RETHINKING APPRENTICESHIP TRAINING FOR THE CONSTRUCTION INDUSTRY IN IRELAND

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The construction industry is of strategic importance to any economy, as it delivers the building and infrastructural needs of society; it is also a major provider of employment. The over-reliance on construction was a contributing factor to the collapse of the Irish economy and employment in construction fell to under 50% of its 2007 peak as a consequence. The decline devastated apprentice training with a reduction in excess of 90% of new registrations of construction apprentices at the lowest point. The implication of this to the industry is disquieting, given the crucial role apprenticeships play in the sector. The Irish model of apprentice training, exalted as a model of excellence when economic drivers were favourable, has been shown to be over-reliant upon employer stability and new apprentice registrations in order for it to flourish. In 2013, the Irish Government announced a review of apprenticeships, in order to address these issues. Though this review extolled the virtues of apprenticeships it failed to address the labour market issues associated with the industry. Now firmly in recovery, the industry faces a knowledge and skills deficit which has the potential to render it unable to respond to future growth. The need for change in the current apprenticeship training system is thus imperative. The paper critically analyses the Irish construction apprenticeship training system and provides a comparative analysis to international practices to identify a benchmark for a new Irish apprenticeship model for construction. The findings highlight the basis of a rethinking of Irish apprenticeship in order to futureproof training and protect against the cyclical fluctuations of the construction industry.

Keywords: apprenticeship, education, employment, Ireland, skills

INTRODUCTION

Overview

In the mid-2000s, the Irish economy had become increasingly over-reliant on construction. By 2007 the sector had completely exceeded a normal level of output and employment for an economy the size of Irelands. This over-reliance on construction was unsustainable and contributed to the much documented, unprecedented collapse of the Irish economy in 2008 (Gerlach 2013; Central Statistics Office 2016a). Six years of contraction followed, with output reducing year on year before bottoming out in 2013 resulting in a severe contraction in construction employment (Central Statistics Office 2016b).

With the reduction in construction employment came a decline in apprentices, particularly in the construction trades (Department of Education and Skills 2013a).

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Although the significance is often overlooked, apprentices do not just provide cheap labour in the form of semi-skilled operatives (Zimmermann 2002). Instead, apprenticeships supply foundational education for those who will potentially evolve into construction managers over time (Mohrenweiser and Backes-Gellner 2010).

Though extensively analysed as a paradigm of learning, a detailed focus of apprenticeship under the stresses of an economic downturn remains undocumented. This paper sets the context of construction apprenticeship in Ireland. An overview of the current Irish construction industry, employment and apprenticeship is therefore provided. Finally, an analysis of Europe's most pervasive training model is presented followed by conclusions for the future of Ireland's apprenticeship. Ultimately, the analysis possibly raises as many questions as it answers, however its importance to the industry warrants careful consideration and debate in this regard.

Research Methodology

As Biesta and Burbules (2004) point out, educational policymakers "want knowledge that can inform their actions and activities" and that they "seek knowledge that can support and guide their decision making".

The research presented is based on documentary analysis of available publications from key stakeholders including industry, government departments and education providers as well as national statistical data. The work forms part of an ongoing PhD thesis thus does not purport to be conclusive, but more so serves to provoke a deeper investigation to a crucial component of construction labour market analysis.

CONSTRUCTION INDUSTRY IN IRELAND

Economic growth and construction employment

The construction industry is vital for economic growth as it delivers the building and infrastructural needs of the rest of the economy and society. In Ireland, the importance of the construction industry to the national economy cannot be overstated, due in no small part to it being a major provider of employment and "a key generator of wealth" (Forfás 2013: v). Consequently, this symbiotic relationship between the macro economy and construction industry, proved detrimental to both in the context of the recent economic downturn.

Figure 1 details the reduction in construction output and the corresponding reduction in construction employment. A direct correlation between the two is clearly evident.

Despite the fact that economic cycles are expected, the severity of the shock was unprecedented and the industry was unprepared. In particular, the resultant reduction in new apprentices was unanticipated (Department of Education and Skills 2013a). This is conceivably attributable to the fact that the training model had been operating with overwhelming success since its inception (Steedman 2010) and further, that this was the first collapse of the Irish construction industry in living memory.

Trends in apprenticeship registrations

A successful apprenticeship system relies upon a steady supply of new apprentices annually. Prior to recession, new registrations were constantly in excess of 8,000 individuals annually. At the time of impact of the recession, there was circa 30,000 apprentices across 26 trades in Ireland, grouped by industrial category: construction, electrical, engineering, motor and printing.

Figure 1: Change in construction employment in relation to construction output (Data: Dept. of Environment, Heritage and Local Government, Central Statistics Office)

Figure 2 shows the catastrophic effect to apprentice registrations. A decline of 82 % is seen at the lowest level (2010). When focusing solely on construction trades, the reduction is of the order of 93 % at its lowest (2012).

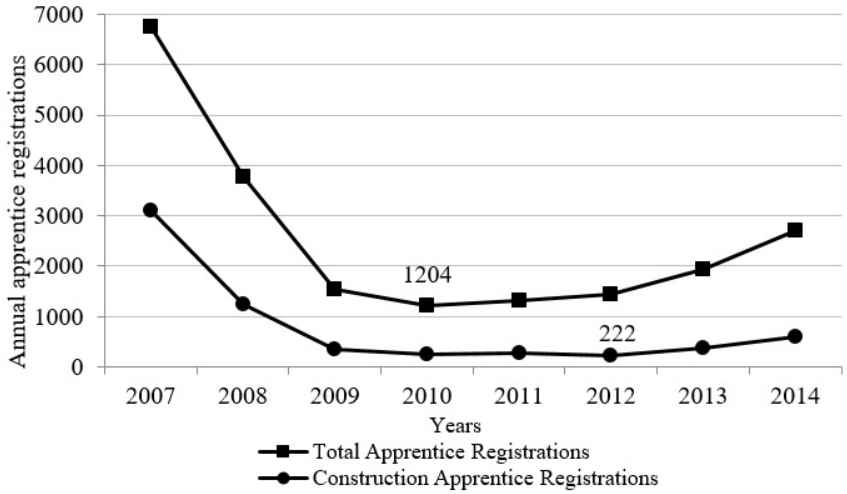

Figure 2: Change in annual registrations of new apprentices (Data: FÁS, SOLAS)

A further indicator of the severity of the collapse upon apprenticeships was the increase in the number of unemployed apprentices. The total number of unemployed apprentices increased to more than 20 times its level in only three years (Figure 3). So extreme was this change, that in 2010, there were more unemployed than employed apprentices in Ireland (SOLAS 2015a).

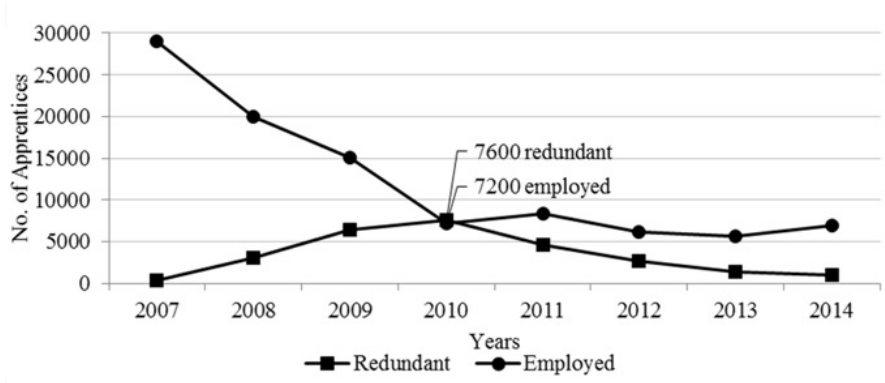

Figure 3: Change in the number of redundant apprentices (Data: FÁS, SOLAS)

Following arduous years of depression, the Irish construction industry is in a recovery phase with recording growth of 7.8% in Q4 2015 (Central Statistics Office 2016c). Recently there has been a modest increase in apprenticeship registrations (SOLAS 2015a). However, this increase is unlikely to meet medium term demand given the rate of economic growth. Now, more than ever, a lasting system of apprenticeship is required to ensure stability over the economic cycle.

APPRENTICESHIP IN CONTEXT

Apprenticeship as a paradigm of learning

There is no single authoritative definition for what constitutes 'apprenticeship'. For the purposes of this research, the definition provided by the International Labour Organization is used, stating that:

> apprenticeship means any system by which an employer undertakes…to employ a young person and to train him…for a trade for a period…in the course of which the apprentice is bound to work in the employer's service (Steedman 2012: 2).

It is this ideal, that an apprenticeship is a contract between an employer and employee, which is important. It raises the topical issue that "not all instances of training on a job are apprenticeships" (Richard 2012). Principally, an apprenticeship is experiential in nature, specifically, that the apprentice must learn in the workplace (Rauner *et al*., 2012). This mode of learning implies a 'duality' of importance between college and workplace as learning environments, hence the term 'dual based apprenticeship' (Muhlemann, Wolter and Wuest 2009).

Apprenticeships in Ireland

In Ireland, apprenticeships have always been 'demand led' meaning that the number of apprenticeships offered depends on employers offering places based on their own requirements (Steedman 2007: 5). Traditionally, apprentices trained under a 'time served' model, whereby apprentices were required to 'serve' as an apprentice for a pre-determined amount of time. This system was limited in that there was a lack of standards applied; despite successive Irish governments attempting to address the issue through legislation and the formation of national training authorities (O'Connor and Harvey 2001).

In 1991, following a major review of manpower in Ireland, the then newly established training authority FÁS, introduced a new 'Standards Based' Apprenticeship framework aimed at replacing the emphasis on time served with common standards (O'Connor 2003). Immediately, the new apprenticeship model thrived. To a large extent, this success was enabled by a period of economic growth, which concealed the fact that the new model was overly dependent upon employer engagement.

Government review of apprenticeship

In 2013, a review of the Irish apprenticeship system was announced by the Irish Government (Department of Education and Skills 2013b). By which time the Irish economy had been in recession for nearly five years. It is therefore not unreasonable to suggest that this review was overdue.

A potentially contentious issue raised by the review relates to the purpose of apprenticeship socio-economically. In positing the need for apprenticeship, this report states that: "by 2020, while all jobs will require higher levels of skill, 50% of them will need medium level skills and 15% will require low level skills...[and]…even in a

high tech world some two-thirds of all jobs will be in the mid to low skills range. (Department of Education and Skills 2013c).

To determine that apprenticeship as a paradigm of learning is suitable only for the delivery of low to mid-level skills is not constructive. This stance does not aid apprenticeship in the difficult battle against academic snobbery when there is a need to enhance the public perception of apprenticeship (Lee 2012).

In this regard, the Irish review of apprenticeship could have taken the lead from its contemporary review in the UK. The Richard review states that "we must ensure that apprenticeships are well regarded. Apprenticeships cannot be the collateral partner amongst our learning pathways. It is inappropriate for it to be viewed as a lower-status alternative" (Richard 2012).

A Qualitative concern for the future of apprenticeship

Whilst this paper presents for the most part quantitative issues regarding apprenticeship, there are concerns of a qualitative nature going forward.

The culmination of the apprenticeship review was a call for the proposal of new apprenticeships by enterprise (Department of Education and Skills 2014). Whilst this is in essence a positive move to expand the utilisation of experiential learning as a method of training, there is a fundamental concern.

The Standards Based Apprenticeship (SBA) model demanded a form of legislative homogeneity in terms of key common standards such as duration, examination, certification etc. (SOLAS 2015b).

Although the SBA is the only extant apprenticeship model in Ireland, theoretically, the expansion of apprenticeship may allow for alternative training standards and therefore a lack of conformation of the key common standards mentioned above. Thus, the future of apprenticeship is open to possible deregulation and a potential diminishment of common standards which have upheld the core value of Irish apprenticeship.

CONSEQUENCES FOR THE INDUSTRY

Future skills shortage

As stated, a negative implication for the construction sector, which a serious reduction in apprentice numbers brings, is one of a future skills shortage. In the UK, a report prepared by the Work Foundation describes how skills shortages exist more than a generation after recommendations were made to invest in labour market skills (Wright, Brinkley and Clayton 2010).

More recently, a survey of its members by the Chartered Institute of Building revealed that 82 % of respondents felt there is a serious skills shortage in today's UK construction industry (Chartered Institute of Building 2013).

The issue is also evident in the Irish construction industry, less than a decade after the economic downturn began. The severity of the situation has been noted by SOLAS, who have indicated that "the availability of qualified tradespersons may become an issue as the recovery in the labour market continues" (Skills and Labour Market Research Unit 2015). Even before this becomes a long term issue, in the short term, the skills shortage in Ireland is being fed by a need for skills in other countries, which has seen Irish apprentices and tradespeople emigrate (Skills and Labour Market Research Unit 2008). Between 2005 and 2013, Irish emigration trebled from 30,000 to 90,000 annually (Central Statistics Office 2016d).

Future management shortage

In addition to the issues associated with a skills deficit, there is another, potentially more serious implication for the construction industry brought about by a lack of apprentices, namely, the threat to future management skills.

Apprenticeships supply the industry with a chain of craftspeople that perform an essential role within the hierarchical structure of the industry (O'Connor and Harvey 2001). Historically, these individuals, through their applied skills and experiential knowledge of the industry, evolve into construction managers over time (Skills and Labour Market Research Unit 2008).

When considering the principle members of a construction project team (Figure 4), only one member follows a vocational route to management – the construction manager. Traditionally, this individual has followed a route of experiential learning, often beginning with apprenticeship (Mohrenweiser and Backes-Gellner 2010). This is vital, as it delivers a pragmatic understanding of construction which is not readily replicated by other members of the project team. Though the other team members, also play crucial roles in their own right, they have followed paths through tertiary education which were not aimed at qualifying them as site managers.

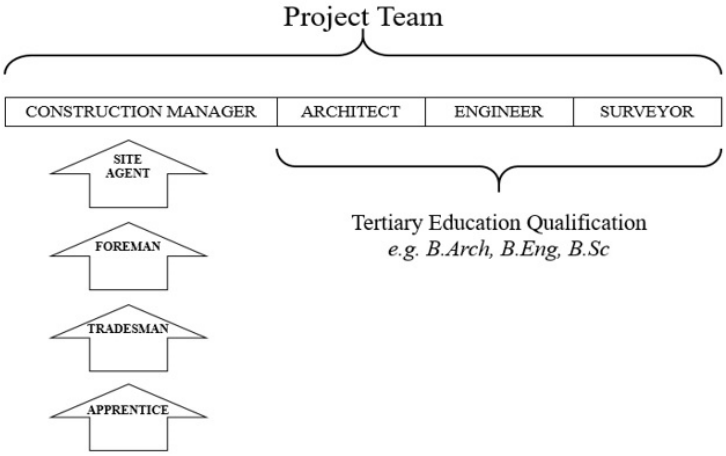

Figure 4: Vocational route to management of the construction manager

It should be noted that many of Irelands Institutes of Technology now offer degree programmes in Construction Management. However, it remains to be documented as to whether this is an acceptable alternative to the alternative vocational route in terms of the quality of managers it produces.

A need for change

Given the reduction in apprentice numbers, there is evidently a need for change to avoid a future skills and management shortage in the construction sector going forward. Such a shortage has already been evidenced within other parts of the construction labour market, including the quantity surveyor profession (Murphy and Walsh 2014) and is likely to occur elsewhere also.

There are many elements to consider. Firstly, numerous stakeholders are involved. Many successful European arrangements are "social partnerships between the State, employers, trades unions, and education and training providers" (Fuller and Unwin 2008). By engaging with social partners in this way, apprenticeships in theory, are aimed at "meeting the needs of the changing economy" (Richard 2012).

Herein lies a fundamental issue – the economy is constantly changing with numerous facets affecting output. Apprenticeships therefore, are no longer homogenous as can be seen from the varied programmes of training internationally and the need to equip society with the skills required by the current and future economies (CEDEFOP 2009).

It could be posited that the ideal apprenticeship structure should be flexible enough to cope with the cyclical nature of the sector. Assuming this as an essential quality, research would almost certainly lead to the German apprenticeship system as an exemplar (Gibbons-Wood and Lange 2000; Wyman and Gedge 2015).

However, the supposition that the German training model could be simply transposed to another nation is illogical. While the German model is meritorious, there are many significant differences, not least of all, that vocational training begins in second level school in Germany (Deissinger 2004) and it does not in Ireland for example. Thus it is an issue which is not easily replicable by another country without major educational reform.

In addition, recent investigations of German VET shown that they too have problems as "an increasing number of German youth are unable to access Germany's much lauded vocational training system" (Kohlrausch 2014). This may be due to the myriad transformations of a "political, policy and institutional" nature, which the German labour market has undergone in recent years (Brady, Biegert and Vitols 2015).

One strategy introduced by the German government is the 'transition system', aimed at easing the shift for many young people from school to training, due to the fact that increasing numbers of youths fail to successfully make the traditional transition (Kohlrausch 2014). Yet this measure has not had the intended success of Government. Owing to the differences in qualification levels of second level, the system has made "access to vocational training…more stratified" (Kohlrausch 2012). This has led the OECD to conclude that "the transition system…suffers from undue fragmentation and an absence of transparency" and that "too few…participants make a successful transition into the regular VET system" (Hoeckel and Schwartz 2010).

Clearly then, there are issues even with the world's most ubiquitous model of excellence.

IMPLEMENTATION

The Irish apprenticeship system needs to be cognisant of all of the aforementioned information, both positive and negative. Owing to the fact that the existing standard of training is amongst the highest standard on offer (Steedman 2010), the answer would not appear to be an attempt to simulate a central European framework. However, determining a model of training is not the only issue to be addressed. Another is the method of implementation of an alternative model. In this regard, Ireland is lucky in that it has a well-established method of social partnership for apprenticeship which Government has promise to preserve going forward (Department of Education and Skills 2014).

Nevertheless, issues surrounding the use of the National Training Fund (NTF), previously the Apprenticeship Levy, remain for the most part unexplored. An investigation should be undertaken as to whether an augmented NTF could be used as a method of addressing apprenticeship engagement by employers during economic downturns. The viability of combining social welfare support with emergency

funding from the NTF should at least be probed by government as a means to bolster apprenticeship levels during periods of recession.

CONCLUSIONS

The Irish apprenticeship model is misinterpreted as being ineffective when in reality the primary failing lies with an over reliance on employer engagement. Addressing this requires legislative change in order to build in protection against cyclical elasticity. Another significant and ongoing issue is that of the value of apprenticeship socially and culturally. This must be addressed in order for the Government's plan for the expansion of apprenticeship, as a paradigm of education, to be successful.

The examination of the current German apprenticeship system shows that vocational education is valued there. It would appear that this is the best way for apprenticeship to flourish; it must be socially accepted as a credible educational method. This would require a major cultural shift in Ireland due to a cultural lack of value in VET.

The solution would appear not to be to attempt an emulation of the German system but rather to encourage the adoption of a Germanic type appreciation of vocational education. Apprenticeship must be valued, just as it is in Germany. Furthermore, as there are many stakeholders to apprenticeship, the government cannot afford to be partisan. To do so would be irresponsible and potentially perilous in terms of future skills. The future success of apprenticeship will depend upon all parties collaborating.

Ireland's educational leaders therefore stand at an extremely important juncture in the history of apprenticeship. The status quo cannot be allowed to remain. Now is the time to tackle the social inequality of education stratification and to rethink the concept of apprenticeship. Through collaboration, there is an opportunity to design a modern model of excellence for the delivery of apprenticeship training, flexible enough to minimise the risks of future cyclical shocks, thereby improving the labour market for the betterment of society and ensuring the ability to meet future skills needs.

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