TAKING TRAINING SERIOUSLY: 
LESSONS FROM AN INTERNATIONAL 
COMPARISON OF OFF-THE-JOB TRAINING 
FOR APPRENTICESHIPS IN ENGLAND 

SIMON FIELD
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ACKNOWLEDGEMENTS
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EXECUTIVE SUMMARY AND POLICY RECOMMENDATIONS

INTRODUCTION
This report compares off-the-job training (OffJT) in apprenticeships in England with parallel arrangements in other apprenticeship countries, aiming to identify some of the main challenges involved in delivering and regulating off-the-job training. Policy recommendations are advanced.

Apprenticeship has a proven record as a powerful tool for vocational education and training. In England, a sequence of reforms aims to ensure that apprenticeship is adequately funded; that employers are more fully engaged in its provision; that apprentices acquire an agreed minimum of general education; and that the qualifications to which apprenticeships lead have a clear place in the qualifications system as a whole. While welcoming these objectives, this report aims to identify areas where further improvements are necessary.

The apprenticeship system of England is distinctive in many respects. It is more diverse than in most countries, so that the notion of a 'typical' apprenticeship makes limited sense. It includes both young school leavers and adults (often incumbent workers). Programmes range from one to several years in length, and from very basic skills levels to programmes at degree level and above. OffJT now has a central place in the English apprenticeship system, accounting for a required minimum of 20% of the apprenticeship programme. This was in part a response to a history of insufficient training in many apprenticeships. OffJT in England has a special definition, and can also include training in the workplace and that delivered by employers registered as employer-providers.

GIVING APPRENTICES THE RIGHT QUANTITY AND MIX OF TRAINING
In other countries, apprentices’ time spent in a school or college and not with the employer often represents between 15% and 30% of the apprenticeship programme. But especially in the dual system countries, apprentices, in addition to their off-the-job time in schools, also spend much of their time in employer-organised training outside productive work, so that total off-the-job training may be as much as 50% of the programme. (While, informally, much unfunded employer-organised training also takes place in English apprenticeships, it is less systematic). While the 20% minimum requirement has been controversial, international comparison therefore suggests that in England, the 20% should be treated as a bare minimum. In the past, the required minimum amount of off-the-job training has been widely ignored, with as many as 40% of apprenticeships offering less than the minimum. OFSTED faces capacity challenges, and it has itself recognised that weak practice is already too common.

**Recommendation 1.** The requirement of 20% off-the-job training should be treated as an absolute minimum, recognising that most quality apprenticeships will offer more than this. The minimum requirement should be robustly enforced, with adequate resources for the task.
INCLUDING SUFFICIENT GENERAL EDUCATION

In most countries, general education is routinely provided to all young apprentices as part of their programme. In England, despite a recent requirement that all apprentices should have or pursue at least level 2 qualifications in maths and English, the general education requirements are still not sufficiently strong. Even though teenagers in England are more prone to weakness in numeracy and literacy than in most other apprenticeship countries, the general education component of youth apprenticeship is limited. In comparison, in the dual system countries, all apprentices spend some hours a week on literacy, maths and foreign language skills, while in Norway apprentices spend two years in school before starting their work placements. The Independent Panel on Technical Education (2016) has argued convincingly that all young people should be equipped with minimum standards of numeracy, literacy and digital skills, a commitment that should be embodied in the new T-levels. General education for apprentices allows them, on graduation and if they wish, to progress to further and higher education, and to succeed in their careers. While some countries provide general education to young apprentices, in others, such as Ireland and Canada, most apprentices are older, and already have upper secondary qualifications that should, at least in principle, have developed their basic skills.

**Recommendation 2.** Apprenticeship for young people under 19 should require more general education delivered off-the-job, consistent with the expectations for all young people advanced by the Independent Panel on Technical Education. More general education will underpin the successful outcome of the apprenticeship itself, and help to provide for the career and learning progression of graduate apprentices. To achieve this outcome, more attention should be given to the resourcing and development of high-quality teaching capacity.

DELIVERING QUALITY IN OFF-THE-JOB TRAINING

In the past, alongside much good practice in apprenticeship in England, there have been serious quality problems: sometimes little off-the-job training has been provided and sometimes it has been poor quality. International experience suggests that market competition between training providers is unlikely to drive quality improvements mainly because quality is difficult to observe. The quality assurance systems currently in place are not sufficient, particularly to respond to the new requirements of apprenticeship standards and growing numbers of higher level apprenticeships. Quantitative indicators are not adequate on their own, and will not necessarily highlight problems given small sample sizes and unclear division of accountability between training providers and employers.

**Recommendation 3.** Recognising that minimum standards have not been met in the past, there needs to be a step improvement in the quality assurance systems governing off-the-job training, so that they ensure that standards are being met.
LINKING OFF-THE-JOB TRAINING IN AN APPRENTICESHIP TO AN OCCUPATIONAL QUALIFICATION

Apprenticeship, as a form of learning, is often confused with the qualification to which it leads. The qualification in question should confirm the possession of all the skills, knowledge and behaviours required by a target occupation. For adults with relevant work experience seeking qualifications, the full programme of off-the-job training associated with an apprenticeship would not be desirable or appropriate. Instead, skilled workers should be able, as in other countries, to obtain that qualification directly through the final assessment, without having to go through an apprenticeship programme.

Recommendation 4. The final assessment associated with an apprenticeship standard should be certificated with a label which differentiates that qualification from apprenticeship – for example an ‘occupational diploma’. On the model of other countries, adults with relevant experience should be permitted to pursue the final assessment and obtain this diploma without having to pursue a full apprenticeship.

ENSURING BREADTH IN TRAINING PROVISION AND QUALIFICATIONS

In any apprenticeship, off-the-job training can and should provide a counterbalance of broader education and training to complement on-the-job training, which is more narrowly specific to the individual employer. But this depends on an underlying apprenticeship standard of sufficient breadth. In England, some of the new apprenticeship standards are narrow, and standards are more numerous than apprenticeship qualifications of comparable countries. This reflects the way in which other apprenticeship countries than England ensure a counterweight to pressures from employers in narrow occupational domains for ‘their’ apprenticeship standard. Over-narrow standards will be unhelpful to young apprentices seeking a good start to their working lives, and will damage the apprenticeship brand.

Recommendation 5. Too many apprenticeship standards have insufficient breadth, and their numbers are increasing unnecessarily. The Institute for Apprenticeships and Technical Education should ensure that all apprenticeship standards have sufficient occupational breadth to correspond to a meaningful occupation. To this end the Institute needs to establish more demanding criteria before agreeing to new Trailblazer groups and launching new standards, and promote mergers between standards and their associated Trailblazer groups.

ARTICULATING APPRENTICESHIPS WITH T-LEVELS

There is some ambiguity about the relationship between T-levels and apprenticeship standards, and therefore in the requirements for OffJT. Part of the challenge arises from the diversity in length and level of apprenticeship standards. While, in theory, T-levels and apprenticeships are different paths to the same
occupational goal, in practice some divergence is likely, given the inclusion of more general education in T-levels. International experience offers different models for logical relationships between the two pathways and target qualifications. Countries such as the Netherlands have successfully established both school-based and apprenticeship routes to the same vocational qualification. In some countries there is a division of labour between apprenticeship and other forms of vocational training, with apprenticeship being limited to only some occupational sectors. Alternatively, T-levels might precede apprenticeship. These models have different implications for the mix of OffJT to be provided within apprenticeship programmes. Whatever the model, clarity will be important for both students and employers, so that students can follow the right path to achieving their occupational targets.

**Recommendation 6.** More clarity is needed on the relationship between T-levels and apprenticeship standards, so that there are clearly defined routes to the qualification needed to work in any occupation.

**SUPPORTING SOCIAL MOBILITY**

Apprenticeship, as a key part of the skills system, needs to play its part in delivering equity and social mobility. Currently, apprenticeship offers too few opportunities for career progression, and although apprenticeship at level 3 and above offers good returns, access to such programmes is surprisingly dependent on social background. The development of more demanding apprenticeship standards (including degree apprenticeships) is an opportunity, but it may also be a risk if the result is to make success in higher level apprenticeships the privilege of elites. Off-the-job training needs to provide the targeted support necessary that will allow those who have been less well prepared academically to succeed in their apprenticeships and gain access to rewarding careers, including opportunities to obtain more advanced qualifications.

**Recommendation 7.** Off-the-job training needs to be appraised for its equity characteristics, including the extent to which it targets support on those with the greatest needs and helps them to succeed. Off-the-job training must also develop apprentices’ study skills, providing apprentice graduates with the capacity to enter and succeed in further and higher education.
ENHANCING THE OFF-THE-JOB CONTENT OF YOUTH APPRENTICESHIP

In England, about one quarter of apprenticeship starts are for those aged 16 – 18. To match youth apprenticeships in other countries, those in England need to have the length and breadth necessary to launch a career, rather than just fill one job, (as in Recommendation 5) and be underpinned by substantial general education in the off-the-job element of the training (as in Recommendation 2). This means that youth apprenticeships have to be longer than the current minimum of 12 months. This will also be necessary to make youth apprenticeship properly comparable with two-year T-levels.

Recommendation 8. Youth apprenticeships need to have the quality and status to be a convincing alternative to T-levels, providing young people, through off and on-the-job training, with the range of general skills and extent of occupational training that can successfully launch their careers. To achieve this objective, youth apprenticeships should be a minimum of 24 months in length – comparable to most other apprenticeship countries. Additional government support, over and above that already in place, may also be necessary to ensure the success of youth apprenticeships.
SECTION 1 INTRODUCTION

This report compares off-the-job apprenticeship training in England with the experience of other countries

This report, commissioned by the Gatsby Foundation and drawing on available literature, looks at off-the-job training in English apprenticeship, and compares the experience of other countries. It identifies some key issues and challenges for off-the-job training, and advances policy recommendations.

Apprenticeship is experiencing rapid reform

In the 1960s, about one third of 15 – 17-year olds entered apprenticeship (Harris, 2003), but in the following decades, apprenticeship was neglected, with apprentice numbers in Britain in manufacturing and engineering falling from just under 400,000 in 1964 to under 100,000 in 1989 (Broadberry, 2005). This has led to an occasional misperception that England has no tradition of apprenticeship. In fact, in the UK and England, as in many other countries, apprenticeship has played a large role in the education and training of young people for centuries. The last half century has been marked by a rapid sequence of reforms, through the introduction of Modern Apprenticeships in the 1990s, the 2012 Richard review, and consequent replacement of apprenticeship ‘frameworks’ by ‘standards’, the launch of the apprenticeship levy and the creation of the Institute for Apprenticeships and Technical Education1 (Mirza-Davies, 2015a, 2015b; Powell, 2017). This pace of change and reform is itself remarkable, whether set against a long apprenticeship tradition in England, or against the relative stability of some other leading apprenticeship countries.

The broad objectives of reform are commendable

The strategic objectives of recent reforms in the apprenticeship system are right. Apprenticeship has a proven record as a powerful tool for vocational education and training in England, and reforms have sought to re-establish its central role in the English skills system. These reforms aim to ensure that apprenticeship is adequately funded; that employers are more fully engaged in its provision; that apprentices acquire an agreed minimum of general education; and that the qualifications to which apprenticeships lead have a clear place in the qualifications system as a whole. Moreover, the reforms build on the undoubted high quality of the best apprenticeships in England. While welcoming these objectives, this report identifies several areas where further improvements are necessary to establish an apprenticeship system of the highest quality, that can compare well with the strongest apprenticeship systems internationally.

The core defining feature of apprenticeship is a contract between the employer and the apprentice

In the classical apprenticeship contract, the employer trains the apprentice, and in return the apprentice works for the employer. Contracts of this form can be found in Babylonian times, several centuries before the birth of Christ (Kedar, undated). For most of the period since then, apprenticeship training has been delivered by employers, integrated into daily work. It is only in the last few hundred years that off-the-job training (abbreviated in this report as OffJT) in a vocational school, college or workshop has become common and increasingly

1 As the ‘Institute for Apprenticeships’ will be renamed the ‘Institute for Apprenticeships and Technical Education’ in 2018, the new name for the organisation will be used throughout this report.
obligatory for apprentices. In England, in the early part of the twentieth century, OffJT first emerged as apprentices started to attend local government-provided night school, and a growing number of apprentices attended school on a day-release basis by the Second World War (Gospel, 1994).

The single system approach of England is quite different from the dual system
In England, in the era of Modern Apprenticeships in the early 2000s, employers could register as employer-providers (as they can today) and provide all the training themselves, very often on site (Harris, 2003). All the training had a single target, namely a single set of competences associated with the occupation. This ‘single system’ history contrasts with the situation for example in Germany, which started to make off-the-job learning in vocational schools mandatory during the 19th century. From 1883, apprentices under the age of 18 were required to attend part-time vocational school. Germany cemented these arrangements with further reforms in the 20th century thereby establishing, in the dual system, quite separate and complementary education and training responsibilities for the training firm and the vocational school (Gessler, 2017).

From 2013, 280 hours of guided learning were required in apprenticeships
The Richard review of apprenticeships (Richard, 2012) led to several reforms of off-the-job training. From 2013, the Specifications of Apprenticeship Standards (DfE, 2017a) introduced new rules on OffJT. Apprenticeships had to be of at least 12 months in length, and level 2 and 3 apprenticeship frameworks had to include at least 280 hours of ‘guided learning’, of which 100 hours, or 30% (whichever was greater) had to be off-the-job (Mirza-Davies, 2015).

New rules mean that 20% of apprenticeship programmes must now be in off-the-job training
New funding rules, introduced alongside the apprenticeship levy in 2017, further changed the way in which the minimum training requirements for apprenticeships are determined. Apprentices are now required to spend a minimum of 20% of their paid working time in OffJT, potentially including all training outside productive work (Education and Skills Funding Agency, 2017). Most levy funding for apprenticeships will go to activities identified as OffJT, alongside assessment. These new requirements, backed by a new definition of OffJT, now drive apprenticeship provision. These reforms seek to ensure that apprenticeship includes a substantial amount of training of whatever type, against a historical background where too many apprenticeships involved little actual training.

Apprenticeship in England is distinctive in many respects
Apprenticeship in England is remarkably diverse, in that it ranges from short programmes of little more than a year offering low-level skills, to programmes occupying four years or more. It covers a wide range of fields of study, and serves quite different student groups, including those opting for a degree apprenticeship as a practice-focused way of achieving a university degree as well as those with very weak prior attainment seeking a basic job qualification. Apprenticeship standards can be as broad as a ‘teacher’ or as narrow as a ‘dual fuel smart meter installer’ (see Section 5 for a discussion of occupational breadth). This means it is very difficult to meaningfully refer to a ‘typical’ apprenticeship in England. In that respect it contrasts with many other countries, where apprenticeships are more homogeneous.
Apprenticeships in England are often shorter and lower level than in many other countries, and often involve adults
While recognising this diversity, apprenticeship in England is on average, shorter and lower level than in other apprenticeship countries, with apprenticeships of little more than a year in England contrasting with three and four-year programmes that are usual elsewhere. To some extent this reflects different types of target jobs and careers, and sometimes also different expectations of the level of skills in job roles which are formally similar. It is also a development of recent decades: Broadberry (2003) notes that in the early post-war period, British apprenticeships, at around five years in length, were much more substantial than their three-year German counterparts. In England, a rapid growth in adult apprenticeships in recent years means that only a minority of apprentices are young school leavers entering employment, and most are incumbent workers and adults. This is very different from most continental European apprenticeship systems where apprentices are usually school-leavers, but is closer to the English-speaking countries, including Canada and the US, where adult apprenticeship is the norm, and to Australia, where, like England, adults represent a growing proportion of a mixed apprentice population (Knight and Karmel, 2011).

The literature identifies three different types of off-the-job training
Three different forms of off-the-job training can be identified, and are set out below. In England, while the distinction between general and occupation-specific education and training is well-recognised, there is less attention to the distinction between theoretical and practical training. In some of the countries of continental Europe, the distinction between all three different types of OffJT is very clearly marked.

- **General education.** This will include the teaching of maths and literacy skills and other general education subjects such as history and a foreign language. This is usually taught in the classroom, although sometimes maths and literacy can be taught in the context of vocational training.

- **Theoretical vocational education and training.** This will include education related to the target occupation, including some of the general principles and science behind the practice. The nurse will learn some medicine; the baker about the science of yeast; the electrician the physics of electricity.

- **Practical training outside of productive work.** This will include workshop training, in which the apprentice learns how to perform practical tasks, operate machinery and undertake projects. But it is not part of ordinary productive work, and is therefore ‘off-the-job’.
Three distinctions are linked to the definition of off-the-job training. Some other key distinctions are linked, and sometimes conflated with the distinction between on and off-the-job training. These are distinctions of:

- **Provider**: between apprentice training delivered by the employer, and that delivered by a separate external training provider, such as an FE college.

- **Location**: between training undertaken in the workplace, and that undertaken in a separate location.

- **Integration**: between training which is integrated into productive activity – when an apprentice learns by doing – and when an apprentice learns outside such productive activities.

Apprenticeship training can be classified into five subcomponents. These three distinctions allow for a classification of apprenticeship training as in Table 1.1. Employers may provide training in the workplace both as part of productive activities, and separately, and they may also deliver training outside the workplace, for example in a company workshop or classroom (sometimes shared with other employers). External training providers may provide training outside the workplace, or less commonly, in the workplace.

Table 1.1. Off-the-job training in English apprenticeships

<table>
<thead>
<tr>
<th>Location of training</th>
<th>In the workplace</th>
<th>Outside the workplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider delivering training</td>
<td>Employer</td>
<td>As part of productive activities</td>
</tr>
<tr>
<td>External training provider</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In England, fundable off-the-job training can include all types of training apart from when it is part of productive work. Fundable OffJT includes the training provided by an external training provider, and some of this may take place in the workplace. Where an employer is registered as an employer-provider, OffJT can also include training provided by the employer in the workplace and sometimes elsewhere. Since only some employers with apprentices register as employer-providers, some employer-provided training is not funded. OffJT excludes training delivered as part of the productive process. (Education and Skills Funding Agency, 2017).

2 The funding rules (Education and Skills Funding Agency, 2017) state: “Off-the-job training is training received by the apprentice, during the apprentice’s normal working hours, for the purpose of achieving their apprenticeship. It is not training delivered for the sole purpose of enabling the apprentice to perform the work for which they have been employed” (paragraph 32). The latter sentence appears to prevent most training delivered during productive work from being funded as off-the-job training. Moreover paragraph 91.15 rules out funding for “time spent by employees/managers supporting or mentoring apprentices... For example, we would not expect to pay for any time spent by the apprentice’s line manager for any of these activities”. Since the main cost of training during productive work is the guidance and feedback offered by line managers, this also means that training during productive work cannot be effectively treated as fundable off-the-job training.
Dual system apprenticeship divides the training cake quite differently

The approach in England may be contrasted with many other apprenticeship systems. In dual system apprenticeships for example, the main regulatory distinction is between training provided by the employer (in different forms and contexts), and that provided by the vocational school (the external provider) – typically outside the workplace (see Table 1.2). Regulation on work release then determines how much time the apprentice spends at the vocational school, as opposed to with the employer. For example, in Germany, a framework agreement determined by the German Länder (regions) in the Standing Conference of the Ministers of Education and Cultural Affairs (KMK) requires at least 12 hours per week of vocational education in schools for apprentices (see Gessler, 2017). The employer and external provider have separately defined training requirements, and the employer has discretion – for example over the mix between training as part of productive activities and that delivered separately. This is indicated in Table 1.2.

Table 1.2 Key regulatory distinctions in dual system apprenticeships – e.g. Austria and Germany

Shaded area indicates different types of training provided (vocational schools do not usually offer training in the workplace)

<table>
<thead>
<tr>
<th>Location of training</th>
<th>In the workplace</th>
<th>Outside the workplace</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employer</strong></td>
<td>As part of productive activities</td>
<td>Separately from productive activities</td>
</tr>
<tr>
<td>(working with one part of the curriculum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>External training provider</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(vocational school)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(working with a second part of the curriculum)</td>
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</tbody>
</table>

Comparing off-the-job training in England and other countries is not straightforward

The comparison of OffJT, in its modern English form, with the apprenticeship systems of other countries, is therefore not straightforward. Other systems tend to cut the apprenticeship training ‘cake’, illustrated in the diagrams, in different ways. But this does not invalidate comparison. Across all countries, there are similar reasons why some types of knowledge and skills are best imparted in the workplace, or not; are best built into the experience of productive work, or separately; are best delivered by the employer; or by an external provider.
SECTION 2 GIVING APPRENTICES THE RIGHT QUANTITY AND MIX OF TRAINING

There has been a decline in the overall amount of employer-provided training. There is a long-standing anxiety in the UK over weak productivity levels and growth relative to Organisation for Economic Co-operation and Development (OECD) competitors (OECD, 2017; Dolphin and Hatfield, 2015). One potential reason for this weakness is inadequate investment in skills. A survey by Green et al. (2013) identifies a significant reduction in employer-provided training in recent years. Green and his colleagues used data from eleven separate survey sources to argue that average training volume per worker declined by about half between 1997 and 2012, with the sharpest declines affecting the young, the poorly educated and those in the private sector. While this argument has been challenged, (see Amin-Smith et al., 2017), the consistency of Green’s findings across multiple data sources make them more convincing. The reasons for the decline, as Green and his colleagues acknowledge, are unclear.

Current reforms to apprenticeship are a response to this decline. Wolf (2015), in an influential paper, cites this decline in employer investment in training as one of the main reasons why an apprenticeship levy would be desirable. A more general rationale for training levies is that they correct the tendency of employers, if left to themselves, to provide insufficient training: this tendency is because, in theory at least, workers rather than employers benefit from employer investment in those skills which are not firm-specific (Johanson, 2009). Against this background, the apprenticeship levy was introduced in 2017, and the minimum of 20% of apprentices’ time spent in OffJT established.

Countries define on and off-the-job training differently. Table 2.1 sets out country responses when asked about off-the-job training in apprenticeship and on the face of it suggests a range of 15 – 30% for the proportion of a programme spent in OffJT. However, in this survey, OffJT was not defined for respondents. Very often, as explained in Section 1 above, countries divide apprentice time between a) time spent with the employer — including time in which they receive training from the employer, and b) time spent in a college environment, away from the job, receiving training and education.
Table 2.1 How countries describe their ‘off-the-job’ training
Selected countries (other than England) responding to the OECD – G20 questionnaire, 2013

<table>
<thead>
<tr>
<th>Country programme</th>
<th>How countries described the quantity of ‘off-the-job training’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
<td>Apprenticeship Traditional training models provided for apprentices have included one day per week (or the equivalent in ‘block training’) at a training provider.</td>
</tr>
<tr>
<td><strong>Belgium Flanders</strong></td>
<td>Dual system and ‘Part-time education’ Dual system: in-company training (four days per week) and training (one day). Part-time education: three days per week of in-company training, two days theory in centre for part-time education.</td>
</tr>
<tr>
<td><strong>Brazil</strong></td>
<td>Apprenticeship Theoretical training, delivered by a training institution, must represent between 30% and 50% of the program total.</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>Apprenticeship 80% to 90% of an apprentice’s training time takes place in the workplace. The remainder is typically provided at a public or private college, a union training centre, or other training organisation, usually in eight-week training blocks. In Quebec, the in-class training is taken prior to the apprenticeship.</td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
<td>Apprenticeship One-third of the studies take place at school providing theory and basic practical skills.</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td>Apprenticeship The programme includes 20 to 30% of theoretical instruction in vocational institutions.</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>Apprenticeship Usually three weeks a month are dedicated to training with the employer and one week dedicated to off-the-job training, which takes place in Centres de Formation des Apprentis. It includes both general and technical education in class, and technical and practical training in workshops.</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>Apprenticeship Training is mainly provided in the company (three to four days per week) – supported by teaching in vocational schools (one to two days per week).</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
<td>Apprenticeship About 20% of the total programme duration is spent in off-the-job training, in a Training Centre, Institute of Technology or College of Further Education.</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>3-4-year apprenticeship for 15-25 Off-the-job training includes between 400 and 990 hours/training, depending on entry-level competences of apprentices and the training pathways. Accredited agencies provide the training.</td>
</tr>
<tr>
<td><strong>New Zealand</strong></td>
<td>Apprenticeship Off-the-job training includes a minimum of 40 credits per year (each credit is equivalent to 10 notional learning hours) or a third of a full-time course load, provided by public and private industry training organisations.</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td>Apprenticeship The programme normally includes two years at school with practical training in school workshops and short work placements in a company, followed by two years at an enterprise or public institution, involving one year of training and one year of productive work.</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td>Apprenticeship Training takes place through the totality of the programme, three to four days per week with the employer; leaving one to two days at the vocational school.</td>
</tr>
<tr>
<td><strong>UK – Scotland</strong></td>
<td>Modern Apprenticeship Proportion of on and off-the-job training varies depending on the framework followed. The training provider can be a private business, college or Group Training Association (where employers group together to fund organisation to deliver training for their industry).</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td>Apprenticeship For each year of the apprenticeships, there is a recommended minimum of 144 hours of related classroom instruction (plus 2,000 hours of on-the-job training). Training is provided by apprenticeship training centres, technical schools, and community colleges.</td>
</tr>
</tbody>
</table>

*Source: OECD (2014)*
In some countries, employer-provided training is a major addition to vocational school education

Employers in Switzerland and Germany (as in other dual system apprenticeship countries) often organise training in workshops and classrooms, and these are also sometimes organised collectively by groups of employers. This training is ‘off-the-job’ (outside productive work) but additional to the one or two days a week that the apprentice spends in vocational school. The German government authorities indicate that the apprenticeship training is “mainly provided in companies” and this is simply “supported” by training in the vocational schools (OECD-G20, 2014). 70–75% of the resource costs of training in the dual system are estimated to fall to the employer (Bliem, Petanovitsch and Schmid, 2016). The total percentage of apprentice time spent in training ‘off-the-job’ (outside productive work) would therefore be very much higher than 20 – 30%. In the rather different Norwegian system, apprentices are expected to spend the first of their two years with an employer in training, and only their second year in productive work. In this case too, the employer makes a large additional contribution to off-the-job training, over and above the time spent in school (50% of the apprenticeship programme; see Box 7.1). In practice, therefore, some of the stronger apprentice systems internationally offer a great deal more than 20% of the programme in ‘off-the-job training’ in the inclusive sense of the English definition.

In England, nearly 40% of apprentices have been receiving less off-the-job training than required

The apprenticeship learners survey, undertaken in early 2017, suggests that nearly 40% of level 2 and 3 apprentices were receiving less than the statutory minimum of five and a half guided learning hours per week required by the rules for apprenticeship frameworks: a third (33%) received one to five hours of formal and informal training per week while a further 4% received under an hour. Fully half of the apprentices over 25 were receiving less than the statutory minimum amount of training. This last finding reflects a strong association between age and the amount of training – so that, on average, apprentices under 19 spend around 20 hours, or half the working week, in some form of training, while those over 25 receive half that amount (DfE, 2017b). At the same time, many apprentices, and particularly young apprentices in traditional apprenticeship sectors such as construction and engineering, are receiving good quantities of training (see Table 2.2). This is consistent with the findings of OFSTED (2015), and suggests that the problem of insufficient training is not so much with apprenticeship overall as with the weakest sectors.

Apprentices spend more time learning on-the-job than off-the-job

In early 2017, apprentices were receiving 14 hours of training per week on average, made up of just over four hours with an external provider, just over three hours of formal training in the workplace, and seven hours of training during normal working activity (see Table 2.2). The implication is that on average, (and recognising that the average conceals some very large variations), level 2 and 3 apprentices receive between four and seven hours a week of OffJT, less than the seven hours on average they receive while going about their work.
Training built into productive work – ‘learning by doing’ – has some special qualities. Chankseliani et al. (2017) describe the diverse literature which emphasises the value of learning through demanding, difficult work, and how this can engage and empower the apprentice in ways that cannot be replicated by off-the-job training. Fundamentally, learning by doing is learning in a ‘real’ working environment, and although simulated work environments can be very important and useful, and increasingly supported by sophisticated technologies, they will always lack some important elements. Midwives can now be trained using a robot mother giving birth to a robot baby. While this is a very useful technology, it still lacks much in the domain of human interaction between midwife, mother and baby.

Table 2.2. Apprentices spend as much time training while working as they spend in separate training

Weekly number of hours of training of different types reported by level 2 and 3 apprentices in 2017

<table>
<thead>
<tr>
<th>2017</th>
<th>Training at external provider</th>
<th>Formal training in workplace</th>
<th>Training during usual activities</th>
<th>Total training 2017</th>
<th>Total training 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Arts and media</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Business</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Construction</td>
<td>10</td>
<td>5</td>
<td>15</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Engineering</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>26</td>
<td>22</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>ICT</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Leisure</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Retail</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Science</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>All fields of study</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>14</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: DfE (2017b) Apprenticeships evaluation 2017: learners

In some countries, employers can constructively replace off-the-job with on-the-job training

Given a free choice, employers may decide either to train their apprentices outside productive activities (for example in a separate classroom or workshop) or alternatively, during productive working activities, provide guidance and feedback to apprentices who are learning by doing. Typically the latter approach is more challenging for employers, as it involves careful supervision of partially skilled workers as they perform productive tasks, imparting skills while also managing the risks involved. But this approach can also be more rewarding because the apprentices contribute more to output, and may also learn faster because of the real-world demands on them. Jansen et al. (2016) showed that German firms adapted to labour market deregulation in the early 2000s by increasing the proportion of time apprentices spend undertaking productive tasks, while maintaining the quality of learning outcomes. Efficiency gains were realised by reducing OffJT in favour of training integrated into production in a context where the apprentice employer, as in Germany, is obliged to realise training outcomes but has discretion over how they are realised (see also Kis, 2016).
In England, better enforcement is needed to ensure that all apprentices receive the required training. Compared internationally, the required 20% of off-the-job training is at the lower end of expectations, with many apprenticeship countries offering more than this. The 20% should therefore be regarded as an absolute minimum, and supplementing it with general education is entirely appropriate. It is worrying that the necessary training minimum does not appear to have been enforced, with as many as 40% of apprenticeships offering less. Most apprenticeships involve adequate or good amounts of training, but the credibility of the apprenticeship brand depends on employers and would-be apprentices being confident that all apprentices have received the statutory minimum amounts of training. Given the evidence, there is a need to look again at the adequacy of current enforcement arrangements for training amounts. The new requirement for 20% of apprentice time to be devoted to OffJT will create a major new enforcement challenge, and OFSTED has itself expressed concern regarding its capacity to handle increased demand for inspection generated by expansion in apprenticeship, particularly in respect of employer-providers (OFSTED, 2017a).

**Recommendation 1.** The requirement of 20% off-the-job training should be treated as an absolute minimum, recognising that most quality apprenticeships will offer more than this. The minimum requirement should be robustly enforced, with adequate resources for the task.
SECTION 3 INCLUDING SUFFICIENT GENERAL EDUCATION

Core academic skills requirements may help progression, but can be a barrier to inclusion

The Independent Panel on Technical Education (2016) has argued convincingly that all young people need strong basic skills, including not only literacy and numeracy but also digital skills. This is partly because rapid technological change is increasing the importance of such skills in underpinning further learning and adaptation in the workplace, and partly because these skills will support the further and higher education to which young people pursuing vocational programmes, including apprentices, increasingly aspire.

Figure 3.1. In England, one-third of teenagers have poor basic skills
Percentage of 16 – 19-year olds with numeracy or literacy levels below level 2: main apprenticeship countries participating in the Survey for Adult Skills, 2012

Source: Kuczera, Field and Windisch (2016) and OECD Survey of Adult Skills (2012)

Teenagers in England have many weaknesses in numeracy and literacy

Using data from the 2012 Survey of Adult Skills, Kuczera, Field and Windisch (2016) show that one-third of 16 – 19-year olds in England have weak basic skills, worse than most comparable countries (see Figure 3.1). This implies that a large proportion of actual and potential entrants to youth apprenticeships will have weak basic skills. Cavaglia, McNally and Ventura (2017), in a recent analysis using longitudinal data, show that prior school attainment – closely linked to basic skills – is a key driver of positive outcomes and progression in English apprenticeships. A much older study showed that, of a group of further education students identified as needing remedial basic skills support, those that went on to receive it were fully three times less likely to drop out (Basic Skills Agency, 1997). (While the group who opted to receive support in this study were probably more motivated, the size of the difference strongly suggests that basic skills support promoted successful completion).
But apprenticeship in England includes less general education than many other apprenticeship countries

In recognition of the basic skills issue, all apprentices are now required to either have already, or pursue, level 2 qualifications in mathematics and English (Education and Skills Funding Agency, 2017). In 2014, around half of the apprentices under 25 were receiving basic skills education (BIS, 2014). Such education is separate from the 20% minimum of OffJT, and is funded directly by government rather than through the levy. Despite this initiative, English apprenticeship programmes still include less general education than those of continental Europe. Kuczera and Field (2018) estimate that, over the course of an apprenticeship programme, apprentices in England typically receive only around 50 – 100 hours of general education focused on maths and literacy, compared with around 400 hours or more of mandatory general education (covering a wide range of subjects) for apprenticeships in Switzerland, Germany and Norway. In Switzerland, for example, throughout a three to four year apprenticeship, all apprentices receive two and a half hours per week of teaching in the official language, communication, civic education and applied mathematics (Kuczera and Field, 2018).

**Box 3.1. Separate curricula for on and off-the-job training in dual system apprenticeships**

In Germany and Austria, the syllabus for the part-time vocational school is prepared separately than for the employer-provided training, but in Switzerland a joint core syllabus is established. The core syllabus in Germany and Austria sets out the basic contents of teaching at VET school, then the details are worked out at the Länder/province level. For example, in Austria, core syllabuses for vocational schools (off-the-job education and training) are initially developed for each apprenticeship occupation by a group of experts headed by the Ministry in Vienna, then put out to consultation. These national syllabuses are then coordinated with the training curriculum required for the company (the training regulation), and converted into specific curricula for each province.

The apprenticeships culminate in a final assessment, organised by the employer organisations in Germany and Austria. These assessments use both practical tests and written exams. Quite separately, there are school-based assessments, which, depending on the country, are taken into account when graduating apprentices. Thus in Germany the school-based results have no bearing on the final examination; in Austria success in the school exam exempts the apprentice from having to pass the theoretical part of the final assessment; in Switzerland the school examination is an integrated part of the final assessment (reflecting the integrated syllabus).

*Source: Bliem, Petanovitsch and Schmid (2016).*
In the dual system, more on-the-job training allows space for vocational schools to provide general education

In countries with dual system apprenticeships such as Germany, Austria and Switzerland, as described earlier; more of the burden of developing practical occupational skills falls on the employer, leaving more space for OffJT, delivered through vocational schools, to include general education. This larger component of general education supports access to higher education (typically through an additional examination) as well as providing the foundations for higher and specialised vocational qualifications (for example the master craftsman qualification). The curricula for OffJT (in the sense of education and training in the vocational school) are also usually government- rather than employer-led and, as a result, have a stronger agenda of general education. Gessler (2017), describing the history of the dual system in Germany, points to the contrast between the vocational schools, with broad curricula organised by regional governments, and employers, with their more pragmatic focus on immediate occupational skills (see Box 3.1).

Countries have different ways of ensuring that apprentices receive adequate general education

Countries have two main ways of ensuring that apprentices have received sufficient general education. First, in apprenticeship systems aimed at young school-leavers, general education is usually a substantial part of the curriculum. Thus in the dual system countries, as explained above, the curriculum includes much general education in part-time vocational school. Similarly in Norway, the first two years of an apprenticeship are spent in a vocational school, with a strong emphasis on general education, before starting the work placement (see Box 7.1). Second, some apprenticeship systems are aimed at adults and therefore for those who have already completed a full programme of general education. For example in Ireland (Kis, 2010a) and in Canada, apprenticeship is wholly or largely postsecondary, so that upper secondary education is normally completed by the time an apprenticeship starts (OECD, 2014). Most English apprentices are adults and incumbent workers, who have completed their general initial education. But this leaves an issue over whether English youth apprenticeships offer sufficient general education. Given the evidence, Kuczera and Field (2018) recommend more general education in English youth apprenticeships.

English youth apprenticeships need to provide the general education that will support progression

The issue goes well beyond remediation for those with the weakest skills. In England, those who already have level 2 maths and English will not receive any further general education unless it is built into the apprenticeship standard. This is unfortunate if apprenticeship is indeed to provide a potential stepping stone to further qualifications, where maths and English beyond level 2 would be usually helpful and often vital. While a good level of numeracy, literacy and digital skills will be reflected in T-level curricula (BIS and DfE, 2016), there is no obvious equivalent mechanism for including these requirements, including those for digital skills, in apprenticeship programmes. A recent report seeking to identify best practice in apprenticeship internationally, goes so far as to argue for off-the-job provision that “supplements scientific and industrial skills and knowledge with a broader education that enhances, for example, an apprentice’s subject knowledge in information, technology and communication, mathematics, economics, politics, chemistry, and their home language” (Mieschbuehler and Hooley, 2017).
There are multiple implementation challenges
Additional general education in youth apprenticeships would reduce the time available for productive work, thus making apprenticeships less attractive to employers. The challenge of accommodating more general education in youth apprenticeships is further addressed in Section 9 below. Teaching capacity is also an issue, given the evidence that the existing numeracy and literacy requirements are already creating bottlenecks in teaching supply. The Education and Training Foundation estimates that an additional 2,000 maths teachers and 1,500 English teachers are needed to meet the immediate capacity challenge, as well as upgrading the skills of existing staff (Education and Training Foundation, 2017). As well as setting higher expectations, the delivery of more general education to young apprentices will require attention to the resourcing and implementation of more and better teaching.

Recommendation 2. Apprenticeship for young people under 19 should require more general education delivered off-the-job, consistent with the expectations for all young people advanced by the Independent Panel on Technical Education. More general education will underpin the successful outcome of the apprenticeship itself, and help to provide for the career and learning progression of graduate apprentices. To achieve this outcome, more attention should be given to the resourcing and development of high-quality teaching capacity.
SECTION 4 DELIVERING QUALITY IN OFF-THE-JOB TRAINING

Realising high quality in apprenticeship training is vital
While quality is always important, it is peculiarly vital in English OffJT, for three reasons. First, as described below, apprenticeship has been afflicted by serious quality problems in the past. Second, as indicated by employer surveys (e.g., BPP University, 2017) the apprenticeship levy and public-sector apprenticeship targets will encourage larger employers to substitute apprenticeship for other forms of skills development. For this substitution to be desirable, apprenticeship training must be not just adequate, but of high quality. Third, the target of three million apprenticeship starts by 2020, unless it is balanced by robust and demanding quality standards, risks compromising quality.

Even with effective final assessments, quality assurance of off-the-job training is important
Recent reforms emphasise rigorous final assessments linked to apprenticeship standards. While success in these assessments is an important test of the quality of programmes that culminate in successful assessments, good reasons remain for retaining demanding programmatic requirements when it comes to apprenticeship quality. These requirements should be designed to preserve the identity and status of apprenticeship as a special form of learning capable of realising the desired learning outcomes. (Section 5 below will underline the distinction between realising the standard and the apprenticeship programme which leads to it). Programmatic requirements on apprenticeship are also designed to ensure that all parties to the apprenticeship contribute their share of the effort required, and bear their share of the costs.

An OFSTED study reports serious quality problems alongside some strong provision
The Richard review (Richard 2012) was concerned that many apprenticeships at the time involved little actual training. Despite the reforms which followed, some of these quality problems have persisted. Following criticisms voiced in its 2013/14 annual report, OFSTED undertook a survey of quality in apprenticeship (OFSTED, 2014, 2015). One third of the 45 providers visited did not provide sufficient high-quality training. While high-quality provision was observed, particularly in the motor vehicle, construction and engineering sector, many apprentices in the food and retail sector were only pursuing unskilled tasks such as cleaning floors, and some learners were unaware that they were apprentices. Apprentices over 19 were particularly at risk of a lack of off-the-job training. The report is blunt: “employers and providers involved in poor quality, low-level apprenticeships are wasting public funds and abusing the trust placed in them by government and the apprentices”. More recently, an OFSTED report on the biggest private sector provider of apprenticeship training, Learndirect, found that “company directors and senior leaders presided over a sustained decline in performance across all programmes” (OFSTED, 2017b). Paradoxically, around 90% of apprentice learners say that they are satisfied with their training, and 84% of employers reported themselves happy with the quality of the training that their apprentices received (DfE, 2017b, 2017c). Given the evidence from OFSTED and other sources on quality challenges, these findings on the perceptions of apprentices and employers may reflect low expectations.
Recent reforms have given emphasis to the objective of quality
New legislation in 2016 established the Institute for Apprenticeships. The Institute started work in 2017, with responsibility for high quality in the newly introduced apprenticeship standards. From 2018 it will take on additional responsibilities for technical skills training outside apprenticeships and is changing its name to the Institute for Apprenticeships and Technical Education (Powell, 2017). The role of the Institute is primarily to regulate the quality of apprenticeship standards and assessments rather than how they are translated and delivered through quality OffJT, where OFSTED remains the key player (Institute for Apprenticeships, 2017). Some observers have been sceptical of these reforms in respect of quality. The Association of Colleges, for example, is concerned that “there is little in the current reforms that provides reassurance that the quality of the offer is of critical concern” (Association of Colleges, 2017).

England, like some other English-speaking countries, encourages a market in training providers
In May 2017, an apprenticeship levy was launched across the UK, at the rate of 0.5% of employer payrolls over £3M. Employers can use the levy funding to choose training providers and assessors for their apprentices. The government has emphasised the role of employers, as intelligent customers of training, in driving up quality (see BIS, 2015). Competition is encouraged between further education colleges and other providers, and two thirds of apprenticeship provision comes from private providers (Chankseliani and James Relly, 2015). Some of the English-speaking countries have apprenticeship systems where the management of off-the-job training is similar. In Canada, the United States and Australia, multiple training providers – including publicly supported providers such as community colleges in Canada and the United States, and TAFE institutions in Australia – compete with private sector training providers to offer the off-the-job element of apprentice training. For example, under the “New Apprenticeships” model, which launched in 1998 in Australia, access to school-to-work training (including apprenticeships) was made a right for all Australians, in effect offering trainees ‘training vouchers’. The states would set the unit costs of different types of training and, under the principle of ‘User Choice’ the client – a blend of the employer and the apprentice – would choose the appropriate provider. Funding would then flow to that provider, who might be either in the public or the private sector” (Knight and Karmel, 2011).

But reforms in which employers choose providers may not drive quality improvements
While the intention of the government is that employer choice of providers will drive up quality, both Chankseliani and James Relly (2015) and Morris (2016) argue that this is unlikely. Quality in education and training is difficult to measure and observe, and employers, particularly small employers, will therefore find ‘shopping for quality’ very difficult. Where apprenticeship standards are very narrow (see Section 6 below) there may be a very thin market in provision, and therefore local monopolies in which market competition cannot address poor quality. The parliamentary select committee argues: “It is unclear whether there will be enough information available to employers to choose between providers. If this proves to be the case, there will either be little competition or, more damagingly, competition based purely on price which could drive down quality” (House of Commons, 2017).
International experience of for-profit training provider markets is not encouraging. International evidence also argues against expecting that competition in the training provider market will enhance quality. In the United States, paralleling the recent experience in England with Learndirect, some large training providers, such as ITT Institute, have had to shut down after failing to meet Department of Education quality standards (Los Angeles Times, 2016), while recent research shows that on average students who pursue vocational certificate programmes in for-profit colleges in the US are typically worse off rather than better off as a result (Cellini and Turner, 2016). In Australia, Victoria’s relatively open market in training provision has been troubled by widespread problems of poor quality and fraud on the part of providers (Victoria Government, 2015). Hunt et al. (2016), in a comparison of several countries in relation to higher education and the UK, argue that international experience of private for-profit providers of higher education gives little reason to expect quality improvement through competition. While these markets typically involve students rather than employers as the buyers of education services, the common factor is the great difficulty in observing quality, and therefore in using market choice and competition as a means of quality assurance and improvement.

In continental Europe, OffJT is typically delivered by state-run vocational schools. Many countries in continental Europe deliver OffJT through government-run vocational schools and colleges. In these cases, there is little in the way of a market in off-the-job provision. In the dual system countries, once someone has found an apprenticeship place with an employer, then the state is under an obligation to provide a place in a vocational school (see for example Box 4.1).

**Box 4.1. Off-the-job training of apprentices in Austria: the part-time vocational school**

In Austria, apprentices spend around 20 – 30% of their working time receiving education and training in a part-time vocational school. The apprentice attends part-time vocational school depending on the location of the training enterprise. Classes are grouped in schools according to the individual apprenticeship occupations or in some cases according to groups of related apprenticeship occupations. School-based education and training may take place in one full school-day or two half school-days a week, or in blocks of several weeks. About two-thirds of this time is spent on instruction in the occupation: composed of both theoretical training in the occupational field, and practical training in workshops and/or laboratories. The remaining one-third is devoted to general education, including subject-related language training.

*Source: Tritscher-Archan (2015)*

In England, the qualifications required of teachers in OffJT are relatively unregulated. A vital element in the quality of OffJT is the quality of the teachers and trainers involved. In the English context of a relatively open market in training provision, there are few regulatory requirements on vocational teachers. Proposals for mandatory qualifications for further education teachers introduced in 2007 were dropped as impractical – although this move has been criticised by the Institute for Learning (Fazaeli, 2013). In any country, setting required qualifications for vocational teachers is challenging, because the requirements need to reflect both the need for teaching skills and practical and recent industry experience (see OECD, 2010). These
requirements correspond to the ideal of the ‘dual professional’ advanced by the Commission on Adult Vocational Training and Learning (2011). One reason for the absence of mandatory requirements is the need to attract, on a flexible and often part-time basis, industry professionals into vocational teaching, to take full advantage of their up-to-date knowledge of industry. In England, large proportions of vocational teachers are part-time. But other countries typically handle this challenge differently, by defining different entry routes into vocational teaching for industry practitioners, while still requiring specific qualifications. The level of deregulation in England contrasts with the mandatory qualification requirements for vocational teachers and trainers that are usual in dual system countries (see Box 4.2).

Box 4.2. Preparation of vocational teachers
In Austria, vocational teachers are trained in a three-year bachelor course at university colleges of education. The entrance requirements to such courses depend on the type of vocational teacher for which training is sought. Those training to be teachers of occupation-related practices need a relevant master craftsperson certificate or an equivalent relevant qualification as well as the general university entrance qualification.

In Denmark, teachers are recruited by the VET colleges based on their qualifications and competence. They are supposed to be skilled workers and, if subject-teachers, have a qualification at level 6 in the National Qualifications Framework. After employment, those wishing to be VET teachers must now go through a consecutive pedagogical programme at diploma/bachelor’s level. The programme alternates periods at school with periods at the workplace. All existing VET teachers currently lacking this diploma must now complete at least one module from this programme before the end of 2020.

In Germany, apprentices are taught by two types of vocational teacher in vocational schools. Some vocational teachers study at university to become a vocational teacher in a certain field (often after earlier training as apprentices). They take the state examination for teachers and can teach vocational and general subjects. Teachers of a vocational practice must have a relevant vocational qualification, such as master craftsman, and they must supplement this with pedagogic training over one or two years.


Past quality problems and new incentives make quality assurance a large challenge. Quality has to be pursued in the context of past weaknesses and new pressures. There is evidence of multiple quality problems in OFSTED reports. Many apprenticeships break the rules by providing little training (and too commonly pay sub-minimum wages). There are also failures in the provider market and little regulation of vocational teaching qualifications. At the same time, there are new incentives in the apprenticeship levy and in government targets to expand apprenticeship numbers (even if the initial impact of the levy has been to reduce apprenticeship numbers). Resolving this challenge successfully will require a step change in the approach to quality, to ensure that the new approach to apprenticeship represents a real improvement in the English skills system.
Quality criteria for OffJT could be broadened

One way of realising this step change might be to implement additional quality requirements and criteria. The Gatsby Foundation has proposed additional quality indicators which include equity measures, such as gender, ethnicity, disability and socioeconomic background of apprentices, as well as outcome measures such as wages by field of study, the proportion of apprentices who remain in the occupation for which they were trained, registrations with professional bodies and career progression (Gatsby Foundation, 2017). Fuller and Unwin (2017) argue that the quality criteria proposed by the Institute for Apprenticeships and Technical Education are mostly quantitative, and they do not address the quality of training except by reliance on OFSTED reports. Fuller and Unwin set out a set of desirable characteristics of ‘expansive’ apprenticeships, whereby OffJT should include time for reflection, and stretch individuals to reach their full potential: other proposed quality criteria would bear on the role of the apprentice in the workplace.

Quality assurance faces a challenge of accountability as between the training provider and employer

Evidence given by OFSTED to the parliamentary select committee raises other significant challenges regarding quantitative indicators of quality, and how they may be linked to the accountability of training providers when the unit of analysis is now the employer rather than the training provider:

We have concerns over the usefulness of success rate data for apprenticeships under the new arrangements. Currently these are by provider and generally the cohorts have been large enough for success rate data to be useful. However, if in the future the data are for each individual employer, it is likely to become less useful as the numbers of apprentices involved will normally be relatively small. Any data for providers will only be relevant to the part they provide, as they are not responsible for the completion of the apprenticeship, just the elements for which they get paid. Although some large employers have many apprentices, the majority have just a few. This raises questions about accountability and who is ultimately accountable for the success of an apprentice (OFSTED, 2017a).

But implementation of quality standards in off-the-job training may be the key challenge

Alongside more demanding standards of quality in OffJT, those standards need to be met, and there is good reason to believe that this is the major challenge. Many apprenticeships currently fail very basic hurdles in terms of the amount of training, as discussed in Section 2. One in five apprentices are also paid less than the appropriate wage minimum (BEIS, 2017) and, while this is not a direct measure of training quality, it suggests a disturbing proportion of apprentices are being exploited by employers. This suggests that quality assurance systems for OffJT may need to be rethought.

Recommendation 3. Recognising that minimum standards have not been met in the past, there needs to be a step improvement in the quality assurance systems governing off-the-job training, so that they ensure that standards are being met.
SECTION 5 LINKING OFF-THE-JOB TRAINING IN AN APPRENTICESHIP TO AN OCCUPATIONAL QUALIFICATION

Apprenticeship is a form of learning rather than a qualification
Apprenticeship typically leads to the set of competences (or knowledge, skills and behaviours in the terminology of English apprenticeship) required for a target occupation. Possession of these competences can then be certificated as an occupational qualification through some combination of assessments and programmatic requirements. Apprenticeship can therefore be logically separated from the occupational qualification to which it leads; for example in the Netherlands, it is possible to obtain the same vocational qualification either through apprenticeship or through school-based vocational education (Fazekas and Litjens, 2014).

Reforms following the Richard review have established apprenticeship as a form of learning
Historically, many apprenticeships were certificated on the basis of time served, and this was still the case in England in the middle of the twentieth century, leading to much criticism of this approach as opposed to the attainment of standards (Gospel, 1994). The establishment of Modern Apprenticeships in England in the early 1990s therefore abandoned the ‘time served’ requirement, in favour of an emphasis on standards and competences (Harris, 2003). This ‘competence-based’ approach, while apparently logical, eventually had some unfortunate consequences, in that quite a number of ‘apprenticeships’ in the first decade of the 21st century were short exercises of a few weeks in length for incumbent workers, with little training and primarily involving recognition of prior learning. The Richard review identified this problem, and rightly argued that whatever the merits of such exercises, they should not be treated as apprenticeship (Richard, 2012).

But apprenticeship is still too often confused with the qualification to which it leads
While apprenticeship may be a good route to occupational competence, other routes are also possible and may be more suitable for adults who have already acquired many of the relevant skills through work experience or other means. Modern Apprenticeships embraced this possibility, but at the cost of mislabelling the totality of these routes (including the simple recognition of prior learning) as ‘apprenticeship’. More recent reforms have swung the pendulum in the opposite direction, as the apprenticeship programme and final assessment are presented as inextricable elements of the apprenticeship standard, without recognising the possibility of realising the standard and undertaking the final assessment through some alternative non-apprenticeship route. While this may have been an understandable reaction to discredited ‘apprenticeships’ which involved just recognition of prior learning, it has left a gap in provision. Kuczera and Field (2018) argues that this gap needs to be filled.
Box 5.1. Most leading apprenticeship countries offer access to an occupational certificate without completing a formal apprenticeship

In Austria, individuals over 18 may apply for the final apprenticeship examination without enrolling as an apprentice, if they can demonstrate sufficient relevant work experience to acquire the required skills. Such skills can be acquired through internships, non-formal training in a company, other practical experience or enrolling in schooling that amounts in total to at least half of the duration of a regular apprenticeship. Direct applications to the final examination accounted for 15% of awarded apprenticeship qualifications in 2012.

In Canada, there is a route to a trade certification without a formal apprenticeship programme. Candidates must a) accumulate sufficient hours in the trade (typically one and a half times the apprenticeship period); b) successfully pass an examination (provincial or Red Seal written exam); and c) satisfy all requirements enabling the apprenticeship authority to issue a certification.

In Germany, individuals may take an “external examination” taking the final assessment of apprenticeship programmes without completing the programme itself. Access is limited to those who have been performing skilled tasks for at least for one and a half times as long as the duration of the apprenticeship. School qualifications may also be taken into account. Candidates may prepare for the assessment by themselves, or following preparatory courses. In 2009, 6% of successful final assessment candidates had followed the external examination procedure.

In Norway, candidates may obtain a trade certification without an apprenticeship. They must demonstrate comprehensive competence in the field. The candidate must normally have five years of work experience and must pass a theoretical exam. About a third of journeyman certificates were awarded on the basis of experience-based certification in 2015/16.

In Switzerland, adults with relevant work experience may access the final qualifying examination of apprenticeships without pursuing an apprenticeship programme. Five years of work experience are required, including three years in the targeted occupation. In some occupations, preparatory courses for adults are available and, in all occupations, adults may pursue additional training by attending vocational schools or inter-company training centres.


Many countries allow experienced workers direct access to the final apprenticeship assessment

Many apprenticeship systems offer the opportunity of direct access to the final qualifying examinations, bypassing the requirement for an apprenticeship. Typically access to the exams is limited to adults who have relevant working experience. They may also pursue preparatory courses, to ‘top up’ their practical knowledge and skills prior to the examinations (see Box 5.1). In England, for someone with – say – one-third of the skills and knowledge required in the target occupation, a normal apprenticeship programme may be suitable, but it might
allow for accelerated completion and reduced payments and quantity of OffJT – something permitted under the regulations at least for adult apprentices. But for someone with two-thirds or more of the relevant skills and knowledge, a normal apprenticeship would not be suitable either for the apprentice or for the employer. They might need some additional training following which they should proceed to the final assessment, following the models in Box 5.1. (They would not be ‘apprentices’, and the funding arrangements for their assessment would need to be considered). Apprenticeship standards in England do not at present offer this possibility, although it was explicitly envisaged in the Richard review (Richard, 2012).

**Historically, English apprenticeship has been weakly linked to occupational targets**

In many apprenticeship countries, a key pivotal concept is the profession or occupation to which apprenticeship leads – the Beruf in the German-speaking apprenticeship countries. Fuller and Unwin (2013) show that this notion has been very weak in England as a foundation for apprenticeship. Instead, apprenticeship has been primarily conceived in relation to a job or ‘job role’, which are much narrower and shorter-term targets for apprenticeship learning, and do not necessarily offer a route to a career.

**Apprenticeship standards offer an opportunity to establish an occupational qualification**

This lack of a stronger occupational anchor for apprenticeship made it harder to define an occupational qualification in the past. But the creation of apprenticeship standards offers an opportunity to remedy this problem. Under apprenticeship frameworks, apprenticeships were made up of an a la carte package of mini-qualifications and associated programmes offered by different awarding bodies. Under apprenticeship standards, apprenticeships may or may not include qualifications provided by an awarding body and regulated by Ofqual (standards are described as “occupation-focused, rather than qualification-led”). The head of Ofqual has stated that the successful completion of an apprenticeship standard “is not a qualification per se” in the sense that it is not regulated by Ofqual (House of Commons, 2017). But the successful completion of an apprenticeship still yields a qualification in the usual sense of a certificate indicating occupational knowledge and skills with labour market value. Mieschbuehler and Hooley (2017), pointing to the examples of Denmark and Germany, argue that apprenticeships should lead to a qualification with a clear occupational title. Given the potential confusion in this area, England should, as argued in Kuczera and Field (2018), offer a better name for the qualification obtained from apprenticeship standards – for example an ‘occupational diploma’. Such a designation, which deliberately leaves out the word ‘apprenticeship’, would allow for the possibility of obtaining the diploma through a non-apprenticeship route.

**Recommendation 4.** The final assessment associated with an apprenticeship standard should be certificated with a label which differentiates that qualification from apprenticeship – for example an ‘occupational diploma’. On the model of other countries, adults with relevant experience should be permitted to pursue the final assessment and obtain this diploma without having to pursue a full apprenticeship.
SECTIONS 6 ENSURING BREADTH IN QUALIFICATIONS AND TRAINING PROVISION

Off-the-job training, linked to broad apprenticeship programmes, should balance narrower workplace experience

In any apprenticeship, the role of on-the-job experience and training with the employer is to develop the concrete and specific knowledge and skills associated with a particular job. Off-the-job training should complement that specificity with the broader training that will allow a qualified apprentice to have the skills required for an occupation. The government vision is commendable: “... apprenticeships must be more than just training for a single job or employer: they must ensure that apprentices can adapt to a variety of roles, with different employers, and develop the ability to progress their careers” (BIS, 2015). This means that apprenticeships should be designed to have both breadth and depth, and off-the-job training will be key to this end.

Employers have a leading role in determining apprenticeship standards

Recent reforms have radically changed, strengthening employer involvement in the content of OffJT through apprenticeship standards, developed through Trailblazer employer groups under the auspices of the Institute for Apprenticeships and Technical Education. This has brought England into much closer alignment with the approach of other apprenticeship countries. This is very welcome, but it leaves open the question of occupational breadth. The Richard review underlined the importance of such breadth (Richard, 2012), while the Gatsby Foundation has argued that “there should be guidelines as to how much specialisations should have in common in order to be part of the same occupation, and what proportion of an apprenticeship can be devoted to the specialisation” noting the risk that “the pathways within an apprenticeship can be de facto the apprenticeship but without the breadth necessary to provide full occupational competence” (Gatsby Foundation, 2017).

Concern about the proliferation of standards has been expressed widely.

The National Audit Office (2016) reported the views of some employers and industry groups that the current approach was leading to a “large number of narrow and overlapping standards that may restrict the extent to which apprentices gain transferable skills”. Several witnesses to the parliamentary select committee on apprenticeship expressed concern about the proliferation of apprenticeship standards. Alison Fuller said that the “snowballing of standards” was working against the original rationale of associating one standard to one occupation (House of Commons, 2017). The Institute for Apprenticeships and Technical Education has itself acknowledged “a risk of duplication and proliferation of standards which are too narrow to develop apprentices’ transferable skills” (IfA, 2017). A new OECD report (Kuczera and Field, 2018) argues that in the face of this proliferation, the number of apprenticeship standards needs to be limited to less than one thousand.
There is a clear economic rationale for limiting the number of standards
The economics may be best illustrated through an imaginary example. Pizzeria employers are best-placed to decide on the skills required of pizza cooks, but it does not follow that there should be a separate apprentice standard for pizza cooks. If there is a large overlap between the skills of a pizza cook and those of other cooks, then it will be in the interests of the apprentice, and the wider economy, to signal this in the way in which the apprenticeship is certificated, since it will allow the graduate apprentice to use their skills in the most effective and productive way (which might involve moving on from pizzas into other fields). Unfortunately, it will often be in the interests of the pizzeria employers to narrow the qualification down to their sector, disguising the degree of skills transferability, since this will reduce the risk to them that other employers will recruit their pizza cooks. Recognising the risk of allowing employers to choose niche standards, Richmond and Simons (2016) point out that the government’s decision “to allow employers to choose their own definition of an ‘occupation’ and which occupations ‘require’ apprentices has meant that the volume of new standards being generated by the Trailblazer groups shows little sign of abating”.

In other countries, occupational breadth is ensured by balancing the employer voice with other interests
It follows that the governance of apprenticeship systems needs to balance the leading role of employers in determining skills needs, with measures to ensure that the qualifications to which apprenticeship leads are sufficiently broad. The need to counterbalance the natural desire of employers in narrow sectors for ‘their’ apprenticeship is well-recognised in many continental European apprenticeship systems, and typically addressed through social partnership arrangements. Some years ago Hilary Steedman commented:

In most other European countries, employers’ concern to minimise costs and maximise specific (rather than wider occupational) training is counterbalanced by other bodies which are accorded a compensatory role in the governance of apprenticeship by the legislative framework. In the dual-system countries, trade union representatives perform the essential role of representing the interests of employees and of apprentices themselves at every level - local to national - of the apprenticeship structure. In France and the Netherlands, trade union influence is less important but the role of protecting the interests of the apprentice and of other employees is undertaken by government (Steedman, 2001).

Narrow apprenticeship standards will also reduce competition in the provider market
Given England’s reliance on market competition in the provision of OffJT as a test of quality, there are further arguments for avoiding narrow standards. As noted in Section 4, narrow standards will increase the risk of local monopolies of provision in highly specialised fields. These local monopolies offer no incentive on training providers to drive up quality, while that degree of specialisation also imposes large barriers to market entry on other potential providers, who may not see the one-off investment costs in developing training capacity as worthwhile in fields that are so specialised that apprentice numbers are small. The same arguments apply to markets for assessment providers in relation to each apprenticeship standard, noting the widely expressed concern in finding assessment providers for each standard (House of Commons, 2017). FE Week reported that in March 2018, 87 out of 162 of approved apprenticeship standards still lack an approved assessment organisation (FE Week, 2018).
England is heading for a larger number of narrower occupational qualifications than other countries

One good measure of occupational breadth is the total number of occupational qualifications to which apprenticeship leads – with a lower number indicating more breadth in individual qualifications. In March 2018, 244 standards were approved for delivery, with 283 in preparation (Institute for Apprenticeships, 2018). These figures include 115 degree apprenticeships approved and in preparation. More standards are on the way: a report by the National Audit Office (2016) suggests that by 2020 there might be as many as 1,600 apprenticeship standards. In Austria there are just under 200 different apprenticeship occupations, 320 in Germany, 230 in Switzerland, and just over 100 in Denmark (European Commission, 2017). English-speaking countries sometimes have slightly more: there were somewhat more than 500 apprentice occupations in Australia, and somewhat more than 400 in Canada (OECD, 2014).

Individual examples also illustrate the narrowness of some standards

Approved standards such as “Building services engineering ventilation hygiene technician”, and “Dual fuel smart meter installer” or, in development, the “Mineral processing weighbridge operator” and the “Powered pedestrian door installer and engineer” (see Institute for Apprenticeships, 2018) respond to specific skills requirements associated with current technologies, but they do not obviously correspond to occupations and career paths. They would not be recognised as separate apprenticeships in most other countries. Narrow skillsets of this nature would be much better developed, primarily by the employers concerned, within the frame of broader apprenticeship qualifications combined with off-the-job training that would empower the individuals concerned to adapt and learn new skills as their career develops, and as technologies change. Richmond and Simons (2016) compare some emerging apprenticeship standards with equivalent qualifications in the German apprenticeship system, and demonstrate that the English apprenticeship standards are typically much narrower. But this outcome is not surprising – the guidance from the Institute for Apprenticeships and Technical Education offers some gentle encouragement to Trailblazer groups, responsible for developing standards, to seek common core skills across different specialities, but it does not include any specific requirement for occupational breadth (Institute for Apprenticeships, 2017). One attempt to remedy this gap is described in Box 6.1.
In response to the narrowness of some apprenticeship standards, Richmond and Simons have suggested a practical test of occupational breadth to be met by potential new standards. They should be required to meet at least two of the following criteria:

a) listed in the UK National Occupational Standards (NOS) as a ‘skilled’, ‘professional’ or ‘operative’ role;

b) listed in the US occupational classification (O*NET) or the International Standard Classification of Occupations (maintained by the ILO) as a ‘skilled’, ‘professional’ or ‘operative’ role;

c) listed as an apprenticeship in two or more high-performing apprenticeship systems abroad;

d) closely aligned or integrated with professional body standards.

Source: Richmond and Simons (2016).

The creation of apprenticeship standards needs to ensure occupational breadth

For OffJT to ensure sufficient occupational breadth, it needs, in the interests both of the wider economy and the individual apprentice, to lead to a broad apprenticeship standard, that will facilitate the transferability of skills over a career in a fast-evolving economy. While this aspiration is part of the government’s own vision, it is not always being realised in practice. Over-narrow apprenticeship standards are emerging, while the governance arrangements in the Institute for Apprenticeships and Technical Education do not appear to offer any counterbalance to the inevitable pressure from employer groups for niche apprenticeship standards.

Recommendation 5. Too many apprenticeship standards have insufficient breadth, and their numbers are increasing unnecessarily. The Institute for Apprenticeships and Technical Education should ensure that all apprenticeship standards have sufficient occupational breadth to correspond to a meaningful occupation. To this end the Institute needs to establish more demanding criteria before agreeing to new Trailblazer groups and launching new standards, and promote mergers between standards and their associated Trailblazer groups.
SECTION 7 ARTICULATING APPRENTICESHIPS WITH T-LEVELS

The Sainsbury review proposes a work-based and college-based route to occupational standards

The Independent Panel on Technical Education (2016) (the Sainsbury review), proposed a technical education option for young people with two modes of learning: a work-based route (largely apprenticeship) and a college-based route, including work placements (typically two years full-time), but both subject to a common framework of occupational standards. The government’s Post-16 Skills Plan, argues:

Rather than the current crowded landscape of overlapping qualifications, we will ensure that only high-quality technical qualifications which match employer-set standards are approved. The new, employer-led Institute for Apprenticeships will regulate quality across apprenticeships and its remit will be expanded to cover all technical education. Routes will begin with high-quality, two-year, college-based programmes, aligned to apprenticeships. Within these programmes, we will put in place only one approved tech level qualification for each occupation or cluster of occupations (which could also be used within the relevant apprenticeship) (BIS and DfE, 2016).

But the relationship between apprenticeships and T-levels could be defined in different ways

As argued in Kuczera and Field (2018) other countries offer examples of three workable models for how other vocational programmes can be linked to apprenticeships. These alternative models have large implications for the required form of OffJT:

• that apprenticeships and technical programmes should provide alternative routes to the same occupational qualification, as in the initial proposal of the Independent Panel. This model, underpinned by the required ‘alignment’ would imply an increased emphasis on the general skills element of OffJT, as proposed, at least in respect of youth apprenticeships, in Section 3;

• that there should be a division of labour; with apprenticeships being offered only in some occupational domains, and T-levels in others where they are more suitable. In Germany for example, many professions in the health and social work sector are trained for only in vocational school, and not through apprenticeships (Solga et al., 2014). The Post-16 Skills Plan suggests this option: “We would not expect technical qualifications to exist for all routes or all parts of each route; sometimes apprenticeships alone might suffice. In other cases, there may not be enough roles to justify the college-based technical route”. Some routes such as Transport and Logistics, and Social Care are expected primarily to be delivered through apprenticeships (BIS and DfE, 2016). But in England, the universality of the apprenticeship levy and the public-sector target for apprenticeship numbers create challenges for this model. It is hard to argue that a particular sector of the economy should contribute to the levy but make limited use of apprenticeships.
that they should be consecutive, with a T-level most often preceding the apprenticeship as a preparation for apprenticeship. The IPPR (Pullen and Dromey, 2016) argues that apprenticeships for 16 – 18-year olds include too much job-specific training and not enough off-the-job general education to support future progression. This would get around the problem of inadequate general education in apprenticeship programmes. In some ways, this is similar to the Norwegian model of apprenticeship (see Box 7.1).

Box 7.1. Vocational school followed by working experience in the 2+2 apprenticeship system of Norway

In Norway, the majority of pupils, on completion of lower secondary education, opt for vocational, as opposed to academic upper secondary education. Upper secondary vocational programmes normally involve two years at school, followed by two years of apprenticeship training with an employer; and is therefore known as the ‘2+2’ model. The first school year consists of general education and an introduction to a broad vocational field, followed by more specialisation in their second year. A study project offers hands-on training in workshops at schools and enterprises; this accounts for 20% of the teaching hours during the first year, and 35% of the teaching hours in the second school year. During the apprenticeship training, the apprentice has one year of training and one year of productive work. Should the pupil be unable to sign an apprentice contract with a company, the county authorities are obliged to organise a year of hands-on training in an upper secondary school.

In 2013, only just over two thirds of those who applied for an apprenticeship place with a company obtained an apprenticeship contract. For those who were unsuccessful, vocational schools provided a year of hands-on training leading up to the same final trade or journeyman’s examination (but those qualified by this route tend to be perceived differently in the labour market).

All training companies receive a grant, that in 2014 was approximately €15,000 for each apprentice covering the whole training period. Companies new to apprenticeship recruitment receive an additional grant of just over €6000.


Whatever the relationship between apprenticeship and T-levels, clarity is vital

A mix of these models is possible, for example to allow both apprenticeship and T-level routes to some occupations, and a division of labour in others (so that for example a T-level might be the main route into certain occupations where apprenticeship is unsuitable). Such a mixed model may well be appropriate given the very diverse landscape of apprenticeships in England. But whatever mix of models is used in England, it will be very important to be clear about which model is being used, and to avoid confusing overlaps. In the occupational domains where apprenticeship standards have already been agreed with employers in Trailblazer groups, it would not be reasonable to consult employers again on these occupational domains in respect of T-levels. Section 5 and Recommendation 4 proposed that apprenticeships should culminate in an ‘occupational diploma’. This would help to clarify relationships, and allow the diplomas to be built into T-levels – so that for example, a T-level could culminate in the final assessment of an apprenticeship standard, as well perhaps as a wider
examination. Broader apprenticeship standards, as argued in Recommendation 5, are also vital to make sense of alignment to T-levels equipped with a hierarchy of routes, pathways and specialisations within each pathway.

**Recommendation 6.** More clarity is needed on the relationship between T-levels and apprenticeship standards, so that there are clearly defined routes to the qualification needed to work in any occupation.
SECTION 8 SUPPORTING EQUITY AND SOCIAL MOBILITY

Apprenticeship needs to play its part in delivering equity and social mobility
For the many young people who do not go directly to university after leaving school, apprenticeship, alongside T-levels, will be one of the key routes of school to work transition. It therefore needs to play its part in ensuring equity and encouraging social mobility. The quality of OffJT is an important element in this, as high-quality OffJT should provide the support that will allow individuals from all social backgrounds, including those with relatively weak prior school attainment, to succeed in apprenticeship and use it as a stepping stone to rewarding careers and further learning.

There has been concern that apprenticeship offers too little in the way of genuine progression
The Social Mobility and Child Poverty Commission (2016) has argued that for multiple reasons, apprenticeships rarely provide a route of upward mobility for young people. This is because there has been little growth in youth apprenticeship numbers, because youth apprenticeships are rarely a step up from previous qualifications, and because few youth apprenticeships are in well-rewarded fields. OFSTED (2015) also expresses concern that too few apprenticeships offer the opportunity to learn new skills and higher qualifications than those previously obtained.

Higher level apprenticeships can yield good returns, but access depends on social background
Wage returns from apprenticeships are highly variable depending on gender and field of study, but apprenticeships at level 3 and above realise the most attractive wage returns. Using longitudinal data, Cavaglia, McNally and Ventura (2017) report that men in level 3 apprenticeships perform particularly well, while Kirby (2015) estimates that a level 4 apprenticeship typically yields lifetime earnings similar to those of a non-Russell Group university degree (but without the student debt). Unfortunately, access to these higher level apprenticeships with the best wage returns appears to be quite heavily affected by social background. Those who start level 3 apprenticeships are similar to A-level students in social background, with both groups being half as likely as the whole cohort to have been eligible to receive free school meals. Those with a level 3 vocational qualification other than apprenticeship are more likely to come from a disadvantaged background (Cavaglia, McNally and Ventura, 2017). More generally, those starting an apprenticeship are more likely to be classified as white and speaking English as a first language.

More demanding apprenticeship standards are both an opportunity and a risk
The results mentioned above reflect past experience. The introduction of ‘more demanding’ apprenticeship standards, and the expansion of higher level (including degree) apprenticeships, might in principle provide more upward ladders of mobility. But this must be set against the risk, given weak basic skills among teenagers in England, that more demanding apprenticeships will discourage those who have not performed well at school from entering apprenticeship. Given the way that social background currently affects access to the more rewarding higher level apprenticeships, this outcome, in the absence of preventive measures, would be very possible. The policy objective should therefore be to accompany the more demanding features of apprenticeship standards with the concrete support necessary
to help those from disadvantaged backgrounds to access, succeed in and progress from apprenticeships. The significant access challenges underline the need for stronger schooling, but also more attention to traineeships, and other forms of pre-apprenticeship that may help to prepare young people with weak school attainment to obtain and benefit from high-quality apprenticeships (see Kuczera and Field, 2018 for a discussion of the international experience with such pre-apprenticeships).

**Off-the-job training can support social mobility in two main ways**

To serve social mobility, apprenticeships need to offer young people a first step on a career ladder. Apprenticeship programmes, and the associated OffJT, therefore need to contain the occupational depth and breadth and supportive general education that will allow them to be a step on the ladder to social mobility – issues addressed above in Sections 3 and 6. There are two more ways in which OffJT can contribute to the social mobility role of apprenticeship.

- First, OffJT needs to be delivered in a context in which additional support is given to those with the greatest needs, particularly in the classroom environment. It is that targeted support which will help those from disadvantaged backgrounds, and who may not have received strong initial schooling, to succeed and excel in apprenticeship and not to drop out (a significant issue, see Gamin, Hasluck and Hogarth, 2009). One criterion of quality in OffJT will therefore be the delivery, by training providers, of this kind of targeted support. The Gatsby Foundation has proposed some additional equity indicators (see Section 4 on quality). The extent and quality of that support should be monitored by OFSTED and the Education and Skills Funding Agency.

- Second, OffJT needs to be designed so as to open the path to further and higher qualifications, reinforcing study and ‘learning to learn’ capacity, as well as basic skills. This is important, partly because for some graduate apprentices, higher education provides a natural way to advance in a career; but also because for those young people who are unsure whether to enter apprenticeship or pursue higher education, it will be very important to signal that the apprentice choice is consistent with subsequent entry to higher education (see UNESCO, 2018, forthcoming). Joslin and Smith (2013) report that 10% of the 2004/5 cohort of apprentices progressed into higher education in the three years following the start of their apprenticeships. Of those who progressed, slightly over half pursued their higher education in a college, and slightly less than half in a university. Most (78%) pursued their studies part-time. But many barriers to such progression remain (see Fuller and Unwin, 2012).

**Recommendation 7.** Off-the-job training needs to be appraised for its equity characteristics, including the extent to which it targets support on those with the greatest needs and helps them to succeed. Off-the-job training must also to develop apprentices’ study skills, providing apprentice graduates with the capacity to enter and succeed in further and higher education.
SECTION 9 ENHANCING THE OFF-THE-JOB CONTENT OF YOUTH APPRENTICESHIPS

In England, one quarter of apprenticeship starters are aged 16 – 18. English apprenticeships serve a mix of adults and young people. In the last full year for which data was available prior to the introduction of the levy, about one quarter of apprenticeship starts (26%) were aged 16 – 18, slightly less than one third (30%) aged 19 – 24, and the remaining 44% aged 25 and over (Department for Education and Education and Skills Funding Agency, 2018). English youth apprenticeships may be compared with the apprenticeship systems in continental Europe which overwhelmingly (although not entirely) serve young school-leavers. The adult apprenticeships in England can be compared with – for example – the apprenticeship system in Canada, where apprentices have an average age of around 30 (Statistics Canada, 2017). Alternatively, in Ireland, apprenticeship is a postsecondary programme, with starting apprentices typically 18 years and older in possession of their School Leaver Certificate (Kis, 2010a). Australia has more similarities to England in this respect, in having a very mixed group of apprentices – some school leavers and many adults (Hargreaves, Stanwick, and Skujins, 2017).

Apprentices of all ages need to pursue the same occupational standard
Given England’s mixed group of youth and adult apprentices, the question that arises is whether the requirements for OffJT differ between the two groups, and if so how that can be managed within the frame of a common apprenticeship system. For any occupation, the same knowledge, skills and behaviours are required regardless of the age of the person working in that occupation. So adults and younger apprentices should be working towards the same apprenticeship standard, and therefore both require the OffJT that will help them to realise that standard. But for youth apprentices, this requirement may represent a minimum.

But those aged 16 – 18 should also receive a full complement of general education
First, there are powerful arguments, set out above in Section 3, to ensure that all young people are equipped with a full range of numeracy, literacy and digital skills. For youth apprenticeships, this implies substantial additions to the general education component of off-the-job training. But a youth apprenticeship of just 12 months (the current minimum) cannot accommodate, in 20% off-the-job training (the equivalent of two to three months of full-time education), broader education that could conceivably compete or compare with a two-year full-time T-level programme. The desired ‘alignment’ between T-levels and the apprenticeship route is not realistic. While younger apprentices have longer apprenticeship durations than average, the average length of an apprenticeship for those under 19 is still only 20 months (DfE, 2017b).

Narrow and limited apprenticeship standards are unsuitable for younger apprentices
Section 6 above describes how apprenticeship standards, in their emerging form, sometimes correspond to very narrow skillsets, and that more breadth is needed. This point is of vital importance for younger apprentices, for even if a somewhat narrower skillset may be a useful addition to the skills portfolio of an adult worker; that narrow skillset, very possibly subject to the risk of technological obsolescence, will not be a suitable introduction to a career for a young person. Young people should pursue apprenticeships that provide sufficient breadth and depth to successfully launch a career, and not just fill a job slot.
Youth apprenticeships should be at least two years in length
For those entering apprenticeship under the age of 19, apprenticeship programmes should be at least 24 months in length. This would allow for the inclusion of much more general education in off-the-job training, and allow apprenticeship for young people to be a meaningful alternative to a two-year T-level programme. It would also help to remove the risk that young apprentices are receiving their initial training in a very narrow skillset that would not support their longer-term learning and career. While this would involve a significant change in the length of youth apprenticeships in England, the 24-month minimum would still be at the low end of the range when compared internationally (see Table 9.1). Such a minimum, linked to a strengthened requirement for general education, would help to establish youth apprenticeship as a quality route not only in comparison with T-levels in England, but also with high-quality apprenticeships in other countries.

Table 9.1 In most countries, apprenticeship is two to four years in length
Selected countries (other than England) responding to the OECD – G20 questionnaire, 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Length of apprenticeship programme</th>
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</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2 – 4 years</td>
</tr>
<tr>
<td>Belgium Flanders (Dual system)</td>
<td>1 – 3 years</td>
</tr>
<tr>
<td>Brazil</td>
<td>Maximum 2 years</td>
</tr>
<tr>
<td>Canada</td>
<td>2 – 5 years</td>
</tr>
<tr>
<td>Finland</td>
<td>Usually 2.5 years</td>
</tr>
<tr>
<td>France</td>
<td>50% more than 2 years</td>
</tr>
<tr>
<td>Germany</td>
<td>2 – 3.5 years</td>
</tr>
<tr>
<td>Ireland</td>
<td>Usually 4 years</td>
</tr>
<tr>
<td>Italy (apprenticeship for those aged 15-25)</td>
<td>3 – 4 years</td>
</tr>
<tr>
<td>New Zealand</td>
<td>3 – 4 years</td>
</tr>
<tr>
<td>Norway</td>
<td>Typically 4 years</td>
</tr>
<tr>
<td>Switzerland</td>
<td>3 – 4 years (except special programme of 2 years)</td>
</tr>
<tr>
<td>United States</td>
<td>Majority are 4 years: minimum is 1 year</td>
</tr>
</tbody>
</table>

Youth apprenticeships deserve additional support
Across many countries, youth apprenticeships have proven successful as a way of transitioning young people into work and launching successful careers. Given that they serve this purpose, they deserve funding support, over and above the support which is available, through the levy and in other ways, for adult apprenticeships which usually involve upskilling existing workers. It is recognised that setting a 24-month minimum on the length of youth apprenticeships might make them less attractive to some employers. With this point in mind, further funding support and incentives may be necessary for youth apprenticeships, over and above existing measures, which include additional payments to employers in respect of young apprentices and exemptions from employer’s National Insurance (Powell, 2017).

**Recommendation 8.** Youth apprenticeships need to have the quality and status to be a convincing alternative to T-levels, providing young people, through off and on-the-job training, with the range of general skills and extent of occupational training that can successfully launch their careers. To achieve this objective, youth apprenticeships should be a minimum of 24 months in length – comparable to most other apprenticeship countries. Additional government support, over and above that already in place, may also be necessary to ensure the success of youth apprenticeships.
SECTION 10 CONCLUSION

By any test of international comparison, apprenticeship should involve at least 20% off-the-job training
Apprenticeship is a form of training that has proved its worth in England and in many countries around the world over a very long time. This report has therefore welcomed the sequence of reforms in the English apprenticeship system that have sought to raise standards, and ensure that the training received by apprentices is well resourced, substantial and of high quality, and that it conforms to the needs of employers. Off-the-job training must now represent 20% of an apprenticeship programme. While this policy is controversial in some quarters, this report has argued that, looking at the strongest apprenticeship programmes internationally, the 20% should represent a bare minimum of requirements.

The training minimum must be enforced, general education enhanced, and youth apprenticeship made more substantive
At the same time, this report has argued that in some respects, reform has not gone far enough. The evidence suggests that existing rules on minimum requirements for training off-the-job are not being enforced. Although many apprentices receive good amounts of training, around 40% do not receive their minimum requirements. This implies looking again, not just at the official standards for off-the-job training, but also at the effectiveness of measures used to enforce those standards. Young apprentices also receive less general education than their counterparts in other countries, and often not enough to tackle weaknesses in basic skills and support further learning. These findings suggest a need to reconsider youth apprenticeship. In its current form, the 20% off-the-job component of a one-year apprenticeship cannot provide the substantive general education that could reasonably compare with a T-level, and launch the career of a young person. Youth apprenticeships should therefore be at least 24 months in length, and backed by further support measures.

Broad apprenticeship standards need to be articulated with T-levels, and lead to assessments that can be accessed not just by apprentices
On other fronts, in common with other policy reviews, this report is concerned that some apprenticeship standards, and therefore the associated requirements for off-the-job training, have inadequate breadth. These standards need to be broad, and articulated logically with T-levels, so that learners and employers can see the relationship between the two types of programme. Apprenticeship programmes should lead to identifiable occupational diplomas that can be realised through non-apprenticeship routes, such as through recognition of prior learning. For apprenticeships to support social mobility, off-the-job training should be organised so as to allow targeted support for the apprentices who are most in need.
REFERENCES


Institute for Apprenticeships (2018). Apprenticeship Standards. https://www.instituteforapprenticeships.org/apprenticeship-standards/?includeApprovedForDelivery=true


