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Banging on the Door of the University: The Complexities of Progression from Apprenticeship and other Vocational Programmes in England

Monograph No. 14 June 2012

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ISSN 1466-1535

Abstract

This monograph examines the extent to which vocational qualifications and apprenticeship programmes are accepted by higher education institutions (HEIs) in England when considering candidates for entry to degree courses. It argues that the prospects for progression for those with vocational, as opposed to academic, qualifications need urgent attention. Four illustrative examples drawing on statistical and documentary evidence are presented. The analysis raises serious questions about the currency of Advanced Apprenticeship and Level 3 vocational qualifications for entrance to higher education (HE) and the extent to which participation from this potential pipeline is likely to increase. The paper also argues that the further segmentation of the HE sector in England currently taking place and the challenge to the concept of whole stand-alone qualifications through the introduction of the Qualifications and Credit Framework (QCF) will further undermine access to HE for apprentices. This paper exposes systemic barriers to progression built into the structure of education and training in England and calls for an urgent and independent review of the regulation, role, content and use of vocational qualifications.

Contents

1 Introduction

The numbers completing higher and tertiary levels of education have expanded considerably across the world, fuelling the aspirations of many individuals who, in the recent past, would not have regarded degree level study as an option. Many occupations that used to be open to people without bachelor degrees now require them and investment in a degree still produces a significant wage return over the life course and will continue to do so, despite the trebling of fees in England from the academic year 2012/13 (Walker and Zhu 2011) onwards. For women, the wage return applies regardless of the subject studied, whilst for men, the rates of return varies considerably across subjects (with degrees in Law, Economics and Management bringing the highest return). The gender difference is important with regard to this paper, as Walker and Zhu (2011: 1184) point out that the results for women reflect the 'greater discrimination that women face in the sub-degree labour market'.

Where once the completion of an apprenticeship or another form of vocational programme would have been seen as an end in itself, there is now an expectation that all forms of education and training should provide a platform for progression (see, inter alia, Bowers-Brown and Berry 2005, Carter 2009, Cowan 2012). The notion of 'progression' in education always tends to place higher education (HE) at the top of the ladder. Yet, 30 years ago Bethune (1977) highlighted the phenomenon of unemployed university graduates in the United States enrolling at Community Colleges and technical institutes to learn a trade. Reflecting on similar activity in Ontario, Canada, Wilson (2009) referred to the phenomenon as 'reverse transfer', a concept that Moodie (2004) has reported on in Australia. In Germany, there has been a rise in the numbers of school leavers who, having attained the necessary qualification (*Abitur*) to gain entry to HE, are choosing to complete an apprenticeship first. This phenomenon of *Doppel-Qualifikation* is most commonly associated with young people taking apprenticeships in the fields of commerce and administration (see Pilz 2009).

Brown *et al.* (2011) have argued that the promise made by governments over the past 30 or so years, particularly in the United Kingdom (UK) and the United States (US), that investment in HE would guarantee access to professional jobs is no longer sustainable. On the basis of their analysis and the current crisis in youth unemployment in many countries, we may see an increase in 'reverse transfer'. In this

monograph, however, we argue that apprenticeships and other forms of vocational preparation that aim to develop intermediate level expertise must be designed to ensure they provide a sufficient platform for progression to higher levels of study. As a model of learning, apprenticeship was traditionally conceived as the first stage of a continuing journey towards occupational mastery (Fuller and Unwin 2010). As such, it transcended the bounded type of training required to carry out routine tasks. The expectation was that the apprentice would be exposed to the full scope of an occupational field and, hence, would have their feet firmly planted on a robust ladder of opportunity. We suggest that whilst in some contemporary government-supported apprenticeship sectors such ladders still exist, others have missing or weak rungs.

In this monograph, we provide an account of the extent to which vocational qualifications and apprenticeship programmes are accepted by higher education institutions (HEIs) in England when considering candidates for entry to degree courses.[1] Four illustrative examples drawing on statistical and documentary evidence are presented. Each illustration focuses on a different occupational sector to highlight how the sectoral dimension is crucial to understanding the evolving landscape of practice with regard to HE admissions and to signal the variable 'exchange value' (Fuller 1995) accruing to successful completion of the qualifications associated with what, in England, are called, Advanced Apprenticeships.[2] This is because each sector has its own history of, and approach to, the concept of progression and, importantly, because some sectors are regulated by powerful professional bodies whose own relationship with HE ensures that progression is built into all aspects of the vocational routes (including apprenticeship) that they endorse.

Higher education has always been strongly vocational. In the UK, universities were established in medieval times to train young men to become clerics and lawyers, and then later to become doctors. The range of occupations requiring a university education and credential has expanded to such an extent that today the majority of degree programmes are occupationally based. The growing demand for HE from

[1] This paper draws on evidence from England but, given that many vocational qualifications are shared between England, Scotland, Wales, and Northern Ireland, and university applications for the whole of the UK are administered through UCAS, we would argue that the issues raised here require attention in all areas of the UK.

[2] Advanced Apprenticeships (known as Modern Apprenticeships in Scotland and Apprenticeships in Wales and Northern Ireland) are positioned at Level 3 (Upper secondary) in the UK's qualification framework. England also has Intermediate Apprenticeships (Level 2), known as Foundation Apprenticeships in Wales, and England, Wales and Northern Ireland also have Higher Apprenticeships (Levels 4 and 5).

individuals, and the perceived benefits perceived to be accruing to participants, raise questions about access and progression and the extent to which opportunities are unevenly distributed across populations. In this regard the prospect for progression for those with vocational, as opposed to academic, qualifications needs urgent attention. Three previous reports, published in 2009 and 2010, have explored progression from both apprenticeship and vocational qualifications. Whilst they contain valuable data and important recommendations, they tend to focus on the need to improve information, advice and guidance, rather than challenging the content of vocational qualifications and apprenticeship programmes and the meaning of level descriptors (see Carter 2009, Skills Commission 2009, UKCES 2010). Developing a better understanding of the entry criteria set by institutions is a crucial step in finding ways to improve opportunities for progression for those coming from vocational and apprenticeship routes.

Following the Introduction, the monograph is organised in five sections. The first places the paper in the context of developments in HE policy. The second reviews the research on vocational progression to HE. Section Three focuses more specifically on apprenticeship and its associated qualifications as a platform for progression to HE and identifies ways in which the 'exchange value' (for a place in HE) of the route is assessed. Section Four presents the sectoral examples. The paper concludes (Section Five) by arguing that our analysis raises serious questions about the currency of Advanced Apprenticeship and Level 3 vocational qualifications for entrance to HE and the extent to which participation from this potential pipeline is likely to increase. Moreover, given the further segmentation of the HE sector currently taking place, and the challenge to the concept of whole stand-alone qualifications through the introduction of the Qualifications and Credit Framework (QCF), we suggest that access to HE for apprentices could be undermined even further. This analysis exposes the systemic barriers to progression built into the structure of education and training in England.

Finally, the paper calls for an urgent and independent review of the regulation, role, content and use of vocational qualifications in the UK, and particularly in England. The current landscape of vocational qualifications in England is highly complex and populated by hundreds of organisations that range in size from the global corporation, Pearson, and the internationally known City & Guilds (a registered company and a charity) to much smaller bodies such as FDQ, a private company

based in Leeds that provides qualifications for the food and drink industry. Navigating this landscape has become much harder in recent years, for reasons discussed later in this paper. We argue that this complexity militates against progression and, furthermore, masks an alarming dilution of qualification standards and actual content.

2 Widening Access to Higher Education

The former Labour government's policy of 'widening participation' in the UK during the 2000s increased the numbers of university students from less socially advantaged backgrounds and there has been a steady rise in the numbers of mature students (David 2010). Flexible patterns of study, using new technologies to create 'blended' approaches to learning, are now available in many HEIs. This has helped them to support the needs of part-time students, many of whom combine work and study, and those wanting to learn at a distance. The three-fold increase in tuition fees for bachelor degrees in England from the autumn of 2012 was predicted to lead to some reduction in the numbers applying to HE, and figures released in January did indeed show a 9.9 per cent fall (UCAS 2012). That statistic reveals, however, that for 18 year olds, the drop was only around one per cent. It is clear that the aspiration to progress to a full-time place at university remains strong amongst young people whilst being weakened amongst older age groups.

As Watson (2002) has argued, from its election in 1997 the New Labour government pursued two main ambitions for HE: a) that it should be globally competitive, fuelling the so-called knowledge economy; and b) that it should be accessible and equitable, promoting social inclusion (see also Pring 2005). As a result of this 'universal agenda', Watson notes that HEIs have come under considerable pressure to 'do it all'. The Coalition Government elected in 2010 has stressed its commitment to both these goals, but has also introduced some significant changes to HE policy in England. From the perspective of this paper, it is clear that the political and economic drivers behind the new government's policies will create a more distinctive and fragmented vocational HE sector.

The two key changes are: a) allowing HEIs to expand the number of undergraduates who enter with a minimum of three A Levels at grades AAB; and b) allowing private companies and further education colleges to offer degrees in their own right without having to be in partnership with an HEI. The effect of the first of

these changes will be to further widen the gap between the so-called elite universities (i.e. those that attract 18 year olds with the highest grades and who can charge the new fee of £9000) and the rest. Around one-fifth of HEIs have changed their original decision to charge £9000, reducing the fee to £7500 or below so that they can compete for an additional 20,000 student places associated with lower fees. This will make it even harder for people from vocational pathways to enter the highly selective part of the HE system. The effect of the second change will be to intensify competition for students on the basis of price and length of degree programme. The government has made it clear it wants to see shorter and more flexible programmes (e.g. two rather than three years; work-based; 'blended' learning); and greater involvement of employers. It is to this type of provision that applicants from vocational pathways (and therefore from more diverse social backgrounds) are more likely to be steered.

2.1 *Apprenticeship and Higher Education*

Apprenticeship is an age-old model of work-based learning. It is also an instrument of state policy in many countries, including the UK, as it forms part of the publicly-funded education and training system (Fuller and Unwin 2010, 2011). In England, since the 1960s, apprentices who showed aptitude for advanced study, notably in sectors such as engineering manufacture and electrical installation, have been able to progress at the end of their apprenticeship to higher level technical qualifications. Their original apprenticeship would usually be extended for a further year to allow them to attend a college of further education (usually on a day-release basis, but sometimes through evening classes) to attain the qualifications. These qualifications, known as Higher National Certificates (HNCs) and Higher National Diplomas (HNDs) are still available throughout the UK and have always been highly valued by employers. In 2001, the then Labour government introduced the Foundation Degree as an alternative to HNC/HNDs and in 2009 they gave a name to the longstanding practice of adding an extra year to apprenticeships by introducing Higher Apprenticeships. Both initiatives symbolised Labour's goal of widening access to 'higher education'.

On 1 December 2011, Vince Cable, Secretary of State for Business, Innovation and Skills, went a step further by referring to Higher Apprenticeships as 'degree level apprenticeship', when he announced how £18.7m of the £25m fund for Higher

Apprenticeships (declared in the previous July) would be used to develop 19,000 apprenticeships in a range of sectors:

> By radically expanding the number of degree level apprenticeships for young people, we will put practical learning on a level footing with academic study. This is an essential step that will help rebalance our economy and build a society in which opportunity and reward are fairly and productively distributed[3].

Examples of the successful partnerships who had bid for a share of this fund included:

- City of Bristol College, working with local companies such as Airbus and Bristol Media – awarded £1,113,000 to develop 600 Higher Apprenticeships ranging from Level 4 (equivalent to the first year of a bachelor degree) to Level 6 (full honours degree) to meet the skills demands of local businesses in aerospace, engineering, construction, healthcare, graphic design and business skills.

- The University of Derby – awarded £900,000 to develop a Higher Apprenticeship model that can be tailored to meet any job role in any business and in any sector, and a specialist Higher Apprenticeship Framework at Levels 4 and 5 to develop the skills of work-based trainers and educators.

These initiatives appear, at first, to offer individuals the chance to progress to university-level study by staying within an apprenticeship programme. However, as this paper will show, given the variability of the content of vocational qualifications at Level 3 and their associated educational currency, there is a danger that some apprentices and vocational students will hit a form of vocational glass ceiling. Meanwhile, individuals with strong GCSEs and A Levels could be recruited straight into the Higher Apprenticeships without having to have completed an Advanced Apprenticeship first. England is in danger of constructing a multi-layered apprenticeship system whose foundations rest on sand, rather than making sure that the most important layer (Level 3) can properly support the upper floors.

3 Aspirations for Progression from and within the Vocational Jungle

A Conservative Party Green Paper in July 2008 stated that, 'To ensure progression, all Advanced Apprenticeships frameworks should contain qualifications recognised by UCAS' (Conservative Party 2008: 24). Similarly, a Labour government report on apprenticeship also published in 2008 announced that, 'We are committed to Apprenticeships being a route to higher education where desired', and instructed the

[3] http://nds.coi.gov.uk/content/detail.aspx NewsAreaId=2&ReleaseID=422302&SubjectId=2

then Learning and Skills Council (LSC), 'to extend its work with UCAS (to evaluate apprenticeship frameworks in terms of UCAS points) to include all frameworks' (DIUS 2008: 24). In a section on its website addressed to potential apprentices, the National Apprenticeship Service (NAS), which has responsibility for government-supported apprenticeships in England, states:

> Your career doesn't have to stop at the Intermediate or Advanced Apprenticeship, if you want to go on to University you will find that many institutes of Higher Education value your skills and knowledge and will happily offer you a place on a Foundation Degree or other higher level qualifications.[4]

Similarly, the Directgov website states:

> If you want to start work after Year 11,[5] an Apprenticeship can be a route into higher education. You'll usually need to take an Advanced Apprenticeship. This leads to an NVQ at Level 3 on the National Qualifications Framework.
>
> As an Apprentice, you will also study for Key Skills, a technical certificate or other qualification relevant to your job. These can also count towards entry into higher education.[6]

For apprentices to gain entry to HE, however, universities would need to recognise the qualifications they obtain (Carter 2009). A variety of vocational qualifications and the Advanced Level General Certificate of Education (A Level) are classified at Level 3 in the National Qualifications Framework. One of their functions is to act as a stepping stone to HE (Level 4 and beyond). Indeed, A Levels were introduced in the 1950s to prepare young people for entry to university. However, very few vocational qualifications are recognised for direct entry to HE. A search of the qualifications included in the UCAS tariff confirms that, with some important exceptions identified later in this paper, few vocational qualifications appear.[7]

3.1 *Defining Vocational Qualifications*

Before continuing, it may be helpful to give a brief summary of the different ways vocational qualifications (VQs) are categorised in England. According to the Office of

[4] http://www.apprenticeships.org.uk/Be-An-Apprentice/The-Benefits.aspx (accessed 12 March 2012)
[5] Year 11 is currently the final year of compulsory schooling in England. In 2013 young people will be required to participate in some form of government-approved education or training until the age of 17 (Year 12) and from 2015 this will rise to 18 (Year 13).
[6] http://www.direct.gov.uk/en/EducationAndLearning/14To19/OptionsAt16/DG_066261 (accessed 12 March 2012)
[7] http://www.ucas.com/ students/ ucas_tariff/qualifications

Qualifications and Examinations Regulation (Ofqual), there are two distinct categories:

- Occupational VQs
- Vocationally-Related Qualifications (VRQs)

On its website, Ofqual states that Occupational VQs are:

> ...designed to meet the national occupational standards (NOS) for a particular sector/work place and employers rely on these qualifications for evidence that an employee is competent to carry out the job. VQs are often designed to prepare learners to be able to carry out a job role or to confirm competence of doing that role in the workplace.

In contrast, VRQs:

> ...may not be based on the national occupational standards and can be designed to allow learners access to further/higher education and/or the workplace. Some VRQs are technical certificates which assess the knowledge requirements of apprenticeships.[8]

If you put the term 'vocational qualifications' into the Directgov website[9], it provides information about the QCF as follows:

> All vocational qualifications are grouped together in different levels on the Qualifications and Credit Framework (QCF). The level shows how difficult each qualification is – from entry level right up to level 8… Vocational qualifications are made up of units of study. You can study units at your own pace. These can then build into qualifications that are right for you.

According to the Directgov website (that no longer provides information about well-recognised and popular vocational qualifications such as BTEC or OCR Nationals), Vocational qualifications include names you may already be familiar with, such as:

- NVQs (National Vocational Qualifications)
- HNCs (Higher National Certificates) and HNDs (Higher National Diplomas)

If you click on NVQs, you are taken to a page about NVQs in Welsh, part of the Welsh Directgov site. If you click on the HNC/HND link, this statement appears:

> HNCs (Higher National Certificates) and HNDs (Higher National Diplomas) are work-related (vocational) higher education qualifications. While bachelors degrees tend to focus on gaining

[8] http://www.ofqual.gov.uk/qualifications-assessments/89-articles/517-vocational-qualifications (accessed 12 March 2012)

[9] http://www.direct.gov.uk/en/EducationAndLearning/QualificationsExplained/DG_181951 (accessed 12 March 2012)

> knowledge, HNCs and HNDs are designed to give you the skills to put that knowledge to effective use in a particular job.

Aside from the confusion these statements must create in the minds of individuals and employers, the key distinction that comes through is that 'vocational qualifications' are knowledge-focused and acquired through classroom-based study. The description of HNCs/HNDs also suggests they involve practical activity or, at least, in comparison to bachelor degrees. These distinctions are important in helping to understand why NVQs are regarded by many commentators as inferior to other forms of vocational qualification (see Raggatt and Williams 1999, Unwin *et al.* 2004, Brockmann *et al.* 2008).

3.2 *Gaining Admission to HE*

In terms of HEIs' admissions' practice, some vocational Level 3 awards are only accepted in combination with academic qualifications and many are not recognised at all (as the case studies later in this paper will show). This is despite the paradoxical fact that the expansion of student numbers in HE has been accompanied by an expansion in the number of vocational degree courses, including the Foundation Degree, which itself provides a platform for individuals without A Levels to progress to the final year of a bachelor degree (Connor and Little 2007, Parry 2010).

The complexities of admissions procedures are at their most opaque when it comes to HE's relationship with the vocational. In the case of apprenticeship, the case for advocating that it, too, should provide progression to HE raises additional issues. Apprenticeship is a model of learning whose goal is to prepare the individual to become a productive member of an occupational community (Fuller and Unwin 2001). The attainment of qualifications forms part of that model, but the completion of an apprenticeship signals that an individual has developed a much broader capability by combining participation in vocational practice in the workplace with the development of associated vocational knowledge. At the moment there are no national guidelines in place for recognising and valuing the worth of this holistic outcome. Some progress has been made at a local level through individually negotiated arrangements with HEIs brokered by Lifelong Learning Networks (LLNs), but we are a long way from establishing a national approach.

To date, there have been attempts to quantify the numbers of young people entering HE with vocational qualifications (see Connor and Little 2007, Vickers and

Bekhradnia 2007, Ertl *et al.* 2010) and from those who have completed apprenticeships (Seddon 2005, Gittoes 2009, Smith and Joslin 2011). Research on Foundation Degrees has tended to concentrate on the way these qualifications have been developed and the experiences of students (see Smith and Betts 2003, Reeve *et al.* 2007, Gallagher *et al.* 2009, Evans *et al.* 2010). In a noticeable exception, Guile (2011) conceptualises work-based learning in Foundation Degrees as a form of apprenticeship. In the main, however, research on apprenticeships and vocational qualifications continues to be carried out in a separate space to the study of HE. This separation has neglected the way vocational qualifications at Level 3 are valued and treated in contrast to academic qualifications (see Fuller *et al.* 2010 for an exception). In addition, our evidence presented in this paper reveals the stark realities that lie behind the rhetoric of the level-based qualification system and the concept of equivalences between qualifications.

3.3 *The Qualifications and Credit Framework*

The introduction of the QCF in September 2010, covering vocational, but not (as yet) academic qualifications, has reinforced the academic–vocational divide. The QCF sits alongside the National Qualifications Framework (NQF) and covers England, Northern Ireland and Wales. As we write, Ofqual, the regulator for all qualifications in England and for vocational qualifications in Northern Ireland, is developing yet another framework to combine the NQF and QCF, but for the moment the two continue to exist.[10] Longstanding calls for a system to allow individuals to gain credit for small amounts ('bite-sized') of either formal or informal learning gained momentum in the mid-1980s in the UK through such initiatives as the Open Tech Programme and the Open College Network.

In the same period, a key part of the rationale for introducing competence-based NVQs was to make the content of qualifications (and, importantly, the assessment requirements) completely transparent. It was argued that this would overcome 'provider capture' by shifting power from education and training institutions to individual learners and employers (see Raggatt and Williams 1999, Unwin *et al.* 2004 for detailed critiques). In 1987, the newly created NVQs were arranged in a four-level NQF (with Level 4 equating to that immediately below

[10] Ofqual shares responsibility for the QCF with the regulators in Wales (Welsh Government) and Northern Ireland (Council for the Curriculum, Examinations and Assessment).

bachelor degree), subsequently extended to include a fifth level in 1989. General education qualifications were also included. The level-based NQF would enable individuals to read across from one qualification to another to establish equivalency between general and vocational qualifications. The five levels were then extended upwards by a further three levels to encompass degree-level qualifications up to PhD. Today, Levels 4 to 8 of the NQF equate to the Framework for Higher Education Qualifications (FHEQ).[11]

Many other countries have followed the UK's lead and introduced a form of NQF, and there is now a European Qualifications Framework (EQF). Young (2003: 231) argues that, 'NQFs represent an almost paradigm case of government intervention in a neo-liberal democracy', as they are 'attempts both to gain greater central control and at the same time to give individuals and institutions a sense that they have more choice'. In that sense, the QCF represents the latest attempt by the state to bring order to a world in which, paradoxically, it continues to create confusion.

The QCF provides a means of classifying vocational qualifications (at Levels 1–4)[12] by assigning credits to the number of 'Guided Learning Hours' (GLHs) required to complete an accredited programme, with one credit linked to ten GLH. There are three sizes of qualifications in the QCF: 1–12 credits (10–120 GLH) is counted as an Award; 13–36 (130–360 GLH) credits as a Certificate; and 37 or more credits (370+ GLH) as a Diploma. In effect, this means the disappearance of the concept of a stand-alone qualification with a distinctive title, as what was once a whole qualification will now be disaggregated into three separate qualifications. The new classification does not map easily to existing recognised vocational qualifications (that also use the nomenclature of Certificate and Diploma), and this makes it difficult for candidates and recipients to gauge their worth and exchange value, for example, for progression to further study. In addition, because the QCF does not include academic qualifications, it is more difficult for individuals to understand how their qualification 'compares' or what it might be worth in relation to well-understood academic benchmarks, including GCSE and A Level passes.

This raises questions about the ability of young people to progress on the basis of their attainment in the QCF. For example, could a young person who has gained a

[11] See Appendix for details.
[12] Some higher level professional qualifications are also in the QCF.

Level 3 QCF Diploma with, say, 470 GLH and 47 credits (ten more credits than necessary to achieve their Diploma) enter HE to pursue further qualifications in their chosen vocational area? The answer is probably 'no'. Currently, most Level 3 vocational qualifications (including those in Advanced Apprenticeship frameworks) are not in the UCAS tariff and those that are (and that are recognised by universities) attract far more than 47 credits and are associated with far more GLH. For example, a BTEC National Certificate (confusingly renamed as a BTEC Diploma in the QFC) that accrues tariff points equivalent to two A Levels attracts 120 credits in the QCF – nearly three times as many credits as those achieved by the young person in our example. To add to the confusion, the formula (10:1) for equating GLH with QCF credits breaks down when applied to those qualifications attracting larger numbers of credits. According to the formula the BTEC Diploma should require 1200 GLH, but it is actually associated with 720 GLH.

Although the original advocates of a credit-based system had noble intentions, the result has been the dilution of existing vocational qualifications in order to create the minimalist threshold required to achieve a 'Level' within the QCF. From the perspective of this paper, the critical point to be aware of is that the QCF's definition of 'Level' is the achievement of (only) 37 or more credits. Prior to the QCF, the notion of Level was benchmarked against academic achievement so that Level 2 was deemed to be equivalent to five GCSEs at A* to C, Level 3 equivalent to two A Level passes, and Level 4 equivalent to a recognised (in terms of HE credits towards an honours degree) sub-bachelor qualification such as an HNC/D or Foundation Degree. Downgrading the concept of 'Level', the key way in which the Specification of Apprenticeship Standards in England (SASE) categorises the 'difficulty' of apprenticeship frameworks, further weakens the currency of a programme that has already been struggling to support progression. Importantly, this point applies to Higher Apprenticeships as their frameworks can be achieved without the attainment of a qualification (e.g. HNC/D) that is recognised as articulating with the credit values used to differentiate between Years 1, 2 and 3 of a bachelor degree course.

In addition, the QCF ignores the hierarchy within vocational qualifications that has developed since the 1990s following the expansion of NVQs and that is recognised and maintained by employers. The recent review of vocational education by Alison Wolf (Wolf 2011) also drew attention to this hierarchy by criticising the

weak content and lack of labour market currency of some vocational qualifications at Levels 1 and 2 (see also Fuller and Unwin 2007).

Irrespective of the continued debates about the strength and weaknesses of the NVQ approach, the qualification has become much more widely used and recognised. As with any educational development, vocational teachers and trainers and employers have adapted the competence-based model to their specific contexts. Thus, NVQs have evolved to the point where their status, purpose and value differ from sector to sector. In some sectors, they are highly valued and used for very specific purposes. For example, an NVQ Level 3 has been incorporated into a degree programme in health and social care at the University of Winchester. This was at the instigation of the local authority, a major employer of graduates from the programme, which wanted to ensure the graduates had both the theoretical underpinning and workplace competence to work effectively in its health and social care settings that are subject to increasing regulation. A second example of a sector in which NVQs are valued is accountancy. In the early days of NVQs, the Association of Accountancy Technicians (AAT) developed a unique NVQ Level 3 that incorporated the knowledge components necessary to enable progression to the next rung of the professional qualification ladder and to be recognised for membership of the AAT, which acts as the professional body. This qualification remains the only NVQ Level 3 to accrue points in the UCAS tariff (see case study below for more details).

Estimates indicate that, whilst over 90 per cent of those with three good A Level qualifications go on to enter HE, this falls to around 50 per cent for those holding vocational qualifications, although that figure has been rising (Connor and Little 2007). Recent research has also shown that an individual's chances of entering HE from a vocational route are greatly increased if they have also acquired an A Level (Hoelscher *et al.* 2008, Ertl *et al.* 2010). A month after the 2010 general election, the new Minister of State for Universities and Science, David Willetts, in a speech at Oxford Brookes University, emphasised the commitment of the Coalition Government to widening participation in HE by arguing that:

> One of the strengths of Silicon Valley, meanwhile, is precisely this pattern of learning. People go to university in California aged 25, having worked for years at the practical end of high-technology industries; they may get more out of university in this way. But that type of career progression remains rare in this country. Indeed, I am going on from Oxford Brookes to UCAS in Cheltenham and will be talking to them about what more we can do to make sure good

> vocational qualifications are reflected in the university entry system and that the vocational and academic routes properly complement one another. (Willetts 2010)

As this paper will show, we are still a long way from achieving either of Willetts' professed goals in the last sentence of his speech.

3.4 *The Problem of Data Collection*

The way that data on qualifications on entry to HE are recorded and counted makes it difficult to unpack and compare the various pathways that individuals with vocational qualifications have taken (see Seddon 2005). This is for three main reasons. First, the available data about individuals' entry to HE are recorded on the basis of qualifications that are included in the UCAS tariff and, as already mentioned, this list provides only partial coverage of Level 3 qualifications. Second, and relatedly, the data do not distinguish clearly between different types of vocational and work-based qualifications. Third, whilst data on entry qualifications are available for applicants to full-time programmes, they are not readily available for applicants to part-time courses in HE, as this group applies directly to individual institutions. For example, this means that data on individual progression to HNCs, often taken on a part-time basis by apprentices in sectors such as engineering, are only available from either college records or awarding bodies. In addition, we have no nationally collated data on how many mature students secure a place at a university with only a vocational qualification.

Researchers have been able to identify the qualification profiles of young people (under 21) applying for full-time courses in HE, according to whether they are applying with recognised (as equivalent to A Levels in the UCAS tariff) vocational qualifications either alone or in combination with A Levels or with only A Levels. Drawing on the figures available from UCAS for the 'young applicant' population for full-time first degrees in 2004/05, Connor and Little (2007) show that 8 per cent applied with only vocational Level 3 qualifications, compared with nearly 60 per cent of applicants who only had A Levels and a further group that had a combination of academic and other awards. A study by Ertl *et al.* (2010) comparing applicants with academic, combined academic and vocational, and vocational attainments between 1995 and 2004 indicates that the group with mixed qualifications is growing at the expense of the groups applying with only A Levels or vocational qualifications. The picture for mature applicants (aged over 21) to full-time first degrees is more diverse.

According to Connor and Little (2007), only a third of these applicants hold A Levels. The introduction of the extra places for applicants with A Level grades of AAB may affect this picture, but it is too early to make firm predictions.

BTEC 'National' courses at Level 3 form an important and popular suite of vocational qualifications that have been included in the UCAS tariff for several years.[13] These qualifications are well-established and widely available in further education colleges, so it is particularly interesting to look at progression from this route. The most recent comprehensive study on progression to HE from BTEC tracked a cohort from their entry on to a Level 3 BTEC in the academic year 2002–03 through to 2004–05, when most would have completed the course (Gittoes 2007). It found that 41 per cent progressed to HE (24 per cent to a degree, and 17 per cent to another undergraduate course, e.g. HND, HNC and Foundation Degree). In their submission to the Wolf Review in 2011, Edexcel Pearson, the awarding body responsible for BTECs, stated that the numbers of BTEC holders progressing to HE was continuing to rise year-on-year and now stood at 43 per cent. Gittoes' (2007) research also found that most Level 3 BTEC qualifiers (78 per cent) entered HE on full-time courses, but there is wide variation between the three types of BTEC qualification. Whereas 90 per cent of those with National Diplomas (equivalent to three A Levels) progressed on to full-time courses, only 26 per cent of those with National Certificates (equivalent to two A Levels) did so. This finding is explained by the fact that many of those gaining the National Certificate would have done so on a day-release basis by those in work, and often by those participating in apprenticeships in sectors such as engineering and construction who will have gone on to pursue HNCs.

The vast majority (86 per cent) of those with a BTEC National Award (equivalent to one A Level) progressed to HE, but this is because the qualification is usually taken by 16–18 year olds in combination with two or three A Levels. Without the routine collection of longitudinal information about all vocational applicants and their routes to and through full- and part-time courses, as well as the full range of their qualification attainment, particularly including those Level 3 vocational awards not covered in the UCAS tariff, it is impossible to construct a comprehensive picture of

[13] In order to comply with the requirements of the QCF, BTEC qualifications at Level 3 have now been renamed BTEC Level 3 Subsidiary Diploma, Diploma and Extended Diploma. As these changes have yet to be reflected in the websites of HEIs, we have continued to use the original titles.

vocational progression to and through HE. We now turn more specifically to a discussion of apprenticeship as a route to HE.

4 Progression to HE from Apprenticeship

The most recent data indicate that 457,000 people started a government-supported apprenticeship in England in 2010/11, with approximately only a third starting a programme at Level 3 or above:

Intermediate Apprenticeship (Level 2)	301,000
Advanced Apprenticeship (Level 3)	153,900
Higher Apprenticeships (Level 4)	2,200

Following the 2009 Apprenticeships, Skills, Children and Learning Act, all apprenticeship frameworks[14] have to conform to the SASE and generate at least 37 credits on the QCF and include a minimum of 280 (note, not 370) GLHs. Once again this provides mixed policy messages as it contravenes the 'one credit to ten' GLH formula written into the QCF. Frameworks must include:

- A competence-based component (expressed as a competence-based qualification at the level of the apprenticeship, that generates at least ten QCF credits.
- A knowledge-based component (expressed and assessed either as part of an integrated competence- and knowledge-based qualification) or as a stand-alone vocational qualification at the specified level of the apprenticeship that generates at least ten QCF credits).
- Functional skills (mathematics, English language and ICT - can be at the same level as the apprenticeship or lower - in some frameworks such as hairdressing and customer service, ICT is not included).
- Personal learning and thinking skills.
- Employee rights and responsibilities

In order to bring sector frameworks up to the minimum 37 credits required under the SASE, the attainments achieved in relation to the functional skills, personal learning and thinking skills and employee rights and responsibilities have to generate at least 17 credits.

[14] Frameworks are developed in a number of ways, by individual employers, sectors or a combination of industry partners, and have to be approved by an 'issuing authority', usually a SSC. For more details, see Fuller and Unwin (2011).

Following concern about the quality of apprenticeship programmes in 2001 (MAAC 2001), an extra knowledge-based qualification, known as a Technical Certificate (TC), was added to all apprenticeship frameworks. This was a significant step as it recognised that, on their own, competence-based NVQs failed to provide a sufficient platform for apprentices to progress beyond their immediate workplace, or to higher levels of study, including entry to university.[15] The requirement for apprenticeship frameworks to include a TC was removed in 2006. Research undertaken prior to the introduction of the SASE revealed that currently around 15 per cent of apprenticeship frameworks did not require the attainment of a separate TC for successful completion. The 2009 Act reintroduced a minimal level of off-the-job training of 100 hours (i.e. two hours per week of the minimum 280 GLH) that has to be delivered off-the-job, and also specified a minimal amount of knowledge-based content as indicated above. The frameworks are being revised to ensure that they are SASE compliant. Further research is necessary to reveal what proportion includes integrated competence and knowledge-based qualifications and what proportion includes separate competence and knowledge-based awards. Irrespective of this, the minimal ten knowledge-based credits required to comply with the Act is indicative of the weak exchange value for entry to HE that many frameworks are likely to accrue.

4.1 *The Growth of Service Sector Apprenticeships and 'Conversions'*

Despite apprenticeships currently being available in around 160 sectors, over three-quarters of apprentices are found in just 12 of them. Nonetheless, the diversity of occupations and jobs covered in these sectors is indicative of the wide range of workplace settings in which individuals on apprenticeships find themselves. One key difference between the sectors is the proportion of participants following Level 2 and Level 3 programmes. For example, in the electrotechnical area, all apprentices follow the Advanced Apprenticeship, whereas in Retail 90 per cent, Hairdressing 70 per cent, and Construction 75 per cent follow the Level 2 programme. Table 1, below, shows the 12 most populated apprenticeship sectors in 2010/11.

[15] However, the NVQ Level 3 in Accountancy has always been the exception.

Table 1: The 12 most populated apprenticeship sectors in England 2010/11

Sector	Total Starts
Customer Service	53,970
Health and Social Care	53,720
Retail	41,410
Business Administration	38,900
Hospitality and Catering	29,810
Management	29,790
Children's Care, Learning and Development	27,410
Engineering	18,330
Active Leisure and Learning	17,650
Hairdressing	16,450
Construction	15,590
IT and Telecoms Professionals	12,030

Source: Data Service (http://www.thedataservice.org.uk/statistics/)

As this table shows, the vast majority of apprentices are in service sector occupations and not in the trades and crafts that have dominated apprenticeship in the past. This reflects the shifts in the British economy over the past 30 or so years away from manufacturing towards the service sector, but that is only part of the explanation. The majority of apprentices in England can be classed as 'conversions'. This means that existing employees have been re-labelled as apprentices, usually as a result of a training provider persuading an employer to become involved in the government-funded scheme. Acting as special advisers to the then Select Committee on Innovation, Universities, Science and Skills during their scrutiny of the Apprenticeships, Skills, Children and Learning Bill 2008/09, we proposed that the Committee should ask officials of the then LSC to make public the statistics on conversions. The LSC reported that over 70 per cent of apprentices in all age groups (including 16–18 year olds) were conversions.[16]

[16] See Pre-legislative Scrutiny of the Draft Apprenticeships Bill, Volume Two: http://www.publications.parliament.uk/pa/cm200708/cmselect/cmdius/1062/1062ii.pdf.

In some cases, putting existing employees on to apprenticeship programmes can be highly beneficial to both employers and individuals, but in many cases, the reality is that the so-called apprentices now gain units towards a competence-based NVQ for the work they are already doing. At best, they may receive some training (mostly on-the-job) to broaden their skills so they can complete the NVQ. Achieving qualifications and gaining recognition for expertise gained in the workplace are very important to personal confidence and for increasing the motivation required to go further. Our point here is not to denigrate this process, but to stress that it is not the same as following an apprenticeship. In addition, given that two-thirds of apprenticeships are at Level 2 and, hence, in some sectors apprentices are acquiring qualifications that have little currency in the labour market or build a platform for progression to Level 3, as highlighted in the Wolf Review (Wolf 2011), both young people and adult employees are in danger of being misled about the value of their training programmes.

In response to a Freedom of Information request we made in December 2011 to the Skills Funding Agency (SFA) asking if the percentage of 'conversions' had changed since 2008, the answer was:

> I can advise that the Agency holds no data on the number of apprentices classed as 'conversions' rather than 'new starts'.

This is a startling admission, given the continued assurances from government and its agencies that bogus apprenticeships would be stopped and that the focus would be on quality of provision rather than on volumes. However, there is a systemic problem here. The very existence of competence-based qualifications at Level 2 (facilitating the accreditation of skills without necessarily increasing an individual's occupational knowledge or indeed requiring much in the way of literacy or numeracy) means that there is no requirement to build a platform for progression (as is the case in general education qualifications such as GCSEs, A Levels and degrees). In essence, Level 2 NVQs (and some Level 3 NVQs) are seen as an end in themselves. Furthermore, as we have outlined earlier in this paper, the shrinking of knowledge-based vocational qualifications in response to the demands of the QCF means that they, too, may no longer provide an adequate platform for progression. This systemic problem has not been acknowledged in other studies of progression to HE from vocational qualifications and apprenticeship that focused their attention on issues such as:

improving careers advice and guidance for young people; and creating vocational pathways for progression between FE colleges and HEIs.

4.2 *How Many Apprentices Enter HE?*

Following their scrutiny of the Apprenticeships, Skills, Children and Learning Bill 2008–2009, the Select Committee on Innovation, Universities, Science and Skills reported:

> We conclude that establishing that all advanced apprenticeships automatically attract UCAS points sufficient for entry into some [sic] higher education for some courses that are cognate to the apprenticeship would be a powerful demonstration of the quality, consistency and currency of the programme.[17]

Despite clear interest across the political parties in progression to HE from apprenticeship, there has been surprisingly slow progress. The Lifelong Learning Networks (LLNs) funded by the government to increase progression to HE from vocational routes have, as yet, had little to say about progression on this issue (Little *et al.* 2008, Fuller *et al.* 2010, Smith and Joslin 2011 for exceptions). A key problem has been the lack of statistical evidence on apprentice progression. Existing data on applicants' qualifications do not reveal whether their qualifications were attained as part of an apprenticeship. This limitation is compounded by the fact that data on applicants to HE are only readily available for those applying to full-time courses. Although ex-apprentices may, of course, apply to full-time HE courses, they may be more likely to apply for part-time participation to enable them to continue the pattern of employment, earning and learning established during their apprenticeship.

A study by Gittoes (2009) for HEFCE made an initial attempt to shed light on apprenticeship and HE. Gittoes drew on data from two main sources: the Higher Education Statistics Agency (HESA) student records and the LSC's individualised and work-based learner records from 2001/02 to 2006/07. The report recognises that defining apprenticeship completion is not straightforward and provides a list of criteria against which individuals have been included or excluded. From the perspective of this paper, perhaps the most important of these is the definition of a 'completer' as someone who has achieved the mandatory NVQ. This means that an apprentice who has achieved other qualification components (e.g. a BTEC National

[17] Para 82, 7th report from the Committee Session 2007-08, House of Commons, Innovation, Universities, Science and Skills Committee, Pre-legislative Scrutiny of the Draft Apprenticeships Bill.

Certificate) as part of their Level 3 apprenticeship framework, but did not attain the NVQ3, has not been counted as an apprenticeship completer. Moreover, those who have completed all the components specified in the relevant apprenticeship framework cannot be distinguished from those who have only achieved the NVQ. In addition, it is not made clear whether any of the completers who progressed to HE had gained an A Level(s) as well as an NVQ. Where this is the case, then it is much more likely that it is the A Level attainment rather than the NVQ which has facilitated their progression to HE. It is understandable that Gittoes has used the attainment of the NVQ as the core criterion for completion, as this has been the mandatory qualification component for all apprentices. However, it limits our ability to be able to assess the basis on which the ex-apprentices were accepted onto HE courses, particularly in terms of how the currency of their various qualification attainments and the experience gained from completing an apprenticeship was valued by HE providers.

Gittoes (2009) suggests that the approach to completion that has been adopted in his work is likely to under-estimate the number of ex-apprentices that have progressed to HE. However, in our view, it may be over-estimating the proportion of apprentices that have progressed to HE on the basis of their attainment of an NVQ during the apprenticeship. There are two main reasons for this concern. First, the study tracks 'the rate of progression to HE within four years for those who completed their apprenticeships in 2002–03' (ibid: 2), including both those who have completed a Level 2 Apprenticeship and those who have completed a Level 3 apprenticeship. The total number of completers that have been tracked is 37,400, of whom 15,390 completed a Level 3 apprenticeship and 22,070 a Level 2 apprenticeship. Given that the highest level of qualification in the latter programme is by definition Level 2 and that HE entry level qualifications at Level 3 are normally required for young applicants, it is likely that Level 2 completers have gone on to achieve additional qualifications at Level 3 after finishing their apprenticeship. It is much more likely that it is on the basis of the currency of these subsequent qualifications, rather than on the basis of the NVQ2 achieved in their apprenticeship, that they have been accepted on to HE level courses.

Second, the apprentice sample covers those in the 16–24 age group. It may be the case, then, that some individuals completed a Level 3 qualification (such as A Levels) before they started their apprenticeship at, say, 19 years old. Given that NVQs are not covered by the UCAS tariff, it is likely that many of those apprenticeship

completers that have progressed will have gained other Level 3 qualifications recognised in the tariff and that may or may not have been achieved as part of the Level 3 apprenticeship framework. This reading of Gittoes' analysis is strengthened by the study's rather surprising finding that 39 per cent of Level 2 completers had gone on to start a first degree (or above), compared with only 25 per cent of Level 3 completers. A likely explanation for the higher proportion of the Level 2 completers enrolling on first degrees is that this group took the opportunity after finishing their apprenticeship to pursue Level 3 qualifications recognised for HE entrance. The figures indicate that most Level 2 completers had a gap of more than one year between completing their apprenticeship and entering HE, giving them time to engage in further study.

It is also notable that a higher proportion of Level 3 completers than Level 2 completers (46 per cent, compared with 24 per cent) progressed to what Gittoes categorises as 'work-based HE', which is 'higher education within the context of work-based learning' (2009: 7). Although the report is not specific on this point, it is likely that this form of progression would, for example, include working towards professional qualifications or an NVQ Level 4 in the workplace, for which the prior attainment of an NVQ3 would provide a 'natural' stepping stone.

Despite our reservations about the extent to which Gittoes' research can be seen to provide evidence of progression to HE on the basis of 'apprenticeship completion', it does present valuable data about the attributes of individual 'completers' who go on to enter HE within the following four years. The study generated a range of findings that could be used to frame further research, including:

- Six per cent (965) of Level 3 and four per cent of Level 2 (820) apprentices progressed to HE within four years of completing their apprenticeship in 2002/03, (five per cent (1785) of completers overall).

- Female apprentice completers were more likely to progress to HE than males.

- Those from 'non-white' ethnic backgrounds were more likely to progress to HE than those from 'white' ethnic backgrounds.

- Those with a declared disability were more likely to progress to HE than those without.

- There was wide variation in the rates of progression from different industry sectors.

- The pattern of progression varied by geographical region; progression was greater in areas with generally higher rates of HE participation.

- Of those completers who progressed to HE, about 30 per cent pursued a first degree.

More recently, Smith and Joslin (2011) tracked apprentices who had completed an Advanced Apprenticeship framework in four successive years from 2005/06 to 2008/09. They found that the proportion progressing to HE from this route has increased from 5.3 per cent for the 2005/06 cohort to 6.8 per cent for the 2008/09 cohort. Within the cohorts, the progression rate for younger Advanced Apprenticeship achievers increased more strongly from 8.4 per cent in 2006 to 11.2 per cent in 2009.

In 2010/11, 160,300 16–24 year old apprentices completed their programme (an improvement of 16.8 per cent from the previous year) and the overall completion rate for apprenticeship was 76.4 per cent. Although Gittoes' and now Smith and Roslin's work provides a basis for an extrapolation of the potential numbers of completers progressing to HE, it is still hard to gauge the true progression rate because of the partial nature of the available data. In particular, little is known about: a) the role of the new SASE compliant knowledge-based assessed element in facilitating progression to HE; and b) progression to part-time HE because individuals apply directly to institutions for part-time courses and not through UCAS. It is highly likely that those ex-apprentices who wish to participate in HE would do so on a part-time basis to avoid having to give up the jobs for which they have been trained. It could also be that some may be funded and supported by their employers, who see employees' progression as part of their career development and ability to contribute to the organisation's workforce development plan and business goals.

4.3 *Qualification Currency in Apprenticeship*

It has been argued elsewhere (see Fuller 1995) that the worth of qualifications can be judged in terms of their perceived 'exchange value' (e.g. enabling recipients to exchange them for better jobs or entrance to particular educational courses). In order for qualifications to have high exchange value in relation to entrance to HE, their worth as appropriate measures for making selection decisions needs to be recognised by the HE sector. This happens in the form of the UCAS tariff that provides a framework of points relating to the type of qualification and the level of grade achieved: the higher the grade, the higher the points the qualification holder accrues

and the higher the value of the currency they have to exchange for a place in a selective system. Hence admissions' tutors for over-subscribed courses can select students by requiring more points gained through the acquisition of 'tariff recognised' qualifications and grades.

Until recently, the official apprenticeship website provided a table indicating that a Level 3 apprenticeship is equivalent to two A Level passes on the basis that it must include the attainment of an NVQ3, but this has now been withdrawn. In a press release issued on 7 February 2012, about the Higher Apprenticeships Fund[18], NAS stated:

> Recent reforms to the Apprenticeships programme include measures to raise quality standards, cut bureaucracy for employers and deliver more advanced training at *'A' level equivalent* and above. (our emphasis)

It is important to note that there is a difference between qualifications available at Level 3 and having a full Level 3 (Fuller and Unwin 2008). In terms of the UCAS tariff, a full Level 3 equates to the points accruing to at least two A Level passes at grade E, or two Pass grades in a BTEC National (both attracting 80 UCAS points). As mentioned in the introduction, however, the QCF has a low threshold for what counts as enough points to be a Level 3 qualification, and has broken down the concept of a full qualification in favour of competence-based and knowledge based credits. This allows some Level 2 attainment to count as part of the minimum 37 credits required for completion of an Advanced Apprenticeship framework.

Clearly, where institutions and courses need to differentiate between candidates for selection purposes, they will be looking for: a) qualifications that are covered in the UCAS tariff; b) the combinations of grades and points from candidates that they judge to provide the most appropriate basis for selection, and c) qualifications in academic/vocational areas that are relevant to the course being applied for. Where then does this leave progression to HE from apprenticeship, as a substantial TC is the only framework qualification that might have currency in UCAS points? The following table shows the variability in relation to QCF credits, GLHs and UCAS points of qualifications in the apprenticeship frameworks for the four case-study sectors chosen for this paper.

[18] http://www. apprenticeships.org.uk/News-Media/Latest-News/Article090.aspx

Table 2: Advanced Apprenticeship Framework requirements

Sector Framework	Pathway	Qualification options	QCF credits	GLH	UCAS points
Engineering Manufacture	Aeronautical Engineering (minimum credits needed to complete the framework = 240)	(Competence-based) NVQ Extended Diploma Level 3	165	441	0
		Knowledge-based BTEC Level 3 Diploma (former National Certificate)	120	720	80–280
		EAL Level 3 Diploma in Engineering Technology	78	600	0
		City & Guilds Level 3 Diploma in Aircraft Maintenance (Civil Aircraft Mechanical)	80	655	0
Accountancy	Accounting (England) (minimum credits needed to complete the framework = 51)	Level 3 Diploma in Accounting (AAT) – the 'old' NVQ3	41	335	160
	Integrated qualification (competence and knowledge)	Level 3 Diploma in Accounting (City & Guilds)	41	335	0
		Level 3 Diploma in Accounting (Edexcel)	41	335	0
Children and Young People's Workforce	Early Learning and Childcare (minimum credits needed to complete the framework = 83)	Level 3 Diploma for the Children and Young People Workforce – awarded by: CACHE, City & Guilds, Edexcel, NCFE, OCR, EDI, ABC Awards, Skillsfirst, FAQ, LAO, AABPS	65	442–525	0
	Integrated qualification (competence and knowledge)				
Business and Administration (England	Business and Administration (minimum credits needed to complete the framework = 72)	Competence-based Level 3 NVQ Diploma in Business & Administration – awarded by: City & Guilds, Edexcel, NCFE, OCR, EDI, ABC Awards, Skillsfirst, FAQ, LAO,IMIAL, KPA, ProQual, FDQ, IAM, iCQ	40	137–297	0
		Knowledge-based Level 3 Certificate in Principles of Business and Administration – awarded by all bodies above, plus AABPS	17	136–176	0

The complexity of this table will be immediately apparent. First, one notices the disparity between the weight of the credits and GLHs between the four sectors, with engineering standing out as substantively different to the others and business and administration standing out as the thinnest. The minimum credits required to complete the Accountancy framework are the lowest but the main qualification attracts 160 UCAS points. The qualifications for business administration, and early learning and childcare have more QCF credits, but do not attract any UCAS points. Second, one notices the considerable number of awarding bodies involved (see Appendix for a

glossary). What is not apparent from the table is that, in the childcare case there is a vocational qualification (CACHE Level 3 Extended Diploma for the Children and Young People's Workforce) that attracts UCAS points but this is not available to Advanced Apprentices. This Diploma, usually acquired after a two-year full-time course (1100 GLHs), is worth 150 QCF credits and is benchmarked against A Levels in relation to UCAS points (i.e. if you achieve A* in your three final assignments, your qualification accrues 420 points, the same as three A Levels at A*.

The concept of GLH is not a currency commonly recognised by the HE sector, although some of the summaries provided of each qualification covered in the UCAS tariff and accessible through the UCAS website provide information on the 'learning hours' associated with qualifications. Using the QCF rebadged BTEC National suite of qualifications as benchmarks, it may be possible to use the GLH associated with individual TCs as evidence of the scope and substance of the course of study that could contribute to future decisions about their inclusion in the UCAS tariff and the number of points accruing to their attainment. However, the seemingly arbitrary approach to stipulating numbers of QCF credits and GLH evident from our examination of frameworks indicates that this is not currently realistic.

5 Advanced Apprenticeship as a Route to HE: Evidence from Four Sectors

UCAS functions as a source of information and advice as well as the mechanism for university application and entry to full-time courses. As such, whilst UCAS has a role in the provision of information, it does not have an explicit strategic or policy role. However, by the nature, scope and presentation of information, it conveys messages to applicants about what is counted and valued in the admissions process. UCAS lists part-time courses and the institutions that offer them, but does not provide any information on entry requirements for these courses or specific guidance for those from work-based routes who are more likely to be looking for part-time attendance. In addition, the only information on the UCAS site about apprenticeships comes in the form of a 'search' box. This directs applicants to enter the name of their qualifications into the tariff calculator to see what they are worth. Tariff points for vocational qualifications are provided, as is information on how to enter details of an Advanced Apprenticeship via the online application. There is a web page of information about Foundation Degrees which includes the following statement:

> They [Foundation Degrees] are offered by universities in partnership with higher education colleges and further education colleges. The study methods can be very flexible, which means that they are available to people already in work, those wishing to embark on a career change and to those who have recently completed Level 3 qualifications (e.g. A-levels, Advanced Apprenticeships or NVQ3).[19]

The NAS website[20] provides general indications that apprenticeships can lead to higher education, including a table showing progression pathways and a 'Prospects' paragraph, as follows:

> Apprenticeships can be demanding but they are very rewarding. Because Apprenticeships train you in the skills employers want, they give you choices in your career. Your career doesn't have to stop at the Intermediate, Advanced or Higher Level Apprenticeship, if you want to go on to University you will find that many institutes of Higher Education value your skills and knowledge and will happily offer you a place on a Foundation Degree or other higher level qualifications.[21]

The evidence in our case studies was collected prior to the introduction of the SASE (i.e. before frameworks have been made SASE compliant). However, given our argument (and the data presented in Table 2) that the SASE requirements weaken the basic currency of Level 3 apprenticeships, the post-SASE situation regarding entry to HE is likely to have been worsened rather than strengthened.

We now present evidence from the four case-study sectors:

- Accounting
- Children and Young People's Workforce (formerly known as Early Years Education or Childcare)
- Engineering
- Business administration

These sectors have reasonably high completion rates and have different gender profiles (i.e. engineering is male-dominated, childcare is female-dominated and accounting and business administration have a more balanced profile). The sectors also provide contrasts in terms of manufacturing and service industries and between those with longstanding experience of providing apprenticeships and those which have become involved in this sort of provision more recently. They also have different requirements for registration with the relevant professional bodies.

[19] http://www.ucas.ac.uk/students/beforeyouapply/whattostudy/foundationdegrees
[20] (www.apprenticeships.org.uk)
[21] http://www.apprenticeships.org.uk/Be-An ApprenticeWhat-do-I-get-out-of-it.aspx

In examining the ways in which each sector is reflected in the courses and access arrangements of HEIs, a sample of universities was used. This varied from one sector to another, but there was an attempt to retain a core of universities across all areas to facilitate cross-sectoral comparisons. For each sector, we identified a course or number of courses that seemed to cohere with the Level 3 apprenticeship, as specified within progression charts or information from the relevant frameworks. In some cases, the sheer number of courses meant that it was necessary to restrict the type of course to one particular course type/description (e.g. for business administration), whereas for others (e.g. engineering) it was necessary to cast a wider net to take account of the various routes apprentices may have taken through their training. For each course, information was collected from the UCAS course search website about: duration, and qualification type; the specified entry requirements in terms of work-based learning (in particular NVQs) and other entry qualifications; statements relating to mature students; and information about entry requirements for appropriate Foundation Degrees. A summary of the findings relating to each of the four sectors is provided in the next section.

5.1 *Illustration from Accountancy*

The accountancy sector is regulated by a number of professional bodies. It has a long history of enabling individuals to qualify through a combination of work experience, on-the-job training and the acquisition of professional qualifications, often by correspondence or attendance at 'night school'. Accountancy, then, is a profession which offers a variety of routes to professional status, some of which involve the achievement of a degree (required for professional registration) and others which do not.

For some years, the AAT NVQ3 in Accounting has been established and recognised by the relevant professional bodies as part of a structured ladder of progression towards professional status. It is the mandatory qualification in the Level 3 Accountancy Apprenticeship and was finally accepted into the UCAS tariff for entry to HE in 2009. The qualification attracts 160 tariff points on a pass-only basis (equivalent to two Grade Cs at A Level, or two BTEC National passes). There is no additional requirement in the Accountancy framework to attain a TC, as the vocational knowledge has been deliberately embedded in the NVQ. At present, then, this NVQ3 has been selected for special treatment by its inclusion in the tariff. The

minimum requirements for entry to the Level 3 apprenticeship include Mathematics GCSE at Grade A* to C or the successful completion of the Level 2 Accountancy Apprenticeship.

To investigate the entry requirements being asked for, and associated information being provided by universities offering courses with the general description of accountancy, we developed a sample of 66 universities,[22] comprising post- and pre-1992 universities across England, Scotland and Wales[23] offering bachelor degrees. There was only one Foundation Degree available in these institutions and so we searched all Foundation Degrees in Accounting, or Accounting and Finance, in both HE and FE. This generated a sample of 18 institutions/courses.

Progression to Bachelor Degree

Out of the total 66 courses considered, 38 had no information on the acceptability of NVQ3 as an entry qualification. Of those that did mention the NVQ3, three specified that the qualification would not be acceptable, and 20 that it would only be acceptable 'when combined' with other qualifications.[24] Five other universities indicated that they would accept an NVQ3 on its own or combined with other qualifications. These universities were post-1992 and all tended to have generally lower entry criteria for standard entry (i.e. in terms of A Level grades and tariff points).

In some cases, universities made it clear that the NVQ3 alone would not be seen as acceptable:

> The Business School recognises a variety of non-tariff qualifications. These range from qualifications which equate to the academic requirement as a whole, e.g. the Access to Higher Education Certificate (kite marked), to others which are recognised as contributing partially to the academic requirement, e.g. AAT Level 3, which should be accompanied by at least one additional A Level at an appropriate grade. (post-1992 University H)

Most (36) of the universities did not mention apprenticeship as a route to entry. Of those that did, seven stated they would consider it on its own or in combination, 12 in

[22] Only courses at institutions with a university title were included; this excluded courses at colleges accredited by a university or linked to a regional federation.

[23] Although the qualifications (vocational and academic) are different in Scotland, many English and Welsh students do study in Scotland so it was decided that Scottish universities should be included. Universities in Northern Ireland were excluded. This decision applies for all the sub-studies.

[24] The use of 'only when combined with other qualifications', and 'on its own and combined with other qualifications' is problematic. It is not clear how the currency of the NVQ3 is actually being valued by and across institutions.

combination and four asked applicants to contact the university. Seven said it was not acceptable.

There was an overlap between universities positive about AAT NVQ3 and those positive about apprenticeship as a possible entry route. However, it is not clear that institutions had a clear understanding that the NVQ3 was included in the apprenticeship framework. For example, one university stated that the NVQ3 was acceptable but that the apprenticeship, on its own, was not. None of the universities at the higher end of the entry criteria scale indicated that they would accept either apprenticeship or the NVQ3 as an acceptable qualification for entry to the course.

Progression to Foundation Degree

Only one university ran an accountancy Foundation Degree and gave no information about entry criteria. Applying a wider definition, we found 18 Foundation Degrees that appeared directly relevant to accountancy, of which 11 did not provide information about entry criteria at all. Of the few that gave any information about entry, only three indicated a willingness to accept work-based qualifications in their own right. In one case, although there were no detailed entry criteria, a general statement specifically mentioned the 'AAT intermediate qualification' that could be gained through an apprenticeship 'NVQ route'. Two specified that the apprenticeship and NVQ3 were acceptable either alone or in combination; another, after linking to the university website, gave NVQ3 as an acceptable qualification for entry to Foundation Degrees generally. Other colleges were not specific about apprenticeship or NVQ3 but had statements referring to the appropriateness of lengthy work experience (four years) and training in lieu of formal qualifications.

Summary of Accountancy

In the vast majority of cases, entry qualifications were expressed in terms of standard entry criteria (A Levels and UCAS points). Even when the AAT NVQ3 was mentioned, it was usually asked for in combination with other qualifications and was not seen as sufficient on its own for entry to a full-time bachelor degree. It is interesting to note from Gittoes' (2009) study that accountancy apprenticeship completers were by far the most likely group to progress to higher level study within four years of completing their apprenticeship (67 per cent, 400 individuals progressed). However, closer inspection of the figures indicates that the vast majority

(91 per cent) of those progressing had taken up 'work-based HE' rather than study at an institution. This suggests that the NVQ3 in accounting is positioned primarily as a pathway to professional qualifications rather than undergraduate courses at university. It is likely also to mean that those participating in the accountancy apprenticeship may well be pursuing a standard entry qualification such as an A Level and be contributing to the growing number of HE entrants accepted on the basis of both vocational and academic qualifications (Ertl *et al.* 2010).

5.2 *Illustration from Children and Young People's Workforce*

Childcare and early years education is becoming an increasing regulated occupation, with the possibility of achieving professional status for those acquiring higher level qualifications (Edmond *et al.* 2007). Below HE level there have been two main routes into this sector: full-time further education; and a work-based, apprenticeship pathway. At Level 3, participation in a course in FE normally leads to the award of the CACHE Diploma. This is listed in the UCAS tariff as having a maximum (depending on grades) of 320 points. The Level 3 apprenticeship consists of the NVQ3 in Children's Care, Learning and Development and a TC available from a variety of awarding bodies, all of which specify 300 GLHs (i.e. less than one A Level or equivalent) for completion. None of these certificates is covered in the tariff and, although they are at Level 3, they would not count as a full Level 3.

The Childcare Workforce Development Council (CWDC), the Sector Skills Council responsible for designing the apprenticeship frameworks, states that the Level 3 apprenticeship can lead to HE but, given that neither the NVQ3 or the TC are in the tariff, we were interested to see whether the apprenticeship or its associated qualifications was mentioned by universities recruiting to childcare and early years education courses.

As far as possible, information was collected about generic 'early years' courses. We developed a sample of 21 universities, comprising mainly post-1992 institutions across England, Scotland and Wales. We also looked at 20 full-time Foundation Degrees, including at additional universities that only offered this level of provision.

Progression to Bachelor Degree

Overall, we found that those successfully completing Level 3 apprenticeships in this sector were unlikely to fulfil the entry criteria for bachelor degree courses. Of the 21 universities, eight had no information referring to NVQ3. Of those that did, one stated that NVQ qualifications were not acceptable and four stated that they would be in combination with other qualifications. However, these universities were often ambivalent about the value of these qualifications, for example:

> Please note that we do not accept NVQ qualifications alone. Extensive and relevant work experience may be taken into consideration. (post-1992 University W)

The remaining universities were a little more positive. Seven indicated acceptability either alone or in combination and as a basis for interview. Over half the universities (13) did not mention apprenticeships at all in their entry criteria. Two said that they would be considered when combined, and four would consider them on their own or combined. One university said that apprenticeships were unacceptable for entry.

Vocational qualifications covered in the tariff, such as the CACHE Diploma, were commonly considered as acceptable entry qualifications for degrees in this sector, but this qualification is usually taken through full-time attendance at college. In addition, the sector often attracts mature applicants through work-based or Access course routes and about half the universities investigated provided links for mature students to follow or provided information targeted directly at this group.

Progression to Foundation Degree

In relation to the childcare and early years sector, 20 universities and other institutions offered Foundation Degrees. Some of the universities referred to work-based routes and indicated that apprenticeship or NVQ3 would allow entry. A few of the institutions made positive statements such as:

> Applicants should be qualified to relevant National Qualifications Framework Level 3, or equivalent. Applicants should also be in appropriate employment and have a minimum of two years full-time experience or equivalent in Early Years. Mature students without formal qualifications are welcome to apply. (post-1992, University C)

Summary of Children and Young People's Workforce

Vocational qualifications covered in the tariff, but not routinely available to Level 3 apprentices are considered acceptable (e.g. the CACHE Diploma). As mentioned, the

TCs listed for approval in the Level 3 framework are not covered in the tariff and, although they are at Level 3, they are not of a sufficient size to be considered as equivalent to two A Levels. The data compiled by Gittoes (2009) on this sector indicate that five per cent of completers (55) from the tracked cohort (930 individuals) entered HE within four years of completing their apprenticeship. This reinforces the picture painted above that, currently and in recent years, completing a Level 3 apprenticeship in this sector has not been perceived as a common platform for progression to HE.

Increased regulation and requirements for higher level qualifications being imposed by the government means that demand for progression to HE via the apprenticeship route is likely to increase. However, on the basis of our research, apprentices are likely to be discouraged by the lack of information on their eligibility. There are also serious questions to be raised about the exchange value of the Level 3 framework. Without the inclusion of the NVQ3 in the tariff or the availability of a full Level 3 TC, the sector's apprenticeship is likely to continue to struggle for currency with admissions' tutors.

5.3 *Illustration from Engineering*

The apprenticeship route in engineering is longstanding and well-established (Fuller and Unwin 1998). Completion of a Level 3 apprenticeship provides a recognised basis for registration with the relevant professional bodies (e.g. Institute of Mechanical Engineers). The sector has a track record of providing apprentices with the opportunity to attend college on a day-release basis to pursue vocational qualifications as well as providing structured on-the-job training and NVQs. Despite the contraction of manufacturing and the primary industries since the 1970s, engineering is still within the top 12 apprenticeship sectors, though it has been dropping down the league table for some years (see Table 1 above).

Apprenticeships in engineering are the responsibility of SEMTA, the SSC (Sector Skills Council) for the industry. There are apprenticeship frameworks in a variety of occupations at Levels 2 and 3, and a wide range of NVQs and TCs have been approved for the various sub-sectors and specialisations. Some of the TCs, notably the suite of BTEC National qualifications, are covered in the UCAS tariff, whilst others, including a range of City & Guilds Certificates requiring between 460 and 750 GLHs, are not. The SEMTA career progression chart indicates that the Level

3 apprenticeship can lead to higher level qualifications, usually at Foundation or other undergraduate level (e.g. HNC/D). The framework also states that the Foundation Degree may lead to an honours programme. Interestingly, there is no assumed link between the Level 3 apprenticeship and entrance to a bachelor degree.

In order to explore the extent to which apprenticeship is recognised as platform for progression to HE, degree courses in engineering, electrical engineering and mechanical engineering were considered. In total, information was collected on 28 universities comprising 20 post- and eight pre-1992 institutions across England, Scotland and Wales. We also looked at foundation courses and at some additional institutions that only offered foundation or sub-degree programmes. We found only two Foundation Degrees in engineering.

Progression to Bachelor Degree

The majority (19) of universities do not provide any information on apprenticeship. Twenty-two mentioned NVQ3 or other work-based routes. Two stated that NVQs are unacceptable, and three that apprenticeship is unacceptable for entry. The others asked applicants to contact the university directly or gave positive but non-specific statements. For example, one university stated that applications were welcome from those with an Advanced Apprenticeship and could lead to higher education:

> The university is committed to widening participation and is always seeking to open new and exciting paths to HE by developing pathways for progression for students who have chosen vocational routes of study. (post-1992 University M)

Our survey suggests that apprentice and vocational applicants would find it difficult to enter a bachelor degree without additional academic qualifications. The information about BTEC qualifications was patchy. In some cases there was no information, in others the BTEC National Certificate was seen as acceptable on its own or in combination. The BTEC National Diploma was usually referred to as an acceptable qualification in its own right, as long as specified grades were achieved. However, it is unlikely that many apprentices will pursue a National Diploma because it is normally delivered on a full-time basis.

Progression to Foundation Degree

Engineering as a subject within FE and HE has a long tradition of vocational and degree-level courses with foundation year entry. The vocational courses, such as

HND/HNC, are geared towards those in work and studying part-time or those with lower levels of academic attainment. Foundation years are geared towards those who may have traditional qualifications, but who may lack some of the subjects that are seen to be essential such as Mathematics or Physics at A Level standard. The existence and strength of these courses and the use of existing BTEC HND/C courses may help to explain the lower number of Foundation Degrees found amongst the sample universities. It may also be that these sorts of qualifications are more likely to be delivered by colleges. Two universities offered Foundation Degrees. In one case those with an NVQ3 or apprenticeship were advised to contact the university. The other did not offer any information about NVQ3 or apprenticeship.

Summary of Engineering

Many of the universities in the sample had a range of courses that were probably linked to local or regional employers in particular branches of engineering. In this context it might be expected that departments within institutions offering engineering courses would be more knowledgeable or more open to considering apprenticeship as a platform for progression. There was no evidence to suggest that, for the vast majority of universities in this sample, this was the case.

Despite, the availability of TCs listed in the UCAS tariff (in the form of BTEC Nationals) in the Level 3 Engineering framework, the proportion of completers progressing to HE according to Gittoes' research is still only five per cent, four years after apprenticeship completion. The low level of progression in this sector is surprising. It may be that significant numbers of ex-apprentices are pursuing sub-bachelor courses part-time at college, but these figures have not been systematically captured.

Universities in this sector have a strong tradition of offering foundation courses to lower attaining (but usually traditionally qualified) applicants. In addition, the HNC/D qualification has a long history which has not, as yet, clearly been replaced by new Foundation Degrees. Where Foundation Degrees existed, they were only slightly more likely to be directed (e.g. by having some information on relevant qualifications) towards potential applicants from the work-based route.

5.4 *Illustration from Business Administration*

Business administration is established as one of the most popular apprenticeship sectors. Unlike accountancy and engineering, it does not have powerful professional bodies or widely recognised professional qualifications. Nonetheless, educational qualifications in business studies or business administration are available from basic to postgraduate level. Undergraduate degrees are widely available across the HE sector. The Business Administration Apprenticeship Framework is the responsibility of the SSC, the Council for Administration.

The Level 3 apprenticeship includes an NVQ3 in business and administration and a TC at Level 3, as well as functional skills. A range of certificates and diplomas provided by various awarding bodies are approved as TCs and require between 300 and 350 GLHs. They are not covered in the UCAS tariff and, on the basis of the GLH numbers, are not equivalent in size to a full Level 3 qualification. The Council for Administration suggests that the Level 3 apprenticeship can provide progression to higher level qualifications, including Foundation Degrees, NVQ4 and professional qualifications, for example in specialist areas of administration such as legal executives.

The range and type of courses available at degree level in business or related subjects was vast. To limit the scope of our search and to ensure consistency, we used courses with one course code that were usually labelled as business studies. As far as possible, we used the same universities as were included in the childcare and early years education sector. In total, the entry requirements for degree programmes were reviewed in 42 universities, comprising mainly post-1992 universities across England, Scotland and Wales. Foundation Degrees and courses were also considered in these and some other institutions.

Progression to Bachelor Degree

In common with the other sectors, there was little information provided about the suitability of either the NVQ3 or the apprenticeship route as entry criteria. Just over half did not mention NVQ3 or apprenticeship. Of those that did, five stated that the Advanced Apprenticeship was unacceptable; eight said that it would be accepted in combination with other qualifications; and three that it would be accepted on its own. Seven said that NVQs would be considered in combination with other qualifications and three asked potential applicants to inquire directly to the university. Four

universities stated that NVQ3 would be considered ‘on its own or in combination’, and one gave this more positive, but erroneous (since an apprenticeship is not a qualification) statement:

> Applications from students studying for this qualification are welcome and all such applicants will be considered on an individual basis. (post-1992 University S)

Most of the universities mentioning the potential acceptability of apprenticeship or NVQ3 for entry were post-1992 universities, including some who have been awarded university title in recent years. One long-established pre-1992 university stated that it would take work-based qualifications into consideration and invited individuals to contact it directly for further information.

Progression to Foundation Degree

Eight institutions offered Foundation Degrees in business studies. These were more commonly colleges, often with links to universities for the final ‘honours’ year and information on entry qualifications (in terms of tariff listed and other qualifications) was often minimal. For the three that gave information on work-based qualifications, one said that Advanced Apprenticeship or NVQ3 would be considered ‘on its own and in combination’; another stated that work-based qualifications (including apprenticeship and NVQ3) would be considered but only in combination; and a third asked applicants to contact the college for more information.

Summary of Business Administration

The Business Administration Framework specifies the Foundation Degree, rather than the bachelor degree as a progression destination. Our findings on universities appear to confirm the lack of currency of the apprenticeship route to bachelor degrees. Given that none of the components of the framework are currently listed in the UCAS tariff, it is not surprising that even when the apprenticeship or the NVQ3 are mentioned, it is in combination with other qualifications or criteria. Links to university sites did not provide further information on ‘non-standard’ pathways, although there are often indications that there could be more flexibility for mature students.

It was more surprising that the possibility for progression to Foundation Degree was also highly unclear, despite this being a specified progression route for Level 3 apprentices in this sector. There was little information available on the UCAS site. Where we looked at university sites directly, they provided little guidance for

potential apprenticeship applicants about their eligibility. Gittoes' (2009) study indicates a progression rate to HE of seven per cent (105 of 1,425 completers). Two-thirds of those that progressed participated in 'non-work based HE'. It is not clear whether this was at sub-bachelor or bachelor level.

Finally, business administration is a well-established subject at bachelor and sub-bachelor level in HE. In particular, there is a long-standing tradition of HNC/D qualifications in business studies that provide a ladder of progression to degree qualifications and beyond. Many of the universities in our sample were offering this type of sub-bachelor level award rather than the Foundation Degree. The framework does not make it clear that these sorts of qualifications would be suitable progression routes into HE and that they are widely recognised by employers and the HE sector.

6 Conclusions

Advanced Apprenticeship in England and the core qualifications required for completion are positioned at Level 3 in the NQF, and now in the QCF, equivalent to A Levels. As the analysis presented in this paper has shown, however, the reality of Level 3 is very different from the illusion of a level-based qualifications' framework. This means there are serious questions about the ability of Level 3 apprenticeship frameworks to generate the currency necessary for more apprentices to progress to higher level study and, particularly, to access bachelor degrees. Issues include: the very limited coverage in the UCAS tariff of qualifications contained in apprenticeship frameworks; the suitability of NVQs to attract UCAS points; and the fact that many apprenticeship frameworks only include 'light' TCs (in terms of the specified GLHs), that, like their NVQ counterparts, do not attract UCAS points. All these shortcomings are exacerbated under the new QCF model and SASE arrangements.

Despite continuing rhetoric from government ministers and government agencies about progression from Advanced Apprenticeship, the data are limited on how many apprentices continue to higher levels of study. In addition, university course information often fails to provide any information to potential applicants from the apprenticeship route. The paradox is that 'non-standard' qualifications are far from being unacceptable. However, for potential work-based UCAS applicants, the invisibility of their achievements is likely to be perceived by many as off-putting. It was particularly surprising that there was also a lack of information on entry criteria

for Foundation Degrees. As yet, Foundation Degrees do not seem to be clearly positioned within UCAS or individual institutions as a progression destination for Level 3 apprentices, despite this route being specified in frameworks and promoted to potential participants.

A range of issues about the currency of apprenticeship as a platform for progression to HE has emerged from our discussion. First, as we have argued elsewhere (e.g. Fuller and Unwin 2010), apprenticeship is not a qualification; it is a model of learning and skill formation that includes various qualification components. As such, it challenges educational norms. The worth of the learning experience to the recipient is not solely, or even mainly, tied up with the acquisition of formal qualifications, but derives from a combination of factors including: the quality of the training; the reputation of the employer; the opportunity to develop vocational identity, expertise and esteem; and the ability to become a skilled and valued member of a team. Reducing the apprenticeship experience to the sum of the value of the qualifications attained can only ever provide a limited lens through which to judge its worth[25] (see also Clarke and Winch 2004).

Second, the UCAS tariff currently allocates points to grades and qualifications. In some cases, the points accrue to generic qualification types. For example, all A Levels and BTEC Nationals (and now with their new QCF nomenclature), irrespective of the subject or vocational area attract the same number of points for the same grade. A specific qualification, likely to be taken by relatively small numbers of individuals, has in other cases been included in the tariff. A vocational example would be the British Horse Society/Equestrian Qualifications (awarded by EQL (GB) Ltd), Stage 3 Horse Knowledge and Care, Stage 3 Riding, and Preliminary Teacher's Certificate. Each of these three qualifications is awarded on a pass-only basis, attracts 35 UCAS points and is associated with 100–120 GLHs. The inclusion of qualifications such as this shows that there is flexibility in what is included in the tariff that, as yet, has not extended to the vast majority of TCs in Level 3 apprenticeship frameworks.

[25] A similar point could also be made about other pathways. For example, for those pursuing A Levels, the quality of the teaching, the extent to which the lessons go beyond the qualification syllabus, the preparation for the exams, the reputation of the school or college are all relevant to the worth and value the individual will associate with their experience and may also be taken into account by HE admissions tutors (in addition to raw grades).

Third, if all the qualifications previously included in Level 3 apprenticeship frameworks (NVQ3, TC and Functional Skills, and since the introduction of the SASE, the separately assessed competence- and knowledge-based components) were covered in the tariff, it would be possible for the points attributed to each award to be aggregated to give an overall score. This would help to recognise the range of attainments involved in an apprentice's successful completion of a whole framework. Whilst ascribing points in this way would ostensibly increase the exchange value of a completed set of apprenticeship qualifications, it would be still be subject to the awareness, understanding and perceptions about worth exercised by the HE sector and particularly admissions tutors.

Fourth, there is the continuing problem of competence-based qualifications and the possibility of their inclusion in the tariff. Without points being allocated to the attainment of the NVQ Level 3, it is hard to see how many Level 3 frameworks that either do not have, or have what might be considered a 'light' TC in terms of exchange value for entry to HE, can accrue sufficient points to facilitate access to HE; particularly for direct entry into a bachelor degree. Unfortunately, the opportunity to strengthen the currency of Level 3 apprenticeship frameworks afforded by putting apprenticeship on a statutory basis for the first time since 1814 has delivered a set of standards more likely to devalue than strengthen their worth for entry to HE.

Finally, it is important, that information about progression provided in Level 3 apprenticeship frameworks across all occupations is sensitive to, and is contextualised within, the qualification traditions that exist in the relevant sectors and existing perceptions of worth relating to occupational entry routes held by recipients and other stakeholders. As we noted earlier in the paper, the current government is now investing in Higher Apprenticeships that include qualifications at sub-degree level and beyond. The first wave of Foundation Degrees demonstrated that when higher education wants to create new revenue streams and also meet the needs of employers in sectors that relate to degree courses, progression problems disappear.

The 'qualifications industry' in the UK is worth millions of pounds per year and continues to grow. Qualifications play a major role in people's lives and it is through them that governments fund, monitor and evaluate education and training. The vocational qualifications landscape has become ever more complex and opaque. If we are serious about addressing the stark inequalities in social mobility, there is an

urgent need for everyone involved in education and training to face up to the systemic problems outlined in this paper.

7 Recommendations

1. The threshold of what counts as achievement of a 'Level' within formalised Qualification Frameworks should be reviewed and set to ensure transparency and permeability between vocational and academic routes.

2. The content of Level 2, Level 3 and Level 4 vocational qualifications should be reviewed and enhanced to ensure they provide a sufficient platform for progression to further and higher levels of study within a reformed concept of 'Level'.

3. The qualifications used in Advanced and Higher Apprenticeship programmes must be of sufficient rigour to provide a sufficient platform for progression to further and higher levels of study, including to bachelor degrees.

4. The SASE requirements should be revised to ensure apprenticeship frameworks at Levels 2, 3 and 4 demand substantive amounts of new learning to develop skills and knowledge, over and above the levels of expertise that the apprentice has already reached prior to starting their apprenticeship and that they can acquire by carrying out every-day work tasks.

5. Administrative data should be routinely collected (and made publicly available) on the progression of apprentices, including entry to sub-bachelor and bachelor courses.

6. The websites of government departments and agencies (e.g. Directgov, UCAS, Ofqual, SSCs) must provide clear information, advice and guidance about the exchange value of vocational qualifications in relation to higher education. These websites must also have a clearly designated section for apprentices.

7. Progression pathways should be created from all apprenticeship frameworks to ensure that their apprentices have the same opportunities to progress to advanced further and higher education. These pathways should be developed by local consortia of employers, professional bodies, FE colleges, Group Training Associations, specialist training providers and HEIs to connect frameworks to cognate degree courses. UCAS, HEFCE, the Department for Business, Innovation and Skills (DBIS) and the Department for Education (DfE) should also be closely involved to ensure the pathways are enforced. The consortia would provide the robust framework for apprenticeship standards at the local level that is currently lacking. In their announcement of City Apprenticeship Hubs in December 2011 (Cabinet Office 2011), government focused again only on growth in apprenticeship numbers rather than tackle the fundamental problems with quality and content discussed here.

8. Apprenticeship should be conceptualised in terms of occupations and professions rather than jobs and tasks, and in line with understandings about the nature of the staged 'journey' required to become a fully skilled, qualified and recognised 'practitioner'. Only those occupations that have a recognisable 'end point', at Level 3 at least – skilled status – should attract public funding. Being clear about the goal, in occupational terms, of each apprenticeship would provide a much more powerful basis for structural reform to the system and rationale for organising and supporting progression pathways.

Acknowledgements

This monograph was originally commissioned by and supported with funding from SKOPE. We are grateful to LLAKES for providing further support to enable us to complete the research. LLAKES is an ESRC-funded Research Centre – grant reference RES-594-28-0001. We are also grateful to Kate Stephens, Dr Jill Turbin and Dr Laura James for helping us with the desk research relating to the four sectoral case studies presented here.

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Appendix: Glossary of Awarding Bodies

ABC	Awarding body established in 1998 through a merger of some regional awarding bodies in England
AABPS*	Accrediting and Assessment Bureau for Post-Secondary Schools
CACHE	Council for Awards in Care, Health and Education
City & Guilds	City and Guilds of London Institute, founded 1878
Edexcel**	Founded in 1996 from the merger of the Business Technology and Education Council (BTEC) and the University of London Examinations and Assessment Council (ULEAC) – in 2004 became fully owned by Pearson plc
EDI	Education Development International
FAQ*	Future Awards and Qualifications
FDQ	Specialist body for the Food and Drink industry
IAM	Institute of Administrative Management
iCQ*	Qualifications awarded by iCAN Qualifications Ltd
IMIAL	IMI Awards Ltd (focus on motor industry)
KPA	Kaplan Professional Awards – division of Kaplan Financial
NCFE	Northern Council for Further Education
OCR**	Oxford, Cambridge and RSA Examinations – charity owned by Cambridge Assessment
ProQual*	No other name
Skillsfirst	No other name

* Organisations that are not currently members of the Federation of Awarding Bodies (FAB), a trade body representing 137 awarding bodies.
** Organisations that award both general education and vocational qualifications.

Table of Abbreviations

AAT	Association of Accountancy Technicians
BTEC	Business Technology and Education Council
CWDC	Childcare Workforce Development Council
DBIS	Department for Business, Innovation and Skills
DfE	Department for Education
EQF	European Qualifications Framework
FHEQ	Framework for Higher Education Qualifications
GLH	Guided Learning Hours
HE	higher education
HEI	higher education institutions
HESA	Higher Education Statistics Agency
HNC	Higher National Certificates
HND	Higher National Diplomas
LLN	Lifelong Learning Networks
LSC	Learning and Skills Council
NAS	National Apprenticeship Service
NOS	national occupational standards
NQF	National Qualifications Framework
NVQ	National Vocational Qualifications
QCF	Qualifications and Credit Framework
SASE	Specification of Apprenticeship Standards in England
SFA	Skills Funding Agency
SSC	Sector Skills Council
TC	Technical Certificate
UK	United Kingdom
VQ	vocational qualifications
VRQ	Vocationally-Related Qualifications