

## Response to the Sub-Committee on Education, Skills and the Economy: Apprenticeships Inquiry

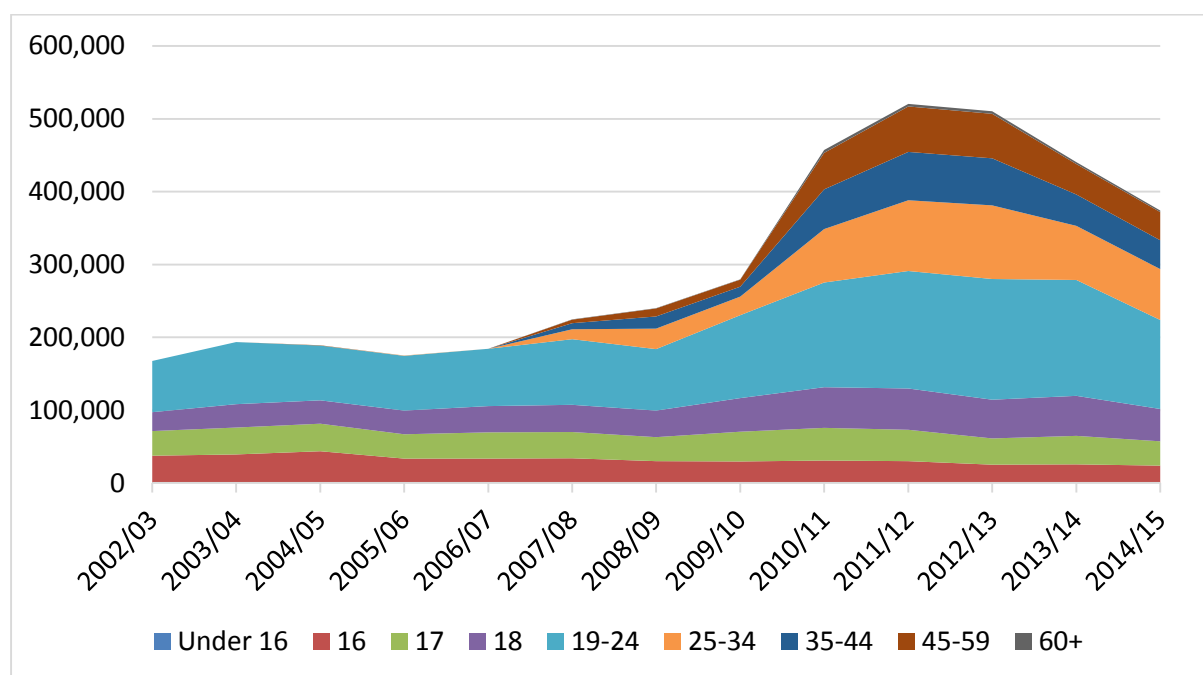
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### Summary

- In the last 5 years there has been a huge growth in the number of apprenticeships. This has largely been for those aged 25 and over (although there has been very substantial growth for 19-24 year olds) with little change for those under the age of 18. The growth has been in newer, less traditional frameworks – in particular Business, Administration and Law; Health and Public Services; Retail and Commercial Enterprise.
- Research on the effect of apprenticeships on individual employment and wage outcomes are generally positive. However, recent work suggests variation by framework and expected returns are not always positive. More research is needed about the effects of apprenticeships on firms.
- About one-fifth of a recent cohort of school-leavers were found to have done an apprenticeship before the age of 20. Many of these are Level 2 apprenticeships. The average GCSE achievement of these apprentices is lower than the average for the cohort. In general, the routes into an apprenticeship are not very strongly related to the educational pathway chosen at age 17. Those taking a lower (Level 2) vocational pathway at this age do not appear to be at any disadvantage compared to those pursuing higher (Level 3) qualifications at this age.
- There is huge gender inequality in the type of apprenticeship framework taken up amongst young people. It is of concern that the relatively ‘high return’ sectors are dominated by males (i.e. engineering and manufacturing; construction).
- Given the low proportion of students who get on to an apprenticeship programme before the age of 18, it is very likely that many people have never met someone who became an apprentice at a young age. If apprenticeships are to become a more mainstream route for young people, there needs to be some coordinated investment in resources that will facilitate a better understanding of the scope of different options.
- There is a wealth of experience in the European Union about apprenticeship systems. The European Commission has published a detailed list of success factors associated with the effectiveness of apprenticeships. We summarise some of these factors below.

## Background

1. In recent years, most growth in apprenticeships has been for those aged 25 and over, although there has also been a big expansion for the group of 19-24 year olds. This is illustrated in the below graph. In countries where an apprenticeship system is well established, like Germany or Switzerland, the beneficiaries typically start before the age of 20 and have no prior work experience. In England, we have seen the emergence of thousands of apprenticeships among the 25-59 year olds in employment, a group for which there were no apprenticeships before 2007/08.<sup>1</sup> There has not been much change for people of age 18 and younger.



2. Many people recruited on to an Apprenticeship have previously worked for their employer. According to a survey published by BIS<sup>2</sup>, over a third (36%) of apprentices aged 16-18 worked for their employer prior to the Apprenticeship and 47% enrolled from school or college. In comparison, 61% of those aged 19-24 and 91% of those aged 25 and over were working for their employer prior to enrolment. Thus, in many cases, the Apprenticeship system does not constitute entry into employment.
3. The same BIS survey published in 2013 shows that the recent expansion in Apprenticeship numbers has been in newer, less traditional frameworks dominated by three framework groups in particular: Business, Administration and Law (157% growth in starts between 2008/09 and 2011/12); Health and Public Services (214% growth in starts); and Retail and Commercial Enterprise (125% growth in starts). These framework groups are also associated with the least amount, and shortest duration, of training.

<sup>1</sup> <http://cverblog.blogspot.co.uk/> Claudia Hupkau, 1/9/15

<sup>2</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/229998/bis-13-1126-apprenticeship-evaluation-learners.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229998/bis-13-1126-apprenticeship-evaluation-learners.pdf)

4. A review of studies from the 'What Works for Local Economic Growth Centre' at LSE has considered the costs and benefits of Apprenticeships.<sup>3</sup> It identified evaluations that try to carefully identify the causal impact of apprenticeships – that is, what changes for workers or firms as a result of participating. The findings are broadly positive – at least in terms of improving employment prospect and to a lesser extent when it comes to the effects on wages and on encouraging further training. However, there is much less evidence about the effects of participating in apprenticeships on firms (only a couple of studies that met the minimum criteria for this review). The available evidence suggests positive effects but more impact evaluations are needed. It is also difficult to extrapolate from this to the effect of a large scale expansion in apprenticeships.
5. A number of studies have estimated individual wage returns to apprenticeships in various ways. For example, ongoing work by Steven McIntosh of CVER (University of Sheffield) is looking at this using the Labour Force Survey, covering those in employment (between the age of 16 and 65) over the period 2004 to 2015. This compares individuals who completed Level 2 Apprenticeships compared to those whose highest qualification was either Level 1 or Level 2; and Level 3 Apprenticeships compared to those whose highest qualification was Level 2.
6. The results show healthy average wage returns earned by those with a completed apprenticeship as their highest qualification, of 17% and 9% respectively at Level 3 and Level 2. At both levels, the wage premium is higher for males than for females, with the difference most notable at Level 2 where females earn no significant premium, compared to 11.5% for males. At Level 3, the premia are 19.5% and 13% for men and women respectively.
7. However, there is variation in estimated returns by sector.<sup>4</sup> The results show large returns to an apprenticeship amongst those working in manufacturing and construction, of 11-13% at both Level 2 and Level 3, relative to their respective comparison groups within the same sector. There are large wage premia of 16% to Level 2 apprenticeships amongst those working in the Hospitality sector and the Hair and Beauty sector, relative to non-apprentices within the same sector (the latter effect observed only for women when disaggregated by gender). However, in the Retail sector, those with an apprenticeship as their highest qualification have wages that are similar to those in the comparison group. This is also true of those working in Health and Social Care. Given that these sectors are amongst those that have seen the highest growth in Apprenticeship numbers (see paragraph 3), this finding ought to be of concern.
8. Against this general background, we now address two specific questions of interest to this inquiry.

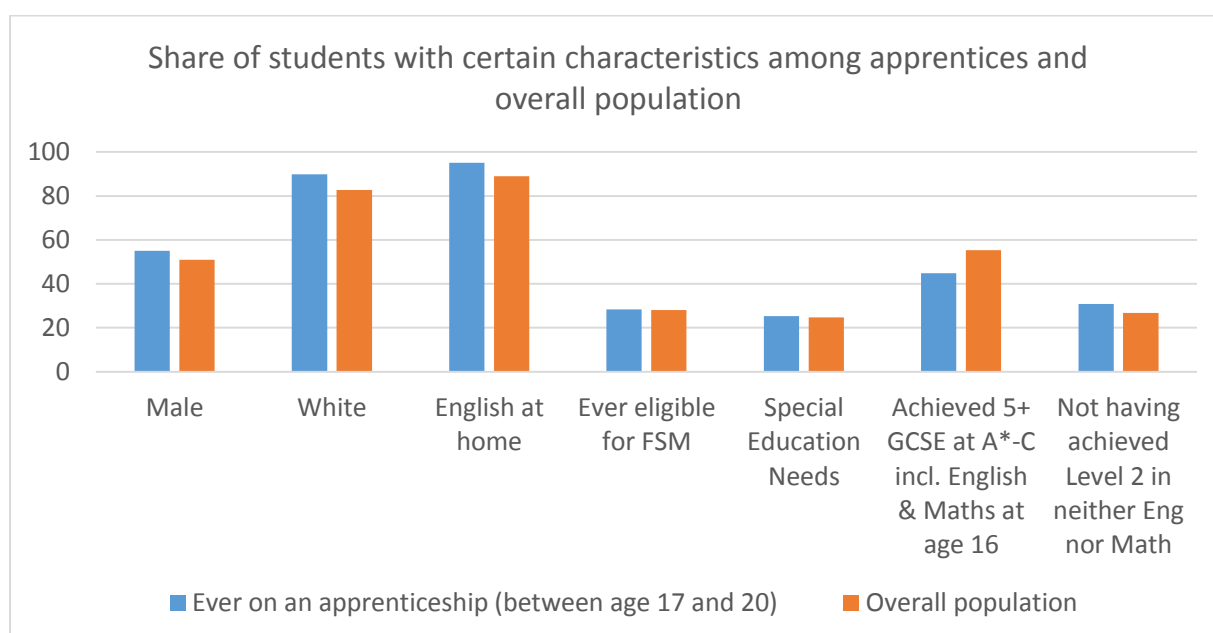
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<sup>3</sup> <http://www.whatworksgrowth.org/policies/apprenticeships>. Also see CVER blog by Henry Overman of 28/10/15. <http://cver-blog.blogspot.co.uk/>

<sup>4</sup> We can disaggregate by the sector in which the individual is *currently working* (which in most cases would be expected to equate with the sector in which they undertook their apprenticeship, though this need not necessarily be the case). Specifically, this is using the same comparison groups but now based in the same sector, e.g. comparing apprenticeship graduates in manufacturing to non-apprentices in manufacturing.

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

9. Analysis undertaken by CVER (London School of Economics) shows that of the cohort of students completing Key Stage 4 (GCSEs) in 2010 (about 575,000 students), about 6.8% were on an apprenticeship at age 17, 11% at age 18, 13.6% at age 19 and 13.5% at age 20.<sup>5</sup> Overall, nearly 22% of the cohort was recorded as having done an apprenticeship at some point between the age of 17 and 20.
10. The probability of taking up an apprenticeship is a little higher for males (about 4%), for those of White British ethnicity (about 7%) and for native English speakers (about 6%). However, they are representative of the rest of the cohort in terms of eligibility to receive free school meals (FSM) and the probability of being classified as having special educational needs. Compared to the overall population (i.e. the cohort who undertook GCSEs in 2010), they are lower achieving on average. Fewer have 5 or more GCSEs at A\*-C (including English and Maths) – 45% compared to 55% overall. There is also a higher proportion of very low achievers (i.e not having achieved Level 2 – or a grade C – in both English and Maths). In the overall cohort, this is about 27% whereas it is 31% amongst those in an Apprenticeship.



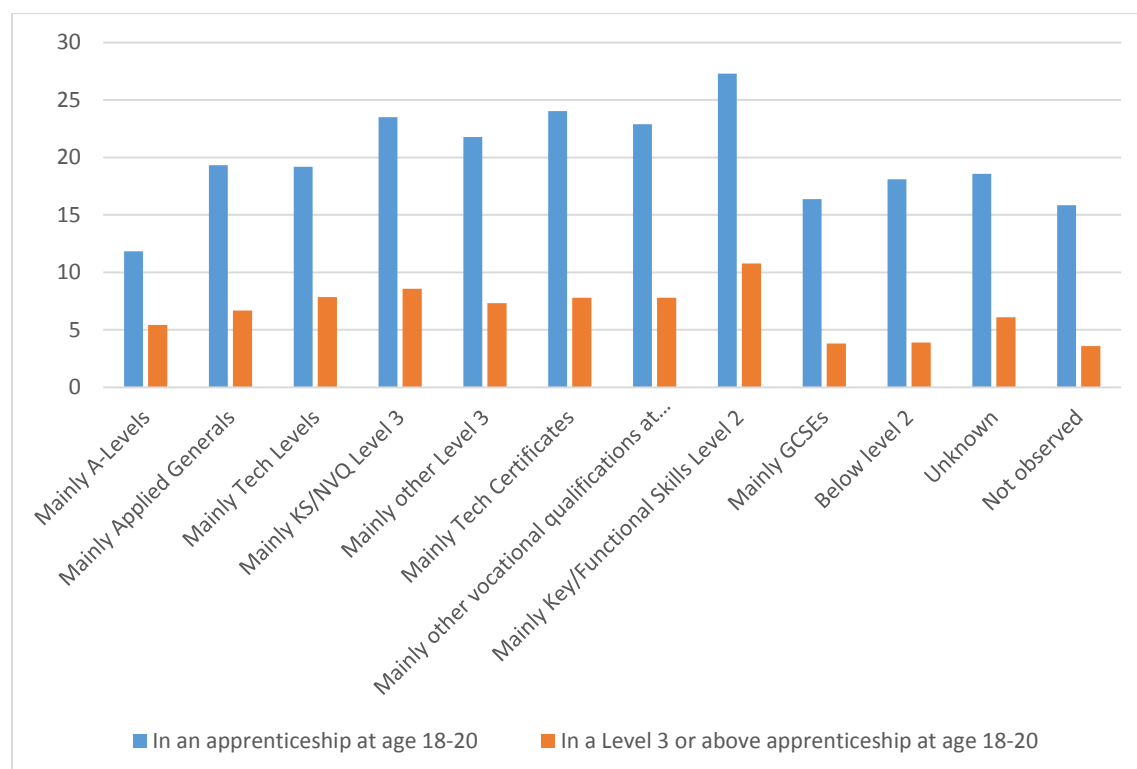
11. A-levels is the biggest single post-16 category. It is the main pathway chosen for about 40% of the cohort. Thus a relatively high share of apprenticeships is accounted for by those who have chosen A-levels (about 30%). However, most of those who study A-levels do not undertake an Apprenticeship.
12. In fact, the post-16 choices that are relatively more likely to lead to an Apprenticeship are vocationally orientated qualifications (like tech certificates). The below graph shows the share of students commencing any Apprenticeship (i.e level 2 or 3) and a Level 3 Apprenticeship between the age of 18 and 20 conditional on the qualification chosen at age 17. This illustrates the following: (1) most Apprenticeships at this age are at level 2

<sup>5</sup> Hupkau, C., S. McNally, J. Ruiz-Valenzuela, G. Ventura (2016). Post-16 Choices in England: What are they and where do they lead? Forthcoming in April 2016. CVER Discussion Paper

(and not level 3) (2) those pursuing level 3 qualifications at age 17 are no more likely to subsequently enter an Apprenticeship programme compared to those pursuing level 2 qualifications at this age.

Again this suggests that Apprenticeships for young people have not been primarily a pathway for ‘high achievers’, even though young people who get on to these programmes may benefit from them compared to other options available to them.

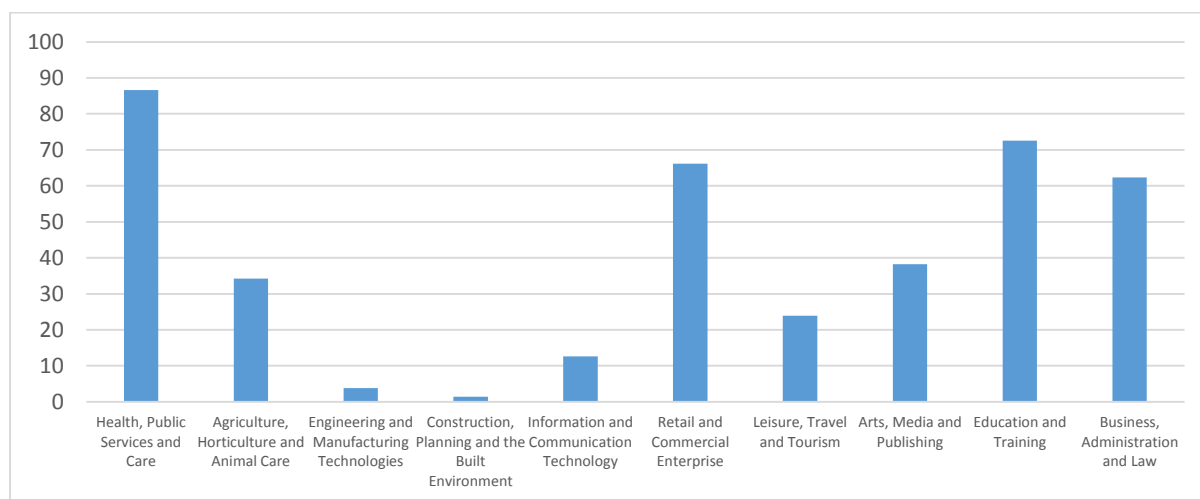
**Share of students commencing an apprenticeship between 18 and 20 conditional on the activity chosen at age 17.**



13. Another striking feature of apprenticeships is the gender inequality in take up. There are certain sectors where almost the entirety of apprentices is female (like health, public services and care (87% female) or retail and commercial enterprise (66% female), and others where nearly 100% of apprentices are male (engineering and manufacturing: 96% male) and construction (98% male). See the below Figure. Health and care and retail are the sectors that have experienced the strongest growth in apprenticeships since 2010<sup>6</sup>, and many concerns have been raised about the quality and returns to these relatively new apprenticeships for young people. The findings on differential returns by sector (paragraph 7) is a cause for concern. The disproportionate take up of relatively lower return apprenticeships by girls additionally raises concerns about the implications for gender inequality.

<sup>6</sup> See <http://cver-blog.blogspot.co.uk/2015/09/the-past-and-future-of-apprenticeship.html>.

## Share of females in apprenticeships by sector



14. However, recent reforms might improve the quality of apprenticeships in the future. Research by CVER (Institute of Employment Studies) has started to explore the effectiveness of the introduction of the current Apprenticeship Standards for England, which came into the effect in the academic year of 2012/13. Specifically, we analyse the duration of completed apprenticeships, excluding any withdrawn apprenticeships. Even comparing completed apprenticeships started just before the change in policy (2011/12) with just after (2012/13) shows a very marked change in the duration of apprenticeships. A large number of very short-term apprenticeships have disappeared. However, there is diversity within individual frameworks and various other aspects of apprenticeships are affected by the reforms (including guided learning hours). In ongoing work, we are exploring the impact of this policy change on the achievement of apprenticeships.

15. As shown in paragraphs (1) and (9), currently an apprenticeship is not a frequently observed pathway for school leavers (particularly if they are under 18 years of age). They may not know anyone who has ever become an apprentice. When young people are thinking about going to university, there are a range of resources which explain options and rankings, including various national newspapers. If apprenticeships are to become a more mainstream option for young people, then there needs to be some coordinated investment in similar resources that will explain what options are available and how they rank, where they might lead, what the pre-requisites are, and practical details about applications.

## Lessons from other countries' approaches to apprenticeships

16. Many international studies have shown a positive association between apprenticeships and youth labour market outcomes – in particular those associated with the dual training system (e.g. Germany, Austria, Switzerland). This has led over 20 Member States to either introduce schemes akin to this system, or embark upon major reforms of their apprenticeships. Prompted by the high and rising youth unemployment during the current economic crisis, a number of governments have looked upon apprenticeships as a (partial) solution to the problem.

17. Given the great diversity of apprenticeship-related national, institutional and cultural frameworks (e.g. legislation, education and training systems, role of VET and apprenticeships in facilitating school to work transitions, youth-related labour market policies, role of social partners, etc.), the way apprenticeships are defined and

implemented varies greatly across the EU. Indeed, even the term apprenticeship, although commonly used, is defined and understood differently in many countries and for research purposes.

18. For example, according to a recent EU-wide study on apprenticeship supply, 24 Member States have apprenticeship systems which could be characterised as mainly company-based, meaning that more than 50% of training activities take place in a work setting.<sup>7</sup> However, the distribution of company- and school-based training in main national programmes varies greatly: from 66-90% of company-based training in Denmark and 60% in Germany, to only 20-30% in Spain. Interestingly, in 18 countries (including the Netherlands, Finland, France, Hungary, Latvia, Sweden and the UK), predominantly school-based programmes co-exist with work-based programmes. There is also considerable institutional and legislative/ regulatory diversity between both Member States and between apprenticeship (dual training), apprenticeship-type and traineeship schemes. The governance and key stakeholder involvement and degree of co-operation also vary greatly.
  
19. The way apprenticeships are conceptualised and implemented across the EU has highlighted a number of factors which most often contribute to their success. A recent study by the European Commission, presents a detailed list of success factors that have been associated with an increase in the effectiveness of apprenticeships across the EU, together with good practice examples from Member States.<sup>8</sup> These include:
  - (i) **A stable, robust institutional and regulatory framework** which sets the overarching context and baseline conditions within which apprenticeships are implemented and includes active social partner involvement.
  - (ii) **Strong employer involvement**, which can take many forms, ranging from the co-design of programmes to the supply of quality placements and associated training and the provision of adequate support to the apprentice/trainee, including compensation and social insurance coverage, to quality assurance and setting standards and, finally, to promoting apprenticeships through awareness-raising campaigns targeted at both young people and other employers in order to increase take-up
  - (iii) **Close partnerships between employers and educational institutions** are crucial in promoting a two-way interaction and exchange of knowledge between the educational system and employer skills requirements.
  - (iv) **Close alignment with national, regional or local labour market needs** which, in turn, inform the curricula or qualification framework. Hosting an apprentice presents additional costs to employers and, therefore, tailoring the learning to the needs of the employer/industry becomes crucial in order to help offset these costs
  - (v) **Funding**, including **employer subsidies** for both the proper design and rigorous implementation of apprenticeship programmes. In order to avoid the possible negative effects in terms of deadweight losses and substitution effects, apprenticeship subsidies should be targeted to specific industries and firms that would not otherwise offer apprenticeship positions.<sup>9</sup>

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<sup>7</sup> European Commission, (2012). *Apprenticeship Supply in the Member States of the European Union*, <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=6633&visible>

<sup>8</sup> European Commission, (2015). *High-Performance Apprenticeships & Work-Based Learning: 20 Guiding Principles*, <http://www.cedefop.europa.eu/en/events-and-projects/projects/apprenticeships-work-based-learning>

<sup>9</sup> Brunello, G., (2009). 'The Effect of Economic Downturns on Apprenticeships and Initial Workplace Training: a Review of the Evidence', *IZA Discussion Papers*, No. 4326; Wolter, S. and Ryan, P., (2011). 'Apprenticeship', in

- (vi) **Robust quality assurance procedures** preferably administered by an external single body or jointly by the sending organisation and host (company) organisations. The focus of quality assurance varies but typically covers: (a) aims, objectives, scope and learning content (b) the type, content, frequency, length and quality of the training, including work-based training (c) the apprentice and his/her working conditions as well as other terms and conditions of the placement (d) the equity of access and transparency of recruitment; and (e) the careful screening of host organisations (companies);
- (vii) **Appropriate matching of the apprentice to host organisation (company)** which increases the likelihood of the apprentice securing employment with the employer
- (viii) **Provision of adequate support, guidance and mentoring to apprentices**, both at the workplace and at the sending organisation (educational institution)
- (ix) **Combination of theoretical, school-based training with practical work-related experience**, where a key element of the on-the-job phase is the design and implementation of apprenticeship placements which identify the individual training needs of each participant and their learning goals and outcomes
- (x) **Existence of an apprenticeship agreement** which, *inter alia*, specifies the aims of the placement, its content and duration, the role, responsibilities and obligations of all parties involved, the apprentice's status and employment terms & conditions, including any remuneration and/or social security contributions
- (xi) **Certification of acquired knowledge, skills and competences** obtained in both the on-the-job and off-the-job phases of training
- (xii) **Tailored and flexible approaches to the needs of vulnerable young people**, including early school leavers and NEETs.