to cover the cost. State funding would be justified on the grounds of efficiency as early investment in skills yields larger benefits than interventions later in life and on the grounds of equity, if other comparable qualifications provided in public institutions, such as technical education and A-levels, are provided free of charge. It would also be consistent with the practice in other countries in respect of state-funded off-the-job education of apprentices.

An increase in general education requirements for apprentices would increase the time which employers would need to release apprentices

An increase in general education requirements would add to the existing cost to employers of releasing apprentices for training for 20% of their time. For example, currently an additional 90 minutes of basic skills per week is provided to apprentices without Level 2 English and maths, thus increasing the proportion of off-the-job training time to around 24%. This is consistent with arrangements encountered in other countries where apprentices spend between 25-30% of their time off-the-job (see Table 1.1). But further increases in the off-the-job time or extension of basic skills teaching to all youth apprenticeships (including those who already have Level 2 English and maths) might well meet resistance from
employers in England who since April 2017 have had to pay the apprenticeship levy. This could lead to fewer employers offering apprenticeships to young people.

*But this additional cost is offset by the subsidy received by employers who provide apprenticeship to those under 19*

The employer cost of taking on young apprentices is reduced by a subsidy of GBP 1,000 offered to employers when they take on 16-18 year-olds, (or 19-24 year-olds who are in care or who have an education and health care plan). Employers are free to direct some or all this additional incentive payment to providers should they wish (DfE, 2017). If the scheme is to be preserved in the future this additional money could cover the cost of the apprentice wage while apprentices are off-the-job in English, maths and other general education classes.

*Provision of basic skills prior to starting on apprenticeships may be another option*

Alternatively, apprenticeship could be organised in blocks, linking apprenticeship to new planned vocational/technical education qualifications and apprenticeships (BIS, 2016). Students would first receive school-based education, which would formally be in pursuit of a technical qualification rather than defined as an apprenticeship, followed by an apprenticeship involving work placement with a company and off-the-job education as currently defined in standards. This would follow the Norwegian model of apprenticeship. The employer would therefore not incur any costs associated with the school-based education and training. In this model young people would be able to acquire relevant information about available apprenticeship options that would inform their career choice while still in school. Evidence shows that currently career information in schools in England is skewed towards academic options (Mann and Huddleston, 2016; Ali, 2016). This proposal is in some ways similar to the policy option proposed by Chapter 6 of this report, and to the IPPR (Pullen and Dromey, 2016) proposal that lower level apprenticeships for 16-18 year-olds should be replaced by a pre-apprenticeship programme, including a qualification, with a stronger element of general education. This chapter argues that this model, involving a period of general education and some occupational training, followed by a period of work-based learning with the company, can also be successfully applied in higher-level qualifications.

**Notes**

1. Those with learning difficulties and disabilities will be exempted from this requirement.
2. Countries with large apprenticeship systems are those with at least 10% of the young people enrolled in apprenticeship as shown in Figure 1.1.
References


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