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Progression of Apprentices to Higher Education – 2nd Cohort Update

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Executive summary

This report presents the findings of research undertaken for the Department for Business, Innovation and Skills (BIS) into the progression to higher education of advanced level apprentices over a seven year period. This is part of a longitudinal study whose first results were published in BIS Research Paper 107 (Joslin & Smith, 2013) and updated in BIS Research Paper 176 (Joslin & Smith, 2014). This report provides a further update for six cohorts of advanced level apprentices over the period between 2006 and 2012.

The research findings are based on the matching of ILR (Individualised Learner Record) datasets with HESA (Higher Education Statistics Agency) datasets between the years 2006-07 and 2012-13. They provide a detailed analysis of the nature of the progression of apprentices, trends in progression rates over time and as the matched records contain demographic information about the apprentices, they provide breakdowns by variables such as gender, age and domicile, and also data about where they progressed from and where they progressed to.

It should be noted that the findings published in this report provide an overall picture of apprenticeship progression at this point in time. As such, the period studied includes only **partial results for apprentices entering higher education in 2012**; a future cohort update could provide a fuller picture of the extent to which higher fees in 2012 may have affected progression for this group of work-based part-time learners and how the first major expansion of higher apprenticeships from 2012 impacted on their progression journeys. The period studied in this report also predates the significant changes to apprenticeships heralded in the Richard Review including the development of “Standards” through the work of the “Trailblazers”.

Defining terms

The key results refer to different types of apprenticeship providers and also to the different ways in which higher education is funded. For the sake of clarity, explanations are given here:

Different types of apprentice provider

In the period of the study, advanced level apprenticeships were delivered by different types of providers which are described here.

Provider of advanced level apprenticeships	Further description – each of these provider types contract with the Skills Funding Agency for the provision of Apprenticeships.
Private Training Providers	Private training companies who deliver a range of work based training programmes including apprenticeships.
Further Education Colleges	Colleges funded by the Skills Funding Agency and/or via HEFCE for prescribed higher education provision. Colleges deliver a wide range of full and part-time programmes including apprenticeships.
Businesses (Direct Grant)	Large private businesses that deliver apprenticeships
Public Sector	For example, local authorities, government departments and hospital trusts that co-ordinate and deliver apprenticeships.
Other	Charities and associations that co-ordinate and deliver apprenticeships.

Different types of higher education

Higher education (HE) in England is delivered by providers including universities, FE colleges and since 2012, a number of private organisations. A key distinction for the purposes of this study is that between "prescribed HE" and "non-prescribed HE" which is described here:

Types of higher education in England	Description
Prescribed higher education	Delivered in universities and FE colleges with funding directed by the Higher Education Funding Council for England (HEFCE)[2]. The following qualifications are included: **First degrees** (Level 6) and **Other Undergraduate** (OUG) qualifications including **Higher National Certificates** (HNC) and **Certificates of Higher Education** at Level 4; **Higher National Diplomas** (HND), **Diplomas of Higher Education** and **Foundation degrees** at Level 5.
Non-prescribed higher education	Delivered in FE colleges with funding directed by the Learning and Skills Council (LSC) up to 2010 and since then by the Skills Funding Agency (SFA). Qualifications include **NVQ** programmes and **Professional Certificates** and **Diplomas** at Levels 4 and 5.

A note about the figures

The report analyses the results of tracking five cohorts of apprentices from 2006-07 to 2011-12 who progressed into higher education between 2006-07 and 2012-13. To capture the complex nature of apprentice progression behaviour, the *tracked cohorts* in this study have been derived in a particular way (described in the section on Methodology) and it should be noted that the cohort numbers do not match directly across to the Statistical First Release (SFR) figures published by Data Services. The cohorts in this study are apprentices who have completed and achieved their framework but the cohort year identifies the academic year they **started** their apprenticeship. So, the 2006-07 cohort started their apprenticeship in this year but many are likely to have finished their framework in 2007-08 and some in 2008-09. The later cohort in 2011-12 started their apprenticeship in this year but are likely to have finished their framework between 2011-12 and 2013-14. A number of apprentices enter higher education in the year they started their advanced level apprenticeship and these are also picked up in the tracking.

In this latest cohort update, new data is presented exploring apprentice success rates in HE and the destinations of HE leavers into employment including their salary bands; these results reinforce the value of longitudinal tracking to investigate the educational trajectories of apprentices and how their journey compares to that of their peers who enter HE through traditional routes.

[2] Technically, the SFA can fund prescribed HE and it plans to when specified as part of a higher apprenticeship

Headlines

Numbers: A total of **244,455** advanced level apprentices were tracked into higher education over 7 years (2006-07 to 2012-13). The numbers of advanced level apprentices aged 17-19 increased by 360 over the period, 20-24 year olds increased by 1,985 but the **25+** age group increased from **115** in 2006-07 to **25,015** in 2010-11, **17,775** of whom were female.

Progression: Between 2006-07 and 2012-13 a total of **35,940** advanced level apprentices progressed to HE. The progression rate for the 2006-07 cohort who were tracked into HE over 7 years was **19.3%**. **44%** of advanced level apprentices progress later, between 4 and 7 years after completing their apprenticeship. **68%** of the 2006-07 cohort progressed to part-time HE but this dropped to **50%** for the 2010-11 cohort.

Higher apprenticeships: Between 2009-10 and 2012-13, **5,195** of the advanced level apprentice cohort progressed to a higher apprenticeship.

FE college or university: **52%** of advanced level apprentices in 2010-11 progressed to study higher education in an FE college but universities are delivering HE to more apprentices than ever before.

Apprentice characteristics: 52% of the 2006-07 advanced level apprentice cohort had previously been intermediate apprentices. **45%** of the 2010-11 cohort came from the most educationally disadvantaged parts of the country.

Success: **75%** of advanced level apprentices who started a First degree finished with an HE qualification (66% with a degree and 9% with a lower award) and **69%** went on to achieve a First or 2:1 honours degree (this compares to an all UK rate of **64%**).

Key results

Progression trends

- **19.3%** of the 2006-07 tracked apprentice cohort **progressed to higher education** when tracked for a total of seven years. This rate of progression is an increase on the seven year rate of 18.8% found for the 2005-06 cohort in the previous study in this series (Joslin & Smith, 2014).

- The pattern of progression to HE is very different to that of traditional full-time school and college leavers, the majority of whom progress the following year. **58%** of the advanced level apprentices who progress, do so within **3 years** of starting their apprenticeship but significantly, **42%** of them do so **4, 5, 6 or 7 years** later.

- Five cohorts between 2006-07 and 2010-11 were tracked for three years allowing like for like trend analysis. The total **numbers** of apprentices progressing to higher education over the three years **increased by 1,560** entrants from **3,890** for the 2006-07 to **5,450** for the 2010-11 cohort.

- However the research also shows that the overall three year **progression *rate* has dipped** over the five cohort years **from 11.2% in 2006-07 to 8.8% in 2009-10.** This

reduction is influenced by the significant increase in the numbers of apprentices **aged 25+.** The numbers of 25+ advanced level apprentices in our cohorts increased from **115, or 0.3%** of the total in 2006-07 to **25,015, or 40%** of the total in 2010-11.

- The progression rate for **25+** apprentices peaked at **7%** for the 2006-07 cohort dropping to **5.7%** for 2010-11 apprentices.

- The progression rate for 17-19 year old apprentices in 2008-09 peaked at **15.8%** dropping to **12%** for 2010-11 young apprentices.

- FE colleges deliver HE to a higher proportion of advanced level apprentices than universities but the gap has narrowed. For the early cohort in 2006-07, **63%** of apprentices progressed to HE in colleges but for the cohort in 2010-11 this had dropped to **52%**.

- **68.4%** of the 2006-07 cohort who progressed did so to **part-time** HE. This had dropped to **50.3%** for 2010-11, an indication perhaps that more advanced level apprentices are choosing to make a life change and progress to education on a full-time basis but the drivers for this are not investigated in this study.

- **52%** of the 2010-11 advanced level apprentice cohort had previously been intermediate apprentices and **7%** of these went on to higher education.

- **Higher education course types vary at framework level** so while **71.5%** of Active Leisure and Learning advanced level apprentices who progressed went onto study a First Degree, only **3.6%** of apprentice Engineers went onto this level of study. Most Engineering apprentices go onto Other Undergraduate (OUG) study, particularly HNC.

- While the advanced level apprentice tracked **population** has increased in every government office region in England, London had the highest increase where the cohort population increased by **+171%,** although this was from a low number base.

- London was the only region to see an increase in the **rate** of higher education progression between 2006-07 and 2010-11.

Demographics

- Between the 2006-07 and 2010-11 cohorts, the **female** advanced level apprentice tracked population more than **doubled** but the male tracked population increased by only **29%**. Young male apprentice numbers only increased by +3% compared to +23% for young females**.** Females were more likely to progress 4-7 years from the start of their apprenticeship than males**.**

- **22%** of advanced level apprentices who entered HE were classified as coming from the **most educationally disadvantaged** parts of the country (POLAR2 Q1). This compares to **11%** for all young undergraduate entrants and **12%** for mature undergraduate entrants (HEFCE, 2012). Apprenticeships clearly play an important role in social mobility.

Success

- **75%** of apprentices who started a first degree finished with a HE Qualification, **66%** with a first degree and **9%** finished with a lower award. This compares with a national rate of **82%** (**79%** first degree and **3%** lower award).

- **69%** of advanced level apprentices who went on to a first degree achieved a **First** or **2:1** honours degree. This compares to an all UK rate of **64%** (HESA, 2012).

- **82%** of HE leavers from the apprentice cohort were in employment 6 months following their degree, higher than the all England HE leaver rate of **76%** and a further **12%** were in further study. The unemployment rate was low at **2.4%.** The average salary of the apprentice HE leaver cohort was higher than that of HE leavers generally.

Higher apprenticeships

This study was able to capture in the ILR flagged higher apprentices for 2008-09, 2009-10 and 2010-11.

- The number of advanced level apprentices progressing on to **Higher Apprenticeships** increased from **1,130** to **1,630** between 2008-09 and 2010-11 with a progression rate for the 2010-11 cohort at 2.6%, slightly higher than the 2.3% rate for 2008-09 apprentices.

- The majority of tracked higher apprentices were on an **Accountancy** framework although in 2010-11 numbers on Business Administration, Management and Health & Social Care frameworks were increasing. The investment in higher apprenticeships from 2012 onwards will change this. In 2009-10 there were only five higher apprenticeship frameworks (Engineering Technology, ICT, Accountancy, Purchasing and Supply and Contact Centres). In 2015 there are, at the last count, over 400 plus 24 new higher apprenticeship Standards.

- The North West had the highest progression rates to higher apprenticeships at around **3.4%.** London had the lowest at around **1.5%.**

1. Introduction

This report presents the findings of research undertaken for the Department for Business, Innovation and Skills (BIS) into the progression to higher education of advanced level apprentices over a seven year period. This is part of a longitudinal study whose first results were published in BIS Research Paper 107 (Joslin & Smith, 2013) and updated in BIS Research Paper 176 (Joslin & Smith, 2014). This report provides a further update for six cohorts of advanced level apprentices over the period between 2006 and 2012.

The research findings are based on the matching of ILR (Individualised Learner Record) datasets with HESA (Higher Education Statistics Agency) datasets between the years 2006-07 and 2012-13. They provide a detailed analysis of the nature of the progression of apprentices, trends in progression rates over time and as the matched records contain demographic information about the apprentices, they provide breakdowns by variables such as gender, age and domicile, and also data about where they progressed from and where they progressed to.

To capture the complex nature of apprentice progression behaviour, the *tracked cohorts* in this study have been derived in a particular way (described in the section on Methodology) and it should be noted that the cohort numbers do not match directly across to the Statistical First Release (SFR) figures published by Data Services.

1.1 The complexities of tracking apprentices

The cohorts in this study are apprentices who have completed and achieved their framework but the cohort year identifies the academic year they started their apprenticeship. So, the 2006-07 cohort started their apprenticeship in this year but many are likely to have successfully completed their framework in 2007-08 and some in 2008-09. The later cohort in 2011-12 started their apprenticeship in this year but are likely to have finished their framework between 2011-12 and 2013-14. An added complication is that some advanced level apprentices have pre-existing Level 3 qualifications and they will enter higher education in the same academic year as their cohort year. The reasonably substantial numbers of these apprentices are the reason that we track progression of apprentices from their cohort year and in the reports in this series, we call “immediate”, progression, that which takes place over three years from the start year.

It is clear that in the period of our study, some frameworks took less time to complete and it might be that these apprentices are older and already in work - a fact picked up in the Richard Review (Richard, 2012) whose recommendation was implemented by the previous government where it established a minimum duration for an apprenticeship along with the stipulation that an apprentice had to be training in a **new** job. (BIS, 2013).

These factors contribute to the complexity of looking at apprentice progression and they have been compounded by the huge increase in **25+** apprentices in our cohorts, from **115, or 0.3%** of the total in 2006-07 to **25,015, or 40%** of the total in 2010-11. Much of this increase has been in service frameworks such as Customer Service and Business Administration providing the possibility for many of these apprenticeships to be more “restrictive” than “expansive” (Fuller & Unwin, 2014). The importance of this is that

expansive apprenticeships are more likely to involve learning that supports progression both in career terms and educationally. Also recent research by Ipsos MORI evaluating apprenticeships from both learner and employer perspectives (Higton, Emmett, & Halliday, 2014) and (Colahan & Johnson, 2014), provides very useful contextual information about progression. This research shows, for example, that apprentices are more likely to view their apprenticeship as a route to a career in what they call the "older" frameworks like Engineering and Construction, and that these frameworks at Level 3 are also characterised as having the greatest amount and longest duration of training. Employers with advanced level apprentices in these frameworks as well as Health and Social Care were also more likely to offer a further qualification including higher apprenticeships, HNCs, Foundation degrees and degrees. They also point out that entrants to the "traditional" apprenticeship frameworks were more likely to have joined their employers as an apprentice and that apprentices on "newer" frameworks were more likely to be internal recruits.

Tracking the progression of apprentices is considerably more complex than school and college leavers who enter HE mostly in the academic year following achievement of their A levels and BTEC qualifications.

It should be noted that the findings published in this report provide an overall picture of apprenticeship progression at this point in time. As such, the period studied includes only **partial results for apprentice starts in 2010-11 and for those who enter HE immediately following their framework completion, in 2012**; a future cohort update will provide a fuller picture of the extent to which higher fees in 2012 may have affected progression for this growing group of work-based part-time learners and how the first major expansion of higher apprenticeships in 2012 impacted on their progression journeys. The period studied in this report also predates the significant changes to apprenticeships heralded in the Richard Review (Richard, 2012) including the development of the new apprenticeship "Standards" through the work of the Trailblazers (BIS, 2014).

1.2 Researching apprentice progression to higher education

In this report, the progression rate of advanced level apprentices is established at two points. The "immediate" progression rate is calculated as being the sum of the first three years from the cohort start date. For example for the 2006-07 cohort, it includes numbers progressing in 2006-07, 2007-08 and 2008-09 and the rate established was **11.2%**. The other rate is where the cohort is tracked for the maximum number of years possible in the scope of the study, so the first cohort, 2006-07 is actually tracked longitudinally to 2012-13 and by this means we can establish that over the course of 7 years, 19.3% of the apprentices from the 2006-07 cohort actually progressed to higher education. Longitudinal tracking is therefore vital to establishing the way that apprentices progress with substantial numbers progressing to higher education several years after their apprenticeship. This reflects the fact that behind the numbers are real people living their lives: working, moving up the career ladder or deciding to change direction, having families, becoming unemployed, deciding to continue their education to enter a professional occupation.

1.2.1 Previous research on the progression of apprentices

There is previous data available which sketches a broad picture of, and often a concern about, the progression of apprentices into higher education. Research carried out by UVAC in 2005 on apprenticeship progression (Anderson & Hemsworth, 2005) suggested

that progression from advanced level apprenticeships to higher education was poor. Six years ago, the Skills Commission's inquiry into apprenticeships (Skills Commission, 2009) and HEFCE's report on apprenticeship progression (HEFCE, 2009) indicate that this situation remained largely unchanged. This was confirmed in a UKCES report on vocational progression (UKCES, 2010) where the rate of progression of apprentices quoted was 6%. At the time, this compared with a 40% progression rate of BTEC learners (HEFCE, 2007) and a 90% progression by A level learners (Carter, 2009).

1.2.2 Tracking apprentice progression longitudinally

As described earlier, this research looks at progression from the point when advanced level apprentices starts their framework. They are then tracked from that point into higher education over as many years as the study allows to the maximum of 7 years for the 2006-07 cohort. This is an important change to the methodology of tracking apprentices as it takes into account the roll-on, roll-off nature of apprenticeships where there is no such thing as an academic year. Longitudinal tracking reveals the very different journeys that significant numbers of apprentices (nearly 20%) take in progressing to higher levels.

Much of the debate about apprentice progression has focused on the need for there to be more parity of esteem between traditional full-time academic and vocational routes and the work-based routes that apprentices take. However, the Ipsos MORI research shows that apprentices have a variety of motivations including greater job security, earning while learning, entering and progressing in a career, higher earnings and it being a necessary component to the job (Higton, Emmett, & Halliday, 2014). It is not perceived to be an alternative route to higher education and yet, nearly one in five do eventually take this step.

Another aspect of this study is that we identify first time entrants to higher education by interrogating earlier higher education datasets to see whether an entrant had previous higher education experience. This is important because a recent BIS research study (IFF Research, 2011) found that around a half of Level 3 apprentices had already studied at this level before. The inference is that many advanced level apprentices may already have achieved the necessary qualifications to enter a higher education programme, though perhaps not in the subject of their choice. Because we are focused on apprenticeships themselves as currency for HE progression, we have focused our research on apprentices who are first time entrants to HE.

As a study of the progression of apprentices, this research can also be seen through a different lens as a study of the progression to higher education of a very large sample of **part-time work-based learners** aged 17+. Not all part-time work-based learners are apprentices, but at level three, advanced level apprentices make up a large and increasing proportion of them and the research show that the majority of them who go on to study higher education, do so part-time. It should be noted that during the period of our study, the proportion of apprentices progressing to **part-time HE** has dropped from a high of **70.5%** in 2007-08 to **50.3%** in 2010 but because the figures for progression from 2011-12 to higher education in 2012-13 are still partial, this study is not yet able to shed useful additional light on the large national drop-off in part-time higher education student numbers from 2011 onwards (HEFCE, 2014).

Finally, this report provides an overview that will often pose new questions as it attempts to answer others. It has already been said that the data provides the opportunity for much

more in-depth and specific analysis than is published in this report and more can be learned from it about the progression behaviour of these learners from a sectoral, regional, demographic and institutional perspective. An example of a more detailed regional drill down can be found in a report based on the 2013 data sets on apprenticeship progression in London (Joslin & Smith, 2013b).

1.3 Policy context

The patterns of progression to higher education of apprentices, the numbers and the trends are influenced by the context of policy changes during and either side of the period as well as by the impact on people's lives of realities like the economic recession. The following timeline is offered to highlight some contextual factors providing a setting for the progression journeys apprentices were making during the period. Picked out are reports and events relating to the overall context of widening participation, higher education, vocational education, universities, FE colleges and apprenticeships.

Year	Policy developments
1997	Dearing Report published (Dearing, 1997) recommending the development of Other Undergraduate programmes in FE colleges
2003	Foundation Degree Forward (FdF) established to promote Foundation degrees set up in 2001/2
2004	University fees rise to £3,000 pa Aimhigher set up to increase widening participation Office for Fair Access (OFFA) set up to monitor fair access to higher education
2005	First Lifelong Learning Networks (LLNs) set up to improve progression rates to higher education for vocational students including apprentices National Student Survey begins
2006	Higher Education Funding Council for England (HEFCE) Consultation on HE in FE colleges published (HEFCE, 2006) Train to Gain starts Advanced Vocational Certificate of Education (AVCE) qualifications end Leitch Report published (Leitch, 2006) Supporting Professionalism in Admissions (SPA) set up
2007	Department for Innovation Universities and Skills set up World Class Skills – Implementing the Leitch Review of Skills published (DIUS, 2007)
2008	Equivalent or Lower Qualifications (ELQ) policy introduced Qualifications and Credit Framework (QCF) established Connexions services transferred to Local Authorities 14-19 Diplomas start Start of economic recession Start of decline in part-time HE numbers

Year	Policy developments
2009	Department for Business, Innovation and Skills (BIS) set up National Apprenticeship Service set up Many LLNs close HEFCE request for HE Strategies from FE colleges Unleashing Aspiration report published (Panel on Fair Access to the Professions, 2009) Higher Ambitions published (BIS, 2009a) Skills for Growth published (BIS, 2009b) Unemployment rate peaks (Oxford Economics, 2014, p. V)
2010	Coalition government comes to power Learning and Skills Council (LSC) closes Young People's Learning Agency (YPLA) and Skills Funding Agency (SfA) established Train to Gain closes 14-19 Diplomas end Browne Review of higher education funding published (Browne, 2010)
2011	Aimhigher programme closes Foundation Degree Forward closes New Challenges, New Chances published (BIS, 2011) Students at the Heart of the System - the Higher Education White Paper published (BIS, 2011a) Higher Apprenticeship Fund announced to support the development of higher apprenticeships First Specification of Apprenticeship Standards in England (SASE) including higher apprenticeship standards published (BIS, 2011b) Educational Maintenance Allowance (EMA) ends Introduction of 16-19 bursaries
2012	Higher Education fees rise to up to £9,000 pa and student number controls include Level 3 AAB grade exclusion and core and margin numbers, the majority of which go to FE colleges Part-time higher education loans start with no student number controls on part-time numbers National Careers Service formed - statutory responsibility for impartial careers advice passes to schools YPLA replaced by the Education Funding Agency (EFA) Richard Review of Apprenticeships published (Richard, 2012) Higher Apprenticeship Fund projects start Employer Ownership Pilots start Marked decline in part-time HE numbers down 42% from 2008 figures (Oxford Economics, 2014, p. 10)

Year	Policy developments
2013	24+ Advanced Learning Loans start for Access courses and non-prescribed HE New SASE document setting out new standards for higher apprenticeships at Levels 4, 5, 6 and 7 published (BIS, 2013) Apprenticeship reforms announced including Trailblazers £40 million announced to fund 20,000 higher apprenticeship starts over 2 years Participation age raised to 17 Study Programmes introduced for all 16-19 year olds
2014	Participation age raised to 18 First Trailblazer standards published Announcement that HE within higher apprenticeships to be government funded at an additional £20 million over 2 years First apprentices start on new standards

2. Methodology

The research findings in this report are based on the matching of ILR (Individualised Learner Record) datasets 2006-07 to 2011-12 with HESA (Higher Education Statistics Agency) datasets and HE records in the ILR. They provide a detailed analysis of the nature of the progression of apprentices and trends in progression rates over time. Since the matched records contain demographic information about the apprentices such as gender, age and domicile and also data about where they progressed from and where they progressed to, there are a wide set of variables that can be compared and this report provides a selection. The findings published in this report provide an overall picture of apprenticeship progression at this point in time.

The start date, rather than the end date, is used as a census point so that the timing of higher education entry can be better understood. It acknowledges that apprentices are rolled on and rolled off an apprentice framework and therefore the start date is deemed the most appropriate census date to determine the year of the cohort, especially as some apprentices appear to commence study of a higher education qualification in the same year as they are completing their framework. Just fewer than 60% of advanced level apprentices complete their framework in two years, although achievement and completion is dependent on the framework structure and how long individual learners take to complete their work based learning. For example, around 60% of the 2006-07 cohort were found to have finished during 2007-08 and a further 24% finished in 2008-09. **Although the start date is used as a cohort census date, this study is based on advanced level apprentices who have completed and achieved their framework.**

Tracking back, as well as forward, allows an investigation into the fluid nature of advanced level apprentice participation in higher education and shows the extent to which some apprentices already have experience of higher education when they first start their apprenticeship. Tracking forward to HESA datasets for advanced level apprentices who have been identified as having no previous higher education experience, enables the study to explore real progression from Level 3 to Level 4. Moreover, linking the cohort to higher education datasets longitudinally over a number of years, allows an investigation into the timing of entry to higher education. For example, all those advanced level apprentices who completed (and were identified as achievers) in 2006-07, were linked to seven years of higher education datasets in 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13. Advanced level apprentices who start their Level 4 qualification in the same year as their advanced level apprenticeship are counted as first time entrants and these records are included in the progression rates, categorised, with the following two years, as **immediate progression**.

In this second cohort update, longitudinal tracking also included a link to the **Destinations of Leavers in Higher Education (DLHE) survey** to explore employment destinations.

2.1 Prior entry to higher education

The HESA datasets with records of prescribed higher education learners were tracked from 2003-04 although students who had entered higher education from 1999 were also flagged within the dataset. Tracking back to datasets prior to commencement of the apprentice framework provides a more accurate picture of apprentice prior participation in

higher education. For this update, apprentices who were identified as already having progressed to Higher Education were removed from the dataset.

2.2 First time entrants

In this report, higher education progression patterns following completion and achievement of apprenticeships are presented for five cohorts of learners from 2006-07 through to 2011-12. The first cohort tracked, 2006-07, has been linked to seven years of higher education datasets and this provides a rich picture of timing of progression.

Immediate progression is classified as those apprentices who enter higher education in the three years from the start of their apprenticeship and given that the average duration of an advanced level apprenticeship is 19 months (Higton, Emmett, & Halliday, 2014, p. 27), these three years capture students who enter HE across the period. However, it is acknowledged that it may exclude those student who started an apprenticeship but who take longer than to complete it and who may enter HE four years after starting. It is recognised that the latest cohort tracked in 2011-12 is not a complete cohort in the sense that many apprentices who started their apprenticeship would not have completed their framework at the census point of this data study and the low population of this cohort reflects this. Furthermore, this cohort have only been partially tracked for two years in this update. This illustrates the importance of longitudinal tracking which is necessary if we want to understand progression patterns for work based learners. The following table illustrates the longitudinal matching:

Table 1: Cohort matching to establish progression

Advanced level apprenticeship start	Advanced level apprentice likely completion	Higher education datasets (HESA and ILR)						
		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
2006-07	Between 2006-07 and 2008-09	**Immediate**						
2007-08	Between 2007-08 and 2009-10		**Immediate**					
2008-09	Between 2008-09 and 2010-11			**Immediate**				
2009-10	Between 2009-10 and 2011-12				**Immediate**			
2010-11	Between 2010-11and 2012-13					**Immediate**		
2011-12*	Between 2011-12 and 2013-14						**Immediate**	

** many apprentices who started their apprenticeship in this year will not have finished it when the data linking took place in 2013-14 and so this cohort is "incomplete".*

2.3 Dataset matching

Two datasets were used to undertake the tracking exercise: the Individualised Learner Record (ILR) for students recorded as advanced level apprentices in 2006-07, 2007-08, 2008-09, 2009-10 and 2010-11 and 2011-12 and the Higher Education Statistics Agency (HESA) dataset for entrants to publicly funded higher education institutions in the United Kingdom during 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13.

The Data Service provided records on learners on an advanced level apprentice programme including name, date of birth, postcode, gender, and framework. Two matching exercises were undertaken to obtain the total number of learners who entered higher education study:

- ILR Level 3 apprentice data to HESA student data to identify FE Level 3 apprentices progressing to prescribed higher education study **and**
- ILR Level 3 apprentice data to ILR Level 4 student data to identify FE Level 3 students progressing to non-prescribed higher education study in FE

The absence of a unique learner number, which follows students from one provider to another, means that individual students were tracked within, and through, each of the datasets using a number of personal characteristics. A fuzzy matching exercise was undertaken by HESA where for each final year Level 3 apprentice in the ILR dataset, the name, date of birth, postcode and gender was used by HESA to match against each year of their dataset. The ILR was matched to HESA datasets between 2003-04 and 2012-13. This enabled identification of students who were already in higher education prior to commencement of their advanced level apprenticeship and these records were removed from the data. For first time entrants, this meant that the 2006-07 cohort was matched against seven years of HESA data: 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13. HESA data for matched students on their first year of programme were returned including: higher education study year, higher education level, higher education subject group, higher education mode, higher education institution and higher education campus.

Similarly, for each advanced level apprentice completer a matching exercise was undertaken with the subsequent years FE Level 4 student data using either the ILR student unique reference, or name, date of birth, postcode and gender. Fuzzy matching using all four apprentice identifiers such as full name, date of birth, postcode and gender is fairly straightforward but sophisticated matching techniques were employed to match records where there were slight differences, e.g. name spelling.

Finally, the matched HESA dataset was then joined back to the ILR dataset so that for each matched record the following profile was obtained for each advanced level apprentice student who progressed: FE Level 4 study year, provider, student name, student age band, student post code, student mode, apprentice framework and higher education study year, higher education location, higher education Institution, higher education campus, higher education study level and higher education mode.

3. Progression of apprentices to higher education – headline figures

The overall findings for advanced level apprentices progressing into higher education for each of the cohorts are provided in this section.

3.1 Overall progression trends by age group

Table 2 shows the volumes of the advanced level apprentices in the first and last full cohorts and the number who progressed by age group. It highlights the growth in the number of advanced level apprentices during the period (**27,240**) and it shows that the major growth has been with mature students aged 25+. The table also shows that the numbers entering higher education have increased: overall **1,555** more entered higher education from the 2010 cohort than from the 2006 cohort and the majority of this increase in HE numbers has been with 25+ students which reflects the growth in the population of this group of apprentices. Young apprentice numbers to HE dropped very slightly.

Table 2: Numbers – 2006-07 and 2010-11 tracked population and higher education entrants

Age	2006-07 Advanced level apprentices		2010-11 Advanced level apprentices		*Difference 2006-07 – 2010-11*	
	Tracked population	Number entering higher education	Tracked population	Number entering higher education	*Tracked population*	*Number entering higher education*
17-19	23630	2940	23990	2905	*360*	*-35*
20-24	11125	945	13110	1110	*1985*	*165*
25+	115	10	25015	1430	*24900*	*1420*
Total	**34870**	**3895**	**62110**	**5450**	***27240***	***1555***

3.2 A longitudinal picture of apprentice progression

Table 3 shows the cumulative rates of progression into higher education for each of the six cohorts of apprentices. It tracks in-year progression where apprentices progress to higher education in the same year as they start their apprenticeship and it shows the numbers progressing for each subsequent year. This pattern of progression of apprentices must be set in the context of their lives – these are people in work and on completion of their advanced level apprenticeship, there may be pressure on them to operate at the technician level they have been trained for. However the rapid pace of change in some industries and the requirements of regulatory frameworks in others will influence decisions of both employees and employers to undertake higher education. The fact that progression rates are still high 2-3 years after completion shows that for many decisions about higher education are taken later and the lower, but still fairly substantial numbers progressing after four and five years on show this pattern. These numbers may also reflect

those students who decide to take another career pathway, or a different step in their existing career such as gaining management responsibilities.

This table shows that when tracked for seven years, apprentices in the 20016-07 cohort progressed at the rate of 19.3%. It also shows that for those cohorts, where three year tracking is possible, the 'immediate' progression rate over the period falls from **11.2%** to **8.8%** but further analysis in the report shows the contributing factors for this decrease are particularly the large increase in the volume of 25+ advanced level apprentices over these years and the fact that this group of learners have a lower progression rate than younger apprentices. Another contributory factor for the lower rate of progression for the 2010-11 cohort is likely to be that many of these students would normally have progressed in 2012-13 (the year following completion year for some of this cohort) and this was the year that higher fees were introduced in HE which was reflected by the fall in the number of entrants to HE across England. This is illustrated in Figure 1.

Table 3: Longitudinal progression of advanced level apprentices

Advanced level apprentice cohort start year	Population	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	3 years tracking		All tracked to date		
		Number							HE immediate progression	% HE progression	Total number to HE	% HE progression	Number of years tracked
2006 -07	34870	420	1325	2145	1040	835	590	370	3890	11.2%	6725	**19.3%**	7 yrs
2007 -08	40785		495	1850	2430	1130	825	560	4775	11.7%	7290	**17.9%**	6 yrs
2008 -09	49215			1110	2095	2610	1235	775	5815	11.8%	7820	**15.9%**	5 yrs
2009 -10	57475				1300	2430	2540	1155	6275	10.9%	7430	**12.9%**	4 yrs
2010 -11	62110					1110	2735	1610	5450	8.8%	5450	**8.8%**	3 yrs
2011 -12	*13925**						*515*	*710*	*na*	*na*	*1225*	***8.8%***	*2 yrs*
Total	**244455**	**420**	**1820**	**5105**	**6865**	**8115**	**8440**	**5180**	**26205**		**35940**		

*NB - It takes most advance level apprentices up to two years to complete their framework and so this population does not include those who started in 2011 but had not yet completed their framework when the data was linked. The cohort populations will change in updates as apprentices who complete their framework are included in the tracking study.

3.3 Cumulative progression by different cohorts into higher education

Year on year numbers of apprentices from different cohorts are shown in the 'Total' row at the bottom of Table 3 and they clearly indicate the increasing numbers of apprentices entering higher education over the period of the study. Cumulatively nearly **36,000** of the advanced apprentices in these cohorts entered HE and these totals will be larger when

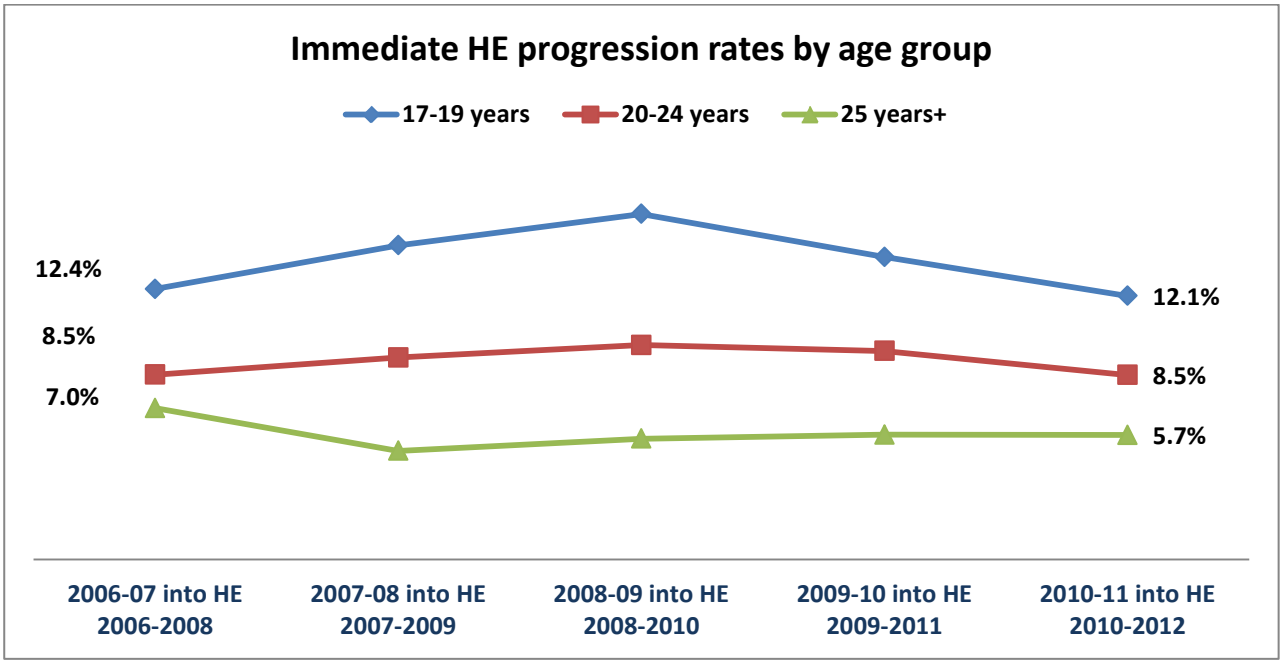
both the continuing progression of apprentices who started prior to 2006-07 are added and the later cohorts include more completers. This pattern of progression will be of interest to HE institutions wishing to recruit apprentices showing as it does the importance of reaching out to people in work who finished their apprenticeships several years ago.

Previously, we have stressed the incompleteness of the progression figures for the 2011-12 cohort and the need to see what the figures look like by tracking again next year. By referring back to the same table in last year's cohort update in BIS Research Paper 176 (Joslin & Smith, 2014, p. 22), it is possible to see how the latest cohort changes in updates. For example, in paper 176, for the latest cohort tracked was 2010-11, the population was **26,430** and **465** HE entrants were found in 2011-12. With this update, the 2010-11 population has increased to **62,110** as more achievers are included and the number of HE entrants from this cohort in 2011-12 is now **1,110**. This shows the incompleteness of the progression figures for the latest cohort and also illustrates the importance of longitudinal tracking for work based learners, where framework achievement is across different durations and where there are complex patterns of progression at framework level.

3.4 Comparative rates of progression across the cohorts

Figure 1 shows immediate higher education progression rates for each of the five cohorts tracked for three years into higher education by age group. It clearly illustrates the stable progression rate of the younger age group compared to a falling progression rate for the older 25+ age group. There has been a particular growth in the number of advanced level apprentices 25+ but higher education progression trends show that with this growth, the proportion of students entering higher education has not been maintained. It is noted that although the number of younger advanced level apprentices has also grown across the tracked cohort years, albeit to a lesser extent, the higher education progression rate has remained stable (as it has for the 20-24 age group).

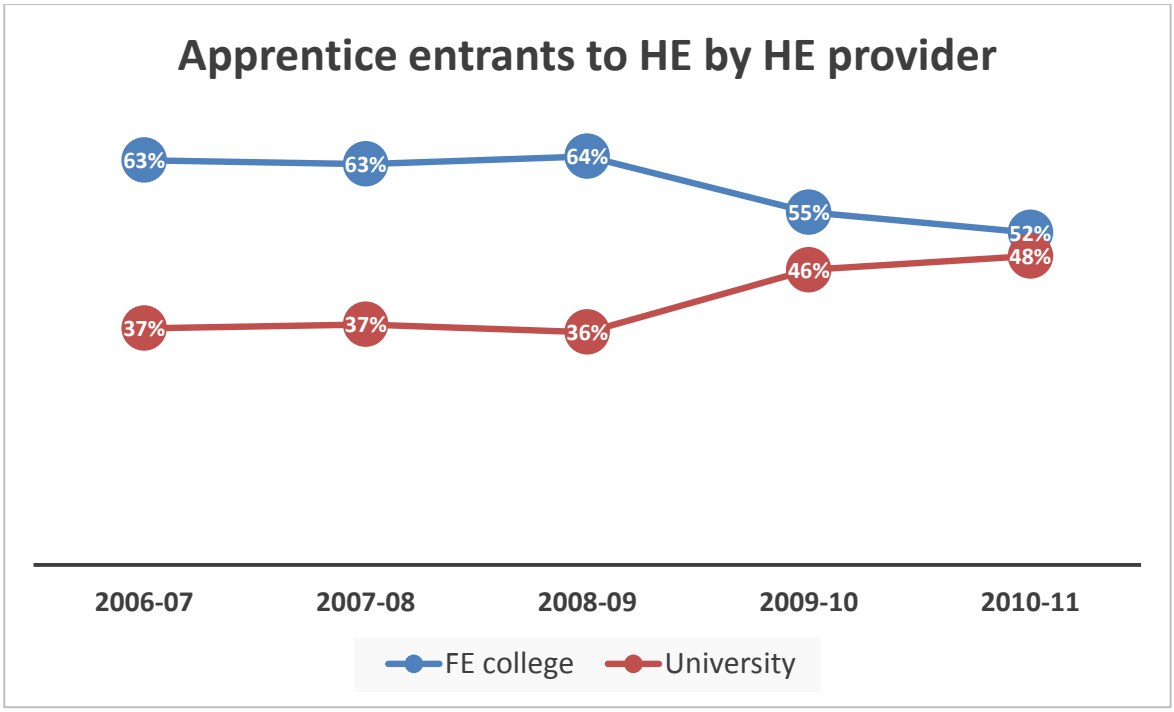
Figure 1: Immediate higher education progression rates by age group



3.5 Progression of apprentices broken down by HE provider

Figure 2 illustrates the part that both FE colleges and universities play in delivering higher education to advanced level apprentices who progress. It shows that up until the 2009-10 cohort, a much higher proportion of students progressed to HE in FE colleges than to HE in universities. From the 2009-10 cohort this started to change and universities have delivered to an increasingly larger proportion of advanced level apprentices. This may be influenced by the increase in admissions of learners with BTEC qualifications into universities and First Degree programmes. BTECs are the now the second highest entry qualification used to enter university (behind A levels). However, for the 2010-11 cohort, FE colleges were still the major HE destination for apprentices and this is likely to be influenced by factors such as accessibility, provision of part-time vocational programmes, good local employer links, flexibility, etc.

Figure 2: Breakdown of advanced level apprentice progression by HE provider



education participation rates to Quintile 5 (Q5), those with very high rates. POLAR is a useful proxy for educational disadvantage. Further exploration of disadvantaged students is provided later in the report in section 7.8. Table 16 shows that apprentices from the most disadvantaged quintiles (Q1 and Q2) had lower HE progression than their peers in Q4 and Q5.

Table 16: POLAR3 breakdown for 2006-07 to 2010-11 cohorts

POLAR quintile	Higher education progression rate					
	2006-07	2007-08	2008-09	2009-10	2010-11	Progression rate % point difference
Q1 - Very low higher education participation	10%	10%	10%	9%	7%	-2.2%
Q2	10%	12%	12%	10%	8%	-1.8%
Q3	12%	12%	12%	11%	9%	-2.3%
Q4	12%	12%	13%	12%	9%	-3.1%
Q5 - High higher education participation	13%	13%	13%	13%	11%	-2.2%
Total	11%	12%	12%	11%	9%	-2.4%

5.6 Trends by type of apprenticeship provider

In Table 17, progression rate trends broken down by apprentice provider are presented showing the immediate progression rates for each cohort. The drop in rates for the 2010-11 cohort is seen for all types but to differing extents. Progression rates for apprentices registered with Businesses has seen a considerable drop as has the rates of learners with the Public Sector whereas those apprentices with FE colleges and Private Training Providers did not seen such a high decline.

Table 17: Type of apprenticeship provider for 2006-07 to 2010-11 cohorts

Provider type	2006-07		2007-08		2008-09		2009-10		2010-11	
	Cohort number	% immediate progression	Cohort number	% immediate progression	Cohort number	% immediate progression	Cohort number	% immediate progression	Cohort number	% immediate progression
Direct Contract Business	5570	11%	6995	11%	8690	13%	10675	9%	10875	6%
FE College	9600	11%	9985	12%	12600	11%	14560	13%	16550	10%
Other	2430	8%	2110	9%	1675	10%	2620	9%	1770	8%
Private Training Provider	16225	11%	20305	11%	24550	12%	27425	11%	30945	9%
Public Sector	1045	18%	1385	16%	1700	11%	2195	12%	1970	9%
Total	34870	11%	40785	12%	49215	12%	57475	11%	62110	9%

Figure 8: Provider breakdown for the 2006-07 cohort

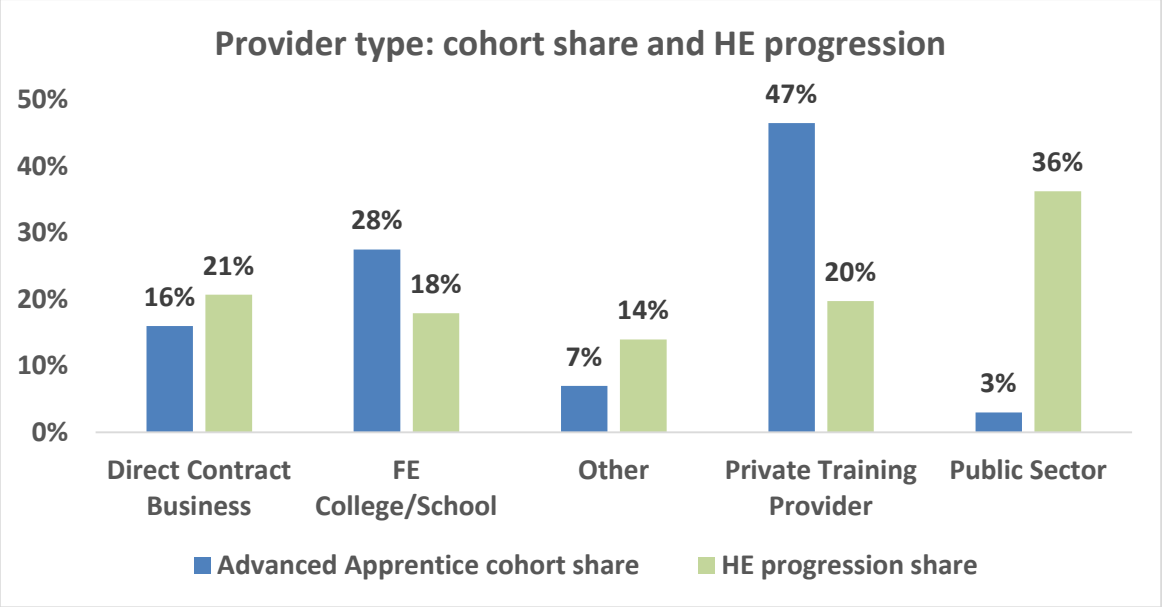


Table 29 shows both immediate progression rates and longitudinal progression rates by provider type. For example, high proportions of apprentices from the Public Sector continue to progress over time where the rate jumps from 18.3% for immediate progression to 39.0% when tracked for seven years. In comparison, apprentices attending an FE college progress at a rate of 17.9% (with 11.4% progressing immediately) showing that although apprentices do continue to enter higher education over time, they do so to a lesser degree than apprentices from the Public Sector. A delivery breakdown in the same table shows varying patterns of progression dependant on delivery. The majority of apprentices from the Public Sector who progress, go on to university. FE college apprentices are more likely to remain in FE colleges for their higher education to study both non-prescribed and prescribed higher education.

Table 29: Higher education progression by type of provider for 2006-07 advanced level apprentice cohort

Provider type	Higher education progression rates		Delivery breakdown (overall progression over 7 years)		
	Immediate progression**	Overall higher education progression*	HE in FE	Non-prescribed HE in FE	University
Direct Contract Business	10.6%	20.7%	40.5%	7.5%	52.1%
FE College	11.4%	17.9%	45.8%	18.6%	35.7%
Other	8.1%	14.0%	45.6%	20.6%	33.8%
Private Training Provider	11.3%	19.8%	40.2%	18.1%	41.7%
Public Sector	18.3%	39.0%	30.0%	9.8%	60.2%
Total	11.2%	19.3%	41.5%	16.4%	42.1%

**Overall progression = seven years tracked from apprentice start, ** Immediate progression = three years tracked from start*

7.7 HE qualification and framework

Those frameworks with a higher education entrant number of 50 and above are shown in Table 30 alongside a higher education qualification breakdown.

81.5% of Engineering advanced level apprentices who progressed went on to *Other Undergraduate* higher education programmes and the majority went on to HNC programmes. The biggest proportion of advanced level apprentices in the Children's Care Learning and Development framework progressed to Foundation degree courses (35%) compared to only 3% of those on a Health and Social Care framework. The majority of Health and Social Care students progressed to OUG (in particular to Dip HE) programmes and this is likely to have changed for later cohorts with the move towards Nursing degree programmes.

Those students on an Active Leisure and Learning frameworks were more likely to progress to a First degree than students on other frameworks. For example, around three quarters progressed to a First degree compared to just 4% of Engineering advanced level apprentices.

Table 30: 2006-07 advanced level apprentice immediate entrants by framework and He qualification

Framework	HE entrants	First degree	Foundation degree	HND	NVQ	OUG	Grand Total
Engineering	1220	3.6%	11.3%	3.4%	0.0%	81.5%	100.0%
Accountancy	890	3.0%	1.0%	0.0%	90.2%	5.7%	100.0%
Business Administration	315	40.4%	12.1%	5.1%	8.6%	31.8%	100.0%
Children's Care Learning and Development	255	30.7%	34.6%	0.0%	5.1%	28.7%	100.0%
Health and Social Care	235	13.6%	3.0%	0.0%	9.8%	73.6%	100.0%
Active Leisure and Learning	135	71.5%	16.1%	2.9%	0.0%	9.5%	100.0%
Construction	135	12.8%	11.3%	6.0%	0.0%	69.9%	100.0%
Customer Service	110	44.4%	13.9%	3.7%	4.6%	32.4%	100.0%
ICT Practitioners	70	52.1%	18.3%	8.5%	0.0%	18.3%	100.0%
Process Technology	60	16.7%	35.0%	3.3%	0.0%	45.0%	100.0%
Hospitality and Catering	55	35.1%	24.6%	1.8%	8.8%	28.1%	100.0%
Electrotechnical	55	21.8%	5.5%	3.6%	0.0%	69.1%	100.0%

7.8 Disadvantaged profile of advanced level apprentices and progression breakdown

Sections 4.1.4 and 5.5 compared the cohorts using POLAR3. In this section the disadvantaged profile of the 2006-07 cohort is analysed in more detail.

The home postcodes of advanced level apprentices were used to classify learners using indicators of educational disadvantage. The POLAR3 (HEFCE, 2012) is used as it classifies neighbourhoods using higher education participation. POLAR3 classifies neighbourhoods by quintiles ordered from Q1, those areas with very low higher education participation rates to Q5, those with very high rates of HE participation. POLAR3 is used both to profile students and explore progression by POLAR3 quintile. The recent HEFCE POLAR3 study provides an up to date comparison of national progression rates.

HE performance indicators are produced each year and classify the entrant cohort using POLAR3. The data shows that **11%** of all entrants nationally were classified as POLAR3 Q1. Table 32 shows that **22%** of advanced level apprentices who entered HE are classified as POLAR3 Q1 indicating that the advanced level apprentice higher education entrant population has twice the proportion of POLAR3 quintile 1 learners than the general higher education population.

Table 32 presents progression rates at POLAR3 group level and shows that the advanced level apprentice rates of progression to higher education are not significantly different according to POLAR profile. For example, 10% of Quintile 1 advanced level apprentices progressed to higher education immediately compared to 13% of Quintile 5 apprentices. Similarly, although seven year progression rates for advanced level apprentices living in a quintile 5 area are higher, the gap is not substantial. This is different from the general young population; the HEFCE POLAR3 study found that the participation rate for POLAR3 Q1 18-19 year olds was 16.1% and for POLAR3 Q5 learners around 57.6%, a substantial gap between the two groups. The table also shows similar timing of entry by POLAR profile although Q5 apprentices are more likely to progress immediately than those from other quintiles.

Table 31: Progression rates of 2006-07 advanced level apprentice cohort by POLAR3 profile

POLAR 3	% of HE entrant population	HE progression rates		Timing of entry (of all HE entrants)	
		Immediate HE rate	7 year HE progression rate	Immediate 1-3 years	4-7 years later
Q1 - Low HE participation	22%	10%	17%	56%	44%
Q2	23%	10%	18%	56%	44%
Q3	22%	12%	20%	59%	41%
Q4	19%	12%	21%	58%	42%
Q5 - High HE participation	14%	13%	21%	61%	39%

7.9 Breakdown by POLAR3 and qualification aim

The POLAR3 profile of two POLAR3 groups, Quintile 1 and Quintile 5, by qualification aim, shown in Table 32 broken down by HE qualification. These results show that advanced level apprentices living in a POLAR3 Q1 area are less likely to study a First degree than their Q5 peers and much more likely to be studying an NVQ at Level 4.

Table 32: Qualification type and POLAR3 quintile comparison

POLAR3	2006-07 advanced level apprentice HE entrants					
	First degree	Foundation degree	NVQ	OUG	HND	Total
Q1 - Low HE participation	20.6%	15.3%	16.9%	44.3%	1.8%	100.0%
Q2	23.4%	17.1%	14.6%	41.6%	2.7%	100.0%
Q3	23.5%	13.3%	13.9%	46.2%	2.2%	100.0%
Q4	25.5%	17.1%	14.3%	40.9%	1.7%	100.0%
Q5 - High HE participation	28.1%	15.6%	11.4%	40.6%	3.6%	100.0%
Total	24.0%	15.7%	14.4%	42.8%	2.3%	**100.0%**

7.10 Breakdown by framework and POLAR3

Progression rates of POLAR3 groups vary by framework: students on an Accountancy framework who live in a POLAR3 Q1 area are more likely to progress to higher education than their framework peers who live in a POLAR3 Q5 area. In general, it appears that although the overall progression rates of POLAR3 groups is similar, this is not the case at framework level suggesting that students on some frameworks living in Q1 areas are just as likely, to progress than their framework peers who live in Q5 areas.

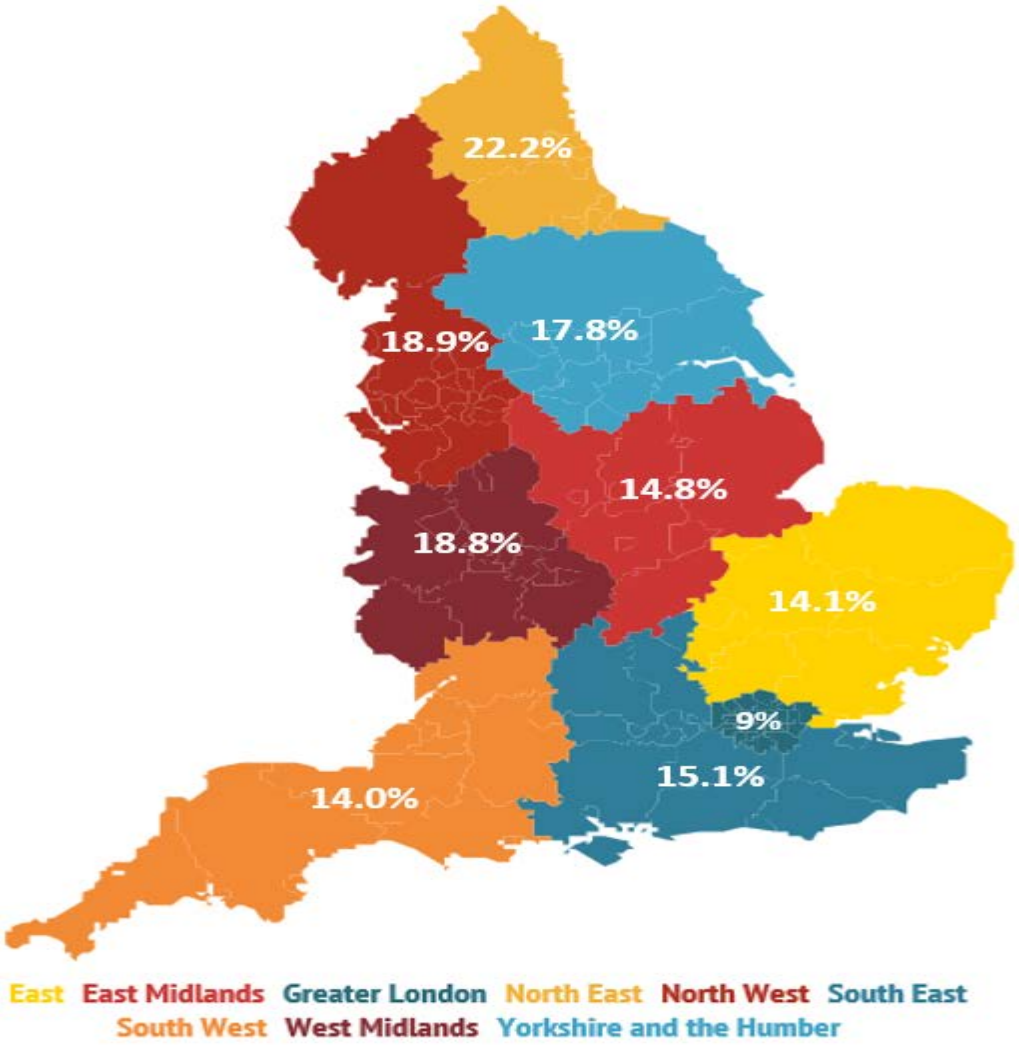
Table 33: Framework and POLAR3 progression

Framework	Q1 % higher education rate	Q5 % higher education rate	Difference progression rates Q1 and Q5
Engineering	42.1%	53.5%	11.4%
Accountancy	78.0%	70.3%	-7.7%
Business Administration	18.8%	26.6%	7.8%
Health and Social Care	28.2%	28.7%	0.5%
Customer Service	11.5%	15.6%	4.1%
Construction	7.7%	13.6%	6.0%
Children's Care Learning and Development	21.5%	25.1%	3.5%
Hospitality and Catering	7.8%	12.2%	4.4%
Electrotechnical	3.4%	5.0%	1.6%
Active Leisure and Learning	20.8%	35.5%	14.7%
Hairdressing	5.0%	5.8%	0.8%
Dental Nursing	11.0%	23.1%	12.1%
ICT Practitioners	17.1%	16.3%	-0.8%

7.11 Region by POLAR3 group and higher education progression

Figure 9 illustrates that disadvantaged advanced level apprentices living in the North East are much more likely to progress to higher education than their counterparts in London. 22% of students living in a disadvantaged neighbourhood in the North East progress to higher education compared to 9% of students who live in a disadvantaged neighbourhood in London.

Figure 9: Regional HE progression of disadvantaged advanced level apprentices

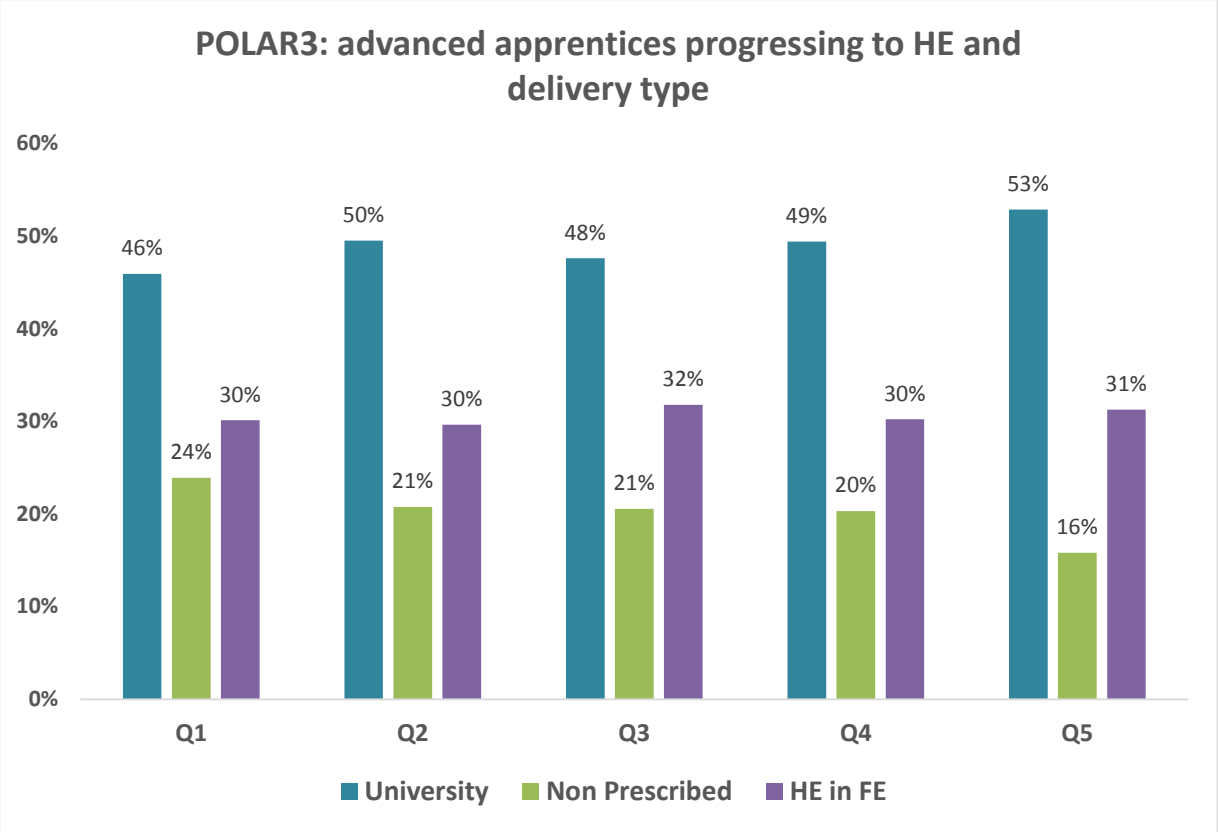


7.12 Delivery of higher education provision and POLAR3 comparison

Figure 10 shows that **53%** of advanced level apprentice entrants to **university** are classified as POLAR3 **Q5**. The converse is found for **non-prescribed** higher education programmes delivered in FE where **24%** entrants are **Q1** compared to 16% classified as

Q5. Similar proportions of both quintiles are found with higher education in FE programmes.

Figure 10: Delivery of higher education provision and POLAR3 quintiles



7.13 Higher education subject areas

Disaggregation of higher education subject areas by framework reveals the extent to which advanced level apprentices continue their studies at higher education level in the same subject area, but also gives an indication of where advanced level apprentices switch subject areas. Only those higher education subject areas with higher numbers of entrants are shown in Table 34. For example, it shows that around half of those on an Accountancy framework continue their studies in this area and a further 15% remain studying business related higher education subjects. The majority of those on an Engineering framework go on to study engineering in higher education whilst apprentices on a Business Administration framework study a range of subjects in higher education.

Table 34: Relationship between advanced level apprenticeship frameworks and higher education subject areas

Framework	Subject area in prescribed higher education	% of total progressed
Accounting	(N4) Accounting	52%
	(N9) Others in business & administrative studies	7%
	(N1) Business studies	8%
	(Y0) Combined	5%
	(G1) Mathematics	5%
Business Administration	(N1) Business studies	20%
	(Y0) Combined	10%
	(N2) Management studies	9%
	(B7) Nursing	5%
	(C8) Psychology	4%
Construction	(K2) Building	39%
	(N2) Management studies	14%
	(H2) Civil engineering	12%
	(H1) General engineering	5%
	(K0) Broadly-based programmes within architecture, building & planning	2%
Children's Care, Learning & Development	(X3) Academic studies in education	48%
	(L5) Social work	9%
	(B7) Nursing	7%
	(X1) Training teachers	6%
	(Y0) Combined	5%
Engineering	(H6) Electronic & electrical engineering	29%
	(H3) Mechanical engineering	23%
	(H1) General engineering	19%
	(H7) Production & manufacturing engineering	10%
	(Y0) Combined	2%
Health and Social Care	(B7) Nursing	70%
	(L5) Social work	7%
	(Y0) Combined	5%
	(B9) Others in subjects allied to medicine	3%
	(N1) Business studies	2%
Active Leisure and Learning	(C6) Sports science	43%
	(N1) Business studies	6%
	(C8) Psychology	3%
	(X1) Training teachers	3%
	(N8) Hospitality, leisure, tourism and transport	3%
Travel & Tourism	(N1) Business studies	13%
	(Y0) Combined	9%
	(X1) Training teachers	11%
	(B7) Nursing	9%
	(N8) Hospitality, leisure, tourism and transport	8%

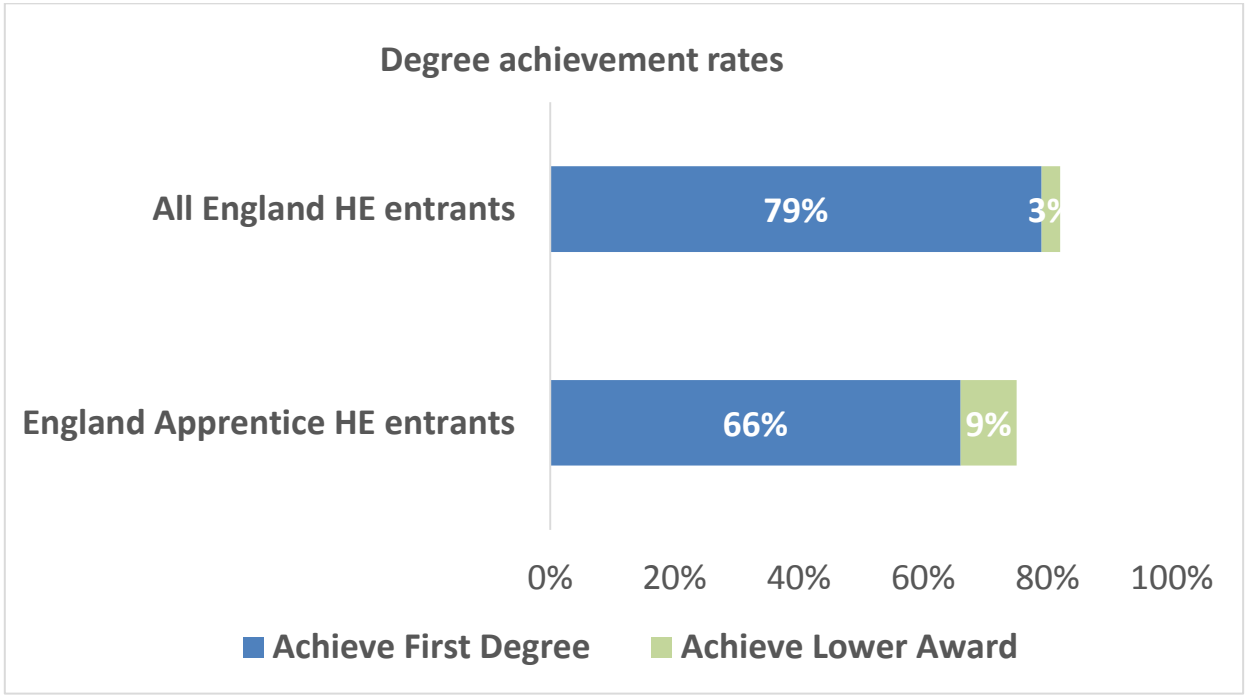
8. Higher education success

In this new section, the HE achievement of the tracked apprentice cohort who progressed to **university** is examined. In order to ensure reliability of achievement rates, the population for our analysis is limited to two cohorts of full-time First degree entrants 2008-09 and 2009-10, who would have expected to have completed their degree by 2012-13.

8.1 Degree achievement

Figure 11 shows a 66% achievement rate for the two cohorts of students who enrolled on a full-time First degree and were expected to have graduated by 2012-13. An additional 9% started on a first degree but were awarded a lower award, such as a Foundation degree. This means that a total of 75% of apprentices who progressed to HE achieved a higher qualification compared to an all-England rate of 82% (HESA, 2012).

Figure 11: Chart showing degree achievement rates compared to national



8.2 Degree achievement and gender

Figure 12 shows that female apprentices who progress are more likely to achieve their First degree than their male peers. A total of **78%** female first degree entrants achieved a qualification, 70% their intended degree level and a further 8% ended with a lower award, e.g. a Foundation degree**.** This compares to **72%** of male apprentices achieving an HE qualification after enrolling for a First degree, with 62% achieving at degree level and 10% achieving a lower award.

9. Conclusions

The progression behaviour of advanced level apprentices is likely to be different from other students who enter HE due to the roll on, roll off nature of advanced level apprentice study and the fact that these students have completed their framework while in work and by the time they enter HE have considerable work experience in a specific field. By identifying first time entrants to higher education and tracking their progression over time, a depth of understanding has been gained about patterns of progression. The advanced apprentice cohort has changed between the first and last cohort tracked in this study. There has been a huge growth in the number of 25+ apprentices who are less likely to go onto further study than their younger peers. Furthermore, there has been an increase in the number of apprentices on specific frameworks: Management, Communication Technologies, Health & Social Care, Customer Service and Business Administration have all seen significant growth in numbers. Technical frameworks such as Engineering and Electrotechnical, Construction and Vehicle Repair and Maintenance have not seen growth. All of these factors are likely to contribute to changes in the overall progression rate and an older age composition affects progression rates at every level.

Longitudinal tracking of the 2006-07 cohort (first time higher education entrants) tracked for seven years showed that 19.3% of advanced level apprentices progressed to higher education. Clearly, pathways are important to work based learners entering higher education and this may explain some of the differences at region and framework level. Although 56% of learners who progress to higher education do so within three years of the start of their advanced level apprenticeship, there are still significant numbers progressing four to seven years afterwards.

Where advanced level apprentices chose to study was explored in this study and results revealed the important role that FE colleges have to play in delivering higher education for these part-time work based learners. However, trends reveal that a higher proportion of advanced level apprentices are choosing to move to full-time study than in earlier years and with this move, universities have increased their share of delivery of higher education to advanced level apprentices.

Trends show that the number of actual higher education entrants has increased from 3,890 for the 2006-07 cohort to 5,450 for the 2010-11 cohort however, against a significant rise in advanced level apprentice cohort populations, higher education progression rates actually dipped between the earliest and latest cohort. The dip may in part be due to the fact that many of the 2010-11 cohort progressed to HE in 2012-13, the year that higher HE fees were introduced and when a dip was seen in HE entrant numbers generally. The lower progression rates of a substantially higher number of 25+ apprentices in 2009-10 was also a significant factor here. Progression rates for the young cohort remained fairly stable.

The success rates of apprentices who entered for a full-time first degree in HE were explored for the first time in this update. Results show lower achievement rates than that found nationally where attrition was higher with the apprentice HE cohort. This may reflect the fact that many apprentices have entered with vocational qualifications and may also have found it challenging to move from work to study. Good degree attainment for the apprentice HE cohort was very positive and a higher proportion of apprentices who

completed their first degree attained a good degree than found nationally with all First degree achievers.

Also in this update, was an investigation on the destinations of apprentices who left HE and these results were also very positive. Only 2% of the cohort surveyed were unemployed, lower than the overall HE leaver cohort. Apprentices who left HE also have a higher than average salary than found in the overall national leaver survey.

It is apparent that a group of apprentices do not continue on the same career paths as their apprenticeship framework. Some of them follow the same subject area of study as their advanced level apprenticeship framework but there are others who apparently decide to opt for a different career and study an unrelated higher education subject and this often leads to a transfer to full-time study.

As some FE colleges expand their higher education provision and universities continue to work to widen participation, the information in this study may help to illustrate the opportunities available to increase the progression rate of work-based learners on apprenticeship frameworks. In sectors where there are clear pathways there are lessons to be learned in particular for higher apprenticeships. By fostering a culture of progression which is supported by access and funding, progression for future apprentices in a range of sectors could be a viable and desirable option for the employee, employer and the economy.

10. References

Anderson, A., & Hemsworth, D. (2005). *From Apprenticeship to Higher Education.* UVAC.

BIS. (2009a). *Higher Ambitions - The Future of Universities in a Knowledge Economy.* BIS.

BIS. (2009b). *Skills for Growth - The National Skills Strategy.* BIS.

BIS. (2011). *New Challenges, New Chances.* BIS.

BIS. (2011a). *Higher Education - Students at the Heart of the System.* BIS.

BIS. (2011b). *Specification of Apprenticeship Standards in England.* BIS.

BIS. (2013). *Specification of Apprenticeship Standards in England.* BIS.

BIS. (2013). *The Future of Apprenticeships in England: Implementation Plan.* BIS.

BIS. (2014). *The Future of Apprenticeships in England: Guidance for Trailblazers.* BIS.

BIS. (2015). *Specification of Apprenticeship Standards for England.* London: BIS.

Browne, J. (2010). *Securing a Sustainable Future for Higher Education - An Independent Review of Higher Education Funding and Student Finance.* BIS.

Carter, J. (2009). *Progression from Vocational and Applied Learning to Higher Education in England.* UVAC.

Colahan, M., & Johnson, C. (2014). *Apprenticeships Evaluation: Employers.* BIS.

Dearing, R. (1997). *Higher Education in the Learning Society.* HMSO.

DIUS. (2007). *World Class Skills: Implementing the Leitch Review of Skills in England.* DIUS.

Fuller, A., & Unwin, L. (2014). *Creating and Supporting Expansive Apprenticeships.* National Apprenticeship Service.

HEFCE. (2006). *Higher Education in FE Colleges - Consultation on HEFCE Policy.* HEFCE.

HEFCE. (2007). *Pathways to Higher Education - BTEC Courses.* HEFCE.

HEFCE. (2009). *Pathways to Higher Education - Apprenticeships.* HEFCE.

HEFCE. (2010, December). *POLAR Young Participation Maps - Polar 2.* Retrieved July 21, 2011, from HEFCE: http://www.hefce.ac.uk/widen/polar/

HEFCE. (2012). *POLAR 3 Young Participation in Higher Education.* HEFCE.

HEFCE. (2014). *Pressure from All Sides - economic and policy influences on part-time higher education.* Bristol: HEFCE.

HEFCE. (2014b). *Further Information on POLAR3.* HEFCE.

HESA. (2010, January 14). *HESA SFR 142 - Higher Education Student Enrolments and Qualifications Obtained at Higher Education Institutions in the UK for the Academic Year 2008-09. Table 6a.* Retrieved from Higher Education Statistic Agency: https://www.hesa.ac.uk/pis/noncon

HESA. (2012). *UKPIs: Non Continuation Rates (including Projected Outcomes) - Table 5 (2008-09).* Retrieved from Higher Education Statistics Agency: https://www.hesa.ac.uk/pis/noncon

Higton, J., Emmett, R., & Halliday, R. (2014). *Apprenticehip Evaluation: Learners.* BIS.

IFF Research. (2011). *Prior Qualifications of Adult Apprentices 2009-10.* BIS.

Joslin, H., & Smith, S. (2013). *The Progression of Apprentices into Higher Education.* BIS.

Joslin, H., & Smith, S. (2013b). *Progression of Apprentices into Higher Education in London 2004 -2010.* Linking London.

Joslin, H., & Smith, S. (2014). *Progression of Apprentices to Higher Education - Cohort Update.* BIS.

Leitch, S. (2006). *Leitch Review of Skills - Prosperity for all in the Global Economy - World Class Skills.* HMSO.

Milburn, A. (2012). *University Challenge:How Higher Education CanAdvance Social Mobility.* Cabinet Office.

NAS. (2012). *Meeting Employer Skills Needs - Consultation on Criteria for Higher Apprenticeships at Degree Levels .* National Apprenticeship Service.

Oxford Economics. (2014). *Macroeconomic Influences on the Demand for Part-time Higher Education in the UK.* Oxford: Oxford Economics.

Panel on Fair Access to the Professions. (2009). *Unleashing Aspiration: The Final Report of the Panel on Fair Access to the Professions.* Cabinet Office.

Richard, D. (2012). *Richard Review of Apprenticeships.* BIS.

Skills Commission. (2009). *Progression through Apprenticeships.* Skills Commission.

Smith, S., Joslin, H., & Jameson, J. (2015). *Progression of College Students in England to Higher Education.* BIS.

UKCES. (2010). *Progression from Vocational and Applied Learning to Higher Education across the UK.* UK Commission for Employment and Skills.

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