

# Potential Implications of Degree Apprenticeships for Healthcare Education

Denise Baker

## Abstract:

**Purpose:** This paper critically reflects on evidence relating to the development and delivery of apprenticeships and its potential implications for pre-registration healthcare education.

**Design:** An iterative review of English language literature published after 1995 to date relating to apprentices and apprenticeships was undertaken. Twenty studies were identified for inclusion. Only three related to the most recent apprenticeship initiative in the United Kingdom (UK), and the majority were UK based.

**Findings:** Three key themes were identified: entering an apprenticeship, the learning environment and perceptions of apprenticeships. Successful completion of an apprenticeship relies heavily on both understanding the role the apprentice is seeking to inhabit, as well as well-structured and comprehensive support whilst on the programme. These findings are then discussed with reference to professional body requirements and pre-registration education in healthcare.

**Practical Implications:** Appropriate work experience and support for learning are critical to apprenticeship success and apprenticeships should be given equal status to traditional healthcare education routes.

**Value:** The introduction of the Apprenticeship Levy in April 2017 (Finance Act, 2016), acknowledgement that all National Health Service (NHS) Trusts will be levy payers and the introduction of targets relating to apprenticeships for public sector employers have all contributed to growing interest in the apprenticeship agenda in health and social care.

**Keywords:** Apprentice, degree apprenticeship, professional nurse training, registered nurse apprenticeship, healthcare professions

## **Introduction**

On 6<sup>th</sup> April 2017, the Apprenticeship Levy was introduced in the United Kingdom (UK) (Finance Act, 2016). For employers with an annual pay bill of £3m or over, a 'payroll tax' of 0.5% will be levied with the resultant funds currently only available for payment of the education and training fees associated with apprenticeships. The UK Government recognises that all NHS Trusts will be levy payers and estimates that in 2017-2018, the National Health Service (NHS) will contribute c£200m to the levy (Dunne, 2017), with annual levy pots for some of the largest Trusts accumulating £3-4m per year. In addition, public sector bodies have been set targets of 2.3% of the organisation's headcount being new apprenticeships each year in England (Enterprise Act, 2016). Following the announcement in autumn 2016 that there would be a degree apprenticeship route into nursing and the interest this stimulated, this review will explore the available evidence relevant to the development and delivery of degree apprenticeships in healthcare. Although the apprenticeship levy is drawn from all eligible employers in the UK, apprenticeships are a devolved responsibility and the development of degree apprenticeships is currently confined to England. This review considers research evidence relating to the potential for the use of degree apprenticeships for pre-registration healthcare education in light of these developments.

## **Methodology**

Due to the emergent nature of this topic, it was necessary to adopt an iterative approach to the search. Whittmore & Knafl, (2005) suggest that the iterative approach allows capture of the

breadth and depth of the available evidence. For this article, the iterative approach allowed exploration of the wider sphere of literature relevant to the development of both degree apprenticeships, higher apprenticeships and apprenticeships in both healthcare and other fields. Phillips & Merrill, (2015) suggest that the iterative approach also allows researchers to keep pace with the rapid transformation experienced in healthcare, allowing the inclusion of policy information as well as published evidence.

CINAHL, PUBMED, British Education Index and Educational Resources Information Centre (ERIC) databases were initially searched to encompass both health and education papers. The key words used were apprentice\*, degree, health\* and experience. The reference lists of located papers were also used to identify additional relevant articles. Subsequently, a targeted search of relevant journals was undertaken in order to identify additional suitable evidence.

Inclusion criteria were papers published after 1995 in the English language relating to apprenticeships as a period of work-based education in preparation for a new job role. The date of 1995 was selected to reflect the introduction of the 'modern apprenticeship' in 1994 - 5 as it was hypothesised that evidence relating to this initiative would inform this review. It was assumed that literature prior to this date would have limited relevance to this review, although this is an acknowledged weakness of this paper. Papers relating to the health of apprentices, cognitive apprenticeships or description of a discrete element of development within an existing role and evidence primarily focussed on compulsory education were excluded. Broader terms such as vocational educational or work-based learning were not utilised as apprenticeships were the specific focus of this review, however, this is also acknowledged as a potential limitation of this paper. Initial searches identified several papers which offered commentary on apprenticeships, but were not based on evidence from research leading to their elimination. Others focussed on a discrete element of the apprenticeship rather than the entire programme or pedagogical approach and these too were eliminated.

Subsequent interrogation of reference lists was utilised to identify any further sources which would specifically illuminate the use of apprenticeships in health and social care. In total, twenty articles were identified as being suitable for inclusion in this review. Reference to current government policy was also necessary in order to reflect contemporary apprenticeship development. These sources were identified through internet searches and further identification of potential relevant literature within any relevant policies and reports located. Based on the search strategy suggested by Whitemore & Knafl, (2005), this additional level of searching allowed inclusion of policy and reports germane to this topic and facilitates greater understanding.

**See table**

### **Findings and discussion**

Twenty papers were identified for inclusion in the review, twelve originating from the UK, six from Australia or New Zealand and two from mainland Europe. All were qualitative studies based on interviews, focus groups, case study or secondary data analysis. Of these, only one focussed specifically on health and the NHS and only one reflected the most recent changes to apprenticeship policy in the United Kingdom. Lack of recent or UK based evidence is a limitation of this paper, however, evidence presented from previous apprenticeship initiatives will still offer useful commentary on current developments.

### ***Entering an apprenticeship***

Spielhofer & Sims, (2004b), Snell & Hart, (2008), Hill & Dalley-Trim, (2008), Dagsland et al., (2015), Chan, (2016), Gambin & Hogarth (2016) and Mangan & Trendle (2017) all identified factors which increased the probability of apprentices remaining on programme. From the outset, it seems clear that apprentices receiving appropriate career guidance and

having a good sense of what the job role actually entails is a critical step. The relatively large scale study by Chan, (2016) noted that prior knowledge of their chosen career was an important factor contributing to retention within the programme, with Hill & Dalley-Trim, (2008) reporting similar outcomes. Although Chan's study is New Zealand based, she suggests that outcomes in that country are consistent with those in the rest of the world, suggesting that these findings will also be applicable in the UK. Chan describes this as a process of 'proximal participation' as being a good preparation for entry into the apprenticeship role, with potential apprentices appreciating the realities of their future role rather than the 'imaginings'. This is also noted in Chan's 2013 study of craft baker apprentices some of whom had been working in associated roles within the bakery before choosing to enter the profession.

The disparity between the expectation and the reality of the role which apprentices were seeking to enter emerges as a significant factor behind apprentices choosing to leave their apprenticeship. This theme is further explored by Dagsland et al., (2015), with participants reporting integration into the workplace as critical to their enjoyment of the apprenticeship. This is explained well by Lave and Wenger (1991) in their work on Communities of Practice and the evolution of the learner from novice to full participant within a community. Evidence of learner experiences in pre-registration healthcare education also indicate that early experiences impact on retention and attrition. For example, Hyde (2015) reports three distinct areas of concern for students as they transition from education to their first clinical placement in pre-registration diagnostic radiography: working with clinical staff, working with very ill patients and the need to move around different areas in the imaging department during their placement. Eick, Williamson, & Heath's, (2012) systematic review identify several studies where early placement experiences (both in terms of support received and the actual nature of the work) prompted pre-registration nursing students to leave their programme. There is no

reason to believe that this will be any different for apprentices, as they will need to meet the same professional requirements as 'traditional' students and potentially be exposed to the same experiences. Health Education England recognise the importance of retaining students in pre-registration education through the Reducing Pre-registration Attrition and Improving Retention project. Evidence from the literature on apprenticeships suggests that this will be equally challenging in apprenticeships as in 'traditional' education routes.

Some apprentices in Spielhofer & Sims' (2004b) study also chose to leave their apprenticeship, but perhaps for economic rather than vocational reasons, with competitors offering more attractive pay and conditions (although not necessarily training). Although Mangan and Trendle (2017) were unable to offer any explanation of how income caused a higher retention in apprenticeships, there was a clear link. This is also highlighted in the review by Eick et al., (2012) where several studies report the problems pre-registration nursing students have in balancing study requirements with financial difficulties. Although the NHS specified that trainee nursing associates should be employed on Agenda for Change Band 3 (NHS Employers, 2017a), there is no such guidance for pre-registration degree apprenticeships. NHS Employers offers suggestions that salary should be a proportion of the qualifying band or that they are paid a band below the qualifying band (NHS Employers, 2017b), but this is not mandated. This offers aspiring degree apprentices in the NHS the opportunity to seek out the best terms and conditions offered by those seeking to employ them. The rules around what can and cannot be funded by the apprenticeship levy are exacting, with no facility for payment of travel expenses or placement support existing (Education and Skills Funding Agency, 2017) as is currently funded by the Department of Health. Any apprenticeship, therefore, needs to appeal to apprentices both in terms of the training offered, but also the employment terms and conditions.

Gambin & Hogarth (2016) and Mangan & Trendle (2017) all identified that higher levels of prior educational attainment were influential and beneficial in the successful completion of apprenticeships. Female apprentices in the study by Gambin and Hogarth (2016) had a higher chance of completion in female dominated professions, which should bode well for health, although this data is largely based on further education (and therefore lower level apprenticeships). However, both studies identified that apprentices with a declared disability or from a minority ethnic background had poorer apprenticeship completion rates. Selection of appropriate candidates to enter any of the health professions needs to be values based and requires evidence of prior academic achievement, but the aspiration that apprenticeship routes will widen recruitment to the workforce perhaps need to be considered. With evidence suggesting that some groups of apprentices may struggle, the support available on programme will be critical to achieving this.

### ***The learning environment***

On entering an apprenticeship, several authors identify challenges faced by learners and employers alike. Spielhofer & Sims, (2004b) note that in organisations where the apprenticeship route is valued, apprentices have better outcomes. Several of the studies describe the competing priorities of apprenticeships - 'getting the job done' or maintaining productivity and the need to develop the apprentices' knowledge and skills. Snell & Hart, (2008) also recognise the competing priorities of the workplace as a critical factor in non-completion of apprenticeships. Previous criticism of apprenticeships has identified the quality of and time devoted to the educational element of the apprenticeship (see Paul, (2007) P31). The amount of 'off the job' training time is now set by the Government in an attempt to

protect apprentices' learning (Education and Skills Funding Agency, 2017) in an attempt to ensure the educational element is valued by employers.

Bishop (2017) describes organisations where the apprenticeship role is well structured and recognised as offering good outcomes for apprentices. However, apprentices in this study were happy to be led through their apprenticeship by the employer, and did not actively seek out additional or external learning opportunities. In smaller organisations where learning was less formalised, apprentices were actively encouraged to engage in working across boundaries. Bishop (2017) suggests that the personality of the apprentice will largely determine the success of their learning through the apprenticeship route – those who would prefer a more prescribed learning journey may not perform well if learning opportunities are ad hoc.

The transition into and through the community of practice also appears to have an on-going influence on the learner journey. Dagsland et al.,(2015) note the differences between apprentices' positive perceptions of the workplace initially and when nearing completion, when some learners report a lack of respect or even workplace bullying. In spite of this, both Dagsland et al and Snell & Hart note that even when apprentices report problems, they still complete their apprenticeship citing personal motivation to achieve the qualification as a factor.

The relationship between the training provider and the employer is also critical to the success of the apprenticeship. Where good working relationships exist and shared goals transparent, apprentices are more likely to complete their apprenticeship (Spielhofer & Sims, 2004b). Irons, (2017) also reports the need to fully involve employers particularly in the design stage of the apprenticeship, although notes that the resultant programme also needs to meet the needs of the apprentice and the training provider. The availability and quality of workplace

support is also cited by Snell & Hart, (2008) and Dagsland et al., (2015) as critical to the success of apprenticeships for vocational and pastoral aspects of the apprentice's development, including feeding back to the apprentice about their progress and performance. Related to this is the need to develop knowledge and skills at an appropriate pace, so that apprentices remain engaged and challenged in the workplace and can clearly see their progression. Chan, (2016) and Dagsland et al., (2015) both report this adds to the learner's motivation and improves perceptions of their learning experience. This is also noted by Dismore, (2014), Filliettaz, (2011) and Bishop (2017) who report that the learning environment, process and support were all key to the transformation reported by apprentices. Filliettaz, (2011) also notes that support of apprentices is a collective responsibility within an organisation and it should not be presumed that the onus rests with one individual trainer or supervisor. Some apprentices in the study by Fuller & Unwin, (2003) quickly found themselves becoming productive members of the workforce and their learner identity was lost. The significance of employer engagement with apprenticeship schemes and the provision of adequate support cannot be underestimated. Apprenticeships in continental Europe are perceived to hold a much higher status than in the UK (see Filliettaz, 2011), with stronger general education, as well as, vocational education forming part of the apprenticeship (see Li and Pilz, 2017). The UK would be wise to draw on evidence from the continent where apprenticeships have continuing popularity and success. The duality of the apprenticeship in terms of productivity and education is explored by Fuller & Unwin, (2003), who suggest that participation, learner development and institutional arrangements all contribute to the success or failure of apprenticeships and describe an 'expansive / restrictive' continuum to illustrate how these themes interplay. Clear identification of what will constitute the workplace curriculum coupled with a structured programme of how the apprentice will navigate through this are characteristics displayed by expansive organisations.

Fuller & Unwin, (2003) argue that organisations demonstrating these qualities will allow apprentices to foster deeper and more meaningful learning and apprentices employed by expansive organisations in their case studies achieved enhanced outcomes compared with those whose learning was more poorly planned and implemented. Bishop's (2017) study refutes this to some extent and argues that even organisations at the more restrictive end of the continuum offer expansive learning opportunities, but that apprentice success is founded on the apprentice's own motivation to learn. Billett (2003) notes that deeper learning is required in order to underpin the complexities of an occupation in order to be flexible and adaptable in different workplace situations, apprentices need more than a set of competences associated with a role.

Turbin et al., (2014) describe through their case study approach the use of advanced apprenticeships in healthcare in the United Kingdom in 2010 - 11. This article reports part of a larger scale study, but focuses specifically on how apprenticeships are being used in the NHS, progression from advanced apprenticeships to Higher Education and employers' perceptions of apprenticeships. Whilst this study focusses specifically on the NHS, it must be noted that results relate to advanced rather than degree apprenticeships and that the study is based around the Isle of Wight, perhaps limiting findings to the NHS as a whole and to the use of the degree apprenticeship.

Advanced apprenticeships for pharmacy technicians in the study by Turbin et al., (2014) had far more structured content when compared with those of generic support workers. This element of formal, occupational recognised learning had positive implications for both the apprentices throughout their learning and their subsequent progression within their field. In contrast, support workers for whom the apprenticeship was much less formal and had evolved to suit individual employers' needs were perceived less favourably and struggled to progress through to more formal stages of learning or pre-registration education. Turbin et al.,(2014)

further note that support workers reported a much more restrictive apprentice experience as learning was focussed on development of ability to perform tasks and the need to become a productive member of the workforce rather than growing into a profession. This is also identified in the report by Unwin et al., (2004) who comment that:

The emphasis on formal education and training in the NHS discriminates against informal learning despite the fact that much of that learning is extremely valuable to the delivery of effective medicine.

This again reflects the dual nature of the apprenticeship described by Billett, (2003) and Hordern, (2015) where the development of skills needs to be matched by deeper learning in order for the apprentice to achieve full participation within a job role or profession Whilst Bishop (2017) suggests that protection for the off-the-job element of the apprenticeship should be statutory, it is perhaps more pertinent to suggest that it is not just time that is needed. The quality, structure and element of co-participation in learning are all critical to the success of the apprenticeship and thus the quality of 'on-the-job' training also needs to be considered. Harris and Simons (2005) suggest that the factors which can be influenced *should be* influenced in order to increase apprenticeship completion rates, and identify several 'process' factors pertinent to the learning environment which could lead to positive outcomes for the apprentice.

### ***Perceptions of Apprenticeships***

Employers in the study by Spielhofer & Sims, (2004a) report negative perceptions of the apprenticeship route and the notion that apprenticeships are associated with manual labour and 'trades'. This perception is echoed by Turbin et al, (2014) who suggested in their study of apprenticeships in NHS that those registrants who had completed more 'traditional' pre-registration programmes would be more likely to progress to advanced roles compared with

vocational learners. The split between the traditional and vocational learning is described by Turbin et al (2014) as 'privileging' of academic qualifications over those achieved in workplace learning. The perception of apprenticeships appealing to young people with lower levels of educational attainment also provides continuing confusion for participants (Smith, 2010), while Gambin & Hogarth (2016) and Mangan & Trendle (2017) both note that apprentices with prior educational achievements are more likely to complete their apprenticeships. Brockmann & Laurie, (2016) suggest that the government's use of apprenticeships is a way to

scoop up any 'low achievers' though a low entry point (level 2) (p229)

surely reinforcing the stereotype that apprenticeships are for those who do not do well at school is perhaps challenged by these findings. Saraswat, (2016) suggested that apprenticeships were poorly understood by employers, careers advisors and potential apprentices alike, all contributing to negative conceptions about their value. This is further reinforced by the OECD, who note the perceptions of apprenticeships as being a 'second class choice' (OECD, 2014, P.3) and that recognition of the apprenticeship route needs to be improved.

Other employers report the bureaucratic nature of apprenticeships deterring employers from engaging with them (Spielhofer & Sims, 2004a). This is also reflected in the study by Dagsland et al, (2015) who recommend that employers need to plan the structure of the apprenticeship, provide adequate and appropriate supervision and have clear outcomes and learning goals associated with apprenticeships. Where apprenticeships are being used to address a recruitment problem such as that described in Fuller & Unwin, (2003), outcomes for both employer and learner are less favourable and whilst the apprentice becomes a productive worker, their knowledge and skills are narrow and restricted.

Smith, (2010) reports that the apprentices themselves had reservations about the use of apprenticeships to develop the teaching assistant role and that on-going workforce transformation in education could potentially be undermined by the need to respond to Government drivers. The association of apprenticeships with the acquisition of low level skills and competencies did not align with the progressive professionalisation of the teaching assistant role at the time. The Modern Apprenticeship of the 1990s was hindered by a perception of poor quality and irrelevant content (Hogarth & Gambin, 2012), and the current iteration of apprenticeships has attempted to address this issue with greater involvement of employers from the outset. Hogarth & Gambin, (2012) also reflect the competing nature of apprenticeships, as a politically driven initiative versus industry and employer needs.

This is borne out in the study by Turbin et al., (2014), where employers switched easily into an apprenticeship model of delivery for their pharmacy technicians as this offered an alternative funding stream for existing education programmes. Turbin et al., (2014) further suggest that an area of conflict exists in the NHS, and that economic drivers play a significant part in shaping the workforce, perhaps implying that apprenticeships are used for convenience rather than as a tool for educational and career development. Similarly Saraswat, (2016) suggests that employers are utilising apprenticeships to secure cheap labour and the learning experience suffers as a result. Unwin et al., (2004) conclude in their report that learning on the job is sometimes regarded as a cheap way to train, but as a recent report from the Institute of Fiscal Studies noted that whilst employers will be incentivised to utilise levy monies, this could be detrimental to the quality of training offered and still not deliver the return on investment that the Government promises (Amin-Smith, Cribb, & Sibieta, 2017.) Nevertheless, the government incentives and targets around apprenticeships combined with the recent predictions for the shortfalls in the healthcare workforce (HEE, 2017) mean that pre-registration degree apprenticeships may gain traction with employers. The assertion that

Health Education England is 'expanding apprenticeships' (ibid, P9), however, is challenging. Apprentices need to be employed for the duration of their apprenticeship and unless Health Education England evolves into an Apprenticeship Training Agency, it is difficult to see exactly how this expansion will be achieved.

Irons, (2017) reports the development of a degree apprenticeship in computing and identifies the relationship with the employer as critical to the success of the programme. Although this article focuses on the development rather than the outcomes of the apprenticeship, it allows a useful insight into the latest drive to develop apprenticeships in the UK. Irons acknowledges that although the apprenticeship route offers new opportunities and models of learning, it needs to be economically viable and sustainable. Irons also recognises that the apprentices themselves need to be committed to their programme of learning, perhaps echoing the findings of Smith, (2010). Irons, (2017) reports the need for enhanced partnership working and tenacity when bringing together all of the elements required to design, deliver and fund apprenticeships, suggesting that some of the bureaucracy identified by Spielhofer & Sims, (2004a) is still present.

### ***Pre-registraiton education***

Balanced against all of these findings is the need to meet professional body requirements when considering pre-registration education in health or social care. The Nursing and Midwifery Council (NMC) and the Health and Care Professions Council (HCPC) both identify a batchelors degree as the required minimum threshold qualificaiton for professional registration for the majority of professions (HCPC, 2009; NMC, 2010). The apprenticeship

route will still require registrants to achieve this level of education, albeit in a less traditional manner. In order for apprentices to be able to achieve the educational outcomes required by the professional bodies therefore, the apprenticeship route appears not to be a route for those 'low achievers' discussed by Brockmann & Laurie, (2016). Education providers will perhaps continue to apply equivalent entry criteria regardless of mode of study through to registration in order to assure learner success. This suggests that degree apprenticeships simply offer an alternative funding source for employers as identified with the pharmacy technicians in the study by Turbin et al., (2014). There has been a significant level of interest across all health and social care professions in the development of pre-registration degree apprenticeships and it remains to be seen whether their promise will be fulfilled.

Both the NMC and the HCPC require registrants to be competent and identify 'Standards of Proficiency' (HCPC) or 'Essential Skills' and 'Standards of Competence' (NMC) which pre-registrants need to meet prior to qualification. Fuller & Unwin, (2003) have already identified that the NHS values the development of competence perhaps at the expense of deeper learning, and the terminology used by regulatory bodies reinforces this. The recognition by Billett, (2003) and Hordern, (2015) that apprenticeships need to recognise both the competency element but also the deeper learning required to successfully enter the job role needs to be acknowledged by employers and training providers. Lambert (2016) identifies the accountability frameworks around apprenticeships remaining a challenge for education providers, as much of the burden of accountability remaining with the provider rather than the employer. The Quality Assurance Agency note that Higher Education Institutions have 'sole responsibility' for the quality of their provision (QAA, 2017) but that Professional, Statutory and Regulatory Bodies (PSRBs) will also need to have oversight of the apprenticeship.

The requirement for an independent end point assessment originally proposed by Richard, (2012) and adopted by the government presents additional challenges in pre-registration apprenticeships. End point assessment focuses on the holistic assessment of the knowledge, skills and behaviours required for successful completion of the apprenticeship. Previous criticism of the development of apprenticeships having two distinct elements (development of competence and acquisition of underpinning knowledge (see Anderson, Bravenboer and Hemsworth (2012)) should be avoided by the use of such assessment. However, it could be argued that the divide between competence and learning suggested by Bravenboer and Lester (2016) has already been overcome in pre-registration education in health. The Nursing and Midwifery Council, for example, require students to undertake 50% of their degree in practice (NMC, 2010). This suggests that pre-registration qualifications should have a much easier transition to becoming degree apprenticeships and combining both elements, although the validity of an assessment conducted over one day or less to reflect the suitability of an apprentice to complete their three or four year apprenticeship could be questioned.

‘Traditional’ pre-registration nursing students will be eligible for NMC registration on completion of their degree qualification, however, apprentices will not complete their apprenticeship until the end point assessment has been undertaken and passed. Format and timing of this end point assessment is prescribed as it cannot be undertaken until the formal qualification is completed. Although some degree apprenticeships allow an integrated assessment (completion of the formal qualification and end point assessment are synchronous), the nursing degree apprenticeship is not. Where end point assessment is not integrated into the apprenticeship, there is the potential for a disconnect – apprentices may pass the higher education element of their training but fail the apprenticeship itself. Entry to the professional register, theoretically, has already been assured by completion of the higher education qualification, but the apprenticeship has not been completed. This potentially adds

to the challenges and bureaucracy identified by Irons, (2017) and Spielhofer & Sims, (2004b) but could also lead to delays in professional registration or lack of impetus to complete the apprenticeship element of the programme.

## **Conclusions**

Apprenticeships clearly appear to offer opportunities for employers to access to alternative modes of education for their staff, and offer private or independent healthcare providers an opportunity to 'commission' pre-registration education not previously available. However, evidence from literature relating to both apprenticeships and pre-registration education identifies challenges for employers and training providers when selecting and educating apprentices. Ensuring that employers select the most capable and suitable applicants to enter pre-registration healthcare apprenticeships may mean that the apprenticeship route does not offer the element of social mobility envisioned by the government. The amount of support required to deliver a high quality apprenticeship in the workplace needs to be considered prior to embarking on apprenticeship training; although pre-registration healthcare education may already have similar characteristics to apprenticeships, support for learners and the importance placed on the apprentice as a learner need to be fully embraced to ensure success.

## **Recommendations for research**

Although there is a body of evidence relating to apprenticeships, the introduction of the apprenticeship levy and the development of higher level apprenticeships offers opportunities for contemporary research in the United Kingdom.

The use of apprenticeships in continental Europe is well described both in terms of purpose and outcomes (see Mazenod, (2016) for example) and exploration of uptake by employers, perceptions of apprentices and outcomes including subsequent progression within the field in

the United Kingdom would be beneficial. Similarly, further research into the use of apprenticeships in the NHS and particularly for pre-registration education would contribute significantly to employers understanding of apprenticeships and their value to workforce development in health and social care.

Studies to date have largely adopted a case study approach or are relatively small scale. Both offer insights into the development of and experiences on apprenticeships, but equally, larger scale studies which look at more than measures against government targets would be beneficial.

### **Recommendations for practice**

The findings of this review offer clear guidelines for employers considering the use of degree apprenticeships for pre-registration education:

- Appropriate work experience is essential to inform the decision to enter a profession
- Employer terms and conditions for apprentices should encourage them to remain engaged with the apprenticeship
- The apprenticeship route needs to be valued by employers and apprentices be given equal status to 'traditional' learners
- Support for learning needs to holistically reflect transition into the chosen profession or the community of practice and not merely focus on competencies or tasks

The use of a degree apprenticeship offers a credible alternative for employers, and the introduction of the apprenticeship levy should enable flexibility in the development of individuals and the workforce.

## References

- Amin-Smith, N., Cribb, J., & Sibieta, L. (2017.). 8. Reforms to apprenticeship funding in England. Available from <https://www.ifs.org.uk/publications/8863> Last accessed 1.07.17
- Anderson, A; Bravenboer, D; Hemsworth, D. (2012) "The role of universities in higher apprenticeship development", *Higher Education, Skills and Work-Based Learning*, Vol. 2 Issue: 3, pp.240-255
- Billett, S. (2003). Vocational Curriculum and Pedagogy: an activity theory perspective. *European Educational Research Journal*, 2(1), pp6 - 21.  
<https://doi.org/10.2304/eej.2003.2.1.11>
- Bishop, D. (2017) Affordance, agency and apprenticeship learning: a comparative study of small and large engineering firms, *Research in Post-Compulsory Education*, 22:1, 68-86,
- Bravenboer, D & Lester, S. (2016) "Towards an integrated approach to the recognition of professional competence and academic learning", *Education + Training*, Vol. 58 Issue: 4, pp.409-421
- Brockmann, M., & Laurie, I. (2016). Apprenticeship in England – the continued role of the academic–vocational divide in shaping learner identities. *Journal of Vocational Education & Training*, 68(2), 229–244. Retrieved from <http://10.0.4.56/13636820.2016.1143866>
- Chan, S. (2013). Learning Through Apprenticeship: Belonging to a Workplace, Becoming and Being. *Vocations and Learning*, 6(3) 367-383. <https://doi.org/10.1007/s12186-013-9100-x>
- Chan, S. (2016). Belonging to a workplace: first-year apprentices' perspectives on factors

determining engagement and continuation through apprenticeship. *International Journal for Educational and Vocational Guidance*, 16(1) pp9-27.

<https://doi.org/10.1007/s10775-014-9282-2>

Dagsland, AHB., Mykletun, R. J. and Einarsen, S. (2015). “ We ’ re not slaves – we are actually the future !” A follow-up study of apprentices ’ experiences in the Norwegian hospitality industry. *Journal of Vocational Education & Training*, 6820(June 2017), 1–22. <https://doi.org/10.1080/13636820.2015.1086411>

Dismore, H. (2014). Experiencing the transition from an apprenticeship to higher education. *Journal of Education and Work*, 27(6), 585–607.

<https://doi.org/10.1080/13639080.2013.802831>

Dunne, P (2017) 'NHS Trusts: Apprentices'. Parliament Written Question and Written Answer 18 April 71082. Available from <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2017-04-18/71082> Last accessed 29.07.17

Education and Skills Funding Agency. Apprenticeship funding and rules for training providers (2017) Available from:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/612159/PROVIDER\\_V3\\_\\_1\\_.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/612159/PROVIDER_V3__1_.pdf). Last accessed 6.07.17

Eick, S. A., Williamson, G. R., & Heath, V. (2012). A systematic review of placement-related attrition in nurse education. *International Journal of Nursing Studies*. Vol 49 No 10: pp1299-1309 <https://doi.org/10.1016/j.ijnurstu.2011.12.004>

Enterprise Act (2016) Ch 4 Available at:

<http://www.legislation.gov.uk/ukpga/2016/12/contents/enacted> Last Accessed 29.07.17

Filliettaz, L. (2011). Collective guidance at work : a resource for apprentices ? Collective guidance at work : a resource for apprentices ?, *Journal of Vocational Education & Training*, 63:3, 485-504, DOI: 10.1080/13636820.2011.580359

Finance Act (2016) Ch6 Available at: <http://www.legislation.gov.uk/ukpga/2016/24/contents>  
Last accessed 29.07.17

Fuller, A., & Unwin, L. (2003). Learning as Apprentices in the Contemporary UK Workplace: creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16(4), 407–426. <https://doi.org/10.1080/1363908032000093012>

Gambin, L & Hogarth, T. (2016) Factors affecting completion of apprenticeship training in England, *Journal of Education and Work*, 29:4, 470-493, DOI: 10.1080/13639080.2014.997679

Harris, R, & Simons, M. (2005) "Exploring the notion of retention in apprenticeship", *Education + Training*, Vol. 47 Issue: 4/5, pp.350-365

HCPC. (2009). Standards of education and training, 1–16. Retrieved from <http://www.hcpc-uk.org/assets/documents/1000295EStandardsofeducationandtraining-fromSeptember2009.pdf> Last accessed 12.07.17

HEE (2017) Facing the Facts; Shaping the Future; A draft health and care workforce strategy for England to 2027. Available from <https://www.hee.nhs.uk/sites/default/files/documents/Facing%20the%20Facts%20%20Shaping%20the%20Future%20%E2%80%93%20a%20draft%20health%20and%20care%20workforce%20strategy%20for%20England%20to%202027.pdf>. Last accessed 6.03.18

Hill, A & Dalley-Trim, L. (2008). Hanging in there. What makes a difference in the first year

of an apprenticeship? *Youth Studies Australia* 27(1) 36-42

Hogarth, T., & Gambin, L. (2012). Apprenticeships in England: What next? *Journal of Vocational Education & Training*, 64(1), 41–55.

<https://doi.org/10.1080/13636820.2011.590221>

Hordern, J. (2015). Higher apprenticeships and the shaping of vocational knowledge.

*Research in Post-Compulsory Education*, 20(1), 17–34.

<https://doi.org/10.1080/13596748.2015.993867>

Hyde, E. (2015). A critical evaluation of student radiographers' experience of the transition from the classroom to their first clinical placement. *Radiography*, 21(3), 242–247.

<https://doi.org/10.1016/j.radi.2014.12.005>

Irons, A. (2017). Reflection on higher degree apprenticeship development. *Higher Education, Skills and Work-Based Learning*, 7(1), 112–22.

<https://doi.org/10.1108/HESWBL-05-2016-0033>

Lambert, S. (2016) Are current accountability frameworks appropriate for degree apprenticeships?, *Higher Education, Skills and Work-Based Learning*, Vol. 6 Issue: 4, pp.345-356

Lave, J and Wenger, E (1991) *Situated Learning. Legitimate peripheral participation*, Cambridge; University of Cambridge Press

Li, J & Pilz, M. (2017) Modularisation in the German VET system: a study of policy implementation, *Journal of Education and Work*, 30:5, 471-485

Mangan, J & Trendle, B. (2017) Attrition and retention of apprentices: an exploration of event history data using a multi-state modelling framework, *Education Economics*, 25:4,

- Mazenod, A. (2016). Education or training? A comparative perspective on apprenticeships in England. *Journal of Vocational Education & Training*, 68(1), 102–117.  
<https://doi.org/10.1080/13636820.2015.1117521>
- NHS Employers (2017a) Available from: <http://www.nhsemployers.org/your-workforce/plan/nursing-workforce/nursing-associate> Last accessed 29.07.17
- NHS Employers (2017b) Degree Apprenticeships: What employers need to know Available from <http://www.nhsemployers.org/~media/Employers/Publications/NHS%20Employers%20Degree%20Apprenticeship%20guide%20final.pdf>. Last accessed 6.03.18
- Nursing and Midwifery Council. (2010). Standards for pre-registration nursing education. Available from: <https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-for-pre-registration-nursing-education.pdf> Last accessed 16.01.17
- OECD (2014), “G20-OECD-EC conference on quality apprenticeships for giving youth a better start in the labour market”, OECD Conference Centre, Paris, 9 April
- QAA (2017) Quality Assuring Higher Education in Apprenticeships: Current Approaches. Available from <http://www.qaa.ac.uk/en/Publications/Documents/Quality-assuring-higher-education-in-apprenticeships-2017.pdf>. Last accessed 6.03.18
- Paul, Lord. (2007). Select Committee on Economic Affairs Apprenticeship : a key route to skill Volume I : Report, I(July). Retrieved from <http://dera.ioe.ac.uk/8439/1/138.pdf> Last accessed 16.05.17
- Phillips, A. B., & Merrill, J. A. (2015). Innovative use of the integrative review to evaluate

evidence of technology transformation in healthcare. *Journal of Biomedical Informatics*, 58, 114–121. <https://doi.org/10.1016/j.jbi.2015.09.014>

Richard, D. (2012). The Richard Review of Apprenticeships, 1–143. Available from <https://www.gov.uk/government/publications/the-richard-review-of-apprenticeships> Last accessed 6.07.17

Saraswat, A. (2016) Higher apprenticeships and the new apprenticeship standards: Perceived potential and limitations, *Higher Education, Skills and Work-Based Learning*, Vol. 6 Issue: 4, pp.401-416

Smith, P. H. (2010). Teaching assistant apprentices ? English TAs' perspectives on apprenticeships in schools apprenticeships in schools, *Journal of Vocational Education & Training*, 62:3, 367-380, DOI: 10.1080/13636820.2010.510250

Snell, D., & Hart, A. (2008). Reasons For Non-completion And Dissatisfaction Among Apprentices And Trainees : A Regional Case Study, *International Journal of Training Research*, 6:1, 44-73, DOI: 10.5172/ijtr.6.1.44220

Spielhofer, T., & Sims, D. (2004a). Modern apprenticeships: hitting the target?, *Education + Training*, Vol. 46 Issue: 3, pp.112-118, <https://doi.org/10.1108/00400910410531769><https://doi.org/10.1108/00400910410531769>

9

Spielhofer, T., & Sims, D. (2004b). Modern Apprenticeships in the Retail Sector : stresses , strains and support, *Jouranl of Vocational Educaiton and Training* 56(4), 539–558.

Thomas, S., Grimes, D. (2006). Evaluating the integration of key skills and NVQs into an undergraduate degree programme : a case study from the graduate apprenticeship initiative. *Education + Training*, Vol. 45 Issue: 7, pp.383-391,

<https://doi.org/10.1108/00400910310499956> Permanent

Turbin, J., Fuller, A., & Wintrup, J. (2014). Apprenticeship and progression in the healthcare sector: can labour market theory illuminate barriers and opportunities in contrasting occupations? *Journal of Vocational Education & Training*, 66(2), 156–174. Retrieved from <http://10.0.4.56/13636820.2014.894553>

Unwin, Lorna & Felstead, Alan & Fuller, Alison. (2004). LEARNING AT WORK: TOWARDS MORE 'EXPANSIVE' OPPORTUNITIES Paper prepared for the NIACE Commission of Inquiry into 'The Future for Lifelong Learning. available at: [www.niace.org.uk.ezproxy.derby.ac.uk/lifelonglearninginquiry/docs/Workplace-Lorna-Unwin.pdf](http://www.niace.org.uk.ezproxy.derby.ac.uk/lifelonglearninginquiry/docs/Workplace-Lorna-Unwin.pdf) (accessed 15 December 2016) .

Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*, 52(5), 546–553. <https://doi.org/10.1111/j.1365-2648.2005.03621.x>

About the author Denise Baker is Head of Allied Health and Social Care at the University of Derby. She has been heavily involved with the development of apprenticeships nationally and leads the Support Worker and Apprenticeship Network. Denise Baker can be contacted at: [d.baker@derby.ac.uk](mailto:d.baker@derby.ac.uk)

-



Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Fuller & Unwin, (2003)	Learning as Apprentices in the Contemporary UK Workplace: creating and managing expansive and restrictive participation	Case study	UK	Varied	3 companies	Expansive / restrictive approach to apprenticeships proposed based on participation within a community of practice, support for learners and institutional attitudes to apprenticeships
Spielhofer & Sims, (2004a)	Modern apprenticeships: hitting the target?	Interviews	UK	Varied	12 employers - various personnel per employer	Poor knowledge of apprenticeships amongst employers, negative connotations of the term apprenticeships, complexity and bureaucracy associated with apprenticeships present barriers to engagement by employers with apprenticeships.

Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Spielhofer & Sims, (2004b)	Modern Apprenticeships in the Retail Sector : stresses , strains and support	Semi-structured interviews across organisational levels	UK	Retail	Not specified	Low completion rates and competing needs of 'doing the job' and learning negatively impact on perceptions of apprenticeships, poor support in workplace increased attrition from apprenticeship, employers needing to value dual aspect of apprenticeship in order to improve uptake and completion
Unwin, Felstead, & Fuller, (2004)	Learning at work: towards more 'expansive' opportunities	Case studies	UK	Varied	4 case studies	Identification of expansive or restrictive learning environments, conflict between skills acquisition and deeper learning, support required for employers to maximise use of work based learning via apprenticeships.

Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Harris & Simons (2005)	Exploring the notion of retention in apprenticeship	Qualitative interviews of apprentices, trainers and supervisors	Australia	Varied	437	A model of factors influencing retention is proposed, with antecedent, context, incidental and process factors influencing outcomes. Factors are interrelated and their potential influence changes during the lifetime of the apprenticeship
Thomas, & Grimes, (2006)	Evaluating the integration of key skills and NVQs into an undergraduate degree programme: a case study from the graduate apprenticeship initiative	Mixed methods - questionnaire (students), interviews (employers), focus groups (graduate apprenticeship programme managers)	UK	Hospitality and catering	7 students, other participants not specified	Transition from HNC/HND to degree was academically challenging for students, student confidence and skills increased during the programme, workload demands are high, good working relationship (partnership) required between employer and training provider

Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Snell & Hart, (2008)	Reasons For Non-completion And Dissatisfaction Among Apprentices And Trainees: A Regional Case Study	Semi-structured interviews	Australia	Mixed	105	Unpleasant working conditions, poor quality training, a lack of support and low wages are contribute to both non-completion and a high degree of dissatisfaction among apprentices and trainees
Hill & Dalley-Trim, (2008)	Hanging in there - what makes a difference in the first year of an apprenticeship?	Interviews and secondary data analysis	Australia	Mixed	13 interviews	Good career advice prior to entering apprenticeship, workplace and social support for apprentices increases retention

Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Smith, (2010)	Teaching assistant apprentices? English TAs ' perspectives on apprenticeships in schools apprenticeships in schools	Semi-structured interviews	UK	Education	44	Anxiety about the TA role and the use of apprenticeships to develop skills (lack of expansive learning opportunities), status of 'apprenticeship'
Filliettaz, (2011)	Collective guidance at work: a resource for apprentices?	Case study	Europe	Engineering	2	Support for apprentices' learning comes from many sources, not just named supervisors. This has the potential to enhance but also complicate learning when mixed messages are given.

Chan, (2013)	Learning Through Apprenticeship: Belonging to a Workplace, Becoming and Being	Longitudinal case study	New Zealand	Catering	13	Distinct phases noted of the apprenticeship journey - belonging to a workplace, entering the new role, inhabiting the new role. Barriers and enablers to apprenticeships
Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Turbin, Fuller, & Wintrup, (2014)	Apprenticeship and progression in the healthcare sector: can labour market theory illuminate barriers and opportunities in contrasting occupations?	Desk-based analysis supported by informant interview	UK	Health	17 interviews conducted	Variations in content of apprenticeship still exist despite 'standardisation', progression is limited either academically or professionally, differences in labour market in NHS between employers for Bands 1-4 and lack of role identity persists.

Dismore, (2014)	Experiencing the transition from an apprenticeship to higher education	Semi-structured interviews	UK	Varied	3	Apprenticeship offered progression opportunity to further qualification, but could also be considered restrictive. Transformational element of apprenticeship also noted
Dagsland et al., (2015)	“We’re not slaves – we are actually the future!” A follow-up study of apprentices’ experiences in the Norwegian hospitality industry	Semi-structured interviews	Europe	Hospitality	11	Lack of challenging and varied tasks contributed to dissatisfaction, learning process lacked structure, apprentices required guidance to facilitate own workplace learning
Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Chan, (2016)	Belonging to a workplace: first-year apprentices’ perspectives on factors determining engagement and continuation through apprenticeship	Qualitative case study - interviews and focus groups	New Zealand	Varied	90	Apprentices' sense of belonging was enhanced by knowledge of job role prior to apprenticeship, experience within apprenticeship and support for workplace learning. Poor experiences of these affected retention and completion rates

Gambin and Hogarth (2016)	Factors affecting completion of apprenticeship training in England	Secondary data analysis	England	Varied with FE focus	N/A	Ethnicity and disability are associated with poor completion rates. Females were slightly more likely to complete their apprenticeship (especially in female dominated professions), but older apprentices were less likely. Higher levels of prior educational attainment improved chances of completion.
Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Saraswat (2016)	Higher apprenticeships and the new apprenticeship standards: Perceived potential and limitations	Qualitative interviews	UK	Varied with FE focus	19	Government policy seen as increasing demand for apprenticeships. Providers recognise potential for expansion. Apprenticeships valued for alternative educational route and different learner journeys. Apprenticeships used to fill specific skills gaps. Employer and learner preconceptions
Bishop (2017)	Affordance, agency and apprenticeship learning: a comparative study of small and large engineering firms	Semi-structured interviews and observations	UK	Engineering	13	Co-participation is a better indicator of suitability of learning environment, rather than the expansive / restrictive characteristics described by Fuller and Unwin (2003). Attitudes of business owners / managers is critical to apprentice outcomes. Whilst off the job training is protected, some attention needs to be paid to the quality of on the job training too.
Irons, (2017)	Reflection on	Case Study	UK	Computing	N/A	Introduction of degree apprenticeships

	higher degree apprenticeship development					present challenges and opportunities for higher education providers. Pedagogical approaches to apprenticeships need to be considered to provide an appropriate learner experience.
Author(s)	Title	Methodology	Location	Sector	Number of participants	Main findings
Mangan and Trendle (2017)	Attrition and retention of apprentices: an exploration of event history data using a multi- state modelling framework	Secondary data analysis	Australia	Varied	300	Prior educational attainment assists with successful completion of apprenticeship. Indigenous, disabled or non-English speaking apprentices were more likely to leave apprenticeships. Increased income during the apprenticeship leads to a greater chance of completion.



