# NEW APPROACHES TO EMPLOYER ENGAGEMENT WITHIN SURVEYING EDUCATION: DEGREE APPRENTICESHIPS

Andrew Ross and Mohan Siriwardena\*

Department of Built Environment, Liverpool John Moores University, United Kingdom

## **ABSTRACT**

Differing models of academia and the construction industry collaboration have evolved in the UK and internationally to develop a healthy skills supply chain. However, the increasingly popular Degree Apprenticeships in the UK has caused there to be much greater prominence of the issues around industry-academia interaction. Degree apprenticeships were part of an initiative introduced by the UK government in 2015 aimed at boosting employer investment in education and training. In April 2017, employers whose pay bill exceeded £3m had a 0.5% levy deducted, which was ring-fenced to support new apprentices.

This paper explores the tripartite structural issues that this new approach will need to address for the initiative to deliver the outcomes required by the Universities, employers and apprentices. The paper, inter alia, reports on an employer survey aimed at gathering opinion data. The data were collected from a survey designed to investigate employer's expectations of degree apprenticeships, their advantages and disadvantages and to ascertain the impact that the new approach might impact graduate recruitment in future. The survey findings and subsequent interpretation of results will be used to inform the strategic direction of the university's engagement with industry and with the degree apprenticeship initiative. Possible implications to future delivery of surveying education in the UK are also discussed including references to lifelong learning.

**Keywords:** Degree Apprenticeships; Lifelong Learning; Professional Bodies; Surveying Education; University Industry Collaboration.

# 1. Introduction

Developments in the area of employer engagement in academic degree programmes, have been inconsistent and difficult to predict. Although there are established models of industry-academia collaboration in different sectors such as IT (Gorschek, 2006) many of these relate to research interaction rather than skills and capacity building. The Degree Apprentice initiative is one of the first structured frameworks to formally drive the collaboration of industry and academia in large scale educational delivery.

This paper explores the tripartite structural issues that the new Degree Apprenticeships programme will need to address for this particular initiative to deliver the outcomes required by the Universities, employers and apprentices. Paper presents a background to the programme, research method for the study, the findings of the research and the implications for the future of the programme.

## 2. DEGREE APPRENTICESHIPS INITIATIVE

The development of bi-partite arrangements that support the effective engagement of academia with industry stakeholders has been an important aspect of built environment education in the UK (Ross & Riley, 2018). The engagement often occurred in an ad hoc manner with employer's representatives attending industrial advisory groups to consider curricula and employment trends. The nature of this engagement has often been fragmented and sporadic with employers tending to feed their skills supply chain needs through a mix of

<sup>\*</sup>Corresponding Author: E-mail - m.l.siriwardena@ljmu.ac.uk

recruitment from full-time undergraduate programmes supplemented by staff development through part-time undergraduate programmes.

The new UK government pledged itself to continue with an ambitious programme of reforms to apprenticeships, which were set out by the previous government in 2015 and informed by the 2011 Wolf Review of vocational education. The Wolf review's (Wolf, 2011) findings impugned a system where too many apprentices were locked into dead-end jobs and where many high-quality apprenticeships were rare. The drivers behind the government's apprenticeship reforms are cited by the Skills Funding Agency (SFA) as being:

- A need to improve productivity through up-skilling
- A desire to force employers to invest more in high-quality training
- An ambition to improve social mobility and create more opportunities for young people
- The ongoing policy directives around getting universities and business to collaborate

As well as increasing the quantity of apprenticeships available, the government aimed to increase their quality by setting up the Institute for Apprenticeships (https://www.instituteforapprenticeships.org/). This new body, which was launched in April 2017, was made up primarily of employers who were responsible for setting the new apprenticeship standards, which were developed and proposed by employer consortia (Trailblazer groups) in consultation with educational providers.

## 3. DEGREE APPRENTICESHIPS MODEL

The programme involves a tripartite agreement. Parties to the agreement are the employers, university and the apprentice. In order to incentivise employers to invest in apprentices, an apprentice levy was introduced. This apprenticeship levy came into force on 6 April 2017, at a rate of 0.5% of pay bill, paid through PAYE and was only paid on any pay bill in excess of £3m. Only 1.3% of employers pay the levy and this 'tax' can be reclaimed through a digital account that supports higher-level training – and it is estimated that this will involve over 19,000 employers generating approximately £2.5b of Apprenticeship Levy Funds. Non-levy employers will be able to access the scheme through co-investing 10% of the cost of training and receiving a 90% government contribution

In order for employers to spend their apprentice levy contribution on degree apprentices, two components have to be available; these were an approved standard and an approved assessment plan. These prescribed behaviours, skills and knowledge that needed to be achieved by the apprentice on completion of the apprenticeship. Once these two components were approved the standard was "ready for delivery" Currently, in February 2018, 119 level 6 standards have been published with 44 ready for delivery, although far few are actually being delivered at present due to complexities with the apprentice standard assessment plans. (Ross & Riley, 2018)

The UK Government is not clear on whether the money raised via the levy will be entirely new money and how much will be available for degree-level apprenticeships. To a large degree this will be left with employers to determine – and some employers (particularly in the public sector, where resources are scarce) are expected to want to move quickly to recoup their levy contribution and invest in staff training. The financial structure of the DA model is generally favourable to universities. Although employers are encouraged to negotiate the best price for the training they require, funding is available for up to £27k of the cost of a Level 6 award (BA/BSc). This is the full cost of a UK, 5 year construction management degree. To incentivise completion of the apprenticeship and to encourage providers and employers to ensure that the end point assessment is achieved, a 20 % fee retention is held back until evidence is submitted to the Education Skills Funding Agency (ESFA) of satisfactory completion. It is anticipated that this will create a significant change to the relationship that Higher Education Institutions (HEI) have with their students. Under this new arrangement, they are required to monitor and support the apprentice and his employer upto 2 years after graduation.

## On programme assessment approaches

The end point assessment for the chartered surveying standard is undertaken by the Royal Institution of Chartered Surveyors. It comprises 24 months of structured training and 24 hours of continuous professional development which are evidenced by a training log. The candidate also has to complete a reflective report on

a case study indicating how competencies were practiced at the appropriate level. The training log of competencies and case study form the basis for an interview which if passed confirms completion.

#### 4. BENEFITS OF THE DA APPROACH

The benefits to the learner/apprentice are that they gain a degree qualification and relevant work experience without building up significant debts, have excellent employability and earning power and the scheme contextualises learning by combining practical and theoretical perspectives. It also leads directly to membership of the relevant professional body. The benefits to the universities are that it provides additional learners, more structured employer engagement which is central to the aim of economic engagement with local industry and provides good evidence of local economic impact.

It has been posited that successful industry-academia collaboration requires ten success factors as follows:

- need orientation
- industry goal alignment
- deployment impact
- industry benefit
- innovation
- management engagement
- network access
- collaborator match
- communication ability
- continuity

(Sandberg et al., 2011)

It can be argued, cogently, that the Degree Apprenticeship initiative inherently reflects these principles and should, therefore, have strong probability of success in the long term. The success of such collaboration has often been considered in terms of outcomes although with particular reference to the construction sector it is also essential to consider success in terms of impact. (Pertuze *et al.*, 2010) One of the possible implications of the initiative is the potential for disruption in the existing education al models that support the sector.

Much of the current literature investigate the demand side considerations such as need for greater enhancement of the skill base (National Audit Office, 2016), flexible learning opportunities, reducing the funding burden on students (Hall *et al.*, 2010) and greater fit with industry needs and higher employability. However, there is a clear gap in current literature on the supply side issues/challenges of HEIs when delivering such programmes.

Degree Apprenticeship (DA) offers the opportunity for universities to secure funding to recruit students from non-traditional backgrounds. The scheme is designed by employers, universities and professional bodies, which aims to deliver high-tech and high-level skills and offer an alternative to a traditional degree course (National Audit Office, 2016).

However, current accountability frameworks may result in an unnecessary confusion around the roles and responsibilities of individual actors associated with DA delivery resulting in a missed opportunity to maximise the value arising from the tri-partite delivery relationship (Lambert, 2016). In this instance the specific approach has been to encourage the employers to be part of this process. In the light of the current funding arrangements for HEI for England, universities may see this as a way of supporting the securing of student numbers. Sectors such as BE may also see this as rolling back the years, when the vocational education use to have a strong apprentice base.

Significant amount of literature highlights the need for apprentice schemes of various forms including DAs (Hall *et al.*, 2010; National Audit Office, 2016). Whilst recognising the increased presence of employer involvement (Phoenix, 2016), several supply side issue requiring further investigation has been cited in literature. Some of such aspects include questioning the suitability of current accountability standards of HEIs in relation to DAs (Lambert, 2016), factors affecting completion of apprenticeships in England (Gambin & Hogarth, 2015) and ascertaining the levels of success (Kirby, 2015). However, there is a dearth of literature with a critical investigation into how DAs affect the supply-side of BE HEIs.

This new approach to learner and employer engagement was considered potentially disruptive to the University and, in turn, the department whose current focus is primarily upon full time education. Approximately 17 % of the department's full time equivalent (FTE) undergraduate students were part time; these were almost exclusively studying one programme that had a long-standing tradition of "day release" education. It was considered that if the numbers of degree apprentices significantly increased and they became replacements for full time students that this would have a disruptive impact on the department's approach to teaching and learning, the organisation of the timetable, the deployment of academic resources to support the employer and apprentice during the apprenticeship. The impact this would have upon the resources was also exacerbated by the need to monitor the learners post-graduation. There would also be a significant impact upon the income generated as the tuition fee would be recovered over a six year rather than a three year period and there would be "lost fees" due to non-completion of the end point assessment and the retention of 20% of the fee. In order to explore this in more detail it was resolved to gather data from employers regarding their intentions to engage with this new initiative and whether they were considering moving from a graduate only recruitment policy to one that favoured degree apprenticeships.

# 5. RESEARCH METHOD

A preliminary literature review was conducted, and it highlighted the need for the development of the skills of the built environment and the related professional areas. A series of open interviews were carried out with four employer's representatives who were part of a programme industrial advisory group. The interviews were aimed at exploring awareness and attitudes to degree apprenticeships, the implications for employer HR departments, the perceived associated benefits and disadvantages and future recruitment intentions. Analysis of this data identified that there were a range of conflicting views of employer's attitudes to undergraduate education and part time employment and it was resolved to undertake a wider study involving additional participants.

A questionnaire survey was designed to investigate the attitudes of employers across five sectors, construction, digital, healthcare, engineering and other. The survey was designed to collect demographic data about the employer, size and sector and investigate the following areas using a Likert scale approach;

# The employers awareness of the degree apprenticeship initiative:

This was aimed at establishing whether their recruitment practice of graduates had been adapted in light of the new levy introduction and to assess their likelihood of engaging with the initiative. The degree apprenticeship approach requires the employer to support the apprentice for a period of at least 6 years from initial engagement until completion of the end point assessment. This was perceived, in initial discussions with employers, as lacking flexibility when compared with their traditional practice of employing graduates and made the initial selection of the apprentice critically important. It was also perceived as having an inherent risk if the apprentice could not complete, due to a moral obligation to support a younger person, which was considered stronger than that due to a graduate.

#### The employer's opinion on the impact:

This refers to the fact that the apprentices were likely to have upon their business, their productivity and the implication of the requirement for an industrial mentor and whether this would have a positive impact on the organisation.

After piloting the survey with eight employers, amendments were made and distribution of the survey took place in April 2017. An email was sent with a link to the online survey to 215 organisations who had previously sponsored part time students or had registered an interest in employing graduates. This sample was primarily located within the north west of England within a catchment of 75 miles from Liverpool and was contained approximately 40% of small and medium sized enterprises and 60% larger employers. The survey was open for two weeks and which was extended by a further two weeks with two email follow up reminders.

## 6. RESULTS AND DISCUSSION

31 organisations responded which represented a disappointing 14% response rate. The categories of respondent are shown in Figure 1. Small and medium sized enterprises (SME) employing 250 people represented 61% (n=19) of respondents.

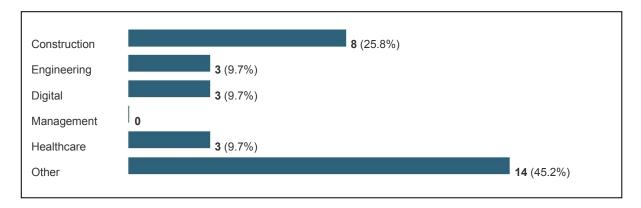


Figure 1: Categories of Employer Respondent to the Degree Apprentice Survey.

The survey sought to gather information on the employer's intentions to recruit graduates, a question regarding graduate recruitment sought the numbers of graduate recruited per year. Figure 2 indicates that the majority of the employers recruited 1-5 graduates per annum. The larger employers had a centralised recruitment policy and employed over 20 per year. The SME employers formed 91% of the respondents seeking 1-5 graduates, this was expected given their size.

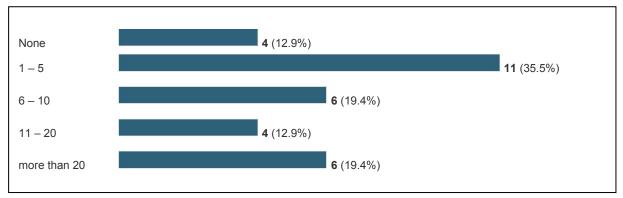


Figure 2: Number of new graduates employed per year

## **Employer awareness**

In order to put the survey into context, data was gathered from the employers regarding their awareness of the degree apprentice initiative. The University had undertaken an intensive awareness raising campaign alongside a national campaign by the UK Government. A Likert scale was used to assess the level of awareness, which is shown in Figure 3.

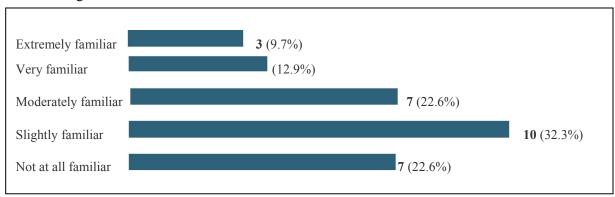


Figure 3: Level of Awareness of Employers of the DA Scheme

A minority of employers were very or extremely familiar with the scheme, these respondents were the larger employers with a dedicated human resources department who had been researching the impact that the apprentice levy may have upon their business. However, it is not clear at this stage whether these particular respondents have distinguished the DA scheme from the day-release scheme.

The employers were asked about how relevant they considered the scheme to their future intentions and as shown in Figure 4, 73% felt the scheme was highly or very highly relevant to their future recruitment needs. The respondents who indicated moderate or low relevance were all from the SME category.

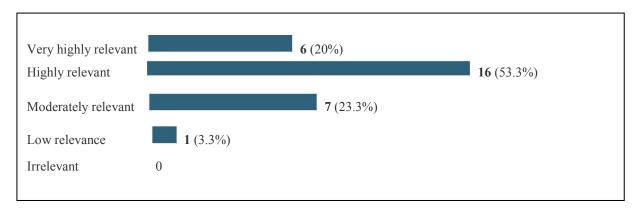


Figure 4: Relevance of the DA scheme to future graduate recruitment intentions.

#### **Impact**

Employers were asked about their opinions about the barriers that may hinder their engagement with the degree apprentice scheme. They were asked to rank the following barriers from 1-7, 1 being the most significant barrier.

These were that the DA programmes were too inflexible, required a long-term commitment to untested employees, required a change of approach to recruitment practices, required changes to existing human resource systems, required excessive time from industrial mentors, and required the apprentice to undertake the end point assessment.

The results indicated that the long-term commitment to an untested employee was the biggest disadvantage to the scheme, 39% of respondents raised this as either highest or second highest disadvantage; the employers in the SME category (70%) were over represented within these respondents. The next highest ranked disadvantage was the time required by industrial mentors to support the apprentices in the workplace, 26 % of respondents ranked this as the very significant or second highest. The SME organisations were under represented in this category (10%).

The other disadvantages were ranked as relatively minor by the respondents. The category of requiring professional body membership was ranked by 29% of respondents as the least disadvantageous possibly indicating that this was a major employer benefit of the scheme.

# **Perceived benefits**

A similar series of questions sought information from employers about the benefits they perceived they would derive from engaging with the DA scheme. A Likert scale of 1-5 was used to seek their strong agreement (5) or disagreement (1) with a series of statements such as engagement with a student at an earlier age than a graduate, use of existing staff to support the apprentice and the apprentice being more likely to be loyal to the company

80 % (n=24) employers strongly agreed or agreed with the statement that the apprentice was likely to be more loyal than a graduate employee and remain with the organisation once the apprenticeship had been completed. This confirmed the views of the pilot group of interviewees who stated that graduates tended to have little loyalty to their first company and that the companies tended to experience proportionally higher churn amongst graduates than other employees. 73% (n=22) indicated strongly agreed with the statement that engagement with younger person would benefit their organisation. The open interviews conducted before the survey indicated that many employers felt that graduate tended to have high expectations in relation to their skills and productivity and that the employment of an apprentice that could be trained in the company methods would be

preferable. The majority of employers 70% (n=21) indicated their strong agreement or agreement with the statement that the use of existing staff to mentor their apprentices would provide a benefit to the company. This confirmed the findings of the open interviews were employers stated that tacit knowledge transfer from experienced employees to new starters would provide benefits to both parties via the formulation of practices.

The employers were less sure about whether an apprentice would be more productive than a graduate, 50% (n=15) indicated very strong or strong agreement with the statement that the apprentice would be more productive than a graduate would.

## Support required

The employers views about the University's role in recruitment and support of the apprentices were sought . 81% (n=25) indicated that they would welcome the university taking a role in the recruitment of apprentices, 61% (n=19) indicated that they would engage with a post graduate support system for development of the graduate to the end point assessment, 50% (n=16) indicated that they would require assistance with their employee development programmes 19% (n=9) indicated that they would like support for the development of HR support systems. 42% (n=13) indicated that they would welcome support from subject specialists.

Unsurprisingly the SME employers indicated that they would require more support than the larger employers would and valued the subject specialists input higher than the larger employers. This possibly indicated the more transactional nature of larger employers with Universities when compared with the small organisations.

The survey results and ongoing discussions with employers suggest that the degree apprenticeship scheme will have a disruptive effect on undergraduate vocational education. Employers are likely to be seeking fast track degrees, which will require elements of work based learning and assessment. This will require Universities to become more agile in their approach to the design of these programme's curricula, this will need to also encompass approaches to quality assurance of the apprentices work place experience and homogeneity of work place competences across arrange of employers size and sectors. The implications for funding for University departments involved with the degree apprentice schemes is that the fees are recovered over a 6 year period rather than a 3 year (full time) or 4 year (sandwich) degree. In addition to this, the 20% fee retention until completion of the professional body's end point assessment (EPA)will require University's to track, monitor and support the graduate upto 2 years post graduation. The risk in fee loss due to apprentices not undertaking the EPA is considered high and, from anecdotal sources, Universities are seeking to pass this risk to employers.

The employers indicated that their recruitment practice of employing graduates will likely change, as they will need to ensure that they get value from their levy spend. The implications of this are that they will require entering into longer term and less flexible arrangements with younger employees. Their commitment to the apprentices will, in some cases, be up to 6 years that has consequences for mentoring, employment contracts and support for the professional body EPA. The results of the survey indicated that the employers welcomed the opportunity to engage existing staff in workforce development. It is too early to establish the impact of this in practice and this will form an ongoing research project with employers.

# 7. CONCLUSIONS

Degree apprentice programme is relatively new, hence too early to draw major conclusions on its success. However, it is a scheme has much to commend it as a new model of engagement between employer and university. It requires both sectors to develop a better understanding of the external and internal factors that influence their practices. Over time, this will develop into shared approaches to recruitment, education and support of the apprentices. Early reflections suggest that both sectors are entering into arrangements that are, as yet, fully mature. There needs to be rapid development of quality assurance practices in both sectors to ensure that the learning experience of the apprentice, the employers confidence in the scheme and the Universities' financial model. This will cause disruption and it is likely that the benefits of engagement will outweigh the disadvantages. The relatively long term between the academia and the industry also offers potential to facilitate lifelong learning through through-life studentships (Siriwardena et al., 2011).

# 8. REFERENCES

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

- Gorschek, T., 2006. A Model for Technology Transfer in Practice, IEEE Software, 23, 6
- Hall, G., Joslin, H. and Ward, J., 2010. Developing higher apprenticeships in England. *Lifelong Learning Networks National Forum*.
- Kirby, P., 2015. Levels of success: The potential of UK apprenticeships.
- Lambert, S., 2016. Are current accountability frameworks appropriate for degree apprenticeship? *Higher Education, Skills and Work-based Learning, 6(4),* 345-356.
- National Audit Office, 2016. Delivering Value through apprenticeships programme, Report by the Comptroller and Auditor General prepared for the Department of Education, UK.
- Pertuze, J., Calder, E., Greitzer, E. and Lucas, W., 2010. Best Practices for Industry-University Collaboration. *MIT Sloan Management Review*, OSP Massachusetts Institute of Technology
- Phoenix, D. A., 2016. Making a Success of Employer Sponsored Education. Higher Education Policy Institute.
- Ross, A. and Riley, M., 2018. Degree apprenticeships: Disruption or business as usual, *Annual Conference of the Associated Schools of Construction*, Minnesota.
- Sandberg, A., Pareto, L. and Arts, T., 2011. Agile Collaborative Research: Action Principles for Industry-Academia Collaboration. *IEEE Software*, 28, 4
- Siriwardena, M., Amaratunga, D., Malalgoda, C. and Thayaparan, M., 2011. Addressing the construction labour market skills mismatch through lifelong learning in higher education institutions. *Education in a Changing Environment (ECE) Conference*, University of Salford July 2011
- Wolf, A., 2011. Review of Vocational Education-The Wolf Report, Department for Education, UK